

If not claimed within 14 days please return to the Alice Springs Field Naturalists Club
Inc. PO Box 8663, Alice Springs, NT 0871

November 2007



| | | | |
|-------------------|------------------|-----------|----------------------------|
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| Vice-President | Liz Carpenter | 8953 6750 | lizcarpenter@bigpond.com |
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Web site: www.geocities.com/alicenats

MEETINGS

7.30 pm on the second Wednesday of the month.

Venue: Olive Pink Botanic Garden, Tuncks Road

Nov 14 Last meeting for 2007. Speaker Bob Read. "Are Grasshoppers eating your Garden?". Grasshoppers in and around Alice Springs.

Feb 13 2008 First meeting for 2008

TRIPS / ACTIVITIES

Sat 24 Nov. Moonlight cycle trip to Picnic Spur off the Larapinta Bike trail. Meet at Flynn's Monument, Larapinta Drive, at 6pm. Contact Bob Read 8952 1935

Sun 2 Dec. Bird watching at Alice Springs Sewage Ponds. Turn left off Commonage Road just before the Rubbish Dump. Meet at gate at 7am. Contact Liz Carpenter 8953 6750

Sun 9 December. Christmas break-up. 8 am Breakfast at Simpsons Gap. BYO.

GUEST SPEAKER REPORT

METEORITES AND THEIR IMPACT STRUCTURES

Unravelling the history of our
Solar System

Mike Green Sept 12th 2007

By Bill Smyth

Part of the reason we know so much about the early earth is due to meteorites. Meteorites are good representatives of early planets. By studying meteorites we can learn about the processes and materials that shaped the Solar System and our planet.

The predominant sources of meteorites are the asteroids although some come from the moon and Mars. Meteorites are residues of intergalactic dust, collisions and others are bits of planets which didn't make it.

The earth consists of three main concentric zones, an Iron-Nickel core, surrounded by a

rocky mantle with a thin layer of lighter rocky material called the Crust.

The varieties of meteorites represent the various zones within the earth.

Iron Meteorites represent the core of terrestrial planets;

Stony-Iron meteorites represent the mantle and Stony-chondrite meteorites represent the planet crust.

Tektites are not meteorites but molten rock.

Crater forming meteorites are those which hit the earth's surface with sufficient speed to excavate material. They are the largest meteorites that hit earth and in the order of several tonnes of material. The mechanism behind crater formation is the reaction of rock to compression and decompression during shock. The high shock pressures compress the rocks, rendering them almost fluid. Following the pressure wave is a decompression front that allows the shocked material to be ejected outwards in a sheet of material.

Criteria to identify meteorite craters: Circular structure; Rims uplifted; Central uplift features; Coarse fragmented ejecta; Fragments of meteorites; Melted and shocked rock; Shatter cones; Presence of high pressure minerals.

Craters can be simple or complex craters depending on the configuration of impacts and the timing. The Moon has good examples of has multiple craters which allow for dating of events. Central Australia has numerous documented meteorite craters. The best known are Wolf Creek, Goss Bluff and Henbury.

Henbury has several craters and complex craters resulting from the break up of a single large meteorite. Approx 1000 kg of Fe-Ni meteorites have been recovered. Henbury is relatively recent at 47,000 BP and is thus better preserved than older impacts would be.

Mike's search for other less obvious and well preserved craters continues.

Australia is good place for craters as old land surface - Wolf Creek, Goss Bluff

Henbury - multiple structure due to one large meteor breaking up. Relatively recent at 47,000 BP. Approx 1000 kg of Fe-Ni meteorites have been recovered

Easier to find Fe-Ni meteorites as chondrites which are more common look a lot like ordinary rocks and would weather similarly

Rapid change to planetary environment due to big impacts. Mass extinctions attributed eg dinosaurs.

