



June 2025

Alice Springs Field Naturalists Club Newsletter



Red-headed Mouse Spider (*Missulena occatoria*)
See page 4 for more from May's speaker night
presentation by Tamara Morgan

CONTENTS

Meetings, trips and contacts	p. 2
Newsletter archive update	p. 3
Speaker night—Spiders, Predatory Invertebrates and Other Faves	p. 4
Des Nelson writes... <i>Remembering insect swarms</i>	p. 7
Golder Orb Weaving Spider— <i>Nephila pilipes</i>	p. 9
Speaker night flyer—10 June	p. 10
Treasurer's Reports—April & May 2025	P. 11

✉ PO Box 8663, Alice Springs NT 8071

🌐 www.alicefieldnaturalists.org.au

✉ contact@alicefieldnaturalists.org.au

🌐 [Alice Springs Field Naturalists Club](#)

The next newsletter will be published on or around **1 July 2025**.

We appreciate all contributions, articles, and photos both local and from elsewhere. Please have them to Lisa McLean lisamclean@outlook.com by **20 June 2025**.

ALICE SPRINGS FIELD NATURALISTS CLUB

Wednesday 11th June – 7.00pm. ***Dragons, Kings and Crocs***. Join Christabel as she shares her soft spot for reptiles, and loves to educate others on their care and conservation. This presentation is going to be a fascinating look into her time spent in Indonesia and Darwin looking for some of the world's most iconic reptiles - Komodo Dragons, King Cobras, and Crocodiles.

AUSTRALIAN PLANTS SOCIETY—ALICE SPRINGS

Wednesday 4th June, 7.00pm. Suzanne Lollback will introduce you to some of the features of FloraNT. Bring along a copy of the newly revised book Wildflowers & Plants of Central Australia and we will explore how to use this book in conjunction with the on-line information.

The Alice Springs Field Naturalists Club Committee Members

President	Vacant	
Vice President	Vacant	
Secretary	Lisa McLean	0412 642 987
Treasurer	Neil Woolcock	0428 521 598
Property Officer	Jill Brew	0437 223 203

General Members

Kylie Cowan	0418 477 450
Peter McDonald	0427 177 450
Wendy Mactaggart	0434 495 903

Public Officer

Anne Pye	0438 388 012
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Other Club Responsibilities

Newsletter—Lisa McLean
Facebook—Meg Mooney moon3@iinet.net.au
Website—Kylie Cowan

Positions Vacant

The positions of President and Vice President remain vacant. The committee will continue to work together to ensure Club activities continue. Your continued support is very much appreciated.

Thank you

Thanks to all contributors toward this month's newsletter: Kylie Cowan, Marg Friedel, Des Nelson, Wendy Mactaggart, Lisa McLean, Des Nelson

Ideas?

Event ideas? Lead a walk maybe?

If you've got ideas for events, trips, or speakers—please email them to lisamclean@outlook.com

ABC Alice Springs is calling...

The ABC Alice Springs Drive presenter has contacted the club seeking someone who might be interested in speaking with him on air occasionally about Club activities, the natural environment of the centre, and all things field naturalist. As a former radio broadcaster, I know how much fun radio can be and the impact it can have on people's lives - both behind the mic and as a listener. So, I would love for you to get involved! If you might be interested [yes, I'm looking at you...], please let me know and I'll put you in touch with Andrew.

