



April 2019

## Alice Springs Field Naturalists Club Newsletter



*Standley Chasm. The fire that ripped through Standley Chasm in January 2019, felled and killed many majestic River Red Gums. ... however many do not give up easily. This individual was sprouting lush new growth from epicormic shoots.*  
*Photo Rosalie Breen*

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.

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## NEWSLETTER

The next newsletter will be May 2019.

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

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

## ALICE SPRINGS FIELD NATURALISTS CLUB

### Wednesday 10 April.

**ASFNC Monthly get-together** at 7.00pm in the lecture theatre in the Higher Education Building at CDU.

**Billy Ross** will be talking about his research into Quolls. All welcome. Presentation followed by tea, coffee and a light supper, and a brief general meeting.

### Wednesday 8 May

### **PLEASE NOTE THAT THE VENUE FOR THIS MEETING IS OPBG**

**ASFNC Monthly get-together** at 7.00pm in the Visitors Centre at Olive Pink Botanic Garden. They have recently installed a large television on the wall and have excellent solar driveway and car park lighting.

**Simon Mann, Geophysics and the bush, a brief story of Australian exploration.** This talk will cover the role and applications for geophysics in Australia (specifically focusing on electrical geophysics). All welcome. Presentation followed by tea, coffee and a light supper, and a brief general meeting.

### Sunday 28 April

Birdlife central Australia/ ASFNC combined **visit to Alice Springs Sewage ponds**. Meet Lisa Nunn and other Birdlife experts at the Sewage ponds gate at 8.00am. It is essential that all participants have completed the on-line induction course with Power and Water. <https://my.rapidglobal.com/Web/selfregistration/index/634/> This can take several days so start early.



### AUSTRALIAN PLANT SOCIETY ALICE SPRINGS

[apsalicesprings@yahoo.com.au](mailto:apsalicesprings@yahoo.com.au)

**Wednesday 3 April 7.30pm** at OPBG. Lucille Guyomarch, who has been undertaking a gardening internship at Olive Pink Botanic Garden for several months, will give a presentation on a few stunning French gardens. All welcome.

### Alice Springs Field Naturalists Club Committee Members

<b>President</b>	Barbara Gilfedder	8955 5452	<b>Treasurer</b>	Neil Woolcock	8955 1021
<b>Vice-President</b>	Lee Ryall	0417 401 237	<b>Property Officer</b>	Rosalie Breen	8952 3409
<b>Secretary</b>	Anne Pye	0438 388 012	<b>Public Officer</b>	Anne Pye	0438 388 012

**Committee Members:** Robyn Grey-Gardner 89 52 2207, Margaret Friedel 0417 849 743, Simon Brown 0429 359 593

**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

## APOLOGY

Last month we showed this photo and called it a Large-tailed Nightjar.

Several of you pointed out that it is not a Nightjar and the more knowledgeable ones told us it is in a juvenile Dollarbird (*Eurystomas orientalis*).

If you did not spot the error, you can be forgiven as its distribution does not cover Alice Springs. As an adult it will display a bright red beak and legs. It is called a Dollarbird because of the distinctive pale blue-white wingspot it displays in flight.





## Standley Chasm Fire Damage

*Aerial photo taken after the fire by Grant E. Allan: Parks, Wildlife and Heritage, Department of Tourism, Sport and Culture.*



### **Wandering through the aftermath** by Colleen O'Malley

Twelve of us gathered at Standley Chasm to wander through the charred landscape left after intense wildfires ripped through much of the Chewings and Heavitree Ranges, surrounding valleys and riverine habitats in January. The massive fire scars can be seen on the NAFI (North Australia and Rangelands Fire Information) website - as well as from your car window - stretching roughly 90km from Fish Hole (south of Hamilton Downs) in the east to just west of Glen Helen.

Most of us anxiously watched the news or followed the fires on social media as parks staff, fire fighters and volunteer fireies fought tirelessly to contain fire fronts and protect important conservation areas, significant park and tourism infrastructure, and favourite walking trails. It's one thing to follow the fires digitally and gasp as each of our favourite haunts in the Chewings got burnt (eg. Brinkley's Bluff, Hugh Gorge and surrounds, Ormiston Pound) but it is altogether another thing to get out there and wander amongst the ash-strewn, razed soils and rockscapes, seeing massive red gums felled and hollowed out by fire, discovering hillsides of scorched and seared native pines that you know can't withstand even mild fires, and hearing the silence of birdless landscapes.

