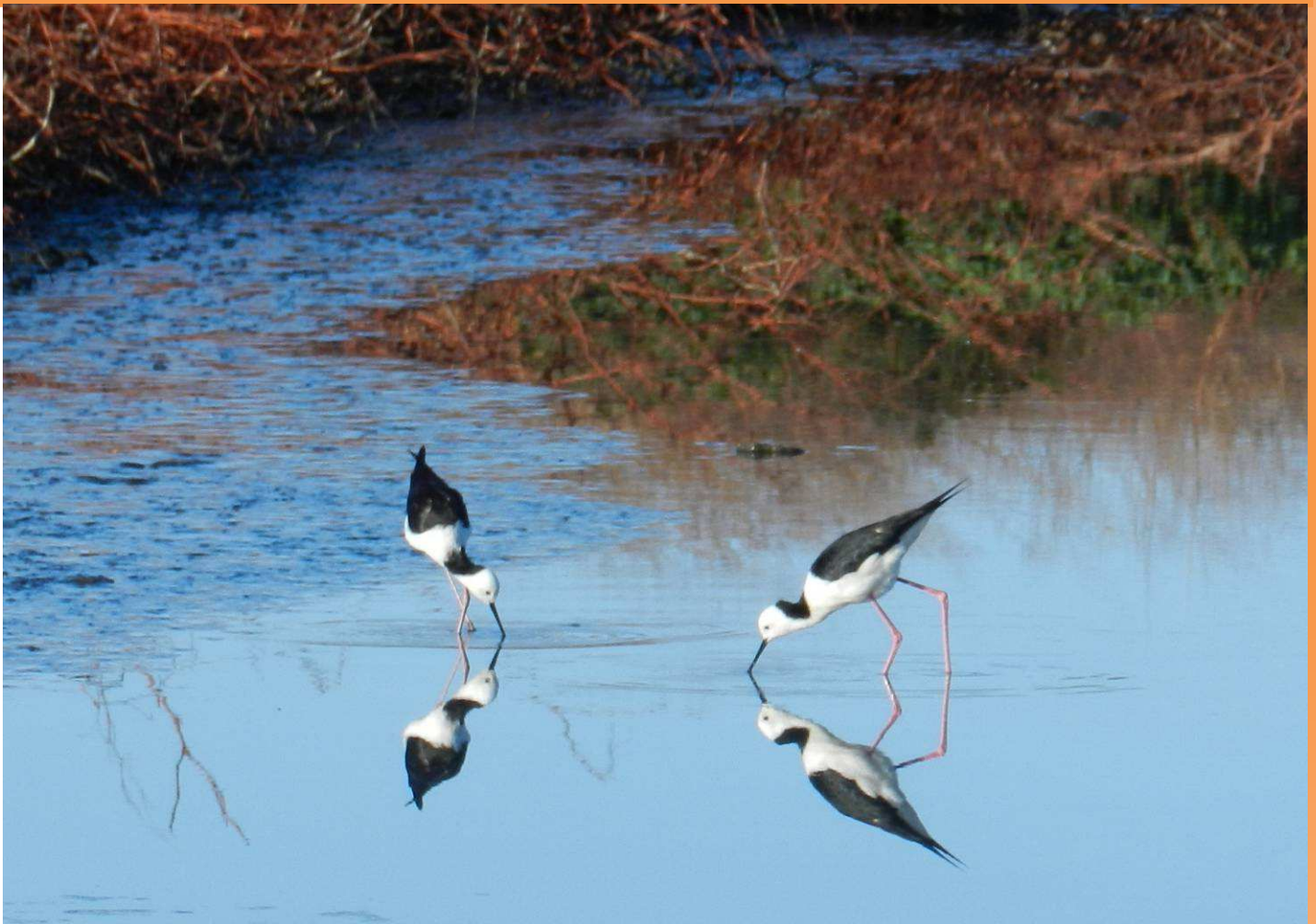




November 2012

Alice Springs Field Naturalists Club Newsletter



A couple of Black-winged Stilts at the Sewage Ponds spotted during the Bird Festival.
Photo by 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

