



ALICE SPRINGS FIELD NATURALISTS CLUB

February 2010 Newsletter

Tawny Frogmouth and Chick *Photo Jim Lawrence*



This beautiful Tawny Frogmouth and her chick on the nest were at a camp near Tilmouth Well on the Tanami Road.

Meetings are held on the second Wednesday of each month (except December and January) at 7:30 PM at the Olive Pink Botanic Garden. Visitors are welcome

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

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MEETINGS

- Wednesday 10 February -** Guest speaker - **Robert Jansen**
Northern Corroboree Frog – last chance to save.
- Wednesday 10 March -** Guest speaker - **Stuart Traynor**
John McDouall Stuart's 1860 Expedition:
A 'Natural' History

TRIPS/ ACTIVITIES

*Field Naturalist members are welcome to attend APS trips.
Please contact the leaders.*

**If you want to
attend any trips
please RSVP to
Trip Leader**

- Sat 6 February** **APS - Early morning walk in the *Eucalyptus intertexta* forest, Ilparpa.** The recent rains have transformed this "dry jungle" into a paradise of plants and birds. Meet 7:30 am at the information bay on the South Stuart Hwy opposite the Old Timers Home. Bring breakfast/morning tea for afterwards. Contact Connie Spencer on 89 524 694 or constans@bigpond.net.au if attending or for further information.
- Fri 12 February** **ASFNC - BBQ/Picnic tea at Simpsons Gap** 6pm. Short walk to the water to check out the frogs. BYO everything. Contact Barb Gilfedder
- Sat 27 February** **ASFNC - Early morning walk** along the upper Todd River in the Telegraph Station. Contact Rosalie Breen on 89 523 409 for further information.
- Sat 13 March** **APS - Early morning walk** around the Araluen gardens. Meet 7:30 am in the Strehlow Centre carpark. Contact Connie Spencer on 89 524 694 for further information.
- Sat/Sun 20 & 21 March**
Miss Pink's Birthday celebrations at Olive Pink Botanic Garden. A plant sale will be part of these celebrations plus the launch of the Friends of OPBG.
- Easter Weekend 24/25/26 April**
ASFNC - There has been a suggestion that we have a camping trip to **Newhaven Reserve** over the Easter long weekend. It will only be organized if sufficient members express an interest. If you would like to go please contact Barb Gilfedder on 89 555 452 or fedders@octa4.net.au

NEXT NEWSLETTER

The deadline for the next newsletter is **Friday 19th February**. Please send your contributions to Emily Findlay – robbiemily@hotmail.com

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From the President.... It was great to see so many members at the end of year breakfast at Pitchi Richi. It was a perfect spot for people to sit under the trees and chat, while some chose to wander and soak up the nostalgia of the place. I'm sure everyone enjoyed the lovely range of food. Thank you to all those members who turned up the day before and helped rake and tidy the area and to Connie Spencer who organized tables and beverages.

Since our last meeting several members attended a further community consultative meeting at Araluen, and again put forward our concerns about the Natural History Museum in the Strehlow Centre. I have since had a letter from Gerry McCarthy, NT Minister for Arts and Museums. In which he says, "I would like to assure you that the Northern Territory Government has no intention of reducing or removing the Natural History Collections from its current location until a suitable alternative is found. I would like to increase the display of Alcoota materials which is currently off limits." A "New" Araluen Development Plan should be out soon.

Barbara Gilfedder

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Tips for Better Newsletter Contributions By Emily Findlay

We love to receive your contributions to the newsletters for without them we would not have a newsletter at all. To make my job as newsletter editor a little easier I have put together the following tips for better newsletter contributions.

Text: Please save all text as a 'Word Document' this should have .doc after the name of the file. You can check what type of file your document is saving as when you hit save and you are prompted to give the file a name. The type of file will be represented after you type in the name e.g. 'FieldNats Newsletter.doc'

Images: If you are sending photographs with your article please do not embed them in the text this makes it difficult for me to use. Also do not send a separate document with the pictures pasted on or inserted in. It is best to send images a separate attachments. jpegs are best, but I can also use bitmaps or tiff files. Please give your pictures a name e.g. 'Reef Egret.jpg' rather than leave the photograph number – P102065 is hard to identify.