So it was with some trepidation that I headed off with Connie in the lead and the rest of the group following - with a thousand flies taking up the rear! What we did see filled me with some hope. Despite an absence of rain and with continuing high daytime temperatures since the fires, there are many signs of regenerating life on the lower slopes and along the valley floor heading towards the Chasm, as well as small patches of habitat that the fire skipped over





and left uncharred. We saw epicormic shoots emerging from charred trunks or from lignotubers of Red Gums, Ghost Gums, Bloodwoods, Tea Trees, Desert Boobiallas (*Myoporum montanum*), Indigoferas and Holly Grevilleas. We also saw plenty of young seedling Hop Bushes, Native Peaches (*Trema tomentosa* var. *aspera*), Round-leafed Wattle (*Acacia strongylophylla*), Butterfly Bushes (*Petalostylis cassioides*), Annual Verbena (*Cullen cinereum*), Blue Periwinkle (*Evolvulus alisinooides*), Silky Glycine (*Glycine canescens*), Kangaroo grasses (*Themeda triandra*), Silky Browntops (*Eulalia aurea*), Clustered Lovegrass (*Eragrostis elongata*), sedges and rushes.



As expected, most of the seedling regrowth was confined to the creekline where spring water was flowing and pooling in places – much to the delight of Rosalie who was keen to sample algae in several of the now easy to access pools.. The hillslopes and range habitats will need a good rainfall event to trigger seedling regeneration there and so we can expect to see big areas of black and grey for some time to come yet. There were a few weeds that had also sprung up along the creekline including Sow Thistles and Nightshades, plus a weedy looking grass that Rosalie was worried about but which is hopefully one of the native *Paspalidium* species. Rosalie collected a flowering sample to take to Peter Jobson at the Herbarium to get a definitive ID and we pulled out the weeds we could positively ID as we wandered along.

I

[Pictures from the top.](#)

[River Red gum shooting from the base \(Barb\); Cycad shooting from the top and also from the base \(Kimberley\); Colleen and Rosalie exploring the area near the spring, others could watch from the path higher up \(Barb\); Tiny seedlings of shrubs and herbs and grasses quick to respond in the damp soil \(Colleen\).](#)





For me the most shocking sight along our walk and across the wider landscape was the many giant River Red Gums that have been totally felled by these fires. The main creekline at Standley Chasm is a virtual graveyard of toppled trees or burnt out trunks of once magnificent gums. Thinking about the hundreds of insects, birds, bats and not that long ago – possums - that once nested or fed in these trees makes you realise just how much has been lost in these fires and how long it will take for these landscapes to fully recover, and to wonder if that is even possible.

It also makes you think about the role of invasive grasses like Buffel in fuelling these hot fires and how ongoing Buffel expansion coupled with predicted changes in climate may lead to these intense wildfires becoming even more common in our lifetimes and in those of our grandchildren. A sobering thought, and a timely reminder to redouble our efforts to keep Buffel out of the more remote gorges and creeklines we visit on Field Nat trips, to join Rosalie and others in buffel busting efforts around town, and to think twice about driving that car and hopping on your bike instead. Like those kids striking for climate action around the world have said – *There is no planet B!*



People may be interested in checking out Fiona Walsh's photo album of before and after shots at Stanley Chasm and at near the Hugh River crossing Flickr site <https://www.flickr.com/photos/131503324@N07/albums>



Above: Many large gum trees will not recover (Kimberley); a Bull Ant exploring the new growth (Barb); our own Field Nats before and after shots of a favourite seat. December 2013 – March 2019 (Colleen).







## March speakers – Robin Delaney and Simon Ward

Report by Simon Brown.

On Wednesday 13<sup>th</sup> March, Simon Ward and Robyn Delaney delivered an amazing presentation of their 16 day walk from Finke Gorge NP to Watarrka NP. The idea was spawned over coffee some 5 years prior to the event, then becoming a reality after good rain seasons in 2016/2017.