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

<http://www.alicefieldnaturalists.org.au>

NEXT NEWSLETTER

The deadline for the next newsletter is **Friday 23rd November 2012**. Please send your contributions to Barb Gilfedder at fedders@octa4.net.au

MEETINGS

- Wed 7 Nov **APS** Meeting 7.30 pm at Olive Pink Botanic Garden. **Guest Speakers:** Sam Hussey & Myra Gorey from Akeyulerre Healing Centre on Arrernte Bush Medicine
- Wed 14 Nov **ASFNC** Meeting 7.00 pm at the lecture theatre in the Higher Education Building at Charles Darwin University. – Speaker: Adam Yates – South African Palaeontology

Note: The next **ASFNC** meeting after this will be in February 2013. The speaker will be Meg Mooney.

FIELD TRIPS / ACTIVITIES

- Fri Sat 9-10 Nov **ASFNC** Friday afternoon arrive at Stanley Chasm BEFORE 5pm to do evening walk and camp overnight OR join us for walk from 8am at Stanley Chasm on Saturday. Up the Larapinta trail to Gastrolobium Saddle and back (or less if you want to); contact Cecily Sutton 0412 501 396 cecsutton@gmail.com
- Sun 18 Nov **ASFNC** Walk in Kyumba Reserve. Meet at Information bay opposite the Old Timers on South Stuart Highway at 7.00am. – Leader: Barb Gilfedder, contact details below.
- Sat 1 Dec **ASFNC** Walk up Spencer Hill – Leader: Rosalie Breen, contact details below.
- Sun 2 Dec **ASFNC** Quarterly Shorebird Count. Bird counters and scribes needed. Meet at Bird Watchers' Gate at the Sewage Ponds at 7.00am sharp. – Barb Gilfedder
- Sun 9 Dec **ASFNC** Christmas Breakfast at ASDP Picnic area. Desert Park activity followed by shared breakfast.

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November Speaker – Michael Green: GOLD!

Report by Meg Mooney; photos of Winnecke gold fields taken in 2005 by Barb Gilfedder.

Why mine gold?

Gold is mined mainly for 'bling' (some of which is investment) and pure investment. 50% is used for 'bling', 40% is investment (ingots) and 10% is used in industry, eg dentistry and hi-tech electronics – gold is a very good conductor.

The world has so far mined 165,000 tonnes of gold, or 20.23 cubic metres, not that much really. World production in 2011 was 2,500 tonnes, of which 255 tonnes was from Australia, being the second biggest producer after China.

Gold prices peaked around 1980, after the first oil crisis, dropped considerably a few years later, rose steadily from 2,000 to 2,011 and have fallen a little since then.

The Big Story – where gold comes from

After the Big Bang, the universe was 73% hydrogen and 25% helium. These are the two lightest elements and all the other elements have formed from them by a series of nuclear reactions in stars.

The percentage of gold and many other rare metals in the earth's crust is much less than in the universe or solar system generally. This is because lots of these rare elements are concentrated in the earth's core, because they 'hang out' with iron, and so there are less of them left in the crust.

The percentage of gold in the solar system, and the earth overall, has been calculated as 0.3 parts per million. So the earth should have 1,791,600,000,000,000,000 tonnes of gold, most of it in the core. The gold concentration in the crust has been calculated to be 0.0031 parts per million.

Common rock-forming elements, such as silicon, oxygen, sodium, magnesium, potassium and calcium, are more abundant in the solar system than the rare metals. Their percentage in the earth's crust is higher still because they occur less in the earth's core.

Gold, Silver, Copper and Zinc all have similar chemistry and compounds of these metals often occur together in rocks.



Where gold is found

Gold usually occurs in quartz veins formed from hydrothermal fluids, like those that come to the surface in New Zealand's hot springs. These fluids, consisting of very hot water under pressure, form in the lower crust in association with mountain-building events and volcanism. Most of the gold deposits dated to the last two million years occur along current tectonic plate boundaries – none is in Australia.