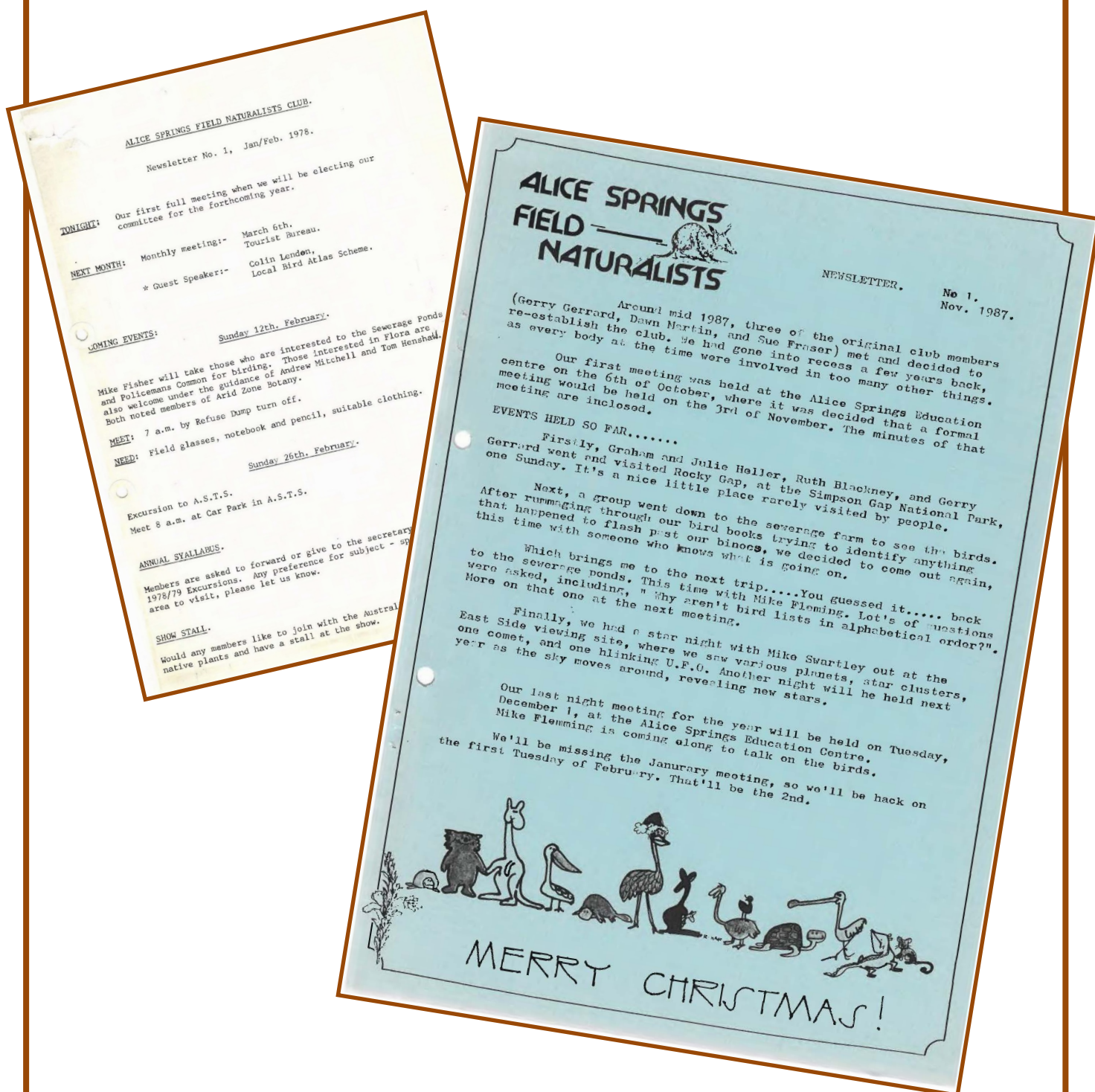


Field Nats' history

Over the past year, the Committee have been working to upload more past newsletters to the website. As you might know, newsletters from 2006 have been available for downloading and reading for a while. Some newsletters prior to 2004 were found in amongst Field Nats' records, and were scanned, checked and uploaded. Most recently newsletters from 2003-2004 were uploaded. For the moment, these haven't been added to the Index, so you'll have to open them to see what articles and other news they hold.

But wait! There's more! We also found Newsletter No. 1 from Jan/Feb 1978, then also Newsletter No. 1 from November 1987—which was the first newsletter following a 'revival' of the Club during 1987. Also discovered were a few editions from 1996, 1997, 2000 and 2002.

If you'd like to take a peek into the past, head to the Field Naturalists website, archive of past newsletters page www.alicefieldnaturalists.org.au/Past_Newsletters.htm. The index has also been updated to May 2025. 🦋



Spiders, Predatory Invertebrates and Other Faves

Tamara Morgan, Naturalists Club Speaker Night, 14 May 2025

Report by Kylie Cowan

Right from the start I knew we were in for a treat! Tamara Morgan, our May speaker began her talk by apologising... she had so much to say about spiders, that predatory invertebrates and her other favourites didn't make the cut (we look forward to part 2 of Tamara's talk down the track!)

