



March 2023

Alice Springs Field Naturalists Club Newsletter



'Sunset on the Ilparpa claypans Feb 2023'. Photo by Marg Friedel.
Our first field excursion for 2023 will be to the claypans on 22nd March.
See p.2 for details.

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

CONTENTS

Meetings, trips and contacts...p.2;
Burrawang, *Macrozamia communis*...p.3;
Birds of Paradise...p.4;
Insect photos...p.6; *Coenotes eremophila*...p.7;
What species is that? Using iNaturalistAU...p.8.

Postal Address: P.O. Box 8663
Alice Springs, Northern Territory
0871

Web site:
<http://www.alicefieldnaturalists.org.au>

Email:
contact@alicefieldnaturalists.org.au

Follow us on Facebook!

The next newsletter will be published on 1 April 2023. We appreciate all contributions, articles and photos both local and elsewhere. Please have them to Marg Friedel, capparis@iinet.net.au by 23 March 2023.

ALICE SPRINGS FIELD NATURALISTS CLUB

Wednesday 8 March 7pm Speaker night. Clare Pearce "What's out there?"

When you are out on a wander, have you ever wondered where all the animals are?

At times the discrete arid zone fauna species can be difficult to find, even the budgies and galahs can hide in among the treetops. Luckily here are easily accessible digital tools available to help.

The Atlas of Living Australia is a collaborative, online resource that pulls together Australian biodiversity data from multiple sources, making it accessible and reusable. It can help with identification, species information and many other things, but my favourite application is the one that allows me to access a species list for pretty much anywhere in Australia, allowing me to explore an area, discover exactly where to look for a specific animal, and even download a species list and field guide for an area.

Wednesday 22 March Bring your own picnic tea and check out the water and magnificent reflections at Ilparpa Claypans as the sun goes down. Meet at the entrance on Ilparpa Road at 5.45pm. Leader: Neil Woolcock 0428 521 598

Wednesday 12 April 7pm Speaker night. Peter Yates "bees and bee-keeping"

AUSTRALIAN PLANTS SOCIETY - ALICE SPRINGS

apsalicesprings@yahoo.com.au

Wednesday 1 March 7pm APS AS AGM to be held at Olive Pink Botanic Garden. This will be followed by a short presentation by **Connie Spencer** showing photos of native plants found on stations NE of Alice during trips from 2003-2011 while searching for bits of rockets fired from Woomera Rocket Range in the 1950s. "Rocket remains for the boys and plants for the girls"

Wednesday 5 April 7pm at OPBG. **Doug McDougall** Trip photos from Pittsburgh USA, Bergen Norway and Frankston Australia.

Alice Springs Field Naturalists Club

Committee Members

President	Marg Friedel	0417 849 743
Vice-President	to be appointed	
Secretary	Suzanne Bitar	0419 897 735
Treasurer	Neil Woolcock	0428 521 598
Property Officer	Claire Norman	0448 341 795

General Members Jan Black 0400 303 123
Wendy Mactaggart 0434 495 903

Public Officer Anne Pye 0438 388 012

Other Club Responsibilities:

Newsletter – Marg Friedel / Barb Gilfedder

Facebook Organiser – Meg Mooney moon3@iinet.net.au

Website controller – position vacant

Changes in the ASFNC Committee

Clare Pearce has had to resign from her position as President of Alice Spring Field Naturalists Club as she is moving to Darwin. Thank you Clare for your service to our club. We wish you well in your new city.

Marg Friedel, previously Vice-President, has volunteered to take on the President's role until the next AGM. Marg has been appointed into this position by the committee as set out in our constitution. The Vice-President position is now vacant.

Congratulations Marg and thank you so much for taking this on.



Behind the Scenes with **FRIENDS OF THE DESERT PARK**

**Wednesday
15 March
5:30pm**

FREE EVENT

Join our Friends of The Desert Park volunteer group for a 45 minute guided tour of the Nocturnal House and learn all about what goes on when night turns to day!