TEN REASONS WHY BIOLOGISTS FIND AUSTRALIA SO INTERESTING

Steve Morton from CSIRO
October 10 2007

By Rosalie Breen

- 1 A continent of immense age and history.
Part of Gondwana
The emu, a weird animal, epitomizes our ancient world.
- 2 A continent with a unique cargo of animals
The Coopers Creek system is imperative for the movement of water birds. Almost all of inland of Australia can act as a habitat for Grey Teal
Stygofauna live in water bodies beneath the ground. Thousands of species are being discovered, often confined to individual aquifers
Terrestrial invertebrates. Insects dominate the continent in the number of species, along with arthropods, spiders and molluscs
- 3 A continent of nutrient poor soils and intense fires
Soils are poor in phosphorus and essential nutrients
In the present age no volcanoes or glaciers so no rejuvenation of soils
- 4 A continent of peculiar plants
Plentiful light and access to moisture (at least periodically) enable plants to make more carbohydrates than needed for metabolism and seed production. In consequence plants have developed persistent evergreen leaves, adaptations for extracting nutrients, defensive tissues, seed protective coverings and digestible exudates to attract plant pollinators and aid dispersal.
This in turn leads to a propensity to burn with intense fires
- 5 A continent of peculiar animals
Large rewards for vertebrate pollinators, lots of nectar eating animals
Leaf eating mammals are small
No mammals eating subterranean plant matter
No fungus-culturing termites or ants
Birds breed more continually and often co-operatively

- Lizards are the dominant termite predators
- 6 A laboratory of ocean currents
Surrounded by seas
Ocean currents influence rainfall.
There is a relationship between Indian and Pacific Ocean
El Nino effect
Indian Ocean Dipolar which in negative mode brings warm currents and intense monsoon rain to northern Australia
- 7 A laboratory of climate change
In 2007 IPPC agreed that human intervention was very likely the cause of the increase in atmospheric greenhouse gases, leading to, in Australia, increasing temperatures and moving rainfall patterns to less in the SE, more in the NW
Many ecosystems will be affected. Coral is bleaching; alpine areas and rainforests will decrease.
- 8 A laboratory for biodiversity
The continent can be managed as one unit
Plenty of opportunities for management studies
2006 State of Environment report sets a ground point
- 9 A laboratory of invasion biology
Many feral plants and animals have found a foothold in Australia, with consequent need to study control or eradication methods
- 10 A fascinating place for human population
Most urbanized country in the world
Science can be used to monitor and manage population growth and change

Summary

Unique environmentally

Old soils, aridity, variable rainfall, abundant sunlight has led to unusual and fascinating plants and animals

A remarkable place to reveal and study climate change and other human environment interaction

A place remarkably vulnerable to some of the worst aspects of water crisis, biodiversity decline

A place with enormous potential to manage its environment effectively

TRIP REPORT

PITCHI RITCHI

(A Buffel Dig)

13th October, 2007

By Rhondda Tomlinson

Our gathering at Pitchi Ritchi was underneath the bush shelter where we all contributed to a table for the breakfast feast and Elsa boiled the billy. The smell of the camp fire in the magical setting was a brilliant atmosphere to present Elsa with her Life Membership for the Field Naturalists Alice Springs Club. Thank you Elsa for all that you have contributed over the years, it is people like you that have maintained and kept this group going for so long.



Elsa receives Life Membership form Bob
Photo: Rhondda Tomlinson

Breakfast chatter over we picked up our tools to attack the buffel under the guidance of Elsa. Our team was small but very keen and in no time we had the area nearly cleared that Elsa has requested.

The morning was heating up and Elsa being a very good supervisor ordered us back to the shelter for morning tea.



Heritage Ricketts
Tomlinson Photo: Rhondda Tomlinson

I took advantage of the time to take several photos of the statues and artifacts. I had visited Pitchi Ritchi in 1969 as a tourist and this was one of the most memorable things of my visit. In 2005 when we had our Field Naturalists Christmas breakup here I again was so impressed by this place and the peaceful setting that I was most keen to come back again.



Heritage wagon
Tomlinson Photo: Rhondda Tomlinson

Elsa told us that she was moving into the Old Timers Retirement Village and was very concerned what would happen to Pitchi Ritchi as she wants it to be a gift to the people of Alice Springs.

There are legal issues to be sorted and **Elsa has asked that we write to the Heritage, Tourism, Politicians**

and anyone you think can have an impact on Pitchi Ritchi being taken over and once again made available to the people of Alice Springs and the visitors to the town.



