

May 2024

Alice Springs Field Naturalists Club Newsletter



One of the spectacular images from Angus Newey's talk at the April speaker night: Black falcon (*Falco subniger*).

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
Speaker night report: Budgies and raptors	р. З
'Seeing' in the dark: Night parrots	p. 5
Wallaby Gap trip	p. 7
The Potter Wasp	p. 8
Speaker night flyer – Glenn Edwards	p. 10

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

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 June 2024. We appreciate all contributions, articles, and photos both local and from elsewhere. Please have them to Lisa McLean lisamclean@outlook.com by **20 May 2024**.

ALICE SPRINGS FIELD NATURALISTS CLUB

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

May 11th – A morning field trip to see Arumbera Range fossils. Leader Pete McDonald. Departure time TBA.

May 12th – ASFNC planning meeting 1.30 pm @ 1 Cowle St, Gillen. Everyone welcome. If you have suggestions for speakers / trips and can't attend, please email Lisa <u>lisamclean@outlook.com</u>

AUSTRALIAN PLANTS SOCIETY – ALICE SPRINGS

apsalicesprings@yahoo.com.au

Wednesday 1st May —7.00pm. Suzanne Lollback will take you through the basics of how to identify plants (using Acacia as an example) and where to find some information to help you. The talk will be followed by a practical session at Olive Pink Botanic Garden on Saturday morning.

Saturday 4th May – 8.00am. This session is for those who attended the talk on Wednesday night.

Alice Springs Field Naturalists Club Committee Members

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 Member	<u>s</u>		
Wendy Mactagga	rt	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

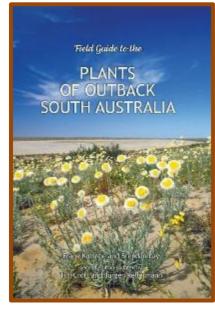
The Club is looking to appoint a Vice-President. If you would like to contribute your time and join the enthusiastic group who keep things rolling, please get in touch with Marg Friedel.

Thank you

Thanks to all contributors this month: Charlie Carter, Angus Newey, Suzanne Lollback, Marg Friedel, Colin Leel.

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.



Field Guide to the Plants of Outback South Australia, second edition

Authors: Frank Kutsche and Brendan Lay (second edition updated by Tim Croft and Jürgen Kellerman)

This comprehensive field guide draws together the knowledge of the more common plants within the outback region of South Australia. It has been designed with all interest groups in mind by using non-technical terms.

The guide is supplemented with a description of landforms and habitats, a glossary and comprehensive index. Around 356 of the most common plants are described and illustrated (incl. 24 introduced weeds). More than 200 of these plants are featured with full page descriptions.

Distribution maps are provided, and all species are arranged by their life form (trees, shrubs, forbs, grasses, climbers) for easier identification.

This new edition has been completely reformatted and newly type-set, all plant names have been updated and 10 more species were added to the book.

\$44.00. The book can be purchased online here

Angus Newey – Hunting strategies of desert raptors targeting budgie flocks

Alice Springs Field Naturalist Speaker Night

Charlie Carter, with photos supplied by Angus Newey



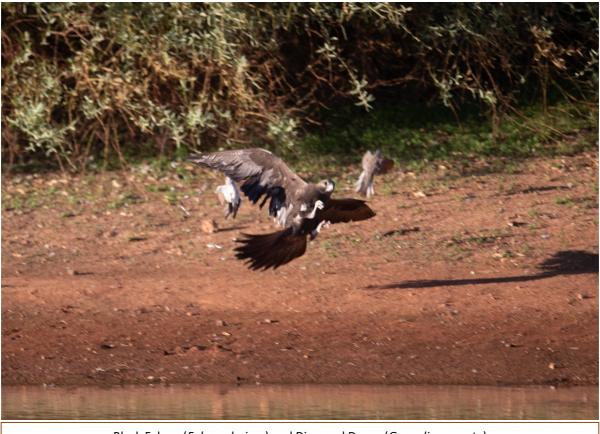
Grey Falcon (Falco hypoleucos) with a captured Mulga Parrot (Psephotus varius) in its grasp

Alice Springs Field Naturalists Club speaker night, Wednesday 10th April featured a talk with pictures of the hunting strategies of our local raptors chasing Budgerigars (*Melopsittacus undulates*). The room at OPBG was packed and all enjoyed a fascinating night.



