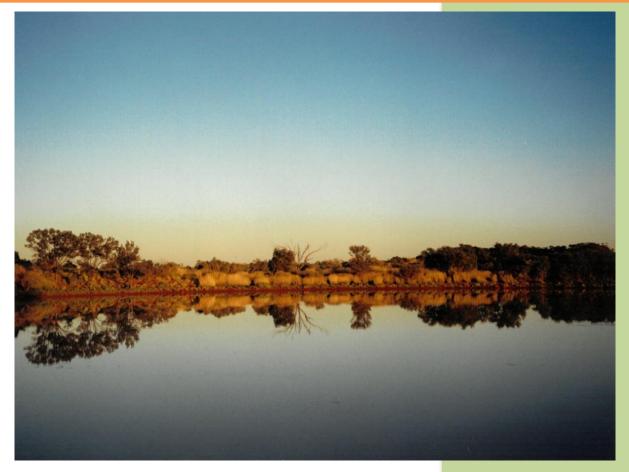


April 2024

Alice Springs Field Naturalists Club Newsletter



The flooded claypan at Ewaninga. This spectacular photo taken by Jane Bannister in April 2001, is a far cry from the dry claypan of 2024, although the rains at the end of March may have returned the claypans to looking similar to this.

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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Web site: www.alicefieldnaturalists.org.au

Email: <u>contact@alicefieldnaturalists.org.au</u>

Follow us on Facebook!

The next newsletter will be published on 1 May 2024. We appreciate all contributions, articles, and photos both local and from elsewhere. Please have them to Lisa McLean lisamclean@outlook.com by **20 April 2024**.

ALICE SPRINGS FIELD NATURALISTS CLUB

Wednesday 10th April – 7.00pm. Angus Newey will present on Hunting strategies of desert raptors targeting budgie flocks.

Saturday 20th April – 8.00am. Meet at Flynn's Grave. Wallaby Gap. Neil Woolcock will lead a short walk. See flyer on p. 10 for details.

Wednesday 8th May – 7.00pm. Glenn Edwards will present *Reflections on feral animal management in Central Australia over 30 years.*

AUSTRALIAN PLANTS SOCIETY – ALICE SPRINGS

apsalicesprings@yahoo.com.au

Wednesday 3rd April —7.00pm. Trent Hardy will introduce us to the art of Bonsai using native plants.

Saturday 27thApril. Wander beyond the Ilparpa Claypans. Further information to come.

Alice Springs Field Naturalists Club

Committee	Mem	bers
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President	Marg Friedel	0417 849 743		
Vice-President	to be appointed			
Secretary	Lisa McLean	0412 642 987		
Treasurer	Neil Woolcock	0428 521 598		
Property Officer	Jill Brew	0437 223 203		
General Members				
Wendy Mactaggart		0434 495 903		
Peter McDonald		0427 177 450		
Kylie Cowan		0418 477 450		
Public Officer				
Anne Pye		0438 388 012		
Other Club Responsibilities:				
Newsletter – Lisa McLean				
Facebook Organiser – Meg Mooney moon3@iinet.net.au				
Website controller – position vacant				

Positions Vacant

The Club is looking to appoint a Vice-President. If you would like to contribute your time and join the enthusiastic group who keep things rolling, please get in touch with Marg Friedel.

Thank you

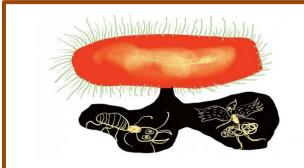
Thanks to all contributors this month: Jill Brew, Jane Bannister, Deb Clarke, Fiona Walsh, Julie Taylor, and Bec Duncum.

Welcome

Kylie Cowan has been appointed to the ASFNC as a General Member. Welcome Kylie! Jill Brew has been appointed to the position of Property Officer.

Friends of Pitchi Richi

With the support of Alex Nelson [caretaker] a new Facebook page has been created to share the history, memories, flora and fauna of this beloved site. Like <u>Friends of Pitchi Richi on Facebook</u> and share your memories and pictures.



ENVIRONMENT

Lines in the sand

By Anthony Ham

By failing to take Indigenous knowledge seriously, a scientific paper speculating on the origin of WA desert 'fairy circles' misses the mark

Mystery in 'fairy circles': Aboriginal people's art and knowledge helps scientists to better understand Australia's spinifex ecosystems

Members may recall this talk by Fional Walsh last October about her work with the Martu people and *linyji*, the termite pavements used as a hard surface for seed processing. The report on the talk featured in the November edition of the Field Nats Newsletter.