Heritage Ricketts

Photo: Rhondda Tomlinson

Exploring in the vicinity of Corroboree Rock

Saturday 29 September 2007

By Connie Spencer

With Bob in the lead, accompanied by Bev & Bill and yours truly at the helm of the second vehicle with passengers, Gavin, and the two Rosalies we were soon at The Corroboree Rock Conservation Reserve, 42 km east of Alice Springs.

Corroboree Rock is a very impressive, unusual formation – a dark grey column of dolomite. “Dolomite is a soft sedimentary fine grained rock. It is very similar to limestone except magnesium carbonate is the dominant compound rather than calcium carbonate.” (NT Government 2007).

We followed the walking track from the car park passing some large shady Supplejacks (*Ventilago viminalis*) and flowering Desert Rose bushes (*Gossypium sturtianum*) in the creek line. As our intention was to explore the hills and valleys to the north of the Rock we left the walking track and followed an old vehicle track for a distance.

We came across flowering Butterfly Bushes (*Petalostylis cassioides*) and the Hill Umbrella Bush (*Acacia bivenosa*). The surrounding hill slopes were dotted with Ghost Gums (*Corymbia aparrerinja*) with Bloodwoods on the lower slopes.

We left the 2 wheeled track and scrub bashed our way through spinifex and dense dry shrubs

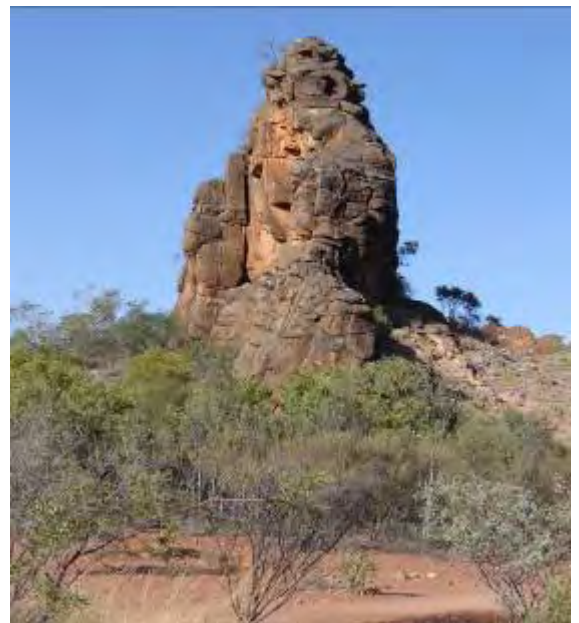
which was rather painful on the legs of those of us with shorts! We followed a creek then up onto a saddle which gave us a splendid view of the surrounding country. From here we headed towards a slot gorge in the range in front of us.

We descended from the saddle to a drainage line at the base where there was a definite demarcation between the limestone we had been walking through and the sandstone & quartzite we were about to enter. There was a complete change in the vegetation. We were now pushing our way through, mulga, cassias and the Rock Fuchsia (*Eremophila freelingii*).

We made our way to the gorge and started scrambling over boulders climbing ever higher and came across **Glory of the centre** (*Ricinocarpos gloria-medii*). Although not unexpected, it was very exciting to encounter this rare, endemic plant which is classified as vulnerable in the NT and Australia. It is confined to the MacDonnell Ranges bioregion, where it is known from five separate populations with its distribution predominantly in the East MacDonnell Ranges. As we climbed even higher we came to the conclusion that this gorge was Glory of the centre haven – there were so many of them and very healthy despite the dryness of the lower slopes.

Corroboree Rock

Photo: Connie Spencer



Bob, Gavin, Rosalie S and Bill continued on and came across Sickle-leaf wattle (*Acacia undoolyana*). This is also a rare plant which is classified as vulnerable.

Whilst they continued on, Rosalie B, Bev and I sat and contemplated the wonderful view with Corroboree Rock a landmark in the distance. One could understand that this rock is of great importance to the Aboriginal people of the region.

As it was warming up and past mid morning we made our way back to Corroboree Rock via a different route, albeit still hard on the legs! We left the sandstone/quartzite and back to the limestone/dolomite where we came across Dolomite Fuchsia (*Eremophila christophori*). Further on there was a brief stop to identify which wrens we could hear. Can't remember which one it was now! As we neared the rock we passed through a forest of Red Mallee (*Eucalyptus socialis* subsp *eucentrica*) eventually reaching the walking track around Corroboree Rock and back to our vehicles where a pit stop and a cup of tea provided by Bob was most welcomed.

