



May 2019

Alice Springs Field Naturalists Club Newsletter



The rarely observed Letter-winged Kite occasionally breeds at Mac Clark Reserve near Old Andado. Lisa and Pete Nunn are keen to find out more about this elusive bird. See article on page 5. Photo: Lisa and Pete Nunn

Meetings are held on the second Wednesday of each month (except December & January) at 7:00 PM. **The May meeting will be held at Olive Pink Botanic Garden.** Visitors are welcome.

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NEWSLETTER

The next newsletter will be June 2019.

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

Please send your contributions to Barb Gilfedder: bjfedders@gmail.com

ALICE SPRINGS FIELD NATURALISTS CLUB



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. OPBG have recently installed a large television on the wall and have excellent solar driveway and car park lighting.

Presentation by 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): resource exploration, environmental monitoring, groundwater research and tectonic mapping. Also showing some examples of the beautiful landscapes and incredible challenges of conducting their work in varied Australian landscapes." (Top 2 photos)

All welcome. Presentation followed by tea, coffee and a brief general meeting.



Saturday 25 May **10.00am -1.00pm Heritage Market at the Telegraph Station**

Long Weekend 8,9,10 June Proposed Trip to **Newhaven Wildlife Sanctuary.** Camping in Newhaven Campground. Members only. Contact Barb Gilfedder.



Wednesday 12 June

ASFNC Monthly get-together at 7.00pm in the Lecture Theatre in the Higher Education Building at CDU.

Presentation by Megg Kelham, "Wildlife, Palm Oil and Eco-Tourism in Malaysian Borneo: The Good, the Bad and the Ugly - a traveller's impression." (Bottom photo)

Presentation followed by tea, coffee and a brief general meeting

AUSTRALIAN PLANT SOCIETY ALICE SPRINGS

apsalicesprings@yahoo.com.au>

Wednesday 1 May 7.30pm at Olive Pink Botanic Garden.

Barb Gilfedder with help from Rosalie Breen and Peter Jobson will show photos taken along the short walk into Standley Chasm before the January fires and on several trips since then.

All welcome.

Tea, coffee and a light supper provided.

Alice Springs Field Naturalists Club Committee Members

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

April speaker:

Quolls and Cats: Billy Ross's Ph. D. project

Report by Lee Ryall

Northern Quolls are cute looking, furry creatures whose white spots flash as they dart out of the videos showing their release from captivity. However, Billy Ross, working on a three year project in the Pilbara in which 450 animals were captured and released, seems to have developed a specific hold for keeping away from the razor-sharp teeth. They have SEVEN pairs of pointed incisors, clearly to be seen as his captives snarled their protests at this handling. Quolls are northern Australia's largest marsupial omnivore - they like fruit, nectar and garbage as well as a range of mammals, birds, reptiles and insects. Actually, that was 450 captures, not that number of Quolls - some of the animals were caught more than once over that period. It's still an impressive number and a useful mass of data.

Like many small Australian mammals, Northern Quolls (*Dasyuridae hallucatus*) are listed as endangered. They are part of the Dasyurid family, which also includes Tasmanian Devils at one extreme and Fat-tailed Dunnarts at the other. Quolls are short-lived - the females often survive for two to three years, but the males rarely outlast their first mating season. The males also have a wider range than the females, living in more exposed areas and may be more vulnerable to predation as a result.

The range of the Northern Quoll previously extended right across the north of Australia, but has contracted to several distinct areas as a result of factors such as changes to their habitat, (resulting from grazing, fire management patterns, etc.) and feral Cats. Cane Toads are also an issue in the north, although not yet in the Pilbara.



Above: Billy with one of the Northern Quolls he has been researching.

Below: the beautiful Pilbara landscape.





Photos from Billy's work in the field.

