



August 2019

## Alice Springs Field Naturalists Club Newsletter



*At our July meeting Dr Kate Stevens presented her research on Grey-crowned Babblers in Victoria, adorable birds that have captured her heart over 10 years of undergraduate and post-graduate study. Read more on page 5. This photo by Dean Ingwersen.*

Meetings are held on the second Wednesday of each month (except December & January) at 7:00 PM. Meetings are held at the Olive Pink Botanic Garden Visitors Centre.

### CONTENTS

Meetings, Trips/Activities, Contacts...p2;  
Behind the scenes at Alice Springs Desert Park...p3;  
Grey-crowned Babbler talk...p5;  
Malaysian Borneo talk...p7;  
*Dentella minutissima*...p9.

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

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

**Email:**  
[contact@alicefieldnaturalists.org.au](mailto:contact@alicefieldnaturalists.org.au)

*Follow us on Facebook!*

## NEWSLETTER

The next newsletter will be September 2019.

The deadline for the next newsletter will be 23 August 2019.

Please send your contributions to Barb Gilfedder: [bjfedders@gmail.com](mailto:bjfedders@gmail.com)

### ALICE SPRINGS FIELD NATURALISTS CLUB

#### **PERMANENT CHANGE OF MEETING VENUE.**

**All general meetings are now held in Olive Pink Botanic Garden Visitors Centre**

#### Wednesday 14 August

**ASFNC Monthly get-together** at 7.00pm at the Visitors Centre at Olive Pink Botanic Garden.

This meeting will start with the **ANNUAL GENERAL MEETING** of the **Alice Springs Field Naturalists Club** at 7.00pm. All Committee positions will be declared vacant and new elections conducted. Please think seriously about whether you can help the club in this capacity. If you are happy to stand for any position please let a current Committee Member know, or come along and volunteer on the night. It would be good to have some new enthusiastic people on the Committee. None of the positions are arduous.

The AGM will be followed by our annual **Members' Night**. Please bring along something interesting to share. Maybe some photos on a USB stick or in an album, a natural history item, a relevant book or magazine article – the list is endless. If time, Barb will show photos taken at Standley Chasm since the January fires.

#### Wednesday 11 September

**ASFNC Monthly get-together** at 7.00pm at the Visitors Centre at Olive Pink Botanic Garden.

Speaker will be **Colleen O'Malley** – A second chance of a lifetime: volunteering on Whenua Hou for the biggest Kakapo breeding season on record! This will be followed by light refreshments and a short general meeting.

#### AUSTRALIAN PLANT SOCIETY ALICE SPRINGS      [apsalicesprings@yahoo.com.au](mailto:apsalicesprings@yahoo.com.au)

**Wednesday 7 August at 7.30pm Meeting** at Olive Pink Botanic Garden.

Speaker: **Meg Humphrys** 'The desert grass lady in the tall Canadian forests'

All welcome. Tea, coffee and a light supper provided

#### Alice Springs Field Naturalists Club Committee Members

<b>President</b>	Barbara Gilfedder	8955 5452
<b>Vice-President</b>	Lee Ryall	0417 401 237
<b>Secretary</b>	Anne Pye	0438 388 012
<b>Treasurer</b>	Neil Woolcock	8955 1021
<b>Property Officer</b>	Rosalie Breen	8952 3409
<b>Public Officer</b>	Anne Pye	0438 388 012
<b>Committee Members:</b>		
	Robyn Grey-Gardner	89 52 2207,
	Margaret Friedel	0417 849 743

#### **Other Club Responsibilities:**

Newsletter – Barb Gilfedder,  
Minutes Secretary – Connie Spencer,  
Facebook Organiser – Colleen O'Malley,  
Website - Pamela Keil      8955 0496  
and Robyn Grey-Gardner      8952 2207

### SUBSCRIPTIONS TO ASFNC

**Payments for 2019-2020 are now due.**

Please pay by cash or cheque at a meeting or by post ...or by direct deposit.

Family \$30, Concession \$25,  
Individual \$20, Concession \$15,

Life membership - Ten times normal fee.

Email Newsletter Only for interstate Members who have previously had full Membership \$10.

Westpac bank details:- BSB No. 035303  
Account No.100981. Please include your name as reference on the transaction.