Thanks Bob for leading and to all the others for their great company.

ANNOUNCEMENTS

Desert Discovery Incorporated Newsletter

**August 2007
2008 desert project**

Planning is underway for next year's Desert Discovery project to be held on Horseshoe Bend station south east of Alice Springs in the NT. Although an active grazing property is not an ideal location for a DD project, the venue

provides access to the Simpson Desert. Staging a project in the Simpson has been high on the committee's 'wish list' after six projects in the deserts of WA.

Since the Rough Leaf project, the committee, with the assistance of Bob Hancock, has scoured the Simpson for a suitable venue without success. The Simpson is either rung by grazing properties or tightly controlled by traditional owners or the various Parks departments, and we believe that Horseshoe Bend has more habitat diversity.

As the operating area assigned to us on the station (approximately 900 square Km) is relatively small in comparison to what we have been used to in the past, it will have to be a different type of project with more emphasis on scientific endeavor. There is no scope for off road pursuits on the station but there are several points of interest outside of the property that may be suitable for excursions.

The timing of the project has been set for 1 July to 21 July 2008.

The bore water available for camp use will be used for showers etc, but is not suitable for drinking. The nearest supply of potable water is at Finke, and all participants will need to be self sufficient for drinking water.

The actual camp site is yet to be finalised but it is likely to be at Lat 25 15 18 Long 134 29 45 near Colson's Pinnacle.

Final permission for the project is still subject to the property receiving sufficient rain. The property was seriously drought affected until recently. All the signs are hopeful but a return to drought conditions could put the project in jeopardy. The committee is working on a contingency plan.

Maps: Plenty to choose from:- Hema Simpson Desert map or Hema Great Desert Track – NE Sheet, Westprint's Alice Springs to Oodnadatta or NATMAP 1:250000 Finke sheet.

Access Track Information:

Access will be from the Old South Road. The track is rough and only suitable for four wheel drives. The 'front gate' of the property is not open to us.

Trips out from the base camp: As the country is not remote, there are unlikely to be any official excursions so participants are invited to plan their own activities. There appears to be real scope for hiking out from base camp.

School Groups: It is hoped to once again have groups of senior school students with parents and teachers, attending the project. They will be involved in the fauna and flora studies and many of the camp activities.

Further Information on Desert Discovery or 2008 Project: For more information, please contact our President

David Hewitt, Email: dmhewitt@ozemail.com.au or Secretary/Treasurer Keith Johnson, Email: minivet@bigpond.net.au We look forward to a wide range of interests and experience amongst participants as in previous years. If you have not already booked for the project but are interested in joining in, please advise Keith in Melbourne by email, by post: 24 Strickland Drive Wheelers Hill, Victoria 3150 or by Phone 03 9561 1072.

BIRDWATCHING IN CAIRNS

1st October 2007

By Liz Carpenter

Sometimes work has its advantages. In October I had the pleasure of going to a conference that was held in Cairns. It was just pre-wet season so the weather was still pleasant as it hadn't built up yet.

On one of free days that I had before the conference I chanced upon a local Birder who seemed to really know his birds. He advised that, yes indeed, the Esplanade at Cairns was a great place to watch waders and that 3pm would be a good time on that very day. He, too, would be there. High tide of 2.35 m was at 1309 and that 2 hours after, as the tide was receding, was the best time.

So much to my delight at 3pm I had a wonderful birdwatch right from the walkway lining the shore of Cairns city. The walkway is about 1 km long with benches and shelters spaced out along it. It stands about 3 metres high above the expanse of mud and sea grasses and, to the north, patches of sand. The tourists plough up and down it on their designer joggers or sit to take photos of themselves with the big birds, the Pelicans, Royal Spoonbills and the varieties of Egrets which huddle together waiting for "the moment" to become active. Surprisingly the

birds don't take any notice of this cacophony of tourism.

I didn't need my scope as the little birds were a mere 10 metres away but, as I had it with me, I put it to use and it did make for excellent views of tail feathers, bills and eyebrows which one needs to see for identification.