It was great to get a glimpse into Tamara's background as a veterinary nurse at a referral centre for 'unusual and exotic pets... think chameleons, tree frogs, sugar gliders and alligator snapping turtles, rather than cats and dogs. But her passion for invertebrates, including spiders, really began over a 10 year period working as a Senior Keeper at the Melbourne Museum looking after the live exhibits. Tamara was lucky enough to work with Lord Howe Island Stick Insects and Australian Tarantulas just to name a few. After completing her honours project as a Research Assistant with LaTrobe University's Insect Ecology Research Group she then returned to Melbourne Museum's Entomology/Arachnology and Marine Invertebrates section as a Legacy Registrations Officer. A Specialist Keeper position at the Alice Springs Desert Park working with reptiles, fish and invertebrates brought her to the Centre, and now, several years later, she works with Low Ecological Services as an Environmental Consultant.



Lord Howe Island Stick Insects



Red Knee Tarantula



Australian Lungfish

While describing herself as an amateur entomologist, Tamara's knowledge and passion shone through as she laid the foundation for our journey into the land of spiders. Hearing that invertebrates make up 90% of all known animal species on earth, are crucial in our ecosystem as pollinators, seed dispersers, decomposers and a vital food source (amongst other things), was an apt reminder about how important (and awesome!) invertebrates are.

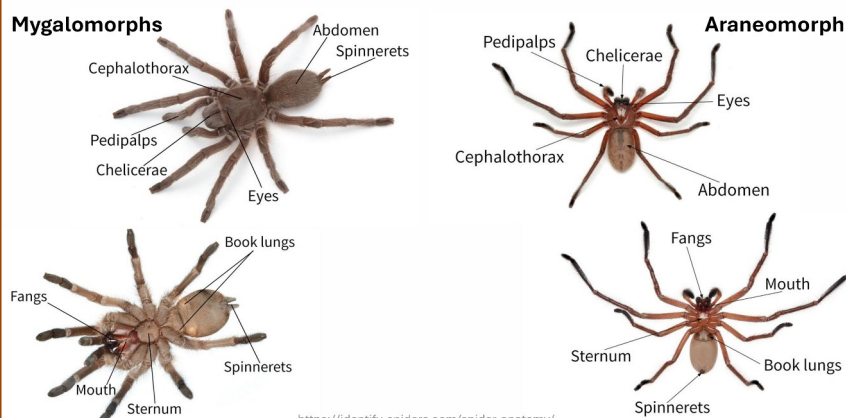
Spiders can be categorised into two groups. Mygalomorphs or 'primitive spiders' with their book lungs, downward striking fangs, robust bodies and visible spinnerettes.... and the more evolutionary advanced Araneomorphs, which are far more diverse both in appearance and behaviour.

Araneomorphs have pincer fangs, advanced respiratory systems. Some do have book lungs as well as a spiracle, a small opening in the exoskeleton that allows for direct oxygen exchange allowing them to thrive in a wide range of habitats. They include huntsmans, jumping spiders and orb-weavers. Mygalomorphs like mouse spiders, funnelwebs and tarantulas function best in humid environments and are mostly burrowing. You may be as astounded as the audience to hear of one Trapdoor Spider living for 43 years!

Spiders can lose (and regrow) legs which is known as leg autonomy, a very effective way of escaping predation – as Tamara said 'if a predator attacks you, sometimes you have to give them a leg'!