Make a reference in your article where the image needs to be inserted e.g. (insert picture of Reef Egret here). Keep your pictures and images under 1 MB if possible as bigger files take up a lot of space and are hard to email, I will just change have to reduce the size to put it in the newsletter anyway.

If you have any doubt or need some help please email or call me and I can try to talk you through it.

Your contributions are always welcome and we would love to have a few new contributors in 2010 so go on don't be shy have a go!

**November Speakers –
"Wetland in central Australia: Where, What and When?", Angus Duguid
"Hydrogeology of central Australian wetlands", Bob Read
by Rhondda Tomlinson**

At the November 2009 meeting we were presented with two very knowledgeable and respected guest speakers, Angus Duguid and Bob Read.

First, Angus presented his talk **Wetland in central Australia - Where, What and When?**

Ten years ago a project was set up with the aim to make an inventory of Central Australian wetlands. In 1999 at the start of the project the Centre was very dry but then the rains came and things really started on foot, by vehicle, helicopter with the aid of basic topographic maps, previous literature and observations and aerial photography and satellite imagery. It was highlighted how modern day exploration compares to the conditions and resources used by early explorers. The Aboriginal people with their local knowledge and survival skills are most highly regarded.

I was fascinated by the disclosure that part of the Simpson Desert is a significant wet land. In the year 2000 Snake Creek, a branch of the Finke River, was a vast wetland and in places 9 metres deep with some areas of water remaining for nearly 3 years. Lake Lewis was of particular interest to me as a Field Naturalists trip visited this area in 2006. Angus explained that the lakes start off as fresh water, then water evaporation and dissolution of salt causes the water to become saline. These lakes are an important haven for water birds. .



Field Naturalist Trip Lake Lewis 2nd September 2006.

As you travel north into the Barkly, the wetlands become more regular and permanent and more documentation and mapping has been done. I was interested in the fact that the water drainage more or less to the west of the Stuart Highway goes into local internal drainages, while to the east, the Todd, Sandover, Hugh and Finke River systems are in the Lake Eyre Basin.

Most of our wetlands in the Centre of Australia are dry most of the time but big rains bring them back to life.

Thank you Angus for a very interesting talk.

The second speaker was Bob Read on the **Ground Water Dependant Wetlands of Central Australia – Hydro geological perspective.**

Springs in central Australia are mostly concentrated in the MacDonnell Ranges, with some in the major drainages to the south, particularly the Finke River, the main surface water drainage.

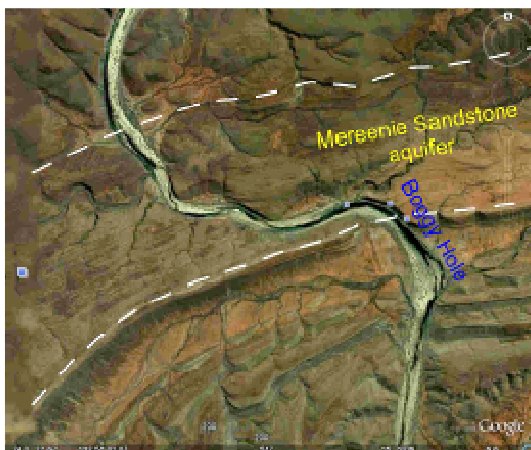
Most of the springs discharge from small flow systems with flow paths ranging from about 100m to 10km.

Bob gave us a definition of groundwater:

- Groundwater is water in pores and fissures in the saturated zone below the water table.
- Does not include water in the vadose or unsaturated zone that is held by capillary tension.
- It originates as rainfall at the surface. A small proportion infiltrates to the water table as recharge.

As part of Angus' project, the list of wetlands was examined to establish which are groundwater dependent. Since both ground water and surface water will move to the lowest point in the landscape this is not always obvious. Where there is running water in a dry period it must be ground water fed. For other water holes such as Simpson Gap the small fall in water level in dry periods demonstrates that it is groundwater fed. This is confirmed by an Aboriginal account collected by Dick Kimber that in a big drought about 250 years ago Simpsons Gap was one of the few water supplies not to dry up.