Gold dissolves at high temperatures and pressures in hydrothermal fluids, and then precipitates as a solid at lower temperatures and pressures, or because of the presence of reactive rocks, near the earth's surface. Hydrothermal fluids flow up near the surface through fractures and faults in rock.

All Australia's gold is 'old gold', deposited from hydrothermal fluids associated with former tectonic plate boundaries. For example, 400 million years ago the east coast of Australia was just east of Broken Hill and consisted of a plate boundary marked by a mountain belt like the Andes today.

Not all quartz veins have gold. In areas of gold deposits there may be 6 generations of veins, with only 1 bearing gold.

Gold mines

Most gold mines today are open cut, in huge holes in the ground. If a rock has visible gold, it has at least 5-6 grams of gold per tonne. At Kalgoorlie, gold can be profitably extracted from rocks, which have only 0.5 grams of gold per tonne.

Heat leach pads are used for mining low-grade rocks. Sheets of plastic are laid on the ground and then covered with the crushed rocks. These are then sprinkled with dilute cyanide solution, which leaches out the gold and is collected in drains.



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SUBSCRIPTIONS REMINDER

Membership fees were due as from the Annual General Meeting in August.

Prompt payment would be appreciated, paid at meeting nights or posted to the Treasurer (P.O. Box 8663) or direct into the club account at Westpac BSB No.035-303 and Account No 100981

Be sure to put your name in the payment details. If personal details have changed please indicate, especially email address. New members to fill in complete form (available in the August or September newsletter or from the Treasurer).

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Aileron walk – Sunday 23 September

Report and photo collage by Barb Gilfedder

It was a cloudy, hazy sort of day, but two vehicles with eight passengers drove up the highway to Aileron. We had all seen the 17 metre tall Anmatjere man who stands guard on the hill over the roadhouse with the Hollywood copy AILERON sign, but this was the first time any of us had walked up there. We walked under the capital A and admired the size of his feet. Sunday roast lunch in the pub was excellent value.

The best bit for me was stopping on the way home where the road crosses red sand country. Parts of it had been burnt a while ago and now small plants were flowering profusely, in spite of the lack of rain since April. Here are a few of them – from the top *Newcastelia cephalanth*, *Senna pleurocarpa*, *Keraudrenia nephrosperma*, *Dicrastylis lewellinii*, *Petalostylis cassioides*, *Acacia victoriae*, *Gnephosis sp.*, *Leucochrysum stipitatum*, *Calandrinia balonensis*. Thank you to Neil and Leigh for suggesting and leading the trip.



Upper Todd Walk - 14 October – Report and Photo by Rosalie Breen

I had a most enjoyable walk with Anne Pye, rediscovering the west side of the river when dry, and the rocky part which must be the Women's sacred site area. We wandered in and out and around what, when the river is flowing, are wonderful waterfalls and cascades. We took 3 hours as Connie had predicted and enjoyed an ice-cream each from the kiosk as a reward. It did not get too hot. I was pleased Ann turned up, she was good company and with no new people we just sauntered along as we pleased. There were not many birds, but included Cockatiels and Budgies. The east side was easy (that is the bit I know well), with a bit of water in the gorge. I checked on the bower I wrote about in a newsletter. It is now abandoned, the walls in disrepair and many treasures are missing.



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Welcome to our New Members!

Welcome to new members Lynne Thompson, Hannah Huenecke, Colette Johnston, Micha Melton, Scott and Lye Lang, Angela Day and family, and David and Rebecca Pearse. Other members may have got to know Hannah and Collette already during the recent field trips to Alcoota or Fenn Gap. Welcome back to James Armstrong, Kay Bailey, and Peter and Lisa Nunn. Also to Colleen O'Malley, who has rejoined with outstanding conviction by taking out Life membership.