Having a guide is not essential but a bonus, so I was pleased to meet my acquaintance again and have birds pointed out to me.

So, I added a few "Lifers" to my list that day.

Each morning and afternoon during the conference I walked down to the Esplanade to view the waders but the tides were higher or coinciding with after dusk so viewing was rather disappointing. My first day was the best.

So, if you are planning a trip to Cairns, make sure you get a tide chart and plan your day around it. You won't be disappointed.

Bird List Cairns Esplanade

Osprey
Australian Pelican
Pied Cormorant
Great Egret
Intermediate Egret
Little Egret
Royal Spoonbill
Striated Heron
Pied Oystercatcher
Lesser Sand-Plover
Grey Tattler

Terek Sandpiper
Bar-tailed Godwit
Black-tailed Godwit
Great Knot
Sharp-tailed Sandpiper
Red-necked Stint
Curlew Sandpiper
Silver Gull
Gull-billed Tern
Caspian Tern
Whimbrel
Eastern Curlew

Terek Sandpiper

Photo: Eric Tan



President

CONGRATULATIONS

Congratulations to ASFNC member Michelle Walker who is going to South Korea under the Australia Korea Young Leaders Exchange Program.

Michelle is one of a delegation of 10 carefully selected young Australian leaders who will travel to Korea for 8 days in November 2007.

The Australia-Korea Foundation, in partnership with the Korea Foundation and the Research Institute for Asia and the Pacific has initiated the Australia-Korea Young Leaders Exchange Program. The program aims to develop the leadership skills of potential and/or current leaders from both Australia and Korea, aged between 25 and 45, in specifically identified subject areas or themes. Delegates were selected according to how they can contribute to the program, leadership potential or experience, interest in Asia and their personal and professional qualities.

Bob Read

Creature Feature

**A NEW SPECIES IS
DESCRIBED
SYDNEY GAZETTE,
NEW SOUTH WALES ADVERTISER**

**Volume Three
March 3, 1805 to March 9, 1806**

Sunday, April 21, 1805 Vol. III Number 112.
Page 3 Column 'a' and 'b'

An animal of truly singular and nouvel description was killed by dogs.

“An animal of truly singular and nouvel description was killed by dogs the 30th of March on a hill immediately contiguous to the settlement at Yorkton Port Dalymple; from the following minute description of which by Lieutenant Governor Paterson, it must be considered of a species perfectly distinct from any of the animal creation hitherto known, and certainly the only powerful and terrific of the

FROM THE PRESIDENT Email Newsletter

A few years ago we started to encourage the option of taking the email newsletter. However with the increasing number of images in the newsletter the email version became a second-rate alternative. The actual Word file with the images included was too large to email to anyone who did not have broadband.

We now have the capability to email the newsletter promptly as a pdf file. If you are not a computer wiz do not worry about this, nearly all computers will read it. The files are manageable size, about one tenth that of the Word files.

Once again I would encourage those with email access to consider taking the newsletter in email form rather than hard copy.

The advantages are that you can feel virtuous about the paper saved, and the photos will be in colour.

You are of course welcome to continue receiving the paper version if it is more convenient. This will be the last newsletter for 2007. Best wishes, for the holiday season and hope to see you in 2008 when we will have a new program.

Bob Read

carnivorous and voracious tribe yet discovered on any part of New Holland or its adjacent lands. It is very evident this species is destructive, and lives entirely on animal food; as on dissection his stomach was found filled with a quantity of kangaroo, weighing 5lbs. the weight of the whole animal 45lbs. From its interior structure it must be a brute peculiarly quick of digestion; the dimensions were, from the nose to the eye $4\frac{1}{2}$ inches: length of the eye, which is remarkably large and black, $1\frac{1}{4}$ inches; breadth of the eye $\frac{1}{4}$ of an inch; from the nose to the extent of the mouth in the upper jaw, 6 inches; and to the extent of the under jaw, $4\frac{1}{2}$ inches; breadth of the forehead, $5\frac{3}{4}$ inches; from the eye to the ear $3\frac{3}{4}$ inches; the ear round, diameter 3 inches; from the ear to the shoulder 1 foot; from the shoulder to the first stripe, 7 inches; from the first stripe to the extent of the body, 2 feet; length of the tail, 1 foot 8 inches; length of the fore leg, 11 inches; and of the fore foot, 5 inches; the fore foot with 5 blunt claws; height of the animal before, 1 foot 10 inches; stripes across the back 20, on the tail 3; 2 of the stripes extend down each thigh; length of the hind leg from the heel to the thigh, 1 foot; length of the hind foot, 6 inches; the hind foot with 4 blunt claws, and soles of the feet without hair; on each side the mouth are 19 bristles, length of each 4 inches; and 6 bristles on each side under the ear, 9 on the lower jaw upon each side, and 8 under the throat; 8 fore teeth in the upper jaw and 6 in the under; 4 grinders of a side, in the upper and lower jaw; 3 single teeth also in each; 4 tusks, or canine teeth, length of each 1 inch; circumference of the head