Robyn and Simon described the meticulous preparation required for such an extended hike, such as:

- Gaining the necessary permissions and permits to cross Station property, Aboriginal Land and National Parks.
- Researching water sources available in the landscape using Google Earth, and structuring their 15 camps in accordance.
- Logistics such as transport, preparation of dehydrated meals and a resupply mid-trek.

Their friends Harry and Kate accompanied them on the journey; with Harry walking through to Watarrka with Simon and Robyn, and Kate catching a lift back to town with Al. (Al resupplied the party at camp 8: Walker creek)

Meg was involved in Transport to Finke NP and walked the first day with the party. Having spent time working at Watarrka, I am familiar with (although will never stop being amazed by...) the landscape in that region, with pool above pool secreted in the ranges.

One of the major standouts photo-wise in the presentation was Eagle Plain, between Areonga and Ilara where *Xanthorrhoea thorntonii* (grass trees) were abundant.

Thanks Simon and Robyn. I was moved and inspired and so was everybody present.



## Bats of central Australia – Erin Westerhuis

For those of you who don't know me, I'm a PhD student at Charles Darwin University, based in Alice Springs. My PHD, which I started in 2016, is focussed on investigating the temporal and spatial patterns of highly mobile vertebrate animals (birds and bats) in river red gum woodlands of central Australia. This particular habitat type is of interest as river red gums can access ground water and tend to maintain productivity irrespective of rainfall. Additionally, as only one of a handful of hollow-bearing trees in the region, river red gums are likely to be very important hollow-using fauna and particularly for the bat fauna in the MacDonnell Ranges, as the majority are tree roosting. One of the main questions I am interested in is whether microbats show a distinct preference for river channels compared to nearby woodlands, and also to better understand the temporal patterns of microbat activity in central Australia. At present, the most diverse mammal order in the central Australian region are bats, but there has never been any systematic monitoring of bat populations in the region. Over the past two years I have used a combination of trapping and acoustic monitoring to investigate these questions. There are twelve described species known to occur in the MacDonnell Ranges, with an additional species occurring in the Dulcie Ranges\*. The species, their average weight and preferred roost type is summarised below (Table 1).

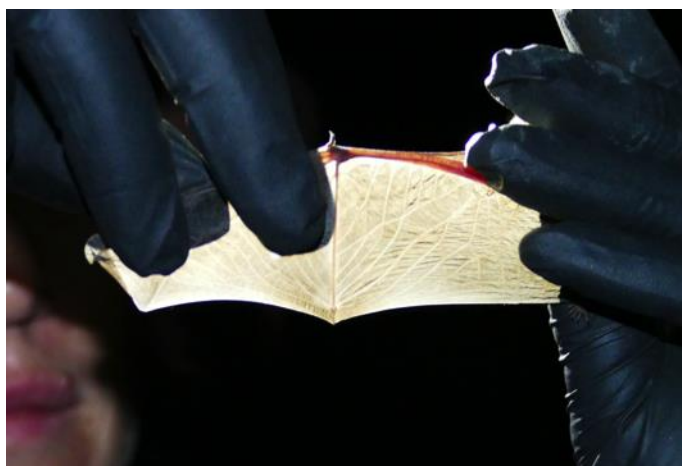
**Table 1. Species of bats occurring in central Australia.** The species can be broadly grouped according to their flight and echolocation characteristics. Species with <sup>1</sup> are generally larger bats which fly in open space and use low frequency echolocation (< 25 khz) to find big flying invertebrates. Species with <sup>2</sup> are edge space foragers which forage along defined "fly-ways" such as along creek lines or spaces between trees and shrubs. These species use echolocation that ranges from medium to high frequencies (30-50 khz). Species with <sup>3</sup> are "clutter-tolerant" bats which have highly manoeuvrable flight and foraging within the canopy of trees and shrubs. Echolocation of these species is variable.

