



August 2015

Alice Springs Field Naturalists Club Newsletter



Alcoota sphinx fossil; Photo by Lee Ryal

Meetings are held on the second Wednesday of each month (except December & January) at 7:00 PM at Higher Education Building at Charles Darwin University. Visitors are welcome.

**Postal Address: P.O. Box 8663
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Web site:

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

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NEWSLETTER

The deadline for the next newsletter is Friday **21 August 2015**.
Please send your contributions to Barb Gilfedder bjfedders@gmail.com
Please **send photos and text separately** as combining them causes formatting issues.

ALICE SPRINGS FIELD NATURALISTS CLUB

Contact: contact@alicefieldnaturalists.org.au

- Wed 12 August** **Annual General Meeting (AGM)** 7.00pm at Charles Darwin University Higher Education Building lecture theatre. This will be followed by a short break for supper. At 7.45pm we have an interstate speaker, Kirsti Abbott "School of Ants Australia: heads down, bums up for citizen science". If you do not wish to attend the AGM, just come at 7.45. The talk will be very special and too good to miss.
- Sat 15 August** **A wander through the Intertexta Forest.** This ALEC "Biodiversity Matters" event is hosted by ASFNC. Meet at turn off to claypans from Ilparpa Road at 4pm.
- Sun 16 August** **Planning Meeting** 2.00pm at Gilfedders' house, 33 Battarbee Street. All members welcome.
- Sat 22 August** **Talk by Tim Low** to a combined group of ASFNC and APS Members and Friends of OPBG at 3pm at the Olive Pink Botanic Garden. **See notice on page 8**
- Wed 9 September** **Meeting** 7.00pm at Charles Darwin University Higher Education Building lecture theatre. Talk by Ben Beeton - The ecology, geology and deep time history of landscapes in art form.

AUSTRALIAN PLANTS SOCIETY

Contact: **APS Secretary** Jude.pringle@nt.gov.au

- Wed 2 September** **Meeting** 7:30 Olive Pink Botanic Garden. Presentation by botanist Peter Jobson about his recent trip to the Washington State desert, USA.
- Sun 20 September** Visit Helen Kilgariff's block.

BIRDLIFE CENTRAL AUSTRALIA

Contact: birdlifeca@gmail.com

- Wed-Sun 19-23 Aug** **Red Centre Bird Festival** - A range of birding activities for everyone, presentations, art and photography workshops and competitions at Alice Springs Desert Park and around town www.alicespringsdesertpark.com.au
- Wed 26 August** **Birdlife Monthly Branch Meeting** at Alice Springs Desert Park Meeting Room 7pm. Presentation 'Indigenous language bird app project' by Margaret Carew. All welcome. Visitors may choose to leave after the presentation or stay for the meeting if they wish.
- Sun 6 September** **Birdlife Social birdwatching outing.** Meet at Alice Springs Waste Stabilisation Ponds gate off Commonage Road near tip at 8am. We may then drive to a different location as a group. Free for members of Birdlife Australia, gold-coin donation for non-members. All welcome. Experienced birders will be on hand to assist beginners.
- September 1-5** The Fifteenth Conference of Australasian Vertebrate Evolution Palaeontology (CAVEPS) will be held in Alice Springs this year, hosted by the Museum of Central Australia and the Strehlow Research Centre. **See notice on page 4**

Alice Springs Field Naturalists Club Committee Members

President	Barbara Gilfedder	8955 5452;	Public Officer	Rhondda Tomlinson	8953 1280;
Vice-President	Lee Ryall	8953 6394;	Property Officer	Rosalie Breen	8952 3409;
Secretary	Charissa Allan	0400 343241;	Committee member	Connie Spencer	8952 4694;
Treasurer	Neil Woolcock	8955 1021;	Website and Newsletter	Pamela Keil	8955 0496.

July Speaker: Doug McDougall report by Jill Brew

Conservation at the Werribee Open Range Zoo through the eyes of a horticulturalist

Doug took us to Werribee Zoo, south-west of Melbourne as it was when he first began work there 17 years ago, and then took us through changes attuned to conservation of native species and rehabilitation of degraded areas, during his eleven years there. These changes were put in process by design, zoo employees and volunteers.