Billy's project is examining the effect of baiting feral Cats on the Quolls in the Pilbara area - on how the Quolls respond and on the effect on Quoll demographics. Baiting feral Cats has had varying effects on Cat numbers. In 2016, an 80% reduction was achieved in the experimental site. This level was maintained in 2017, but in 2018 numbers rose again as a result of invasion of the area by outside Cats, and baiting only achieved a 20% drop in numbers. Billy is comparing the number of young born, and the diversity of parents in the baited areas to those in the unbaited areas hoping to find an increase in numbers as well as in the genetic diversity of the animals. Preliminary results seem to indicate that genetic diversity has increased in the baited areas, although many animals appear still to be keeping to 'safer', more sheltered areas. It appears that the population does fluctuate in response to changes in Cat numbers.

It will be fascinating to hear the results of the project in their final detail - whether baiting is cost-effective in protecting the population of Quolls, whether genetic diversity increases in response to Cat baiting and whether the population has the potential, with this protection, to move out of its 'endangered' status. If you want more detail about this project, check out the YouTube video "Billy and the Northern Quolls" on the internet.

Thanks, Billy, for a fascinating talk.



**Pete and Lisa Nunn:
The Letter-winged Kite project.**

Report by Lee Ryall

At the April general meeting, the Field Naturalists, as part of their general support for local projects, agreed to help Lisa and Pete Nunn start a project examining Letter-winged Kites. The Kite is so named because of the distinctive black stripe under its flexed wings that looks like a large letter “M” or “W” as it flies overhead. It is a mysterious bird, with little published research available about its breeding habits or its range.



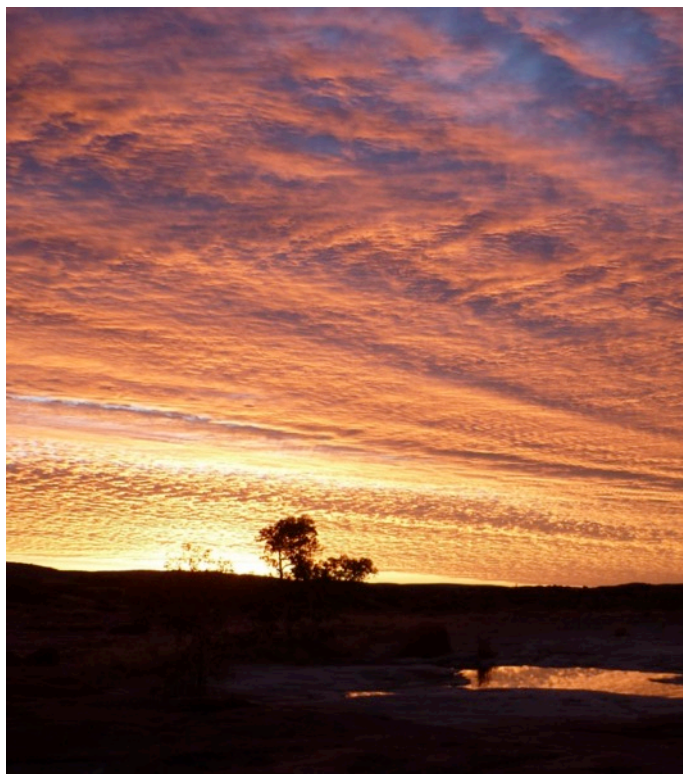
The birds are known for appearing at certain sites when the season is good, and breeding up quickly to achieve large numbers on a diet predominantly comprising rats (they don't do well when restricted to house mice). They appear from somewhere unknown and then disappear to somewhere else unknown, when the good times are over. There has been a site at Mac Clark Reserve/Andado Station in recent years, but it is currently abandoned. There are also reports of birds in the Tanami as well as over the NT border in the channel country of Queensland, and they have even reached Melbourne on occasion. Maybe because it is so mysteriously elusive, its conservation status has never been assessed. The records that do exist point to possible wild fluctuations in numbers of birds and sites, with between 5 and 14 sites reported over the last six years.

Locally, Lisa and Pete are hoping to ‘determine whether a refuge population of this species survives on the Barkly Tablelands as cited in literature, and explore the origin of the birds that arrive and breed intermittently around Mac Clark Reserve’. To do this they will need to evaluate the effectiveness of different trapping methods and will be starting to band birds so that individuals can be followed in their stravaiging about the continent. It's a great opportunity to be a part of this exciting project.