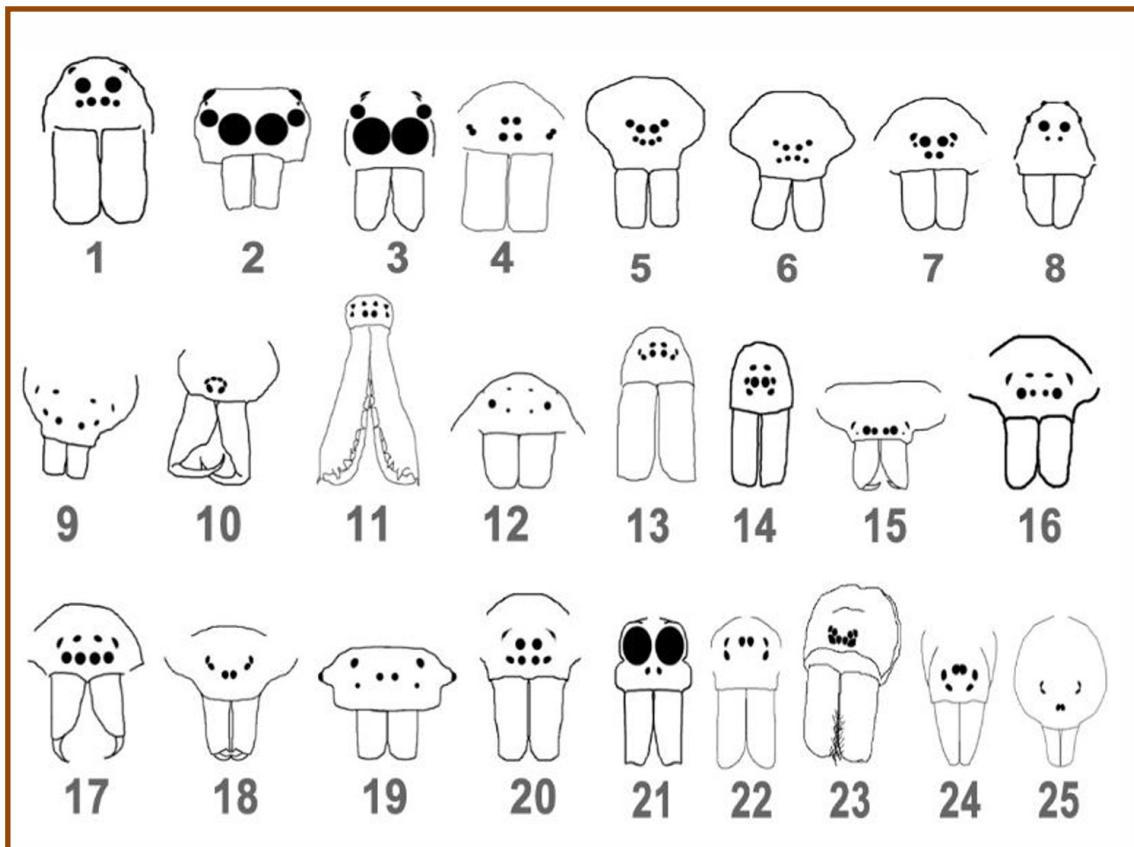
We learnt that when identifying family and genus, one of the most useful clues is the configuration of their eyes. Usually with 8 eyes arranged in pairs (sometimes 6), Tamara shared a diagram of eye patterns which the audience agreed was not only useful, but quite amusing and somewhat beautiful! Many spi-

Spiders: primitive vs modern



<https://identify-spiders.com/spider-anatomy/>

ders have poor eyesight and mostly rely on vibrations and touch. The arrangement of the eyes gives us a clue as to their hunting techniques as well. For example, the Golden Orb Weaver relies on vibrations in its web, whereas the jumping spiders rely more on eyesight.



Once we were guided through this broad understanding of arachnids and spider characteristics, we started to hear more about the spiders of central Australia, many of which Tamara had photographed in her own house, yard and surrounds. A new species to me was the Wishbone Spider, with its black body and silvery hairs.

I loved learning about the species we find locally – Tamara encouraged the audience to submit photos through iNaturalist as there are still so many to be recorded, and much to learn. In fact, it is believed that less than 15% of Australian Invertebrates (including many spiders) have been formally described. Tamara highly recommended the Australian Spider Identification Facebook page as a great resource.

The male Red-headed Mouse Spider is particularly striking – the females being all black and stocky with a large cephalothorax. There was a question from the audience regarding the name which Google indicated is because mouse spiders build burrows similar to those of mice to protect themselves... one of several theories perhaps.