Doug spoke in detail about grassland conservation. Werribee-Keilor Plains were grasslands, part of 2 million hectares of grasslands in south-east Australia; now there is less than 1% left (and this is under threat.) Farming (hard hooves, grazing to the roots, sowing of crops) clearing for housing and other development, and the introduction of weeds have contributed to loss and degradation. A quotation from 1862 noted that Kangaroo Grass, 'succulent' for stock, would 'soon be exterminated'. Remnant grasslands are in rail reserves, cemeteries, gazetted reserves and private holdings (the largest reserves).



Golden Sun Moth – *Synemon plana*



Southern Bell Frog

At the zoo, removal of weeds and planting of native species was undertaken. The critically endangered Golden Sun Moth (*Synemon plana*), which feeds on the roots of Wallaby Grass, is one victim of loss of habitat. Doug explained how Werribee Zoo undertook a three-year project to plant Wallaby Grass (successfully done, with extensive spraying of weeds, planting plugs of Wallaby Grass, and erecting a timber fence to keep animals out) and to move moths in 2001 from Mount Piper (one of the moths' remaining 5 locations) into this new area. Female moths, which live for 3 - 4 days breeding and laying eggs, after 2 - 3 years underground as a grub, and are difficult to find, were caught with butterfly nets. They were transferred to the new sanctuary, but the colony did not survive. A suggestion was that there was a fungus on the roots of the grass. Doug pointed out that grasslands are complex ecosystems that can't be relocated: conserve what is left.

A project to restore the Werribee River and its wetlands was launched in 2000. The wetlands had previously been drained and the red gum forest logged. Volunteers (Friends of the Zoo) made significant contributions to this project, which included removal of noxious weeds like *Juncus acutus* (Spiny Rush) and *Rubus fruticosus* (Blackberry) with herbicide, physical removal or burning, brush cutting and bulldozing. Along with revegetation along the river, a walking trail was made.

Other removals were Chilean Needle Grass and spiky African acacias originally planted around the zoo for African flavour. (Australian acacias clipped appropriately have been substituted.)

To help native plantings to survive, rabbit-proof fencing was set up in one area called the 'lower savanna' and in time it's planned that the whole zoo will be proofed this way. Electric fences and 'hot wires' around trunks protect trees from browsing.

Animal and bird life – frogs (the Growling Grass Frog and the Southern Bell Frog are two), Platypus, Tiger Snakes, Echidnas, Sugar Gliders, Whistling Kites, Blue Wrens and Swamp Hens, for example – have habitat in the restored zoo environs and are establishing themselves.



Chocolate Lily – *Arthropodium strictum*

Thanks to Doug for sharing some of the backstage stories of the efforts to make changes at the zoo, emphasising recognition of the values of the natural landscape and species.

Alcoota Weekend August 2015 Comments by visitors

Jocelyn Davies

One highlight for me:

Adam Yates' knowledge was impressive and his passion contagious. It was great for well-informed imagining about when and how the present day landscape and its fossil beds got there.



Jodie Clarkson and Family

When I arrived in Central Australia in 1996 I met Dr Peter Murray and Ian Archibald, on a number of occasions at the Museum of Central Australia to learn about the mysteries of the past they were discovering at Alcoota. I shared these stories with my team of Guides at the Desert Park so that they could share them with the visitors. Alcoota has always had an air of magic about it. The opportunity to visit was a dream come true. Sharing the experience with my mum, Terry, Scotty and Jacob was a treat. Jodie

Alcoota- a place where the past is fascinating and the present is a thing of profound beauty. Scott Pullyblank

Thanks Dr Adam for letting me dig up and keep some really really old bones. Jacob Clarkson

Impressions from Alcoota Lee Ryall

The animals themselves dominate, led by those huge birds, their maximum weight now revised upwards from half a tonne, their enormous bones filled with a feather-like texture that incredibly did the job of supporting such massive creatures. Then there were the Diprotodontids - including the sheep-like *Kolopsis* whose numerous jaws and worn down teeth testify to a lifetime of mob browsing. Their skulls form delicate arches, intermingled and seemingly inextricable in death but now glow under a slow and careful process of extraction and preservation. An *Ilbandornis* foot bone lies in the sand, its rounded shape bringing a miniature sphinx to mind.