Discharges of saline water that do not match the relatively fresh surface water flows must be groundwater. Some waterholes are inferred to be groundwater dependant in



part from their location on a contact between high and low permeability rock. A well known example is Boggy Hole is where the Finke River crosses the edge of the Mereenie Sandstone.

The water quality varies widely, in part due to the type of rock formations it moves through. The best water is usually in quartzite and springs in limestone are often saline. The springs of the Chewings Range have very good quality water.

Thank you very much Bob. This talk has given me food for thought. Next time I visit these areas I will definitely take your talk into consideration especially when we see flowing water or damp ground.



**Araluen Cultural Centre garden and Northern Territory Museum visit
Saturday 21st November 2009
By Rosalie Shultz**

Two superb outings in one morning – there was too much to see and learn. There is a broad-ranging discussion paper about the future of the Araluen Cultural Precinct. One aspect of this paper is a proposal to transfer natural history elements of the Araluen Cultural Precinct, including the Northern Territory Natural History Museum, away from their current location at Araluen. This would enable the expansion of the visual and performing arts components of the Cultural Precinct. The Alice Springs Field Naturalists Club is concerned about this aspect of the proposal as it may further devalue the role of natural history in the Cultural Precinct, suggesting natural history has a less important role in our cultural heritage.

It seemed practical for the Field Naturalists to visit the centre as a Club. We hoped to see the natural history items on display under professional guidance, together with items in store and under preparation. This may enable us to better understand the proposal and its implications both for scientific endeavour and for public access to the natural history work at Araluen. Much of the space at Araluen for natural history is a technical workshop, but its location adjacent to the Natural History Museum is appropriate.

We were privileged to have Ian Archibald show us the natural history work and displays at Araluen Cultural Precinct. This is Ian's Alice Springs worksite, where he has worked for over 40 years. (Ian's tour was preceded by a delightful walk around the gardens with Connie, which I describe later.)

Araluen museum and natural history discovery tour

One highlight of this was seeing 7 million-year-old bones. Ian and others have been excavating from two fossil digs, one near Alcoota and one near to Rainbow Valley. These sites are thick with fossils. Ian says that individual bone fragments may be lost or damaged but there are many many more to examine.

The excavators use glue diluted with acetone to a thin liquid, so that it runs smoothly over the bones, filling every crevice and holding the remaining fragments of bone in position and protected. Without the glue solution the bones would disintegrate as they were removed from their bed. When excavation work is hurried, entire fossil beds are preserved and dug up, because once exposed to the air the fossils are fragile (despite up to 10 million years of resilience in situ). Excavation can then be completed in the workshop.

The specimens at these sites may be "only" 7 million years old – a short period in geological time. Therefore we are told that the animals have resemblance to familiar animals – though I personally am not very familiar with the rhinoceros that one prehistoric wombat is said to resemble. There are fossils of thylacines, and ancestors of modern crocodiles and kangaroos. To the paleontologists, skeletons may be identified by their pelvis or even a single tooth.

We examined bones of an enormous bird – the *Dromornis stirtoni* – which is the largest fossil bird identified anywhere – 3m tall and weighing 500kg (not as tall as the moa from New Zealand, but heavier). Their eggs are as big as a bucket, weighing 12.5kg. There is a plastic model of a *Dromornis* skeleton on display to the public. We learnt that plastic models are made of the fossil bones, as they are lighter, safer and easier to display than original fossils and they can create a realistic image of the skeleton.

Other mindboggling remnants we saw were those of a horned turtle 10 million years old, and a marsupial tapir.

The Alcoota fossil site is a jumble of fossils, with bones from mammals, birds and reptiles all heaped up together. This suggests that flooding may have washed fossils from upstream into the site.

We started at a preparation hall, an intriguing collection of newspaper cuttings, old books, fossils in preparation for export and some animal specimens in a shipping container heavily laced with naphthalene.