Feather Legged Spiders have no venom glands. They rely on their fluffy, sticky webs to entangle and digest their prey. These small, camouflaged spiders are

social and can build interconnected webs. Badge Huntsmans, named for the unique 'badge' pattern on their underside are the only group of huntsmans to have venom mildly dangerous to humans.



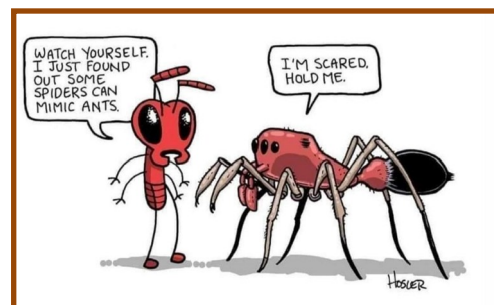
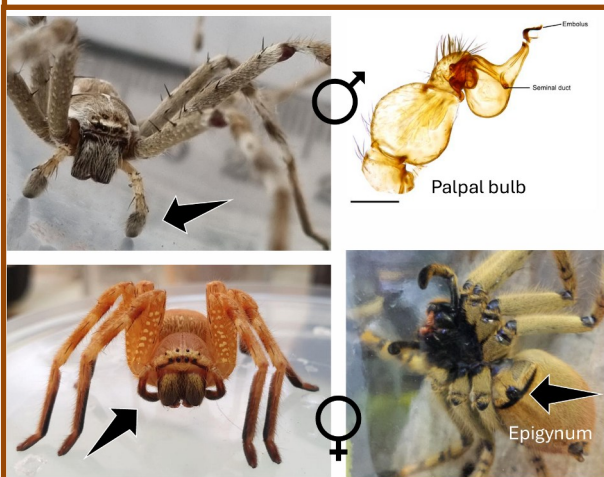
I'm sure there isn't a field naturalist alive that hasn't walked through the incredibly strong web of an Orb Spider! The large female Golden Orb Weavers have a food cache within the web that they use as a back-up food supply, the small males sometimes making use of this as well. Interestingly, spiders with these caches lose less weight in tough times than those without. Unlike the Golden Orbs, Tailed Grass Spiders build their web closer to the ground, occupying different niches in their environments.



Tamara's particular favourite is the ant mimicking jumping spider. Interestingly the mimicking behaviour of the spider is less about predation and more about protection... lots of predators are scared of ants so it's highly advantageous to look and behave like one! The behaviour of spiders is highly variable – like the maternal care shown by the wolf spiders who have special hairs on their back for the spiderlings to cling to, or female huntsmans who incubate their eggs.

This write up is only a snapshot of what Tamara shared! In one short hour, Tamara equipped us with new tools – learning to look for signs that might lead to a spider sighting, clues to assist with identification, characteristics that will help us understand their diet, hunting techniques and habits. I'll remember to look for the 'boxing gloves' on the end of the male spider's pedipalps – at the end of these palpal bulbs is a spur like structure which the male uses to insert sperm into the female's epigynum, and is species specific almost like a lock and key.

Thank you for your presentation Tamara, it was incredibly interesting, beautifully presented and engaging. We look forward to welcoming you back for part 2, predatory invertebrates!



Note: If you see and photograph images of the Christmas Spider *Austracantha minax leonhardii* Tamara is keen to hear from you! Please email photos along with the location to t.morgan81@outlook.com 📧

Des Nelson writes...

Remembering insect swarms

Swag invaders: On a warm moonlit night in 1958 a fellow worker and I were camped on a Spinifex plain 100 km north of Alice Springs. We unrolled our swags for a sleep. My companion was the only person I knew who used sheets in his swag. These caused his sleep to be disturbed as, showing white in the moonlight, they attracted a mass of small green leafhoppers. He had to shake out his bedding and retreat into a nearby hut. My swag had grey blankets, attracting none of the insects.

Flowing upwards: In 1962, in a long drought period, while sitting at night in our house along what is now the Ross Highway, again, small green leafhoppers were attracted to the internally-lit up windows. They covered the glass completely, continually moving upwards, giving the impression of flowing liquid. How could such a swarm be explained in drought conditions? Our garden area was quite limited but a neighbour had a well watered lucerne patch.