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African Safari: Part 1 - Zimbabwe

Text by Steve Sinclair, Photos by Jenny Purdie

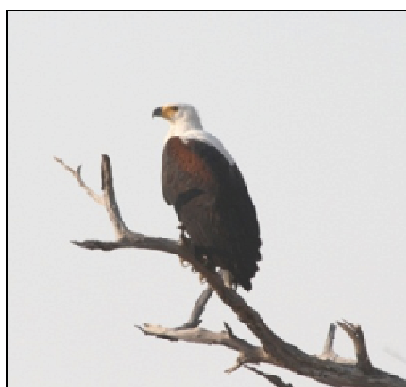
The weather for our 26 days was gloriously warm clear days (24 to 34) with cool nights (12 to 17). Perfect.



Flew via Johannesburg to Vic Falls and next day we bussed to Hwange National Park, where we transferred to open safari Toyotas for the drive to The Hide, a private safari lodge. All the staff were out the front to welcome us and the introductions took some time (especially the African names). The group we were with have visited The Hide many times, so Nicholas Duncan, CEO and founder of the Save Foundation is well known to the staff. After an enormous lunch we parked up til 3.30. Afternoon smoko was served (beginning a theme that saw me stack on a heap of weight) and then off on our first safari drive. Our driver was Daffy, we had six in our vehicle and we had Daffy each day. Saw elephants, giraffes, impala, sable, warthogs, kudu, bushbuck and a leopard (all within 2 hours). The leopard was the most impressive sighting that day as it is unusual to see one at any time, never mind in the open during the day. At

sunset we stopped for drinks etc and watched the sun go down behind the zebra, antelope, cape buffalo, baboons and a family of warthogs. Back at the camp, a quick shower, then more drinks in the open dining room watching all the animals come in for a drink at the water hole about 20 metres away. Then a glorious feed, with more drinks and afterwards a night game drive to catch some of the nocturnal animals. Porcupines, springhares, mongooses and owls were part of what we saw. We slept well that night.

Next morning we headed out on a game walk. Daffy is a fully qualified game guide, which in Zimbabwe means five years of training, including fire arms and anti-poaching procedures. A walk is of no more than six people, with a thorough induction on what to do and not to do when confronted by an elephant or lion, which is why Daffy carries a big gun. The walks were more about tracks and scats, (we learnt a lot about dung) as it was explained to us that it is always better to meet the more playful wildlife in a Toyota, instead of on foot. One thing that really impressed me was the knowledge of these guides, there was almost no question they could not answer and if they did not know the mating habits of the lesser LBB (little brown bird), then while we were sleeping off lunch, they would research it, then present you with pictures and a family tree at smoko. The mornings were particularly good for seeing birds; they have a fish eagle that looks identical to our sea eagle. Besides all of the above, we saw hippos and 12' Nile crocs and some pretty startling looking birds (even the vultures with the ugliest heads you will ever see were fascinating). For three days and nights we saw amazing wild life, ate (and drank) too much, were spoilt by the staff and Jen was taking hundreds of photos every day (and video). (She has a lot of editing to do.) It was a perfect introduction to Africa.



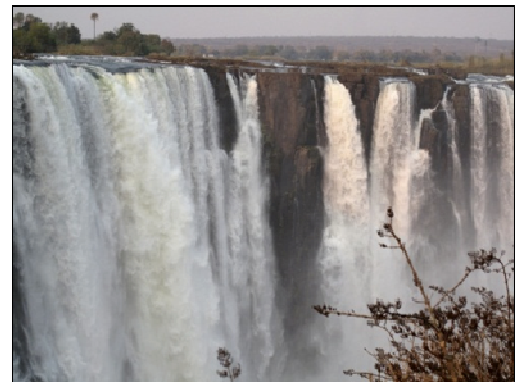
The rooms are either side of the main lodge and all over look the water hole which is floodlit until 10 o'clock. The animals have become used to this and take little notice of the goings on in the lodge. However, if someone steps away from the building into their space, all the ears come up and you become the centre of attention until you return to within the human space. This waterhole is normally only seasonal but the lodge keep it topped up from a bore. The bore discharges into a small concrete pool before over flowing into the main pool. The elephants like to play and mud themselves up in the water hole and when the water is unfit to drink they come up to the concrete pool for clean water (about 4m from the dining room). I can only imagine what the other animals think of this behaviour