Next stop was a wet preparation area, where strong acid is used to wash away limestone from fossils. The chemistry of the bones means that they do not dissolve in the acid bath, while surrounding limestone is removed. Further protection can be provided by painting the fossils with glue. It was striking to me that these unique fossils of immeasurable scientific value were being prepared in an outside area that was not completely secure. A foolish or misguided person could enter the area and

risk their well-being in the acid. They could also threaten the fossils, either willfully or accidentally.

Then we entered the workshop – previously a dance floor. This is where most of the work on cleaning and identifying the fossils appears to be done. Ian has worked hard in difficult conditions of the makeshift workshop, labelling, organising and storing so that unique items can be retrieved when required. He deserves credit for such work in a building not designed for the purpose, and competing for space with dancers and painters.

While in the workshop Ian told us about the Finlayson collection. Hedley Finlayson was a chemist working in Adelaide, interested in the fauna of central Australia. He visited the region four times during his summer holidays in the 1930s to 1950s. Transport was by camel, and Finlayson was well supported by his sensitive relationships with local Aboriginal people, who assisted him in his travels and studies. Not only did Finlayson undertake this work in the heat of summer, he did it with one hand, having lost his left hand in a chemical explosion before coming to central Australia

Finlayson was the last non-Aboriginal person to see many of the mammals of central Australia. His visits coincided with the extinctions of last century. These are attributed to a range of factors including grazing by exotic herbivores, predation by cats and foxes, and habitat alteration mostly brought about by changes in fire regimes. Frequent burning can prevent the establishment of vegetation communities necessary for survival of medium -sized mammals (Woinarski *et al.* 2007).

Finlayson's work included identification and preservation of mammal specimens – a huge ethical challenge for me. Slaughter of living beings solely for human interests is distasteful and unjustified; yet I feel a surreal wonder on seeing their magnificent skins and bodies preserved, and gratitude for the work to enable us to gain some understanding of the natural history of central Australia. Although these beautiful creatures no longer dwell in our land, their magnificence can be seen in the items Finlayson so painstakingly preserved. We examined their unique and beautiful furs and skins. These are held in drawers in the workshop, stored in climate controlled conditions and naphthalene, as apparently insects are now their greatest threat. Finlayson contributed to the limited knowledge of the Burrowing and Brush-tailed Bettong, Bandicoot, Numbat, the Western Quoll, and Lesser Bilby and many more (Woinarski *et al.* 2007). Some of these creatures' carcasses are on display in the public areas of the museum.

During our brief visit, I found the Natural History Museum useful to enable me to study birds, reptiles, mammals and invertebrates that are difficult to look at carefully in the field. The displays enable us to learn to identify creatures by becoming familiar with their distinctive features – without them flying away.

All in all, an extraordinary tour of natural history. The specimens under preparation, in storage and on display are significant for us as central Australians and residents of planet Earth, as we seek to better understand our biological heritage. We need to visit again – both I personally and the Club as a group for learning and teaching. We also need to consider whether the proposal under discussion can lead to a better location for these priceless articles and the critical work being done. A purpose-built workshop and display area are required. A well-resourced and promoted area for public display would also enhance opportunities for public education, understanding and appreciation.

Araluen Car park gardens

With direction from Connie we strolled around the gardens in the Araluen Cultural Precinct. These are worth another visit in themselves, not merely as a sideshow. Our group swelled from 5 to 25 as we walked along the paths and into the car park, noting the wealth of native plants that have been cultivated at the Cultural Precinct.

The highlights for me was a review of familiar grasses – *Eulalia aurea* “silky browntop”- both common and scientific names seem to depict this tussock grass with golden brown flowers and bright green leaves. *Themeda triandra* “kangaroo grass” with a reddish hairy brown spikelet and *Cymbopogon ambiguus* identifiable by the lemon scent, folded leaves and long seed heads. Then there was *Panicum decompositum*, the native “panic” grass – not panicking but Latin *panicum*, a kind of millet. (Purdie *et al.* 2008).

Out near the road were Acacia trees keeling over with the weight of mistletoe they were supporting. I think it was the *Amyema preisii* with bright red corolla (Moore 2005).

Connie gave some interesting history that the car park was originally developed in the late 1980s, with the plants in a bed of river stones. Smashed windows were regularly reported. The river stones were then replaced by sand, and the smashed windows became less of a problem.