## Behind the scenes - Zoology at the Desert Park with Lisa Nunn - 29 June 2019

Report by Lee Ryall. Photos by Lee Ryall and Rosalie Breen



The behind the scenes visit to the zoology sector of the Alice Springs Desert Park started with a look at the Park's animal database. Here each individual animal is recorded. Birds are identified by leg bands, mammals are micro-chipped and reptiles by the most appropriate method - for instance, thorny devils each have a unique belly pattern which is photographed and included in the record. The database records each creature's history including each time it is weighed or treated.



In addition, the Park's membership of the Australian Zoo and Aquarium Association means that it is a part of a database listing all their holdings, which forms the basis for animal exchanges across the country. Feeding the animals and the birds at the Park is an expensive process and the Park grows as much of its food as possible. As a result those of us who could cope with the smell had the privilege of investigating the nurseries of cockroaches, crickets and the mice and rats. Animals, including the feral pigeons contributed by the general public, are euthanased before being fed to the Park's animals and birds, in accordance with Australian law. In the kitchen area we could see the food supplies- mealworms (bird chocolate), frozen insects, vegetables and seed. Mealworms are scattered onto the ground daily in each aviary so that the general wellbeing of each bird can be assessed in the scramble for treats.

The animals in the holdings area were curled up in their diurnal sleep, so were not on view, but we were able to see the raggedy collections forming nests for Stick-nets Rats and the area where the Red-tailed Phascogales are being bred up for release in Newhaven. The complex breeding program for these ferocious little carnivores will enable the Park to give Newhaven hundreds of animals for their feral predator free area. Lisa talked about the delicate status of animals such as the Stick-nest Rat and the Burrowing Bettong which are only still in existence because they have been found on islands after becoming extinct on the mainland.

Walking past some cheeky Emuwrens and a charming Buttonquail basking in the sun, we entered a room containing a motley collection of creatures- the 'spare' Python for the nocturnal house, some tiny Finke River Gobies in an aquarium, and some snails. The snails are being kept in order to learn about their requirements - in case some of the tiny pockets of unique snails around the Alice Springs region are threatened with extinction and need to be conserved at the Park. For example, there is a small group of snails living under a tree at Ellery Creek, which is unknown elsewhere and at risk of extinction.



*Photos from the top: In the food preparation room; Buttonquail; tiny native snails.*



The Finke River Goby is also the subject of research at the Park, establishing their ability to breed on silty substrates. The changing conditions at Running Waters threaten these animals' ability to breed, so this knowledge is crucial for the Goby's continued breeding there.

We continued through the animal surgery and past the termite collection bucket onto the outdoor pens. Here we saw the magnificent burrows built by Bobby the Bilby, whose bad behaviour keeps him away from the nocturnal tour area. He failed to appear, even when tempted by the presence of Lisa. His 'bad', human-attacking behaviour



results from being raised in too close a proximity to people, and losing all fear of them. Later in the tour we saw a three-month-old Black Kite (brought in by a member of the public), and watched the ingenious way it could be fed by a 'mock' parent bird (a puppet called Pingu inserted through the wall) to prevent a lifelong habit of screaming for food every time it sees a human being.

The pens did contain a pair of sleepy Tawny Frogmouths and a Bush Stone-curlew, who were enjoying a sunshine cycle away from the nature theatre.



On the way back to our vehicles we visited the vet room where there were a number of freezers containing dead bodies. Staff may use these for example, to practise trimming falcon beaks without affecting their tomial tooth, a small triangular structure they use to kill their prey. Sometimes the feathers are also used to repair broken feathers on a bird in a delicate operation which involves gluing the new piece on with a tiny metal dowel.

It was altogether a fascinating morning. Thank you Lisa for being so generous with your time and information. We had a great time.

*Photos from the top: Finke River Goby - Gunther Schmida, Aquagreen; Tawny Frogmouth; dead Falcon showing tomial tooth*

### **...and from Rosalie Breen**

One of the gems I learnt today is that care, skill and knowledge are needed in rearing captive animals or strange or unwanted behaviour will arise, which will exclude them ever being suitable to be released back in the wild.