(it quite takes awhile for the mud to settle in the main pool). An interesting side line to this practice is that ticks and other biting insects get caught in the mud and when the mud is at the right consistency they find a convenient post/tree to rub it off, like the little fence just outside our room just as we are getting off to sleep. I was amazed at how much bigger an elephant is when he is just outside your bedroom window, rubbing its haunches against a 4" post. Which reminds me of one of the house rules - NO-ONE is to move outside, unescorted after dark. Besides the elephants (some have young calves and they are no less tolerant of uninvited attention to their young than women are), there are also lions which we could hear (thankfully a long way off) and other undomesticated

fauna. Back to our room, it is basically a very good tent on a concrete slab with a post frame and thatch roof over the top. There is a bathroom/toilet inside and a double shower and bath outside. The outside bathroom gives an uninterrupted view of the wildlife (both ways). The main power goes off at ten and from then you have kero lamps and 12 volt lights which added to the bush feel of the place. At 5.30am a friendly gentle man wakes you with a cup of tea or coffee and breakfast is served on your return from your walk or game drive.

When we left The Hide we dropped into a sanctuary for African painted dogs. These beautiful animals are now endangered as their habitat is being overrun by towns and small farms. These dogs are skilled hunters and rather enjoy the occasional domestic pig (they don't have tusks) or goat and this tends to get up the nose of the average poor as dirt farmer, so they are killed at every opportunity. Also Nicholas arranged for an old friend of his to tell us about his life as a freelance lion relocater. The average lion does not really like to be relocated so you can imagine that we heard some pretty spine tingling stories.



From here we went to the Victoria Falls Hotel which was built in 1905 and I have to say that's pretty impressive because it would be bloody hard to build something like that in Africa today, never mind then when the roads were more wish full thinking than fact and the motor car had yet to arrive in central Africa. This place is pommy extravagance taken to a ridiculous level considering the logistics and thankfully they have preserved it in very much its original condition (having added A/C and electricity). It is all very Stanley and Livingstone, two rather eccentric characters of the day. But the reason they built it here is because of "The Falls". You think Jim Jim is impressive? These falls are huge and we are here during the dry season. The photos and paintings of it during flood just make you want to come back in the wet. We actually went paddling rubber boats down the Zambezi River above the falls and a very fishy looking river it was too; although the bloody hippos make navigation a bit tricky. While at the Vic we had dinner in the same dining room as many queens and kings. It was all silver ware and serviette rings and knives I didn't know what to do with. Although I rather liked the wine waiter bloke hovering over my shoulder ready to top up my glass every time it got below the plimsoll line.

One afternoon we went to a private game park where they have seven black rhino's, including a mother and 5 week old calf. The little bloke didn't like our Land Rover and wanted us to leave but mum was cool, she had seen it all before. The rhino has been wiped out throughout most of Africa due to poaching because their horn is worth so much in Asia. Even the dehorning projects don't work because the 40 to 50 mm left (with blood vessels and nerves) is still worth enough to kill them. This private park has guards 24 hours a day to keep an eye them.



Another night we went out to dinner to try some traditional African fare. The beer is disgusting (the only thing going for it is the alcohol content). We tried warthog, impala, kudu and local vegies. It must be something you have to become accustomed to. The hog was the best. They provided many other things to eat but I thought it only right that I try what the locals are supposed to be eating. In truth, if they can afford it, they eat KFC or Macs.

2012 Red Centre Bird Festival!

Report by Pam Keil;
photos by Rosalie Breen

Well, the first annual Red Centre Bird Festival has come and gone, and it was a definite success. The number of people and activities available increased many fold from the previous few years when it was merely called Red Centre Bird Week. Several art venues around town got in on the act, a series of great speakers, concerts, and movies were to be seen at Desert Park. Many opportunities to go birding with an expert – sometimes that was one of us! Barb and Pam helped out at the Sewage Ponds “birding before work” tour and several other Field Naturalists were spotted around during the other events. And of course, we cannot forget, the great Red Centre Twitchathon!