Species		Average weight (g)	Primary roost type
<i>Austronomus australis</i>	White striped free-tailed bat <sup>1</sup>	40	Tree hollows
<i>Chalinolobus gouldii</i>	Gould's wattled bat <sup>2</sup>	11.5	Tree hollows
<i>Chalinolobus morio</i>	Chocolate wattled bat <sup>2</sup>	7.2	Tree hollows
<i>Hipposideros ater</i> *	Dusky leaf-nosed bat <sup>3</sup>	6.6	Caves
<i>Mormopterus (Seriostrois) eleryi</i>	Bristle-nosed free-tailed bat <sup>2</sup>	4.6	Tree hollows
<i>Mormopterus petersi</i>	Inland free-tailed bat <sup>1</sup>	13.4	Tree hollows
<i>Nyctophilus geoffroyi</i> (photo left)	Lesser long-eared bat <sup>3</sup>	5.2	Tree hollows
<i>Saccolaimus flaviventris</i>	Yellow-bellied sheath-tailed	44	Tree hollows
<i>Scotorepens balstoni</i> (photo centre)	Inland broad-nosed bat <sup>2</sup>	8.7	Tree hollows
<i>Scotorepens greyii</i>	Little broad-nosed bat <sup>2</sup>	6.6	Tree hollows
<i>Taphazous hilli</i> (photo right)	Hill's sheath-tailed bat <sup>1</sup>	22	Caves
<i>Vespadelus baverstocki</i>	Inland forest Bat <sup>2</sup>	3.4	Tree hollows
<i>Vespadelus finlaysoni</i> (photos page 8)	Inland cave bat <sup>2</sup>	4.6	Caves



Some interesting (and also worrying) results have already come out of the data. The previous summer appears to have been particularly challenging for the microbats of central Australia. I have recently found most bats to be between 20- 30% thinner, and clearly emaciated compared to the summer of 2017 / 2018. Additionally, while in previous surveys there were equal numbers of male and female observed, the most recent data suggests that there are fewer female bats in the population this summer. One theory for this is that the demands of pregnancy and lactation could be too great during periods of extremely low invertebrate abundance.





Reproduction for many bat species is a complex process, which begins in Autumn when male bats produce sperm (at other times of the year they do not). Male bats mate with females over the next few months, but fertilisation does not occur immediately. Instead, the female bat stores the sperm over Winter, then during Spring the sperm is released and fertilisation occurs. The female bat gives birth to one or two pups in late Spring/ early Summer, and a pup is born large relative to the mother bat. The female bats feed their pups for several weeks. Pups are left in creches or maternity colonies with other pups while the female bats forage. As relatively long-lived mammals (10 - 30 years), bats are usually able to invest significant resources into raising their pups, but they only reproduce once a year so any significant loss of female bats can have long term impacts on a population.

Over the next few months I will continue to analyse my acoustic data to investigate the broader patterns of abundance and species richness of microbats in river red gum woodlands. It is my intention to present on these findings at the Rangeland Seminars in the middle of the year, so if you're interested in attending keep an eye out for that. I'm also planning on another wonderful Australasian Bat Night in March 2020 in collaboration with Parks and Wildlife NT, so look out for details on that when it gets closer.

### **Photos from the March 2019 Bat Night – Simon Brown**



Erin presented her introduction talk as the last light of the setting sun highlighted the rocks. As darkness fell we headed down towards the gap and the water.





Above: Harp traps set up near the water.



Left: Silhouettes by the pool.

## Be aware and be wary of Bats - Neil Woolcock



This bat was outside on the wall in our patio area. It came and went a few times, usually with a day or so in between before it returned, until finally it left for good.

We have quite a lot of these bats zooming around our backyard at dusk, often skimming the pool surface either for water or picking off insects. I heard somewhere that bats wet the fur on their undersides then lick it off to drink.

This year we've found several of these bats dying or dead around our yard. Maybe the hot and dry conditions are taking their toll on them.

One looked dead on our path and I brushed it with my sandal to check. It was still alive and hissed then darted sideways and bit the side of my sandal. A warning to always assume bats may still be alive and approach them with care! With leather gloves on, I moved this bat into a cooler spot near water. It had moved a bit the next day but I found it dead the day after.

Erin Westerhuis identified this as an Inland Cave Bat *Vespadelus finlaysoni*. They have distinctive black wing membranes and somewhat orange fur, while the Gould's Wattled Bat, also often seen around dusk, has very dark fur on the head and a lighter coloured body.





**ALICE SPRINGS FIELD NATURALISTS CLUB INCORPORATED**  
**Minutes of the general meeting held at the Higher Education Building**  
**Charles Darwin University – Wednesday 13 February 2019**

**Open:** Barb Gilfedder declared the meeting open at 8:30 pm following a presentation by Robyn Delaney and Simon Ward, "Across Tempe Downs: a 16 day walk from Finke Gorge NP to Watarrka NP "

Thank you to Simon Brown for scribing and Ian and Wendy Mann for supper.