Coffee bean beetles: 1966 was a wet year. About then came an invasion of small cockchafer type beetles. At that period I collected beetles for a man who passed them on to CSIRO Division of Entomology in Canberra. I gave him a matchbox full of the beetles, which we named 'Coffee bean beetles'. They were well received in Canberra, a letter stating that they had few specimens of that species at the Division. I filled an empty powdered milk tin with them. When they had been despatched to Canberra, a message came: 'Please send no more of those beetles'. I do not know of such a profusion of those insects occurring again.

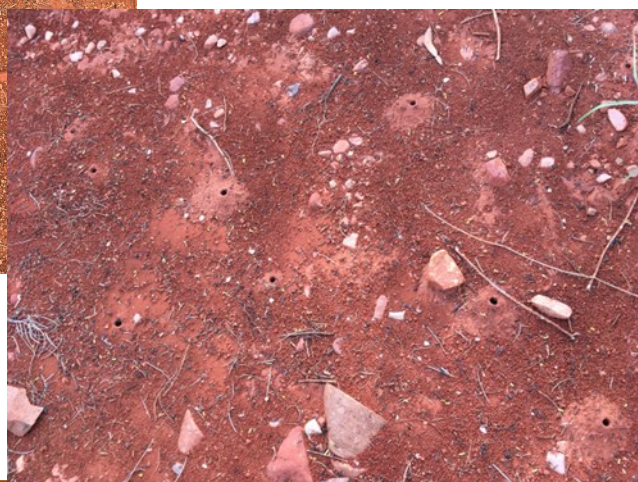


Meat ant nest . Inset: A 'highway' of nests.
(Photo: Marg Friedel).



What happens when you leave the lights on
(Photo: Marg Friedel).

A remedy: In 1967 my family took up residence in a house on the Arid Zone Research Institute. We established gardens to go with already growing citrus trees and grape vines. Produce grew well and so did a myriad of insect pests. We chanced on a unique remedy for these. Across the highway, opposite the Institute, radio station 8HA was built, far away enough not to



intrude on our lifestyle but close enough to us to be able to see a large, well lit sign proclaiming the name of the station. We got into the habit of waiting until dark then switching on the lights above the house front and back doors. These attracted a great number of various insects, many being moths and beetles. When the population reached a peak, the lights were turned off. We could watch a cloud of our pests flying away towards the 8HA sign. It was quite an effective remedy but today may not be so necessary.

The coming of buffel grass: In 1975 our family moved to the former CSIRO property adjacent to the Arid Zone Research Institute. Buffel grass was present but had not yet overwhelmed the area, as it was to do later. Shortly after taking up residence we found the laundry being invaded by meat ants. Their trail was followed for 25 metres to a large community, typically looking like a small claypan, with many access holes. We found other, somewhat smaller, 'nests' further away. There were connecting trails from some of these to others, like highways between cities. We assumed extra water in the laundry attracted the ants. We kept them at bay for some time but they diminished and finally were not seen by the 1980s. Buffel grass had smothered the ground, even the meat ant nests.

Buffel grass entrenched: My accommodation of today has a very large window which looks onto the well vegetated Todd River. My room is occasionally well lit at night. Sometimes, except for a rare small moth or so, insects are absent. Where are the big clumsy Ghost moths that once emerged on dark rainy nights, emerging from the ground and leaving their chrysalis skin poking from a hole in the earth? Once, a feature of camping out was to experience all kind of invertebrates being attracted to a lamp or a lead light. The last time I recall such events was at a camp site near a water course on Allambi Station in the 1990s.



Yeperenye: A final observation is a bit sad. In a field notebook, a note of March 16th 1997 from 15 km southeast of Alice Springs says: '*Boerhavia coccinea*, recovering from a severe grazing by Yeperenye caterpillars'. Last summer 2024/5, from the same location, it was difficult to find any of these caterpillars on Tar Vine.

What's happened to our insects? Are entomologists a dying race? 🦋



Tar vine (*Boerhavia coccinea*) and Yeperenye caterpillar (Australian Striped Hawk Moth *Hyles livornicoides*) (Photos: Marg Friedel, Alex Nelson, Patrick Nelson).