**Bookings essential*
08 89518788
asdp@nt.gov.au

Alice Springs Desert Park
Larapinta Drive, Alice Springs
Northern Territory
www.alicespringsdesertpark.com.au



Burrawang, *Macrozamia communis*, a close relative of our local *Macrozamia macdonnellii*

By Wendy Mactaggart

Burrawang (*Macrozamia communis*) is an Australian cycad found on the south east NSW coast and is the world's most southerly cycad. *Macrozamia* from the Greek *macro* meaning large and *zania* – a genus of cycad. *Communis* – common, referring to how many grow in dense communal stands. Narooma, a far south coast town, in a local Aboriginal language means 'burrawang growing close to water.'

I recently spent time in the bush in this region which consists mostly of very tall Spotted Gum (*Corymbia maculata*) with Burrawangs dominating the understory. (right)

Cycads once dominated the world's landscape. Their fossil records go back at least 200 million years. This is before the dinosaurs appeared with flowering plants not appearing until over 100 million years later. Burrawangs take 10 – 20 years to mature and live up to 120 years.



Plants are either male or female and produce male or female cone-like structures known as strobili. The pollinated strobili of the female plant (left) produce seeds, the male cones (right) contain the pollen. Insects, mostly beetles or weevils transfer the pollen between the cones. Beetles and weevils, can also be traced back 200 million years.



Burrawangs are adapted to survive fire and the seed cones often form after fire. Although I have visited this area over many years I had never seen so many plants with cones. Although the place I was staying hadn't been directly burnt the close-by surrounding area had been massively impacted by the 2019/20 bushfires, so I wonder whether the dense smoke may have prompted the production of cones?

The seeds of the Burrawang (left) are an excellent source of starch but are poisonous to eat unless treated. Aboriginal people pounded and soaked the seeds in water for a week, changing the water daily to leach out the poisonous toxins. The pulp was then made into a damper and roasted in hot coals.

It has been hypothesised Burrawangs were used as a reliable food source for large gatherings. To ensure an abundant supply of seeds the plants would have been burnt to encourage a synchronous production of cones and over time have created the large dominant Burrawang stands we see today.

It was noticed this year many of the Burrawang's outer fronds were turning brown with fungusy-looking whitish spots underneath. A suggested cause was the very wet last few years. Hopefully it won't spread further and will go away in the predicted drier season ahead.

Reference:

<https://hiddenheritage.com.au>

Bega Shires Hidden Heritage Revealed. South Coast History Soc. Inc.

Alice Springs Field Naturalists Club



Red Bird of Paradise - males

Birds of Paradise by Anne Pye

In October 2022, I was lucky enough to travel to the East Indonesian island of Waigeo and also stop at Manokwari on Papua, and later Port Moresby in PNG, all prime spots for birds of paradise. On Waigeo we ascended a steep hill before dawn and saw the mating display of the Red Bird of Paradise, while another group got to watch the Wilsons Bird of Paradise. The Arfak Mountains, out of Manokwari are also known for excellent birdwatching.

Then in Port Moresby we saw several Raggiana Bird of Paradise, the national symbol of PNG, in Varirata National Park, 20 plus km from the city, as well as Glossy-mantled Manucodes and Riflebirds. Later we went to the Adventure Park and saw Parrotias and the Lesser Bird of Paradise in captivity. There are also good displays at the Nature Park which is closer to the city.

(Full disclosure: As I don't have a fancy camera with an enormous lens, the photos taken in the wild were given to me by fellow travellers... and most of the information below is from Wikipedia...)

Birds of paradise are members of the family **Paradisaeidae** of the order Passeriformes. The majority are found in eastern Indonesia and Papua New Guinea, with a couple also found in north eastern Australia. The family has 44 species in 17 genera. They are best known for the plumage and mating displays of the males of the species.... The males tend to have very long, elaborate feathers extending from the beak, wings, tail or head when in season. Mostly, the birds are confined to dense rainforest habitat, and the centre of bird-of-paradise diversity is the large island of New Guinea; all but two genera are found in New Guinea. Many species have very small ranges, particularly those with restricted habitat types such as mid-montane forest (like the Black Sicklebill) or island endemics (like the Wilson's Bird of Paradise).