Angus Newey is a bird trainer, handler, and presenter at the Desert Park, and obviously an avid birdo and photographer.

He started with the Grey Falcon (*Falco hypoleucos*)*. He was fortunate to find a pair of these very rare birds, and to be able to watch, follow and photograph them for some time, and concluded that they are two sisters. Greys are obligate feeders on small birds and used high speed sneak attacks on budgies at waterholes.



Black Falcon (Falco subniger) and Diamond Doves (Geopelia cuneata)

Peregrines (*F. peregrinus*) are larger, and very fast, with the females not agile enough to hunt budgies, while the males can. They are sometimes called 'duck hawks" and their favourite prey are ducks and pigeons. I have seen one take down a Black Duck in Ormiston Pound.



Black Falcons (*F. subniger*) are Australia's largest falcon with females up to one kilo in weight. They have a long tail and are very manoeuvrable but will also hunt budgies. They will also hunt quail, button quail, chats, and other ground feeding birds.

They also often bully other birds to steal their catch.

The Australian Hobby (*F. longipennis*) no, not that, it has two ns, means long feather. They have a long tail, and are small, fast, and very agile, and keen budgie hunters. They fly low and between trees, and perch in trees to hunt and eat their prey. This makes them vulnerable to bullying and theft of their catch. Goshawks and Collared Sparrowhawks (*Accipiter cirrocephalus*) are not usually budgie eaters, nor are Spotted Harriers (*Circus assimilis*).

Whistling Kites (*Haliastur sphenurus*) eat anything and everything and can also be thieves! They're known more as hunters around waterways on the east and northern coasts. Black Breasted Buzzards (*Hamirostra melanosternon*) eat mainly chicks and eggs. Missing from the talk (unless I missed it) was the Australian Kestrel (*F. cenchroides*) one of our most common falcons, but they apparently rarely chase or eat small birds.

Fabulous photos, and an entertaining presentation.

* Specific names from Birds of Prey of Australia (Stephen Debus, 2019)



'Seeing' in the Dark

Marg Friedel

Ever wondered how the Australian Night Parrot (*Pezoporus occidentalis*) navigates at night? Has it evolved sharper eyesight than its near relations, the Eastern Ground Parrot (*Pezoporus wallicus*) and the Western Ground Parrot (*Pezopurus flaviventris*), that forage by day? Has it developed the same strategy as the only other strictly nocturnal parrot in the world, the New Zealand Kakapo (*Strigops habroptila*)?

It seems not. Recent research on a skull has shown that the Night Parrot's eyes, optic nerve foramina (spaces for the nerves to pass through the skull) and optic lobes of the brain were small compared to its Ground Parrot relations. Hence it probably has poor night vision. The Kakapo has a highly developed sense of smell, but the evidence is uncertain for the Night Parrot.

Newer research using CT-scans of the holotype skull suggests that the Night Parrot has enhanced hearing to help with navigation. One distinctive feature is enlarged 'exoccipitals', which are the bony external walls of the ear cavities. Another is 'bilateral asymmetry', not observed in any other parrot species, where the skull bulges more on the right side than the left. Further, the right and left ears are asymmetric, and they are located further forward and higher on the skull than in other

parrot species. The right ear is oriented more forward than the left, while the flatter left ear tilts slightly upwards. The left 'exoccipital' is slightly larger than the right, suggesting the volume of the ear cavities may be different.



The evidence is presently insufficient for conclusions about the Night Parrot's sense of smell, although it's noted that the bony 'nares' are very large and elongate, proportionately more than in nearly all compared taxa.

The researchers suggest an evolutionary trade-off between hearing and vision. The Night Parrot probably had an enlarged cornea relative to overall eye size, which would maximise the amount of light entering the eye. This would increase nocturnal visual sensitivity but not acuteness. The eyes don't appear to be more forward-facing than those of the Ground Parrots, unlike the Kakapo. The researchers say: "The uniquely enlarged exoccipitals, which occupy more of the skull than any other parrot species examined, may act as resonance chambers, amplifying the volume of sound transmitted to the inner ears, while the asymmetries of the ear regions suggest that directional hearing may be more important than previously realised."