Less common animals beg for attention as well - tiny fractions of massive crocodiles, the solidity of the ornamented bone proclaiming these monsters' position at the top of the food chain. People also found fragments of *Hadronomus*, a primitive kangaroo, the marsupial lion *Wakaleo* and snake-necked tortoises. Other tiny pieces of bone led to stories of *Thylacinus potens* - built like a Tassie Devil with a massive head and a small body, spreading panic as it picked off the weaker of the more peaceable browsers.

Other impressions clamour for attention. Cowpat Hill's distinctive strata radiated a range of oranges as the sun set. Shortly afterwards, Venus and Jupiter were fighting for attention in a night sky thick with stars. Waking late at night, snug in a swag, revealed the desert draped in moonlight. In the mornings, sunrise was presaged by a line of fierce red across the eastern skyline which progressed through orange, gold and yellow-blue as the daylight grew.

Many people had been coming to Alcoota for years - Peter Murray, Ian and Jared Archibald, Peter Latz, Louise Kean and of course, Adam Yates, so there was talk, too - talk of past digs, of birds and animals, of plants, bush medicine, geology and palaeohistory, of cameras and photography, of books and anime.





Zebra Finches rejoiced in the water by the field kitchen and took up residence, their noise a chattering background to each meal. Budgerigars flew in. Diamond Doves quarrelled over a precious find. Chasing after a Bourke's Parrot sighting led instead to Mulga Parrots. A young Triller taunted us from the bushes by the camp. Ian Archibald and a Goshawk startled each other near the water tanks. In the pre-dawn a Black-shouldered Kite hovered and retreated to a nearby tree, turning pink in the early light.

In the pit there was glorious stretching after crouching over tangled fossils and ironical despair as yet another bone intruded on a seemingly inextricable mass of pieces. There was also the chance to watch experts at work, the excitement of '...maybe a piece of bird beak?' and, again

and again, the sheer pleasure of working on a lump of dirt, glue and shards to reveal a small but exquisite piece of an animal that lived and breathed 8 million years ago.

Plant walk with Peter Latz Rosalie Breen

Peter, always a mine of interesting information and entertainment, did not disappoint. He said he has identified 44 different native grass species in this area, hardly a Buffel grass plant in sight as he has been successfully waging war against it for years. There are two main grass species on the cracking clay soils. Barley Mitchell Grass, *Astrebla pectinata* and Hoop Mitchell Grass, *Astrebla elymoides*. The common Woolly Oat Grass *Enneopogon polyphyllus* was there and also *Enneopogon cylindricus*, Limestone Oat Grass, whose seed heads break off easily. *Paraneuachne mitoe* is a rare and ancient grass. In the south of NT, it is found in a few locations, including around the fossil site. Alcoota reserve has been made an official reserve for its protection.



Aboriginal people used many plants for medicines, and still use some. Most are made into concoctions for gargling such as *Eremophila freelingii*, which was growing on the hill slopes. Peter said plants are useful for other things too. He said the mat ground cover plant *Euphorbia drummondii* can be useful if you forgot your hat or if you are a bit shy as a pubic covering! This plant too is the girls' plant. Purple flowered Ptilotus species are the sex totem for boys. The girls like to tease the boys by pulling off bits of Ptilotus and of course the boys do the same to the girls' plant.

The animals which were living in this area were predominately browsers. Plants adapted to this. Conkleberry juveniles have prickles and bitter leaves which stopped new plants from being eaten. Native orange trees too are a bit ferocious when young. The Supplejack tree starts life as a vine which grows up inside another bush or tree for protection before it matures. *Acacia victoriae* is interesting. Its present day shrubs are either thorny or not. When the land became drier grazers took the place of browsers and some genes of the *A. victoriae* for prickles, were left behind, as they did not need the thorny protection. But now there are new browsers, camels, and plants with genes for thorns are being selected again.