Red Bird of Paradise - female watching the males displaying

The name Bird of Paradise originates with the Greater Bird of Paradise, *Paradisaea apoda*, described from specimens brought back to Europe from trading expeditions in the early sixteenth century. These specimens had been prepared by native traders by



Magnificent Bird of Paradise

removing their wings and feet, so that they could be used as decorations. This was not known to the explorers and in the absence of information many beliefs arose about them. They were briefly thought to be the mythical phoenix. The often footless and wingless condition of the skins led to the belief that the birds never landed but were kept permanently aloft by their plumes.

Knowledge of the species was expanded to include the Greater, King, Twelve-wired, Superb, Red and Six-shafted Birds of Paradise by Darwin's rival, the naturalist, Alfred Russel Wallace. Wallace spent six years in the region collecting and describing many specimens of animals and birds; which he then chronicled in *The Malay Archipelago* (published in 1869). More recently you may have come across David Attenborough's 2017 program featuring their mating displays in particular.



Above: Wilson's Bird of Paradise - Male and Female.

Right: Raggiana Bird of Paradise

Among bird of paradise, female preference is incredibly important in shaping the courtship behaviours of males and, in fact, drives the evolution of ornamental combinations of sound, colour, and behaviour. Males are polygamous in the sexually dimorphic species (those with 2 distinct forms for the 2 sexes), but monogamous in at least some of the monomorphic species. Hybridisation is frequent in these birds, suggesting the polygamous species of bird of paradise are very closely related despite being in different genera. Hybrid birds-of-paradise may occur when individuals of different species, that look similar and have overlapping ranges, confuse each other for their own species and crossbreed. Many hybrids have been described as new species in the past and some sightings are now being revised to a description of a hybrid.



Birds of paradise range in size, from the King Bird of Paradise at 50g and 15cm, to the Curl-crested Manucode at 430g and 44cm. The male Black Sicklebill, with its long tail, is the longest species at 110 cm. In most species, the tails of the males are larger and longer than the female, the differences ranging from slight to extreme. Their diet is dominated by fruit and insects.

Most species have elaborate mating rituals, with some exhibiting 'lek' mating systems, which is essentially the males doing their displays in a set common arena in an attempt to attract any nearby females to come watch, and hopefully then mate with the male. (On Waigeo we also saw females watching the display but the boys didn't get any takers....) Others, such as the *Parotia* species, have highly ritualised mating dances.



Left: Ceremonial head-dress featuring King of Saxony Bird of Paradise feathers (Port Moresby museum)

Right: A Lesser Bird of Paradise for sale in Javapura, Papua, Indonesia.



Hunting to provide plumes for the millinery trade was extensive in the late 19th and early 20th century; today the birds have legal protection except for hunting at a sustainable level to fulfill the ceremonial needs of the local tribal population. Hunting for plumes and habitat destruction have reduced some species to endangered status; habitat destruction due to deforestation is now the predominant threat.

More fun facts can be found at <https://animals.sandiegozoo.org/animals/bird-paradise-bird>.



A few insect photos from Leigh and Neil Woolcock - all taken in their garden

This is Leigh's photo. Neil tells us it is a Green Bottle Blowfly about 20 mm long, a very big fly.

We have kept the photo large so hopefully you can appreciate the amazing detail of the delicate and intricate veining on its clear wings.

The photo colour is very accurate. It was a bright, iridescent green.

This might be a good photo to get onto iNaturalistAU to get a positive identification and scientific name.



This caterpillar photo was taken by Neil. It was munching away on an Apple bush, *Pterocaulon* species. Beautiful markings but we have no idea of the ID, so perhaps another one for iNaturalistAU.