Members may be interested that this month's *The Monthly* has a short article discussing Fiona's work, and like Fiona's talk, argues the importance of working with, and understanding, Indigneous people and knowledges.

https://www.themonthly.com.au/issue/2024/march /anthony-ham/lines-sand#mtr

Pool rescue and other backyard finds! (1)

Deb Clarke



Bynoes Gecko (Heteronotia binoei)



Female Common Eggfly Butterfly (Hypolimnas bolina)

own specific territory.

7. They enjoy human sweat

It isn't exactly our choice of drink, but these butterflies love it! They consume sweat for its salt content, which is lacking in nectar flowers.

8. They pretend to be toxic

The white markings on the females' outer-wing mimic the Common Crow Butterfly, which is, in fact, poisonous. Pretty clever way to deter predators!

9. Infected caterpillars threatened the population

The male population was sadly reduced by an infection caused by bacteria in the caterpillars. By 2001, the male population had decreased to almost 1%. However, these clever caterpillars developed an immunity to the infection and the population rocketed up to 40% by 2007.

10. Caterpillars are mini monsters

Well, not literally; but they do have spikes and horns!

Bynoes Gecko (*Heteronotia binoei*) rescued from the pool. These geckoes are an extremely hardy species, and very common in Alice Springs gardens. Under extreme conditions the female is able to reproduce without male fertilisation. Individuals are sedentary, and have a home range radius of 10 metres. Info from Reptiles and Frogs of Alice Springs by Nic Gambold and Deborah Metters. 2003.



Male Common Eggfly Butterfly (Hypolimnas bolina)

Common Eggfly Butterfly (*Hypolimnas bolina*)

The male was found dead in the back yard, with a wing span of 9.5cm, slightly larger than the female (below).

Ten facts from

australianbutterflies.com/thecommon-eggfly-butterfly-10incredible-facts/

1. As a pupa, its life literally hangs by a thread

The pupa of the Common Eggfly suspends itself by just one point!

2. Its name is pretty literal The "egg" refers to the white circle on the male butterfly's wings.

3. Female Common Eggfly butterflies are without "eggs" Not literally, of course! However, the female Common Eggfly does not have the bright white "egg

spots" and purple iridescence on her wings. Instead, she is brownishblack, with faint white markings on the edge of her wings.

4. It's also known as the blue moon butterfly

This butterfly is commonly known as the Blue Moon Butterfly in New Zealand.

5. Females are fantastic mothers

Females are known to guard the leaves that they lay their eggs on. They even inspect the leaves for ants prior to laying!

6. On the other hand, males are warriors

The male Common Eggfly is one territorial little critter! They are known to physically battle over territories and each butterfly has his

Backyard finds (2)

Fiona Walsh



In her suburban bush garden, after 14 years of regeneration, Fiona Walsh has paths paved by natural fabrics (cotton, wool, hessian etc) that break down into natural materials without micro-plastic residues. A large blue pure wool carpet from the tip shop was cut into strips. During the hot season, Fiona noticed round divots appearing in the carpet and assumed it was birds using it for nesting material. However, one damp morning after 3 mm rain, there were numerous beetles clearly feeding on the wool. She collected 3 of the insects and took them to Adam Yates of NT Government Megafauna Museum.

He wrote: 'I'm reasonably confident they are *Omorgus insignicollis* a rather common species in Alice Springs (pers. obs.), broadly distributed across inland Australia with records from NT, NSW and WA'.

P.S. Anyone wanting to discard mats of large cotton, jute or other natural materials please get in touch with <u>fiona.walsh2011@gmail.com</u>



Arrulenye, Lyetenye - Old way, New way: An Ethnobotanical study into the contemporary use of traditional medicines of the Arrente community in Alice Springs.

March speaker night – Sam Hussey & Myra Gorey

Report by Julie Taylor, photos kindly provided by Sam Hussey

Samantha spoke about a project from 2009-2012 involving research towards her Master's degree.





Eremophila duttonii (Aherre-Intenhe) image credit: Mark Marathon, Wikimedia Commons, 2014

Preparing the Eremophila

Her interest is in bringing together knowledge from the older traditional ways of preparing medicines with the living knowledge as currently practised. She says it is a dynamic relationship in which the known ways are always evolving. This meant assessing processes used before and after European settlement, such as the introduction of metal billycans which enabled boiling. Did this make a difference to the effectiveness of the end-product or not?

The study involved:

1. ETHICS / RELATIONSHIPS

Firstly, time was taken in getting to know people involved in collecting and processing of plants, building friendships based on trust so that over time, information was shared.

- a) Cross-cultural issues: Sam worked closely with Myra Gorey, an Indigenous colleague with similar interests.
- b) Inter-generational issues: They spoke with older people as well as younger people about their collection and processing of plants for medicines. For example, young people take jars to collect the plant material and tend to use oils in processing, while older people use their hands to process the collected plants and may mix them with fats (eg. kangaroo, goanna).
- c) Intellectual Property (IP) concerns were an important issue and needed to be clarified.