Goldier Orb Weaving Spider—*Nephila pilipes*

Wendy Mactaggart

After the wonderful spider presentation I went looking in my backyard and found a Golden Orb Weaving spider. So decided to find out more about this commonly found spider in Central Australia often identified by the large golden coloured silk web.

🕸 **Scientific name:** *Nephila pilipes*

🕸 **Family:** *Nephilidea*

🕸 **Class:** *Arachnida*

🕸 **Genus:** *Nephila*

The Genus name is derived from ancient Greek meaning “fond of spinning” nien = to spin, nema = thread, philus = to love.

Worldwide there are 12 *Nephila* species. *Nephila pilipes* is the species found locally.

This spider is harmless to humans. It is non-aggressive but if bitten it may cause mild local pain, numbness and some swelling

Evidence has suggested the golden silk colour may serve a dual purpose sunlit webs ensnare bees that are attracted to the bright yellow strands, whereas in shady spots the yellow blends with the background and acts as camouflage. Spiders are notified that potential prey has been caught through the web vibrations. These vibrations can then be followed to the prey which is then wrapped in web to reduce dehydration and kept in caches to provide a backup food source when prey is scarce.

The spiders will eat any suitable prey caught in the strong sticky web eg beetles, butterflies, ants, wasps, bees etc but they can be fussy eaters and will remove from the web things they don't like the taste of.

Females are many times the size of the males (sexual dimorphism) and the tiny males can be difficult to locate in the female's web. Reproduction can be a dangerous time for the male spider so he or approach from the opposite side of the web or approach when the female is feeding. If she allows mating she will then produce an egg sac holding between 300 – 3000 eggs. The sac is wrapped in a mass of golden silk then placed in small pits on the ground and hidden to avoid predation.

Smaller males may have been selected for due to the smaller males being more nimble and quicker allowing them to catch the female more easily and escape quicker when threatened.

Now that I know more about these interesting spiders I will be more respectful when bush-walking not to disturb their beautiful golden webs and check to find a tiny male and see what creatures may be caught in the cache. 🕸

Source: Australian Museum website



Nephila pilipes, East Side, Alice Springs
(Photo: Wendy Mactaggart)



ALICE SPRINGS FIELD NATURALISTS CLUB

Speaker Night

Dragons, Kings and Crocs

Christabel has been living in Alice Springs for 2.5 years and manages the Alice Springs Reptile Centre. She has a love for all animals, but a big soft spot for reptiles, and loves to educate others on their care and conservation. Her presentation is going to be a fascinating look into her time spent in Indonesia and Darwin looking for some of the world's most iconic reptiles - Komodo Dragons, King Cobras, and Crocodiles.

Wednesday 11th June at 7pm



Olive Pink Botanic Gardens

www.alicefieldnaturalists.org.au





The Alice Springs Field Naturalists Club Inc

PO Box 8663
Alice Springs
NT 0871

contact@alicefieldnaturalists.org.au

Treasurer's Report for April 2025

Balance of all funds (inc. petty cash) end of March **\$1,828.35**

Activity in April

Income received

Nil

Expenses

Austcover – reimburse Neil Woolcock **\$495.88**

[Petty cash]

Petty cash opening balance **\$21.85**

Expenses

Nil

Petty cash balance end April **\$21.85]**

Total of all funds (inc. petty cash) end April **\$1,332.47**

N. Woolcock
(neilwool48@gmail.com)
Mob :0428 521 598
3/6/25



The Alice Springs Field Naturalists Club Inc

PO Box 8663

Alice Springs

NT 0871

contact@alicefieldnaturalists.org.au

Treasurer's Report for May 2025

Balance of all funds (inc. petty cash) end of April **\$1,332.37**

Activity in May

Income received

Nil

Expenses

Nil

[Petty cash]

Petty cash opening balance \$21.85

Expenses

Nil

Petty cash balance end May \$21.85]

Total of all funds (inc. petty cash) end May **\$1,332.47**

N.Woolcock
(neilwool48@gmail.com)
Mob :0428 521 598
3/6/25