More photos from Finke Gorge to Watarrka walk, reported in our April newsletter

Simon Ward and Robyn Delaney delivered an amazing presentation at our March meeting on their 16 day walk from Finke Gorge NP to Watarrka NP.



Johnston River Grass, *Paspalum conjugatum*, at Standley Chasm

Report By Peter Jobson; photos by Rosalie Breen and Barb Gilfedder

In last newsletter, there was a report on a group visiting Standley Chasm to see the aftermath of the devastating fires in January. They observed a vigorous growing grass at the spring area and didn't recognise it. Rosalie Breen had been watching it for a while but this was the first time she had found seed heads on it. Many names were postulated but no one was completely comfortable with any of them. The Herbarium was able to confirm that the grass is *Paspalum conjugatum* (Johnston River Grass).



This photo of Johnston River Grass was taken in November 2018. The fern struggling to find room is Oak Fern, *Histeriopteris incise*.



In February 2019 the Grass was carrying paired seed heads and able to be identified.

The spring area at Standley Chasm has three important aspects: cultural, biological and practical. The permanent spring is culturally significant for obvious reasons; the water permanency means a number of species of restricted distribution and significance occur in this area – a number of species that have a disjunction of some 1500 km occur here (eg: *Cyperus polystachyos*, a common sedge at the site) **pictured right**; finally, this spring is the water supply for the caretaker and kiosk that is important for tourism and upkeep of the area. Ensuring this spring be in excellent condition is paramount. The thick root mat means valuable water is being redirected to the wellbeing of this weedy species rather than to the flow of Jay Creek and the native vegetation in the area.



Johnston River Grass, an introduced grass from tropical regions of the Americas, is now regarded as a weed in tropical areas around the world. In Australia, it is more prevalent in tropical and sub-tropical areas such as coastal New South Wales and Queensland. It readily forms mats via runners in damp situations and thereby smothering native vegetation. This species is currently not listed as a noxious weed for the Northern Territory, However, it has been suggested that it be part of a list of species that be monitored. In central Australia, it will always be restricted to areas that are cool, sheltered and with a permanent water source; the spring area at Standley Chasm has ideal conditions for it to thrive. On a subsequent visit, it was observed to be restricted to the area of the spring, with the drier conditions further downstream stopping it from spreading much further.



On the 1st April, Barb Gilfedder, Rosie Breen and Peter Jobson visited the area to assess the extent of the infestation. Johnston River Grass is shallow rooted and easily extracted along the stream bank using either a fork or mattock, and so Rosie and Peter made short work of the plants at the northern end of the population. The large mats present along the edge of the pools were another matter; being water sodden, they were heavy, and with neither being professional tuna or marlin fishers, one of the smaller mats was a struggle. This grass readily produces from runners that easily root. The subsequent root mass can be a good 5 cm thick and extend for large areas over the standing water. It is hoped that once the grass has been removed, the sedges such as *C. polystachyos*, which is dominant where the grass is absent, and other herbs will return.



The fires may have been devastating but the bush is bouncing back where water is available such as the spring area, seedlings and new shoots are prevalent - species such as *Acacia strongylophylla* (Round-leaf wattle), *Petalostylis cassinoides* (Butterfly bush), *Indigofera basedowii* (Showy Indigo) and others. In fact, it was necessary to watch one's step to avoid trampling all the new growth.

Above: Peter and Rosalie found the grass was fairly easy to mattock out from the stream bank, but along the edges of the pools dense heavy mats formed, which are much harder to remove. Below: Round-leaved Wattle and Butterfly Bush seedlings



Intertexta Forest recovering - Barb Gilfedder

In May 2018 an intentionally started fire damaged part of the Intertexta forest at Ilparpa. At that time, I was particularly saddened by the burning of a small *Acacia sessiliceps* tree. It was one of those significant trees that we always visited when in this small forest. I reported this event in our June 2018 newsletter. On a more recent visit, I was thrilled to find this tree resprouting from the base.