Shade trees are planted in the car park drawing attention to the beauty of our local flora. Interestingly some of the Ghost gums planted in the car park are the northern form rather than our local *Corymbia appererinja*. Nevertheless, growing well in the car park. Coolibahs and Beefwood also provide shade and interest. An elegant Kurrajong with showy pink-red flowers also gave shade; it was said to be a species from outside the region but surviving well.

Connie pointed out strong and attractive regrowth after aggressive pruning of cassias. Good advice for the gardeners!

A half hour gave a mere glimpse at the range of plants in this little park, and suggests an inviting area for a future longer walk. Plants to look for include Sturt’s desert pea, *Crotalaria*, desert rose in purple flower, *Eremophila polyclada*, or lignum – a great garden plant, that flowers vigorously in the summer bringing colour to otherwise bleak summer gardens. It grows best in full sun and is very drought tolerant. Many specimens of *Hakea divaricata* trees are now old enough to demonstrate the distinctive rough gnarled bark.

- Woinarski J, Pavey C, Kerrigan R, Cowie I, Ward S (2007). Lost from our landscape: Threatened species of the Northern Territory. NT Department of Natural Resources, Environment and The Arts, Palmerston.
- Moore P (2005). A guide to plants of Inland Australia. Reed New Holland, Sydney.
- Purdie J, Materne C, Bubb A (2008). A field guide to plants of the Barkly Region, Northern Territory. Barkly Landcare and Conservation Association, Alice Springs.

CHRISTMAS BREAKFAST – Pitchi Richi
6th December 2009
by Rhondda Tomlinson

On 5th December when several members of the Field Naturalists arrived with rakes and shovels to give the Pitchi Richi site a spruce up for our Christmas breakfast the next morning. Many hands and light work soon had the site looking really great.

6th December, 8:00am people and food started arriving, it was a perfect morning and soon people were catching up with those they hadn't seen for a while and generally soaking up the magical atmosphere of Pitchi Richi. Elsa Corbett and Domenico Pecorari were our special guests. Elsa as she and her husband Leo has put so much of their life into the sanctuary and Dom as the Chairman of Heritage Alice Springs. The sanctuary at the moment is not open to the public so it was quite a privilege for our group to be able to come here for Christmas breakfast.



Dom talked to us about part of the history and what is happening with Pitchi Richi. Elsa was able to tell us some of her experiences while her and Leo lived here. Other people were also able to add pieces of information and experience of this very special place that hopefully will be again an area for the local people and also visitors to come.

Dom told us that after much to do Pitchi Richi was finally

heritage-listed in December 2008 and Elsa has sold her lease-holdings (which has about 25 years remaining) to the Heritage Alice Springs Inc. who have taken over the management and development of the sanctuary. Chapman's House is also been nominated for heritage-listing as having been built by Pop Chapman whose numerous entrepreneurial achievements include the founding of The Granites mine, the construction of Alice's first public Swimming Pool and the establishment of *The Advocate* newspaper.

Pitchi Richi Sanctuary forms only about 40% of the total area of the lease and the remaining 60% has significant potential for appropriate development to be complementary to this area and possibly become a self supporting enterprise. Grants are at present being applied for to help with the restoration and on going up keep of the area.

If anyone would like to help or become involved in this project Dom would only be to happy to talk to you about the project. Phone: (08) 8952 5420 or e-mail:

dpecorari@westnet.com.au

Confusing Heron by Barb Gilfedder

The dark bird in this photo appeared at the Alice Springs sewage ponds in November. Shirley Goodman spotted it first and pointed it out to me. The only Heron we could find in the field guides with this colouring was a dark morph Eastern Reef Egret. Alice Springs would be well out of the normal range of this coastal bird. Bob Read and Will Cormack went out to inspect the specimen. Bob took the photo and they both agreed with our identification. However when we distributed the photo to birders more familiar with Eastern Reef Egrets, they expressed their doubts. We all looked again and decided that because of its shape and stance it was in fact a melanised White-faced Heron. Melanised means with black colouring, like albino but black instead of white. The bird in the foreground of the photo is the White-faced Heron in its normal plumage. They are the same size, just look different in the photo. You can see why we were confused.