Owls have asymmetrical ears in the dorso-ventral plane, allowing them to pinpoint prey in a vertical plane while in flight. Unlike the owls, Night Parrot ears have latero-medial asymmetry (right ear facing forwards, left ear tilting slightly upwards), helping to pinpoint sounds in the horizonal plane and possibly the vertical plane as well. Hence, they seem optimised to collect sound at ground level, especially since there is no downwards orientation for the ears.

The researchers conclude that enhanced directional hearing "could help to explain the extreme elusiveness of the Night Parrot, which may be very efficient at detecting the direction of approaching humans" and could account for traditional Martu stories about the secretive nature of the bird.

Reference

Elen R. Shute, Alice M. Clement & Gavin J. Prideaux (2023): Cranial adaptations of the Night Parrot (*Psittaculidae: Pezoporus occidentalis*), a cryptic nocturnal bird, Emu - Austral Ornithology. <u>https://doi.org/10.1080/01584197.2023.2181185</u>

Shute and colleagues also note that nocturnal calling by Night Parrots plays a major role in their communication. To hear some of their calls: <u>https://nightparrot.com.au/index.php/resources/night-parrot-calls/</u>.

Beaten back by buffel!

Trip to Wallaby Gap – Saturday 20th April

Lisa McLean

A delightful trip of a short walk to Wallaby Gap was cut short as we were beaten back by buffel grass. Led by Charlie Carter, our small group of two vehicles drove along the rough track from Larapinta Drive for about a kilometre, with Witchetty Bush out in full flower, as were various Mulgas. From the rotunda it was a short walk toward Wallaby Gap, over a few rocks and water holes (with tadpoles!) before getting beaten back by buffel grass. Unable to see the track, it was a little too unsafe to continue. While this was disappointing, it was a magnificent morning in the shadow of Euro Ridge.

Euro Ridge is made up of large slabs of granite tilting at 45 degrees and is a significant part of the Euro dreaming story. For some of us, these trips are just an excuse to have morning tea with delightful company in delightful surroundings – and this trip certainly met the brief. With thanks to Charlie C., Peter B., Wendy M., Suzanne L., Max and Sue O., for their contributions to a short but sweet field trip. Also, thanks to Neil W. for the initial organising of the trip, it's a shame Neil couldn't make it.



Wallaby Gap

Suzanne Lollback





I had never been into Wallaby Gap before, so I was pleased to see what plants were in the area.

Along the way there were a few *Hakea lorea subsp. lorea* (Long-leaf Corkwood), which were in various stages of bud with the occasional flower fully out. The *Acacia aneura* complex (Mulga) and Witchetty Bush (*Acacia kempeana*) were in full flower and golden in the sunlight. The resurrection ferns *Cheilanthes lasiophylla* (Woolly Cloak Fern) and *C. sieberi* (Rock Fern) were still unfurled under many of them and in the shade of rocks.

On the walk to Gap, one plant that stood out for us all was a pink/purple-flowering pea that was spread over the granitebased rocks. While I was confident it was a Tephrosia I did not know which species it was. I took some close-up photos so I could see the detail, however, after looking at my limited references and not getting a definitive identification, I referred it to Dave at the Herbarium. As it turns out he is also waiting for identification from the Tephrosia expert in Western Australia who has done a number of studies on the genus. All will be revealed in due course, in the meantime I am pleased to have seen it and to share photos with you. At the creek itself, the strong aromas of Melaleuca glomerata (Inland Tea-tree), which lines the creek, and Stemodia viscosa (Sticky Blue-rod) hung in the air.



Witchetty Bush (Acacia kempeana)

Long-leaf Corkwood (Hakea lorea subsp. lorea)

While we were sitting enjoying our morning tea I was delighted to see a number of native grasses, in particular the coppersheen of Aristida contorta (a three-awn grass) that was shining in the sun.

