

February 2025

Alice Springs Field Naturalists Club Newsletter



A scorpion (Genus *Urodacus*) in ultraviolet light—see page 7 for more! Photo: Patrick Nelson

Meetings are held on the second Wednesday of the month (except December and January) at 7:00pm at the Olive Pink Botanic Garden.

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Alice Springs Field Naturalists Club

The next newsletter will be published on **1 March 2025**. We appreciate all contributions, articles, and photos both local and from elsewhere. Please have them to Lisa McLean <u>lisamclean@outlook.com</u> by **20 February 2025**.

ALICE SPRINGS FIELD NATURALISTS CLUB

Wednesday 12th February – 7.00pm. Photography - Birds, Bugs and Buffel-Landscapes. Max Rittner

Saturday 22nd February — 2.00pm at the Bean Tree Café in Olive Pink Botanic Garden, ASFNC meeting. The Club meets four times a year, and the meeting agendas always include planning. All welcome to attend and bring some ideas!.

PLEASE NOTE: Meetings are now back at OPBG at 7.00pm. The Club sincerely thanks Alex Nelson and all at the Aviation Museum for providing an interim solution to the 'no meeting venue' dilemma.

AUSTRALIAN PLANTS SOCIETY—ALICE SPRINGS

Wednesday 5th February —7.00pm. Citizen science in retirement: Vegetation change on a former pastoral lease. Gary Bastin.

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 Mactagga	rt	0434 495 903		
Public Officer				
Anne Pye		0438 388 012		
Other Club Responsibilities				
Newsletter—Lisa McLean				
Facebook—Meg Mooney moon3@iinet.net.au				
Website—Kylie Cowan				

Hibiscus solanifolius—Tomato-leaf Hibiscus

Alex Nelson

A brief follow-up to last November's Field Nats visit to Pitchi Richi— the strange little native hibiscus we couldn't identify flowered the next day and these a few photos that reveal it's quite a showy wildflower. I think it's *Hibiscus solanifolius* (Tomato-leaf Hibiscus, amongst other names). It's the only one I've seen at Pitchi Richi.



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: Marg Friedel, Des Nelson, Lisa McLean, Kylie Cowan, Jill Brew, Alex Nelson, Patrick Nelson.

Happy New Year

Happy new year!

We're looking forward to an interesting year ahead, full of interesting events, fascinating speakers and more! If you've got ideas for events, trips, or speakers— please email them to lisamclean@outlook.com

Des Nelson writes...

Some comments inspired by the Field Nats latest Newsletter [November 2024]

Thorny Devils

The article by Casey Croucamp I enjoyed much and it brought to mind observations made many years ago – in the 1950s when I was staying at the old pre-Melanka hostel [which is long gone]. Somebody had a Thorny Devil, I guess brought in from the bush.

An artists friend, Pat Elvins, had sheets of various colours of art paper. These were placed in sunlight and the lizard was moved from one to the other. Changes to its body colour were fairly quick and quite entertaining. Bearded Dragons are good at changing colour to match the bark on trees on which they cling, but they take longer to do so than did the Thorny Devil that I remembered.

It was also put into a saucer of water to observe the water soaking like blotting paper on the reptile's skin. I don't remember the ultimate fate of the little performer.

Processionary Caterpillars

I am familiar with the moth eggs shown on p. 2 [of the November issue]. They are eggs of the Processionary Caterpillar moth. There are two kinds of those "itchy caterpillars", those that build a strong bag for living and pupating quarters and those that make a strong webbed tent-like construction at the base of a tree or shrub. The latter will pupate in a secluded, sheltered place.

We had them occupy the cavity provided by a garden gnome, for that purpose. The moth is quite small when you consider the size of the caterpillar. It is a rather ordinary insect and probably is the moth shown on p. 6 of the September issue of the Newsletter.

In my childhood I, very carefully, emptied the occupants and a mass of shed skin and faeces of an "itchy bag" into a large tin. The caterpillars settled in well and would move out to forage, leaving a silken trail for finding their way home. On a few occasions, later in life, I managed to gently tap the leader of a caterpillar line to veer away and eventually abut the last caterpillar. The creatures would move around in a circle for quite a while before breaking away, leaving a nice silk circle on the ground.