Peter also pointed out how upsetting an ecosystem can have devastating effects. Mistletoe is killing off some trees now because previously possums would be eating it to keep the balance. Quandongs are dying out because there are no brushtail bettongs to bury seeds for later germination. Humans are reducing the trees too, especially along roadsides, as the wood is cut down, and seeds collected for making tourist artefacts.

Peter philosophized, "We can't understand the present if we don't understand the past".

Food for thought.

Alcoota Meg Mooney

A clump of grains
the size of a match head
falls off
then another
soon I can see a flattish surface
streaked grey
slightly polished
the size of my thumbnail

I dig carefully with my fine chisel
a more experienced volunteer
tells me to do one grain at a time
I don't take that too seriously

half an hour later
I've exposed most of one side
of a tibia
from a small marsupial

I hold the little leg bone in my hand
to chip off silt cemented along its edge
drip acetone over the silt
so it falls away under my chisel
like wet sand

then I cradle the leg on a mound of sand
drizzle the acetone with dissolved plastic
into cracks in the cleared bone
to harden it for packing –
with an hour or two between drizzling
the plastic will strengthen the bone
but drizzle too often (to break up silt)
and the acetone will dissolve the plastic
from previous applications
the bone will fall apart along fractures –

everyone here has had disappointments like this
thousands of years in clay soil have cracked
every bone in the jumble in the pit

so each has to be hardened before it is removed –
the clay also worked bones to the surface
so people found them

it's the strong that have survived
to be dug out – legs, jaws, the occasional pelvis
and breastplate, a precious skull
mostly birds, including the largest known,
sheep to rhino-sized marsupials who chomped
bushes and trees, crocodiles, marsupial lions, the odd turtle

as I squat, I talk to my friend
across the sand mound
where a dozen or so cleaned bones are carefully nestled
legs and jaws, one with back molars still sunken –
a young one in a pouch
the bones glitter with acetone
under a sun they haven't seen
for millions of years

a few other volunteers, one expert
work near us in the pit itself
don't say much, peer, scrape
follow grooves and hollows
where muscles attached

I think of the scientists
in the other pit, old men
who've been coming here for decades

something of these ancient animals is in all of us now
they're part of this place
the jokes and camaraderie around the campfire
the earnest questions, cheeky replies

and the spirit of these creatures
works into recent cracks in me
so when I leave I feel almost in one piece again



Old Hamilton Downs Youth Camp: Christmas in July

Connie's Highlights

- The Chewings Ranges as our backdrop for the weekend. What a “vision splendid” they are with the Old Hamilton Downs Homestead in an impressive setting.
- How privileged I feel to be part of such a terrific group of Field Naturalists. It was a truly wonderful evening spent with friends partaking of Christmas fare in July. The weather was certainly right for the occasion! All great fun and I ate far too much!
- Two excellent walks with much discussion amongst us of all things natural. I loved the buzz of interested and knowledgeable chatter.



Barb

What a pretty setting and lovely old buildings, everything well cared for, clean and tidy.

Saturday afternoon, while the others climbed the hill for the view, I found a lovely sunny spot out of the wind and relaxed watching various sizes of little red bugs going about their business.

The meal was great and very Christmassy, although we had to sit around in jackets and beanies to eat it. Thanks to all the contributors.



Sleeping a single swag with a sleeping bag was a bit strange, but I was warm in the new bunkhouse.

Sunday morning walk was pleasant and just short enough for me to enjoy it all. We ate chocolates on warm rocks in Jay Creek looking at the twisted River Gums. We had not had room for the chocolates the night before. Then back to camp for a leftovers lunch.

Ian Hamilton, the current caretaker, was keen to have any feedback on the walks, plant identification, and walk directions. We were able to help him with a few of these, and also advised him that the Fountain Grass (an introduced garden plant) that was growing and seeding well, close to the cottage, would be better removed before it escapes to the creek. I think he will replace with some of the lovely local native grasses from the area.