2. DOCUMENTING OF PRACTICES

There was noting all the changes in practices over the generations and covering of inconsistencies discovered in the literature.

3. BIOLOGICAL INVESTIGATIONS (Macquarie University, NSW)

The aim was to compare different preparations using anti-microbial assays. The plant used for the study was *Eremophila duttonii* (Aherre-Intenhe). It is used as an antiseptic wash and is known to have anti-Staphylococcal properties. Fresh leaves are collected then processed with either water (for washing solutions) or with fats/oils for ointments used to soothe muscle/joint pain.

Experimental design

For the study, only water (no fats or oil) was used to mix with the collected leaves.

- a) Boiling for 10 minutes vs. soaking for 24 hrs in cold water
- b) Young leaves (from top of plant) vs. mature leaves (at bottom of plants)

Alice Springs Field Naturalists Club

- c) Dried leaves vs. fresh leaves
- d) Shelf life measuring the strength over a period of 2 months.

In the laboratory



Amounts of 10g of leaves were weighed and placed into lidded tubes then agitated before being dried down, using lab equipment. Staph bacteria cultures were prepared in Petri-dishes with appropriate gel-medium to provide the microorganisms needed to test the activity of each different herb mixture. To test each of the different ways of processing the herb mixtures, bacterial culture was placed into the tubes and incubated for 24 hours:

- o Control solutions containing Staph bacteria with no medicine
- \circ $\;$ Test solutions of medicine prepared in different ways as above, and
- \circ $\;$ Strong medicine vs. weak medicine over 10 steps of decreasing strength.

Results

- \circ $\;$ Boiling produces stronger antimicrobial activity than soaking.
- Young leaves have stronger antimicrobial activity.
- \circ $\;$ Difference between using fresh or dried leaves is insignificant.
- Shelf life not really applicable: it's best to use fresh. Not measured due to drying out of prepared mixtures.

The **Akeyulerre Cultural Healing Centre** in Alice Springs prepares and sells various preparations of Arrente medicines. Some samples of ointments were brought along by Sam to show. They are used to soothe irritated skin, or as chest rubs, or to soothe muscle & joint pain, and each has its own particular aroma. They are also available to purchase from the OPBG Gift Shop.

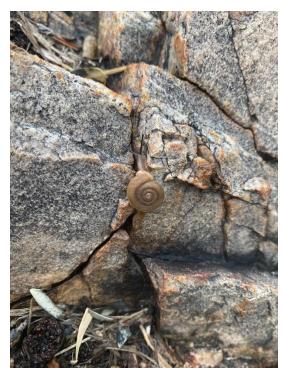


Snails of Central Australia

Bec Duncum

From the early days of tending a central Australian garden, I have been surprised by the variety of snails I find. I particularly like the ones with small conical shells, having no idea if they're meant to be here or not. As a gardener, snails aren't usually 'friends', often munching away on the greenery I am wishing to harvest! But I find them interesting all the same.

Since working for Parks and Wildlife, I have learned about some other special snails that live in our area, ones that have a particular association with our Wild Fig (*Ficus brachypoda*). I have researched them a little, just for my own interest and discovered that the snails that live at Emily Gap (*Anthwerrke*) and Jessie Gap (*Atherrke*) are endemic to each of those places (with more recent evidence increasing their range ever so slightly). They live at Yeperenye / Emily and Jessie Gaps Nature Park and pretty much nowhere else. They are called the Emily Gap Squat Snail (*Catellotrachia emilia*) and Jessie Gap Squat Snail (*Catellotrachia emilia*) and Jessie Gap Squat Snail (*Catellotrachia emilia*). Both are listed as vulnerable under the *Territory Parks and Wildlife Conservation Act 1976*.





Over the years I've lived in central

Australia and exploring our Parks and Reserves, I had seen many empty snail shells, usually under fig trees, but never a live specimen. Like many snails, they only come out when it's raining. So, on a cool, rainy day I took myself out to both Emily Gap and Jessie Gap to search for snails – aiming to get some photos for the Parks and Wildlife image library.

First stop was Jessie Gap. The figs here are still in good condition and have escaped the recent fire that swept through the area. There is very little Buffel Grass under the figs, thanks to a continued effort by the dedicated Rangers who look after this Park. (I did take the time to remove some small seedlings which had recently germinated). It didn't take me long to spot my first snail specimen and once I got my eye in, I found several more, cruising slowly, mainly on the rocks underneath the figs. The thing that struck me was the way their shell sat flat across their back as they moved (instead of being upright). My 'cup' was full, I had seen and photographed my first snails!