Bobby Bilby is not popular. He identifies humans as food source, which must be produced immediately, so he attacks humans. This is not an appropriate view for visitors to see the keeper in danger in the nocturnal house, and is a problem for keepers entering his holding pen.

Monty and Susan are Tawny Frogmouths. One was raised with a bird being imprinted as the food source, the other raised among humans. So when a person appears, it sets up incessant screaming to be fed, which can get a bit wearing after a time and again not suitable for display

Pingu the puppet raptor is the hero for imprinting. He was used to encourage a young Black Kite to react to a bird figure as the food supplier. The young kite on seeing the puppet with its beak opening, popping out from a hole in his cage wall, woke up and spread his wings in anticipation.

Many birds captive raised while still quite young will never be able to go in the wild because they have not received training from parents on how to hunt successfully or how to control flight at great speed.

## Habitat loss and fragmentation implications for the Grey-crowned Babbler

Presentation by Dr Kate Stevens on 10 July 2019. Report by Rosalie Schultz.

Dr Kate Stevens presented her research on Grey-crowned Babblers in Victoria, adorable birds that have captured her heart over 10 years of undergraduate and post-graduate study.

At a global scale, over 1/3 of land is now in agricultural systems, leading to loss and fragmentation of habitat. In Australia, the state of Victoria where Kate did her research is now a grid of straight lines. There remains a patchwork of habitat suitable for babblers, much along roads and rivers. Species that are especially vulnerable to this fragmentation of habitats are those that are very specialised in their habitat requirements, cooperative breeders (where a small group of helpers assists parents); those with small populations, and woodland dependent species.



Australia has four species of babblers, with Grey-crowned Babblers the largest birds. They are well-studied because of interest in cooperative breeding. They live in family groups, averaging 5 and up to 20 birds, with one breeding female and her helpers, many of which are offspring from previous broods. Being in groups keeps the birds safer from their predators, goannas, snakes and currawongs. The importance of cats in the decline of Grey-crowned Babbler has not been studied.

Grey-crowned Babblers depend on big trees, which means trees over 100 years old, and their range is from 2 to 50 hectares. They construct two different forms of nests, for breeding and for sleeping. Since they live in family groups, the nests for sleeping may be large enough for up to 20 birds, requiring large trees in which the nests are hidden. These large trees also host insects, which the Grey-crowned Babblers take from bark, leaf litter and logs. Their long curved beaks are used to fossick for insects and build nests. Males and females are subtly different, with the males larger. Younger birds have dark eyes, which lighten with age (left), and by three years when the birds are mature their eyes are bright yellow (right). They live for about eight years.