Many thanks to Connie for providing me with transport and to Wendy and Ian Mann for organising the weekend.



Meg Mooney (Photos by Pam Keil)

“Along the sunny creekbed”

my friends pass under a redgum branch
flush out a squat, not-small, grey bird
it sits on a twig at the end of the branch

through my binoculars
I see a striped dark and fawn tail
then the head turns

large, sugar-glider eyes look at me
the shiny black pools of them
seem to take up most of its face
more people walk up, slowly now
the bird turns away
there's just a grey back

the bird looks at us
this time I see the short bristles
like whiskers on its round red-brown face

this goes on for 10 minutes or more
the owlet nightjar sitting quietly
turning away and back

I've never seen this bird still before
usually its fluttering erratically
something like a butterfly
with a fan of striped tail
in car headlights
no eye-shine from its face

it feeds on the wing
like a nightjar
and on the ground
like a frogmouth

at last this one flies off
into a hollow in another tree
maybe when we pass
it can return to its roost-hole
sit in the entrance and sun itself



Note: Apparently Owlet Nightjars are most common in the arid zones of Australia, particularly in mature woodland where there are lots of hollows and dead trees. They often sun themselves at the entrance to roost-holes on fine winter days. Their shrill, churring calls can alert people to their presence.

Exploring a hole in the ground – photos by Pam Keil





ALICE SPRINGS FIELD NATURALISTS CLUB INCORPORATED
Minutes of the general meeting held at the Higher Education Building
Charles Darwin University – Wednesday 8 July 2015 at 8.15pm

After presentation by Doug McDougall on ‘behind the scenes’ at Werribee Zoo.

Thank you to scribe Jill Brew and to Connie and Rosalie for supper

Present: 13 Members and 3 Visitors

Apologies: Lee Ryall, Sue O’Callaghan, Rhondda Tomlinson,

Minutes of previous meeting were on back of last newsletter – accepted by meeting.

Business arising

- Inquiry about possibility of ASFNC helping with a field trip for Year 6 Ross Park students. Pam Keil, Jen Kreusser and Charissa Allan were dealing directly with the teacher. Pam Keil reported that she was not involved, Charissa had left messages that were not answered.

Treasurer’s Report.

Balance of all funds end of May	\$ 1,158.55
Bank interest	\$ 0.32
Insurance	\$385.70
(Petty cash balance end June \$8.10)	
<u>Total of all funds end June</u>	<u>\$773.17</u>

Correspondence in/out

- Thank you cards to Jen Kreusser and to Fiona Walsh – previous speakers. Thank you Rosalie.
- Exchange of emails with Ben Beeton, an artist who has had many artist in residence positions. Coming to Alice for CAVEPS (Conference of Australasian Vertebrate Evolution, Palaeontology and Systematics) and will talk to us at September meeting, in exchange for help with accommodation (Suzi Lyon) and trip to somewhere interesting (Meg Mooney). If anyone can help further in either of these areas, please let Barb know.
- Exchange of emails with CDU regarding computer details missing at last meeting. Now attached firmly to computer and Marie Killa, IT person, checked computer at 4.00 this afternoon to make sure everything okay for meeting.
- Barb paid the club insurance and was reimbursed. We now have a Certificate of Currency.

Past Trips

- Sun 28 June – shorebird count at Sewage Ponds. Always sufficient counters and scribes – thank you all. Much discussion over migratory shorebird seen and photographed, here out of season. Finally decided that it was a Red-necked Stint

Future Trips

- 11-12 July - Alcoota Fossil Trip. Lee already there and will meet group at Gem Tree.
- 18-19 July - Hamilton Downs Trip – Christmas in July – Ian and Wendy listed Members wishing to go and sorted what food each would bring to share.

Next meeting – 12 August, 7.00 AGM, 7.45 Speaker- Kristi Abbott - ANTS . Scribe: Pam Keil if no other volunteers, Supper: Pam Windle.

Sightings:

Jill Brew caught a cat in the cat trap on her property after following up with Jen Kreusser, June speaker. She hopes there will be no more piles of feathers and more lizards from now on.

Meeting finished 8.40pm.