Keeping it in the family, this photo was taken by Leigh and Neil's son, Stephen, at the Desert Palms resort. It was in our February newsletter but was incorrectly labeled as *Endoxyla leucomochla*, our local Witchetty Grub Moth. In fact it is a much rarer species around here, *Endoxyla cinereus*, Giant Wood Moth.

Sorry about the error! Bill Low says there have been sightings around Alice Springs previously. Have you seen one?

It is much bigger than *E. leucomochla* but its range is mostly along the East Coast of Australia. It is the heaviest moth in the world; weighing up to 30 g. Its wingspan is approximately 23 cm, or just over nine inches.

The larvae bore into the trunks of trees of the *Eucalyptus* species. They must have strong teeth! Pupation takes place in the larval tunnel.

***Coenotes eremophila*,
Sphingidae family –
Eremophila Hawk Moth.**

Barb Gilfedder

Another photo from Neil Woolcock. This one I can identify, because I have seen it previously in Olive Pink Botanic Garden and in the Intertexta Forest feeding on *Eremophila longifolia*.

The *SPHINGIDAE* are called Hawk Moths because they can fly very fast, and can also hover in flight, enabling them to insert their long *haustellum* (tongue) into tubular flowers to reach nectar.

Hawk Moth caterpillars usually display a caudal horn on their tail end. It can be useful in distinguishing species. It can be slender, robust, curved forwards or curved backwards, straight, very long or very short, even absent in a few species.

The ones I have seen previously were mainly yellow-green with fine black dots and large orange spots around the spiracles. Others have been shown as mainly black with orange and yellow dorsal stripes, like this one in Neil's garden. This form has also been seen at Olive Pink Botanic garden. The forms are so different, it has been suggested that they may be different species. Host plants for these caterpillars are mainly in the Scrophulariaceae family, *Eremophila longifolia*, *E. freelingii*, *E. latrobei*, *E. sturtii*, *E. maculata* and *Myoporum montanum*. It has also been reported on *Prostanthera striatifolia*, *Vachellia farnesiana* and *Santalum acuminatum*. The Lepidoptera House website also tells us they have been found on a wide range of other plants. This one was on a Geraldton Wax.

The moth has streaky fawn wings, and a pattern of diagonal and transverse dark marks on the abdomen. Its wingspan is about 6 cm. This photo taken locally by Adam Yates.



Spinifex Pigeons

This photo of Spinifex Pigeons was taken in the Todd River bed, just north of the Telegraph Station, by **Wendy Mactaggart**.

There have been sightings of them in this vicinity previously and they seem happy here a long way from spinifex sand country.

What species is that? Using iNaturalistAU to find out

By Marg Friedel

Back on 17th April 2021, the Club had a field trip to Ellery Gorge to explore the Dolomite Walk. Early on, someone spotted a spectacular stick insect, recently dead, on a piece of bark, and a few of us took photos. When I showed my photos to Barb Gilfedder, she encouraged me to submit them to iNaturalist Australia for identification. iNaturalist Australia <https://inaturalist.ala.org.au/home> is the product of a membership agreement between the iNaturalist Network and the Atlas of Living Australia (ALA) and CSIRO.