**Present:** 20 members, 9 visitors and 7 apologies as per attendance book.

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

**Business Arising:**

- Website - Robyn Grey-Gardner unable to attend planning meeting held Sunday 24 February 2019. However, she forwarded a possible newsletter index arrangement which was discussed. Anne Pye passed suggestions from the discussion back to Robyn.
- Application for Alice Springs Community Grant to purchase radios failed to meet deadline.

**Treasurer's Report:**

Balance of all funds (including petty cash) end of January 2019 \$3,313.89

Income for February 2019

- Interest .25

(Petty Cash - \$41.85)

Total of all funds (including petty cash) end February 2019 **\$3,314.14**

The meeting accepted the Treasurer's report.

**Correspondence:**

- Meg Mooney suggested Billy Ross as a speaker on *Quolls in the Pilbara*. He agreed to talk at the April 2019 meeting.
- Barb emailed Joe and Danae about a June long weekend trip to Newhaven. We are welcome. Currently very dry.
- Barb emailed Chris Connellan re an overnight trip to Mt Zeil Wilderness camp. He is happy for us to visit. Barb will check that 11 & 12 May 2019 is okay with him.
- Barb emailed Pam Keil re a visit to sewage ponds with Birdlife Central Australia, possibly Sunday 28 April. Birdlife will let us know a definite date. Meanwhile, people who wish to go must do the Power and Water on-line induction beforehand.
- Email from Lisa Nunn from Birdlife Central Australia asking for help with a shorebird count 31 March 2019. Barb will let members know. Once again anyone wanting to attend needs to do the Power and Water on-line induction.
- Lisa also offered a *behind the scenes ASDP zoo tour*. A possible date that fits in with ASFNC calendar is Saturday 6 April subject to Olive Pink Botanic Garden plant sale. Barb to contact Lisa.
- Colleen O'Malley offered a further talk on the wonderful Kakapo of New Zealand.
- Several experts picked up the incorrect ID of bird photo in newsletter. Apology and correction in next newsletter.
- Other relevant correspondence forwarded to membership.

**General Business:**

- Doug McDougall, Grounds Manager at Olive Pink Botanic Garden, is contacting Australian Inland Botanic Gardens in Mildura NSW re Desert Peas, following the ASFNC February 2019 newsletter article.
- Kirsty Norvillas from 8CCC and prospective new member keen to contact Cyd Holden regarding his February Botanical Latin talk. Possibility of a 5 minute documentary with him.
- Heritage Market Saturday 25 May 2019. Members wish to share a stall with Australian Plants Society as previous. Barb to contact Bec Duncum. Roster to be sent out later.
- Simon Brown reported a good turn up of about 30 people for the Bat Night at Simpsons Gap led by Erin Westerhuis. A very small Cave Bat came out at dusk and also a new generation of Black-flanked rock-wallabies. Anne Pye suggested that Barb contact Erin about her introductory talk. Might be a useful article for the newsletter.
- Simon also contacted Mark Anderson at Simpsons Gap about ASFNC members visiting the rare and vulnerable *Ricinocarpus gloria-medii* (Glory-of-the-centre) population after rain. Mark agreeable and keen for ASFNC to visit.

**Future Events:**

- Sunday 17 March 2019 - Stroll into Standley Chasm to inspect regeneration after a fire burnt all along the creek and walk into the chasm 17 January 2019. Drive the 50km independently. Gate open at 7.30am. Entrance fee for locals - \$1.00. Join Connie for the walk, leaving the kiosk at 7.45am. Breakfast is available between 8.00 and 11.00am at your own expense.
- Jessie Gap picnic tea with Australian Plants Society has not been rescheduled as yet.

**Next Meeting:** Wednesday 10 April 2019. Speaker: Billy Ross on *Quolls*. Scribe required. Supper - Sue O'Callaghan.

**Sightings:** Neil Woolcock reported seeing a Centralian Dtella, a species of gecko, and Bats at their place in Larapinta.

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

Minutes compiled by Connie Spencer