If caught out in unfavourable weather conditions, hot, cold or wet, the caterpillars will bunch up together forming a hairy lump. Once a procession did this on our verandah. I slipped a shovel under them and threw them out onto an open area, where they scattered individually as little hairy balls. Later I was surprised to see that somehow they were able to find each other to make a number of small columns of half a dozen or so caterpillars.

Over the years I have noted a number of wildlife species which seem to have vanished with the proliferation of buffel grass but such is not the case with itchy caterpillars. There are plenty of them at the right time.



Male thorny devil (*Moloch horridus*) climbing on trunk of a teatree (*Melaleuca glomerata*) *Photo: Casey Croucamp*



Eggs of the Processionary Caterpillar (Ochrogaster lunifer) Photo: Peter Bannister

The Letter-winged kite (*Elanus scriptus*) Project—an update

Lisa & Peter Nunn / Alice Springs Field Naturalists' Club Member Night 13 November 2024

Report by Lisa McLean. Hard work and photos by Lisa and Peter Nunn

Due to reasons... November's member night was held at the Aviation Museum, so it was amongst the exhibits of human flight—and under the winged of a DC3—that we heard a fascinating



presentation on the joys and otherwise of Lisa and Peter Nunn's letter-winged kite project. How fitting! Lisa and Peter were unavailable to fact check so any errors in reporting, stats or claims are purely mine made in the reporting of the presentation!

This project—a private project of Lisa and Peter's— focuses on the letter-winged kite (*Elanus scriptus*), an Australian bird of prey, and has been underway for about six years. This bird is unique, as it is the only raptor in Australia known to hunt at night. The letter-winged kite is also considered rare, second only to the night parrot, and it is classified as "near threatened" under



the CSIRO's action plan for birds. The Alice Springs Field Naturalists' Club helped fund the purchase of some necessary equipment.

Peter explained that one of the project's key challenges is the lack of knowledge about the letter-winged kite's population and behavior. He thought that some Club members may remember the intention to start the project at Andado in the south-east, but that area is part of the birds' irruptive range and they unexpectedly left before Lisa and Peter's permits came through. So they headed to the area that had the most reliable recent records of the species, which was the Channel Country in south-west Queensland. To the west is the Georgina River drainage system, and to the east is the Diamantina River



Regurgitated pellets (like furballs!)

drainage system, and this is where the project is based.

Though kites are believed to inhabit areas around the Lake Eyre Basin and Barkly region, there have been few targeted surveys to confirm this. The bird's population is considered to have been smaller than historical records might suggest, with fewer sightings in places like South Australia and around the Birdsville Track. The project's maps show that an early population explosion was followed by the birds moving to new areas, such as the Georgina River and Diamantina drainage systems.

A significant part of the research has focused on studying the bird's diet. Early reports suggested that letter-winged kites fed on long-haired rats, but no detailed quantitative studies had been done. Lisa and Peter collected regurgitated pellets—somewhat similar to furballs—that the birds produce once a day. These pellets were analysed by an independent expert (see the chart on page 8, signifying breeding status and site), revealing that the letter-winged kite's diet consists of several prey species, including seven different types of mammals. There's also some thought that the degradation of prey refuges, such as changes in the



Baby in the nest—note the furballs / regurgitated pellets





Cat-cam—this time featuring dingo, echidna, pig & long haired rat

The next phasesatellite tracking

- Are they really nomadic?
- Are there seasonal or prey availability-driven movements down to the rivers?
- What are the critical areas for the species?
- How widely from roost sites do they forage?
 Will enable more effective
- population monitoring by enabling groups of birds to be located

The next phase...[to be clear, this isn't a letter-winged kite!]

bird's natural habitats, could be affecting the population, as the availability of food sources may impact the birds' numbers.

Back to the rats... another interesting aspect of the diet study was tracking how the rat population in the letter-winged kite's diet had shifted over the past few years. The research revealed that, in the past two years, the ratio of rats in the birds' diet had fluctuated and might be tied to breeding patterns. The long-haired rat is especially important to the bird's reproduction, possibly providing vital nutrients needed for egg development. Lisa and Peter let us know that there is still much to understand about how diet and reproduction are linked, and this is a topic that needs be explored!

As the presentation showed, the letter-winged kite appears to be a highly mobile species during nonbreeding periods. The birds are known to move away from their roost sites overnight, which has made it difficult for Lisa and Peter to pin down exact population numbers. There are also notable differences in the number of males and females, with males often outnumbering females by as much as three to one. While this could be due to artificial factors, it's also possible that females are more vulnerable to predators, such as cats, while nesting. Males, in turn, tend to protect roost sites and may help raise the young, often caring for juvenile birds until they are ready to leave the nest. Those pesky cats... where are those sausages when you need them!