before the ears, 1 foot 6 inches, and behind the ears, 1 foot 4 inches; circumference before the shoulder, 2 feet; the body short hair and smooth, of a grayish colour, the stripes black; the hair on the neck rather longer than that on the body; the hair on the ears of a light brown colour, on the inside rather long.

The form of the animal is that of the hyena, at the same time strongly reminding the observer of the appearance of a low wolf dog. The lips do not appear to conceal the tusks.



What am I?

Copy deadline for articles for the next newsletter.

Friday 1st Feb 2008

PHOTOCOPYING

COURTESY

LJ HOOKER REAL ESTATE

ALICE SPRINGS FIELD NATURALISTS CLUB INCORPORATED
Minutes of the General Meeting held at Olive Pink Botanic Garden
Wednesday 10th October 2007

Open: The President, Bob Read, declared the meeting open at 8:10pm
Present: As per attendance book (17 members and 1 visitors).
Apologies: Liz Carpenter, Bev Dawson, Marg Lawrence, Max & Sue O'Callaghan

Minutes: The meeting resolved to accept the minutes of the previous meeting held Wednesday, 12th September 2007 as a true and correct record of that meeting.

Correspondence In:

Nature Territory – September & October – NT Field Naturalists Club Inc
 The Naturalist News – September & October – The WA Naturalists' Club Inc
 Australian Naturalists' Network – Fifth ANN Get-together 10 – 18 May 2008 – Kakadu and Top End

Correspondence Out:

Nil

Treasurer's Report:

| | |
|-------------------------------|------------|
| Opening Balance end July 2007 | \$2,312.43 |
| Plus | |
| Annual Subscriptions | \$415.00 |
| Interest | \$3.68 |
| Less | Nil |
| Current balance | \$2,731.11 |

The president asked for suggestions for expenditure.

General Business:

Function at Else's place will include the presentation of a Certificate of Life Membership. Bring a plate for a Morning Tea.
 Telegraph Station walk. Meet at playground at Goss Street at 6:00am.

Speakers:

C Schlesinger for November

Outings:

| | |
|-----------------|--|
| Sat 15 Sep 07 | Day walk from end of Stephens Road to Emily Gap on north side of Heavitree Range. Approx. 7km. Meeting 7:30 end Stephens Rd. Contact: Rosalie Breen on 8952 3409 |
| Sat 29 Sept 07 | Half-day walk north from Corroboree Rock. Meeting Date Farm 7:30. Contact: Bob Read |
| Sat 13 October | Elsa's Place in Palm Crt at 7:30 to clear buffel grass. BYO plate for morning tea. |
| Sat 27 October | Telegraph Station walk. Contact Rosalie Breen 8952 3409 |
| Sat 24 November | Moonlight cycle to Picnic Spur, leaving from Flynn's grave. Sunset/moonrise start. |
| Sun 2 December | Sewage Ponds. Meet at gate at 7:00am. Contact Liz Carpenter on 8953 6750 |
| Sun 9 December | Simpson's Gap. Breakfast for Christmas break-up. 8:00am. |

Gate Opener for Nov: Jenny Purdie **Supper for Nov:** Bill Smyth **Note taker for Nov:** Jenny Purdie

Sightings:

- Invading cactus at Telegraph Station is spreading from previous sightings.
- Cockatiels, Peregrine Falcons, Cuckoo-shrike, Peregrine Falcon, White-winged Triller, Budgerigar

Meeting closed: 9:29pm.