I moved on to Emily Gap, hoping to have the same success. I immediately noticed a very different situation. The figs were in very poor condition, possibly still recovering from a fire a few years ago. One large tree had fallen and died. I had to wade through knee high Buffel Grass to get to some of the figs. I knelt down and waited patiently for some movement

on the rocks or in the leaf litter. Finally I spotted one, but it was the only one I would find at Emily Gap. Admittedly, it wasn't raining heavily and maybe with the continued rainfall, more would appear but the difference was obvious. I was disappointed but not entirely surprised.

All in all, it was a good morning's outing with images collected for the image library and me successfully finding my first live snails at Emily and Jessie Gaps.

For more information on these fascinating creatures, visit:

Threatened species of the Northern Territory - Emily Gap squat snail (Semotrachia emilia)

Threatened species of the Northern Territory - Jessie Gap squat snail (Semotrachia jessieana)

11 - 04 (alicefieldnaturalists.org.au)

Photo credit: Parks and Wildlife NT

French connection – Olive Pink

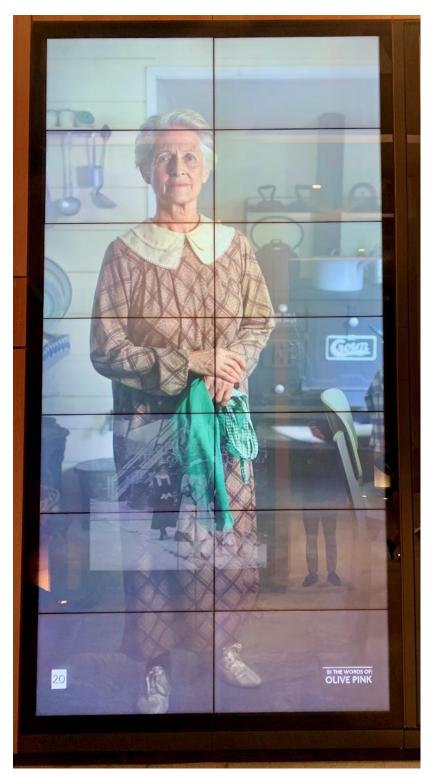
What a surprise Report by Lisa McLean

At the risk of boring readers with more stories of our travels, here's a tale from the north of France, specifically the *Sir John Monash Centre*. The Centre is a facility dedicated to honoring Australians who fought in the First World War on the Western Front, as well as those who were impacted by the war. It's close to the village of Villers-Bretonneux and stands within the Villers-Bretonneux Australian National Memorial and the military cemetery.

The Centre has a magnificent exhibition, complete with video vignettes with actors telling personal stories, alongside photos and memorabilia. These are featured as part of a display "Fates" and illustrate the fates of Australians after the experience of war, for those who went to the battlefields and those who stayed in Australia. It shows the different impacts of the conflict on the lives of many Australians. The images in colour are reenactments especially designed for the Sir John Monash Centre.

I was surprised that our very own Olive Pink was represented in the display. A screen about 3 metres high, showed an actor playing the role of Miss Pink and telling of her devastation and the long-term impact of losing her 'very dear friend" Harold Southern, a fellow artist who was killed at Gallipoli in 1915. In the video vignette Miss Pink is represented as rather 'domestic' which I felt didn't quite impart the persona or truly represent who she was. If you're in the region, drop into the Centre and have a look! And maybe give them some feedback about the true nature of Miss Pink.





ALICE SPRINGS FIELD NATURALISTS CLUB SPEAKER NIGHT

Wednesday 10 April 2024 7.00pm at Olive Pink Botanic Garden

ANGUS NEWEY

Hunting strategies of desert raptors targeting budgie flocks



Angus notes: "During the wet years of 2021 and 2022 I was able to observe big flocks of budgies (10 thousand plus) at various dams around Alice Springs. These flocks drew the attention of many different raptor species. As an animal trainer and wildlife photographer it was the highlight of my birding life watching species such as grey falcons stooping in at amazing speed in an effort to grab some lunch".

Please join us for Angus's talk and photos, and for supper afterwards

Visitors welcome



Wallaby Gap

Saturday 20th April 2024. 8.00 am start

Medium/high clearance 4WD essential due to humps/berms across the track

8.00 am meet at Flynn's grave to rationalise 4WDs and passengers. Continue to locked gate 3 km west along Larapinta Drive. 20 mins drive north into carpark, short walk from rotunda to explore the Gap or a steep walk – less than 1 km – up to the first crest on Euro Ridge for a spectacular view. This latter walk is estimated to take 1.5 hours, all up. Half an hour for morning tea (BYO) and home by lunchtime. We will all have to enter and leave together, due to the locked gate. Leader: Neil Woolcock

Please let Neil know if you have a medium/high clearance 4WD and can take passengers, or if you don't have a 4WD and need a lift. We'll try to minimise the number of 4WDs. Neil: 0428 521 598