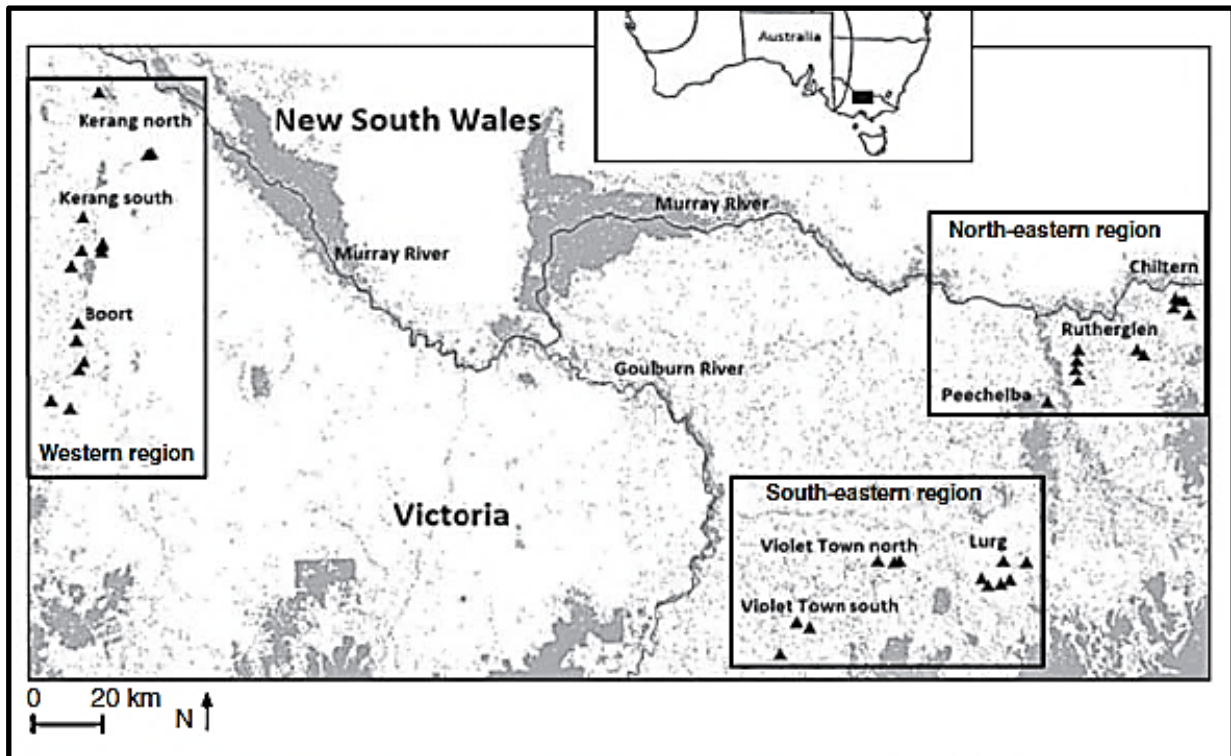


Alice Springs Field Naturalists Club



The main threats to Grey-crowned Babblers are through habitat loss, fragmentation and degradation, which are occurring through fire management, wood collection and road-widening. Grey-crowned Babblers are extinct from their previous range in South Australia, Australian Capital Territory and Southern Victoria; they are threatened elsewhere in Victoria, and vulnerable in New South Wales. They remain common across the Top End and central Australia.

Kate's research was in the southern-most range of Grey-crowned Babblers where 94% of their habitat has been lost. The research explored Grey-crowned Babblers' use of habitat in a range of vegetation types, namely Black and Grey Box, Red Ironbark, mixed Eucalypt and Callitris. It investigated the breeding requirements and genetic variability to identify high conservation value habitats and how closely related the birds were at each of the sites. Research sites were Rutherglen (north-east), Violet Town (south-east) and Kerang (west). Data were collected through observations of the birds and habitats and genetic studies on blood and feathers.



The research showed that all the habitats studied were similarly useful for the birds, perhaps because there was nowhere else suitable for the birds to go. The size of the habitat determined the number of birds and breeding success. If more than seven Grey-crowned Babblers were in a group, the breeding pair had over 90% success.

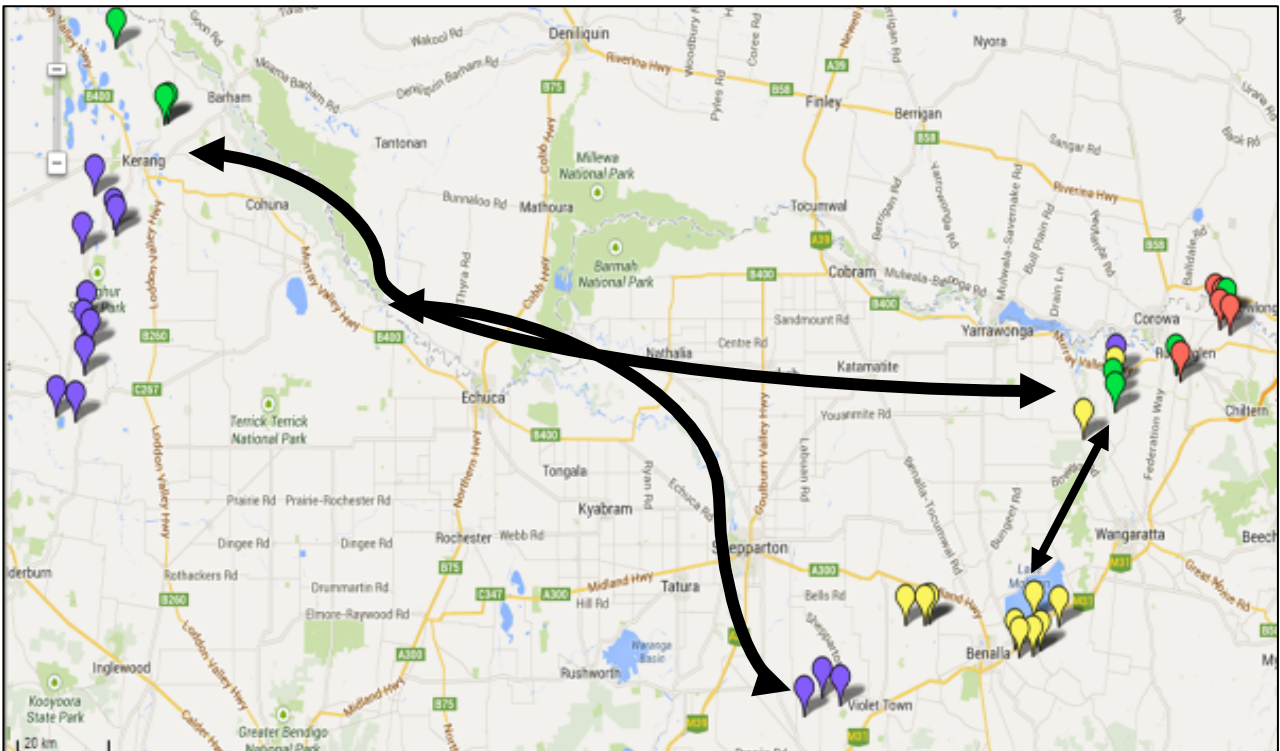
The genetic studies showed that males mated with birds other than the breeding female in their group, including with birds in other groups. This led to gene flow across the landscape, which followed rivers and other connected areas of suitable habitat. The map on the next page, shows the genetic connectivity of the birds.