Above: the *Acacia sessiliceps* before the fire with a good crown of green leaves. Right: The same tree ten months after the fire, with blackened trunk but sprouting strongly from the base. Below: Two other photos taken in March 2019 showing *Eremophila longifolia* and *Jasminum didymum* regrowing and young *Eucalyptus camaldulensis* resprouting.





ALICE SPRINGS FIELD NATURALISTS CLUB INCORPORATED
Minutes of the general meeting held at the Higher Education Building
Charles Darwin University – Wednesday 10 April 2019

After Billy Ross talk on Northern Quolls. Lisa Nunn also answered questions about proposed Letter-winged Kite research. Thank you to Sue O'Callaghan for supper. Thank you to Lee Ryall, scribe for talk.

Present: 12 Members and 6 Visitors and 12 Apologies as per attendance book

Minutes of the March General Meeting attached to the last newsletter. Accepted.

Business arising from the General meeting Minutes.

- Website - Robyn Grey-Gardner not available so no further update

Treasurer's Report: Treasurer Neil Woolcock currently away. Report will be held over until May meeting

Correspondence:

- Chris Connellan unable to accommodate a Field Naturalists visit at the moment – very dry and invasive cattle.
- Erin Westerhuis thanked us for opportunity to put something on Bats in newsletter.
- Account came through for Insurance – due date extended until 15 April. Lee Ryall to check if she can make the payment, otherwise Neil will pay when he returns.
- Barb inquired about 'longer than one day' Newhaven trip as last year we had to pay additional premium for such trips. This year they will not charge extra.

General Business

- Letter-winged Kite Research Project. We will provide \$500 to Lisa and Peter Nunn, in the first instance. Moved Barb Gilfedder, seconded Lee Ryall, agreed unanimously
- Heritage Market Saturday 25 May 10.00am – 1.00pm. Roster has been circulated and is full. Connie, Rosalie, Barb and Neil to set up from 9.00am. Thank you to all who volunteered to work on the stall. Please visit and have a chat if you can. Barb and Rosalie have organized a Backyard Birds recognition activity. Rosalie also collecting interesting items for a 'Nature Table'.

Past Events:

- Sunday 17 March - A short, easy stroll into Standley Chasm to inspect the regeneration after fire burnt all along the walk into the Chasm on 17 January this year. 12 people attended. Everyone shocked by burnt trees but relieved at regeneration. Rosalie Breen collected specimen of invasive Grass species from spring area. Peter Jobson identified it as *Paspalum conjugatum*, a feral, although not a declared weed in the Territory. Peter, Rosalie and Barb went for another look on Monday 1 April. Peter and Rosalie matted out 4 big garbage bags of it – still lots to remove. Nova, the manager is seeking help from other agencies such as Landcare for grants and manpower.

Future Events:

- Proposed visit to sewage ponds with Lisa Nunn and other Birdlife Members proposed for Sunday 28 April may be deferred due to clash with Friends of Desert Park AGM. New date to be advised. AGM will include a tour of some aspects of the Park. **(Date remains the same, but time has been changed to 7.30am. Ed.)**
- We are a bit short on events. Many things suggested at Planning Meeting need to have rain before. Jill Brew mentioned Andrew Fitzgerald's star talk, usual cost is \$150. Discussion of precedent set by paying for talks.

Next ASFNC Meeting - Wednesday 8th May 2019. Simon Mann - Geophysics and the bush, a brief story of Australian exploration. Simon's summary: The talk will cover the role and applications for geophysics in Australia (specifically Simon's focus, electrical geophysics): resource exploration, environmental monitoring, groundwater research and tectonic mapping. He will also show some examples of the beautiful landscapes and incredible challenges of conducting work in varied Australian landscapes.

Note that the venue for this meeting is OPBG Visitors Centre.

Scribe: Lee Ryall. Supper: Marg Friedel.

Sightings: No time for reports.

Minutes compiled by Margaret Friedel.