Pam and Michael fronted a two-man team that twitched around various other engagements (houseguests, Pam giving nocturnal tours, meetings with people who would only be in the country one more day, etc). They managed to scrape by without winning the wooden spoon (I believe we were runners up in that category). A few other field nats were spotted in the area, helping out other teams, and one of our returning members (Pete Nunn) was on the winning team. They got an amazing 107 species – interestingly the same number that won two years ago in the middle of the wet!

Highlights from Pam and Michael’s list included a Darter hanging out at Glen Helen despite the (human) swimmers just around the corner, a nesting Goshawk at Ellery Creek, and a nice long look at a juvenile Grey Butcherbird (actually, he’s the one that let us know the Goshawk was there). A young Pelican was hanging around the Sewage Ponds as well, so keep your eye out for it the next time you’re there!

I definitely encourage all to get involved when this rolls around again next year. It was a blast, and you don’t really have to worry too much about winning or losing – a full day out chasing birds is rewarding enough! If that’s not your style, there’s plenty more to choose from now that we have a fully-fledged Bird Festival.



ALICE SPRINGS FIELD NATURALISTS CLUB INCORPORATED
Minutes of general meeting
at Higher Education Building, Charles Darwin University
Wednesday 10 October 2012

Following presentation by Michael Green on Gold

Present: 13 Members, 2 visitors and 6 apologies as per attendance book.

Previous minutes – accepted.

Business arising from the minutes:

- Jill Brew has sourced hats from Central Uniforms + Embroidery. A bucket hat with embroidered club motif costs \$18. There are other styles available. There are various colours. Orders must be a minimum of ten in each colour.
- Jill and Barbara will decide on colour + style combination to be purchased. Some for sale to members, others as gifts.

Correspondence in:

- ALEC biodiversity workshop is at Fenn Gap on Sat 13 Oct. Barbara will forward Email.
- Alice Water Smart – Notice of public seminar on Community Water Rules on Thursday 11 Oct. Also a call for interested people to help formulate voluntary water use rules. Barb has forwarded both of these to members.
- Field Nats WA Newsletter

Correspondence out:

- Thank you card to Rick Churchill for presentation.
- Thank you card to Alyson for Fenn Gap access.

Treasurer's Report:

Balance:	at 10/10/12	\$3603.88
Deposits:	Subs \$295 Interest \$2.63	
Debits:	Ink cartridge/stamps \$ 81.95, Audit \$15, Cards \$72	

General business:

- Discussion re funds previously promised to Chris Watson for help buying materials for improvements to bird hide and to build more hides at Sewage Ponds. Awaiting action from Chris.
- Consideration of purchasing seats for birdwatchers at Sewage Ponds. Seats must have a design that stops them getting covered in bird droppings. Barbara to investigate.
- Leonids meteorite shower will occur 16-17 November.

Past Activities/Trips discussed:

- Aileron walk/lunch was enjoyably completed.
- Bird Festival was successful. ASFNC contributed as Barbara assisted with a walk at the Sewage Ponds. Members attended events at the Telegraph Station and talks.

Future activities:

Sat - Sun 27-28 Oct - Winnecke Goldfields overnight to be led by Mike Green.
Sat 13 Oct - ALEC Fenn Gap Biodiversity study
Sun 14 Oct - Upper Todd Walk. Leader: Rosalie
Sat 20 Oct - 10 am Museum Excursion to view Finlayson Collection. Adam Yates

Sightings:

- As outlined in Birds Central Australia - at Sewage Ponds – Ruff, Grey-tailed Tattler, Yellow Wagtail.
- Cecily Sutton - Sunday 7 in western sky at dusk - large meteorite with green flare as it burnt out. Michael explained that it must have penetrated a fair way into the atmosphere and was probably due to Sodium.

Next meeting: 14 November

Speaker: Adam Yates on Palaeontology in South Africa.

Scribe: Lee Ryall

Supper : Anna Melton

Meeting closed : 8.55