**Research conclusions**

The most important finding from Kate's research on Grey-crowned Babblers is that the size of patches of suitable habitat is the most important determinant of breeding success. Field Naturalists learnt so much about the Grey-crowned Babblers, their habitat in places outside central Australia, how research is done, and how Kate came to discover both the wonder of these beautiful birds and the urgent need to protect remaining habitat and restore areas to ensure Grey-crowned Babblers and other species survive.



Collecting a tiny blood sample for DNA testing. Kate said this was easy to do once the bird was in the hand and any bleeding stopped quickly.



## Wildlife, Palm Oil and Eco-Tourism in Malaysian Borneo: the good, the bad and the ugly – a traveller’s impressions

A report by Marg Friedel on Megg Kelham’s presentation to the ASFNC on 12<sup>th</sup> June 2019, drawing on Megg’s extensive notes.

Without doing too much preparatory homework, Megg took off for Sabah in Malaysian Borneo in February this year, in search of wildlife, especially Orang-utans. Borneo is comprised of Sarawak and Sabah (Malaysian), Kalimantan (Indonesian) and Brunei. Sabah occupies 10% of the area of Borneo and almost half of it is gazetted as either permanent forest reserve, or State or National Park, but these areas are often disconnected or patchy.

Luckily it was not peak tourist season and, in the three weeks Megg was there, it only rained a couple of times. Locals spoke in terms of drought but it meant Megg could get everywhere she wanted. “The bad thing was, apparently, that there was less visible wildlife.”

After some conversations with friends and a few chance meetings, she worked out her itinerary. Her first stop was Mount Kinabalu, where she was a bit constrained by altitude sickness. Nevertheless the birds and vegetation were “terrific” and highlights included *Rafflesia keithii*, the world’s largest flowering plant, as well as carnivorous pitcher plants and orchids. The downside was the “conveyor belt mountain climb”.



Map of Borneo from Britannica. Sabah and Sarawak are part of Malaysia. Kalimantan is part of Indonesia.



Next, her visit to the Sepilok Rehabilitation Centre was her first opportunity to see Orang-utans but also her first exposure to the underlying politics of protecting threatened species. As she put it “Borneo is under siege, with slash and burn agriculture on an industrial scale for palm oil plantations”. Sabah is doing what it can to protect threatened species and to develop sustainable palm oil production at the same time.

The Sepilok Rehabilitation Centre backs on to regrowth forest and isn’t fenced, to enable rehabilitated Orang-utans to return to the forest.