New Members

We welcome new members for this season, say hallo and we hope your enjoy our club meetings and outings and friendships.

Ian and Wendy Mann, Shae Burns, Kay Bailey, Stuart Traynor, Megg Kelham, James Armstrong, Regina Yurkonis, Claire Meney, Steven Sawrey, Joseph Schofield, Colleen O'Malley

ALICE SPRINGS FIELD NATURALISTS CLUB INCORPORATED
Minutes of General Meeting held at Olive Pink Botanic Garden
on Wednesday 11 November 2009

Open: President, Barb Gilfedder declared the meeting open at 8.50pm.

Present: 20 people were present as per attendance book

Apologies: Sarah White, Jim Lawrence.

Minutes of previous Meeting:

As usual minutes of the previous meeting had been circulated as part of the newsletter. Minutes on the October meeting were moved for acceptance by Rhondda Tomlinson and seconded by Rosalie Breen. Accepted.

Matters Arising:

Deferred to General Business

Correspondence In:

Oct: (not presented at October meeting)

Australian Naturalist Network Reminder about 6th ANN Get- Together 2010

Western Australian Naturalists Club The Naturalist News – October

NT Field Naturalist Club Nature Territory –October

Australia Day Council Invitation to 'Nominate a Territorian 2010'

Nov:

Western Australian Naturalists Club The Naturalist News – November

NT Field Naturalist Club Nature Territory –November

Elsa Corbett Acceptance of invitation to Christmas Breakfast and appreciation of Newsletters

MLA Jodeen Carney Acknowledgement of concerns re Araluen Cultural redevelopment

Gerry McCarthy Acknowledgement of letter re Araluen Cultural redevelopment

Correspondence Out:

Response to Araluen Cultural Redevelopment Plan

cc to MLA Jodeen Carney

cc to Minister Gerry McCarthy

Thank you letters to October speaker still to be sent

Treasurer's Report:

Current balance of \$2776.71 with some 09/10 membership fees still to be paid.

General Business:

Araluen Cultural Centre Development Plan. See Correspondence Out and In. Jodeen Carney conveyed her concerns and will include issues raised in the ASFNC submission when the matter is discussed in Parliament. Barb is seeking a meeting with Gerry McCarthy when Parliament sits in Alice Springs later this month.

Land for Wildlife surveys – there is an opportunity for members to be involved with these bio-diversity surveys on November 30 -December 3 and 7-10 December The survey in the airport area are to teach property owners the techniques involved and are an opportunity for club members to gain trapping and identification skills.

Buffel Grass, vegetation and seed bank sampling. This is being conducted by Boyde Wright over two weekends in November in the Illparpa area. Observers are invited.

Website –Geo-cities which has hosted the club's website has ceased to exist. Bob is looking into a replacement site and will keep members informed.

Alice Springs Town Council website – the ASFNC link needs updating.

Stuart Traynor mentioned that next year it will be the 150th anniversary of John McDouall Stuart's first expedition to 'The Centre'. There are plans for a week of celebrations including a re-enactment on 11April. He suggested that ASFNC may like to have some involvement and perhaps make this a focus for the April 2010 meeting.

Outings/Trips- Reports

Sewage Ponds – see Connie's write-up in the Newsletter

Flagon Hill – sightings of Red Throat and Button Quail capped off with great morning tea at Sue's!

Future Outings/Trips

21 November – conducted tour of Natural History section at Araluen including behind the scenes. This will start at 10.00am; people interested in having a look at the plants outside first can meet up with Connie at 9.30.

5 December – working group to tidy up area at Pitchi Richi for Christmas Breakfast – several people volunteered.

6 December – Christmas Party breakfast at Pitchi Richi. Bring a plate to share.

Sightings:

Channel Billed Cuckoos have been heard – they are back!

Bob reported seeing Black Tailed Godwits, Little Curlews, and Australian Spotted Crake and Orange Chats at the Sewage Ponds.

Next Meeting: Wednesday 10 February 2010

Note taker: Jill Brewer

Supper: Vicki Gordon

Gate: Barb Gilfedder

Meeting closed at 9.25 pm.