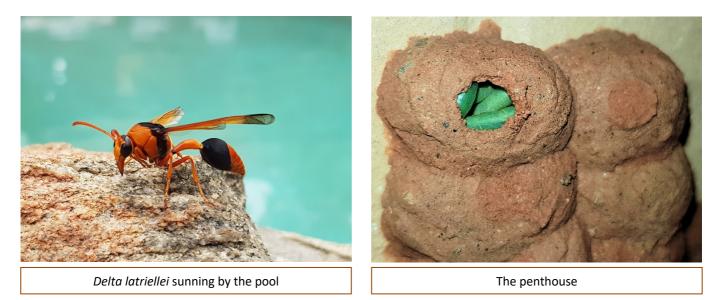
Delta latreillei (the Potter Wasp)

Colin Leel



Every year in Alice Springs we are treated to the appearance of the Potter Wasp (Delta latreillei), a solitary, large and striking looking wasp with vivid orange and black colouration, that is rarely aggressive if left alone. Often when I am trying to photograph them (usually on my mobile), I can sense if they become agitated, and so I slowly step back and leave them alone. When I do approach them to try and get a photo, I move slowly, try not to cast a shadow over them and try to be at arm's length with my camera phone. If they are particularly pre-occupied with a task such as applying mud to the mud nest or stuffing a caterpillar into the nest, it enables me to get near enough for a few close-up photos.

These Potter Wasps have adapted to living with us humans. Both at my workplace and home, I often see them building their mud nests (hence their other common name of Mud Wasp). Observing them build their mud nest is a treat. It appears that they will build their nest just about anywhere, but of course, usually where it is a bit sheltered, down the side of the building, on the front porch of your house, behind rocks and under BBQs, and on the ground near your front door (sheltered by a flowerpot). They do need access to water, whether it is from your bird bath, fishpond, or swimming pool, as they require the water to mix with the clay/sand they use for their construction work. Of course, a miscalculation with a swimming pool can get them caught in the surface water tension of the pool, but usually they are pretty clued in. I caught this one just resting on the rock next to the swimming pool for several minutes (allowing me to casually get close with my mobile phone camera for a few photos).



Back to their building prowess... maybe they should be called the "Builders' Wasps"... as there are some amazing builds by this group of wasps. Typically, like some human urban developments, some mud nests will look the same. Some of course will vary, depending on the site and the material (different colour mud/sand). And in the good times, some mud nests just seem to grow and grow, like a housing block where you just keep adding another studio apartment (check out the blog: a penthouse with a view....)



Megachile aurifrons (the Golden-browed Resin Bee)

Paralastor wasps using the mud nest

For those growing tasty garden vegetables, these wasps are handy to have around. They prey on caterpillars, taking them back to the mud nest as food for the next generation of wasps. It is amazing to see them stuff the caterpillars into the nesting cells. A wasp egg is placed into each cell and once the cell is stuffed with caterpillars, the cell is capped and sealed with mud. At the right moment (I still haven't captured the moment), a newly hatched wasp breaks through the cap to emerge from the cell. The only evidence left, that they were there, is an empty cell.

Now that is not the end of the story with the mud nests. Whilst I have witnessed some mud nests used by the same species of wasps over a couple of seasons, there are other species of insects that check-into and re-use the empty cells for raising their own young. Smaller species of *Paralastor* wasps (that create these unique funnels [photo above] on the mud nest, through which they lay their eggs) and *Megachile aurifrons* (the Golden-browed Resin Bee), also like using the vacated mud nest cells to lay their eggs, capping the cells with a resin-like material.

You can check out more information on <u>https://ausemade.com.au/flora-fauna/fauna/insects/wasps/potter-wasp-delta-latreillei/</u>







ALICE SPRINGS FIELD NATURALISTS CLUB SPEAKER NIGHT

Wednesday 8 May 2024 7.00pm at Olive Pink Botanic Garden

Glenn Edwards

Senior Director Species Management, Dept Environment, Parks and Water Security

Reflections on feral animal management in central Australia over 30 years

Please join us for Glenn's talk, and for supper afterwards

Visitors welcome