While this was not total “rewilding”, it seemed like a



reasonable compromise. By contrast, Sun Bears and Proboscis Monkeys supposedly living wild were being hand fed. How desirable was this? Western tourists wishing to see “wild” animals may have been inadvertently contributing to the de-wilding of native animals. Megg enjoyed her encounters with Orang-utans there. The Orang-utans are rescued from people who keep young ones as pets, a criminal offence in Malaysia, and/or find orphaned Orang-utans in the forest. The orphans stay in the enclosure overnight but are taken to a “playground” during the day to learn habits for survival in the wild. Adult females may have four offspring in their lifetime, while between 11 and 40 years of age. They raise their children on their own and are solitary.

Megg’s next destination was the Kinabatangan River, for wildlife viewing from the river. A ribbon of uncleared vegetation follows the river but is surrounded by palm oil plantations. This is a great place to see wildlife due in part to animals and birds being concentrated in the uncleared areas bordering the river. Narrow corridors, the width of a room, enable Pygmy Elephants to move into disconnected patches of uncleared land.

A reforestation project had been undertaken here, where unproductive older plantations (over 25 years old) were cut down and replanted to rainforest. Interestingly, while men planted three times more than women, fewer of the men’s plantings survived. The women watered theirs!



Finally, Megg visited the Danum River Valley Conservation Reserve, one of the best preserved and richest, biodiverse habitats in South East Asia. There, she missed the flowering fig tree which had drawn wildlife to feed en masse not long before, but she was still happy to see a Water Monitor, deer, Rhinoceros Hornbill, Civet Cat, Red-leaf Monkey and more, including Orang-utans. She learnt that Orang-utans sleep in nests which they make by pulling leaves down around them: the males in their 40s sleep until 11 am while young females are up at dawn! She greatly enjoyed an encounter with a mother and toddler, which after long eye contact between the mother and Megg, seemed to indicate acceptance.

*Photos by Megg. Top: Mount Kinabalu from Che Sui Khor Pagoda. Middle: Giant Rafflesia flower. Bottom: Sepilok Orang-utan.*





Photo by Jimmy Omar of the misty Kinabatangan River

In 1990, scientists had initiated a study in the Danum Valley because it was relatively uncontaminated by humans. Their goal was to determine whether it was possible to sustainably log the forest and maintain wildlife. By 2011 the answer appears to be yes. The study found that the forest reserves were never truly “wild” because they had been cultivated or visited regularly prior to the second half of the twentieth century; subsequently they had not been heavily mined or logged, nor had wildlife been hunted much, so were comparatively “undisturbed”. There is a parallel with Aboriginal land use here, prior to the arrival of Europeans, where no land was truly “wild” because it was “cultivated” (with fire) and regularly visited, but perceived by Europeans as pristine.

Megg found the discussion around the benefits and costs of palm oil production far more nuanced than we perceive from here. Producers are aware that palm oil is not desirable to Westerners, because of conservation impacts, but believe this is due to Western misinformation. For instance, it’s little known that Sabah is trying to make production sustainable by legislating for no more land clearing. Megg suggests that we need to be more considered about opposition to palm oil: we should ask if it’s sustainably grown (as in Sabah) or not (as in Indonesian Kalimantan).

Wildlife tourism is providing alternative income but these enterprises are being run, for example, by the Chinese and by National Geographic. Also city people are in the tourism industry, not the locals, so benefits don’t accrue locally. Megg learnt that Western eco-tourists’ and some local environmentalists’ preference for seeing animals in the wild had clashed with locals’ desire for the development of roads and bridges that would make life easier for them. Megg felt that there was a certain incongruity between Westerners (including herself) flying large distances to see really “wild” animals and the possibility that this desire might be “de-wilding” these animals as well as limiting locals’ capacity to acquire the kind of material wealth on which this form of eco-tourism was based. “A conundrum”, said Megg.

Food for thought – many thanks for an interesting talk, Megg.