Monitoring the breeding season of 2020, Lisa and Peter found it yielded 39 active nests, with 43 chicks and 83 eggs recorded. The nests are made from those furballs mentioned earlier which provide a soft and insulated place for the birds to incubate their eggs. Here the presentation included a beautiful baby-bird-in-the-nest scene...However, those pesky cats pose a significant threat to the letter-winged kite's nests. They are known to sleep in the birds' nests and, in some cases, have been observed using the nests of letter-winged kites and other species. To study this, Lisa and Peter set up a cat camera, which captured some interesting footage. While cats were seen approaching the nests, it was less clear how often they left the area. The camera also picked up footage of other animals, such as echidnas, those tasty long-haired rats, pigs, and even dingoes, along with occasional glimpses of the heroes of the project, letter-winged kites.

The Alice Springs Field Naturalists Club



The next phase...





Peter noted—the fact that they've managed to locate species on the same proper ty for six consecutive years is a significant result. No systematic multi-year monitoring has previously been done for this species.

It was interesting to note the changes in waterline, foliage and other environmental changes captured by Cat-Cam. Grass growing and creeks filling up seem to suggest some improvement in the habitat.

Looking ahead, the next phase of the project involves satellite tracking of letter-winged kites, with the hope of gaining a better understanding of the birds' movements. A grant has been applied for to fund GPS tracking studies, which are expected to run from 2025 to 2026. These GPS devices could provide up to five years of data, helping to fill in many of the knowledge gaps about the species.

> Lisa and Peter have plans to conduct genetic analyses on the population to determine how much mixing occurs across the country. One of the most promising experiments is a cat exclusion study, which would test whether removing cats from the area improves the survival rates of chicks. As we've heard in a previous presentation (May 2023), this has improved the population of the central rock rat (*Zysomus peducnulatus*).

There are more opportunities for the public (and the Club!) to get involved, such as by sponsoring a bird in the research. The land on which many of the letter-winged kites are studied is now owned by large corporations, which are increasingly supportive of conservation efforts. These corporations are welcoming scientific work, making it easier to continue research and conservation efforts in these areas.

Lastly, there was a discussion that the moon may influence the nighttime behavior of the letter-winged kites. This could provide further insight into how the birds time their hunting activities, particularly in relation to lunar cycles.

So, as we found out, some great progress has been made on the project with a lot more to find out about the letter-winged kite.

Thank you Lisa and Peter, for your presentation and most of all, undertaking this important work on a beautiful bird. 🥖

An evening at Ewaninga

Report by Marg Friedel. Photographs by Patrick Nelson.



Note the cm scale at bottom

N ot long before Christmas, Patrick Nelson was in town, and I was lucky enough to be invited to go with him, his brother Alex, and Adam Yates from MAGNT to Ewaninga one evening. Adam had got wind of a smooth knob-tailed gecko (*Nephrurus levis*) sighting there, and was keen to see if he could spot one.

Armed with head torches, big and little hand torches and cameras, our first stop was the Ewaninga siding. We waded cautiously through the buffel grass, given the amount of railway detritus, holes in the ground and potential for lurking snakes. Our only gecko sighting was of the variable dtella (*Gehyra versicolor*), the familiar house gecko, darting up the walls of the old buildings.



Blackburnium neocavicolle. A burrowing beetle related to dung beetles

As we stood talking, a small beetle zoomed over my shoulder from behind and crash landed at my feet. It was no bigger than a child's marble and quite beautiful, as the detail in Patrick's photo shows. Adam identified it as *Blackburnium neocavicolle* and, Patrick later discovered, it was the first time a photo of this creature had been uploaded to iNaturalist*.

The next stop was a favourite of Patrick's, a nearby sand dune, which proved much more productive although (spoiler alert) a smooth knob-tail was not to be seen. We wandered in different directions and my path took me to the top of the dune where I was stopped in my tracks by the sight of a long black tail poking out from under a bush. Mulga snake or king brown (*Pseudechis australis*)! Everyone approached quietly, with torches focussed on the bush, and we could see the rest of the snake looped about itself. After a while, disturbed by photographers, light and movement, it became restless and slithered further into the bush and beyond, and we retreated carefully.