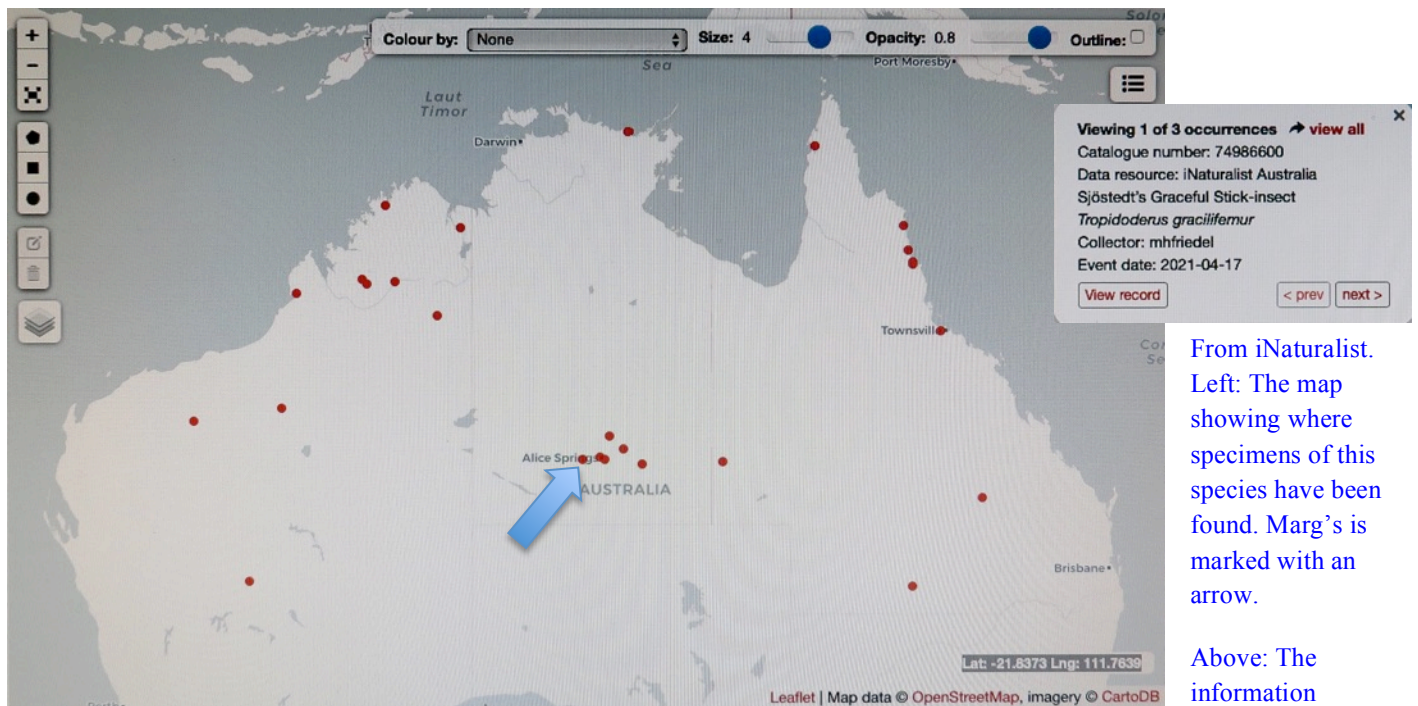


The first step was to create an account and, once done, receive an activation email. So far, so good. I spent some time searching the internet for a possible identification and came up with Pink-winged Phasma (*Podacanthus typhon*). Then it was time to enter an 'observation'. The website is clear about what constitutes an observation and how to upload it. I chose to use the web, but there are options for iPhone and Android. Then I could check back for updates on my observations by the community or be notified by email.

Pretty soon, feedback began to arrive. I was wrong (no surprises there). I should have checked ALA maps for the known distribution of *Podacanthus typhon*, which was broadly coastal. Over time, four community experts agreed that the species was Sjöstedt's Graceful Stick Insect (*Tropidoderus gracilifemur*), which qualified it for 'research grade'. I happily withdrew my identification. I had submitted a second photo but failed to withdraw the ID and discovered later it was described as 'maverick'! Nevertheless it still qualified as 'research grade' and both are now in the records of ALA. Along the way, I was very grateful for advice and encouragement from Bob Read, a former President of the Club.

I wasn't the first to record the species at Ellery, as Ethan Beaver had recorded it in 2016, while it has been recorded around Alice Springs (2015, 2021), Arltunga (2021), near Nummery (1965) and Bob Read had recorded it on the Plenty Highway in 2022.

It's not hard to be a citizen scientist and there's an Aladdin's cave of information on the iNaturalistAU and ALA websites – I should know, because I've just spent several hours poking around looking at photos, maps and detailed records and can highly recommend the websites to you.



From iNaturalist.
Left: The map showing where specimens of this species have been found. Marg's is marked with an arrow.

Above: The information attached to it.