### Tiny flowers on the mud

This photo of a tiny plant, spreading out over a mud flat was taken at Stretch Lagoon at the northern end of the Canning Stock route. It was sent to me by Helen Yoxall with the hope I could identify it. I remembered taking a similar photo at Bowral Sanctuary in NSW in 2008 but I hadn’t found a name for it. Peter Jobson put me on the right track this time, with *Dentella* in the Rubiaceae family, and looking at the distribution we decided it was *Dentella minutissima*. It is a mat plant with tiny, mud-coloured, hairy leaves that spread over muddy areas and give the appearance of tiny white flowers growing straight out of the mud. The distribution pattern is in the shape of a rainbow stretching in a big arc from northern NSW, through Queensland, the middle of Northern Territory and around to Halls Creek in Western Australia. Barb Gilfedder



**ALICE SPRINGS FIELD NATURALISTS CLUB INCORPORATED**  
**Minutes of the general meeting held in the Visitor Centre**  
**Olive Pink Botanic Garden – Wednesday 10 July 2019**

**Open:** Barb Gilfedder declared the meeting open at 8:40 pm following a presentation by Dr Kate Stevens on Grey-crowned Babblers. Thank you to Rosalie Schultz for taking notes and to Jill Brew for providing supper.

**Present:** 18 members, 1 visitor and 3 apologies as per attendance book.

**Minutes:** The Minutes of the June 2019 general meeting as printed in the newsletter were accepted by the meeting.

**Business Arising:**

- Ian Coleman, Curator, has welcomed ASFNC back to OPBG for monthly meetings and he, Doug or Cyd will handle security.
- Barb, Rosalie, Connie and Pat Weeks visited Standley Chasm on 24 June. They spoke briefly to Kelvin Pomare. He advised that they planned to get the prisoners onto removing the invasive introduced Johnston River Grass (*Paspalum conjugatum*) when they are finished with clearing wood from the fire. Barb and Jim revisited on 7 July and spoke to Nova Pomare. She appreciated the letter from Peter Jobson supporting her efforts to remove the introduced grass. She advised that she was also possibly getting some men from the Salvation Army Hostel to help remove the grass.
- Discussion held on a draft letter written by Rosalie Schultz regarding loss of NT Government funding for Land/Garden for Wildlife. Rosalie to take suggestions on board and re-draft.
- Bec Duncum unable to find maker on display boards we borrowed from Parks for Heritage Market, but she will research.

**Treasurer's Report:**

**Balance** of all funds (including petty cash) end of May 2019 \$2,155.83

**Income** for June 2019

- Membership 30.00
- Interest .16

**Expenses** for June 2019

- P&L Nunn for bird brochures to use as gifts 40.00

**(Petty Cash - \$24.85)**

**Total of all funds including petty cash end June 2019** **\$2,145.99**

The meeting accepted the Treasurer's report.

**Correspondence:**

- Margaret Friedel has written and hand delivered letters to Jackson Ankers and Lyle Mellors thanking them for our time at CDU.
- Email from Stephen Nuske re Gamaliel's grave on Henbury Station. Forwarded to members who were on the Jim Lawrence Finke River trip last year, as that may have been the grave visited. Jim to check his photo of the grave for any inscription.
- Various emails addressed to ASFNC have been forwarded to membership.
- Email re Climate Watch received. Barb to forward to members.

**General Business:**

- Barb advised that she had heard there had been rain at Tower Rock (Mac and Rose Chalmers Conservation Reserve).
- Barb asked the best time to visit ASDP to see the wildflowers. Neil advised not much flowering as yet.

**Past Events:**

- 22 June – Walk around Spencer Valley with Sue Morrish and Rosalie Breen, celebrating 10 years of Buffel Busting
- 29 June – Behind the scenes at ASDP with Lisa Nunn
- 5/6 July – AS Show - APS AS sold many plants and the flower display looked stunning

**Future Events:**

- Friday 12 July 5 pm - Art Exhibition opening at OPBG – *Buffel Busting* paintings by Matt Grant. Exhibition runs for 2 weeks after opening.
- 20 July – Day trip or overnight camp at Alcoota fossil dig site. Members only, limited numbers – contact Barb if interested. Currently have 5 members on the list.

**Next Meeting:** Wednesday 14 August 2019 – AGM and Member's night. No offers of supper forthcoming.

**Sightings:** Jim Lawrence reported seeing what he described as a *white breasted* Falcon on Tanami Downs. Further information and photos required for an ID.

**Meeting closed** at 9:00pm.

Minutes compiled by Connie Spencer