Partially hidden, at least 1 m long



A wolf spider (Subfam *Lycosidae*), 3 cm; others were smaller. Note the cm scale at the top.

All of us found small treasures: busy termites, little tiger beetles, an impressive scorpion and sparklyeyed spiders, and Adam found a crowned gecko (*Lucasium stenodactylus*) but it didn't stay long enough to be photographed. The sparkle of spider eyes in the torchlight was quite common and close examination of the sources revealed near-invisible wolf spiders (*Alopecosa* sp.), varying in length from 2-3 cm, and colour-blending with the sand.

Our final stop was the Ewaninga rock carvings and clay pan, where some water remained after a local

downpour. One highlight was a cluster of mallee grass mantids (*Archimantis sobrina*), a female and two males, clinging to a bush on the path from the carpark. The second treat was a thoroughly dead member of the cricket family (*Gryllacrididae*) that had sought shelter in the metal box for visitor information at the entrance gate and come to a very hot end. We were all impressed by its remarkably long antennae.

Thanks everyone for congenial company, Patrick for the fantastic photos and Patrick and Adam for IDs. A wonderful early Christmas present. But no smooth knob-tailed gecko for Adam. *A*

* For more on the iNaturalist entry, see https://www.inaturalist.org/observations/255068094.



A heat-baked "raspy cricket" (Family *Gryl-lacrididae*) with very long antennae



D id you attend the November APS talk about Ngalurrtju (Central Mt Wedge)? It prompted Alex Nelson to send in these photos and write...

"...reminds me of the only time I visited the former cattle station during a pasture survey trip during the last week of June 1986. Took a sequence of photos at dawn one day of Mt Wedge enhanced by approaching clouds in the distance. Turned out this was the vanguard of a weather front that broke an extended dry spell in Central Australia - we made it back to town in the nick of time! Nearly washed out that year's annual Alice Springs Show, as I recall."















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The Great Southern BioBlitz (GSB)

The Great Southern BioBlitz (GSB) is an 'international period of intense biological surveying that aims to record all the living species within local government areas across the Southern Hemisphere in spring using the free and accessible <u>iNaturalist</u> platform. The GSB provides an opportunity to engage your local community and interest groups while increasing biodiversity awareness in the community. The GSB also provides for the creation of an accessible inventory of biodiversity within the areas engaged in the project

We are pleased that the event has been embraced by the Botanical Society of South Africa (BotSocSA), South African National Biodiversity Institute (SANBI) and their community action group Custodians of Rare and Endangered Wildflowers (CREW). These organisations use the event to promote community involvement in biodiversity monitoring and awareness. We believe there is scope for Alice Springs Field Naturalists Club Inc. to do the same. Over the last two years, this event has proven to be a great way to engage people about nature and to learn about the animals and plants in their area.

The GSB organising committee are also eager to have many cities, towns and rural shires involved in this event where people participating at each location are striving to find and photograph as many species as possible within the event time frame. The event has proven to be a great way to engage people about nature and to learn about the animals and plant in their area.

The event will be held from Friday 24th October until the end of Monday 27th October with survey areas based on local government, state or country boundaries depending on the context. Each participating group can define its observation range as being one or more local government areas.

IF YOU WOULD LIKE THE CLUB / TOWN TO GET INVOLVED, please nominate a representative to complete the <u>online form</u> (or paste the following url in your browser <u>https://bit.ly/New_GSB_Organisers</u>). It is planned that online meetings will be held from late May 2025 for representatives to explain in more detail the logistics and processes related to the GSB.

For further questions email. greatsouthernbioblitz@gmail.com Website: https://greatsouthernbiobl.wixsite.com/website

More information can also be found on various platforms here ; https://linktr.ee/gsbioblitz

For background information related to the Great Southern BioBlitz - see links below

Recording a nature observation and iNaturalist <u>https://www.ala.org.au/home/record-a-sighting/</u> and <u>https://</u>

www.inaturalist.org/home

Great Southern BioBlitz 2023

Great Southern BioBlitz 2022

Great Southern BioBlitz 2021

Great Southern BioBlitz 2020

IF someone from the Club would like to get involved and manage this, please see one of your friendly committee members, Jill Brew, Kylie Cowan, Wendy Mactaggart, Peter McDonald, Lisa McLean, or Neil Woolcock.