ALICE SPRINGS FIELD NATURALISTS CLUB

March 2009 Newsletter



Gecko, Gehyra variegata, Photo Don Hadden

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Web site: www.geocities.com/alicenats

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.

Postal address: P.O. Box 8663 Alice Springs, Northern Territory 0871



MEETINGS

11 Mar 2009: Holger Woyt on Spitzbergen. 7:30 pm Olive Pink Botanic Garden. Something to take your mind off the Alice heat.

8 Apr 2009: Jenny Purdie on Africa – 7:30 pm Olive Pink Botanic Garden

TRIPS/ ACTIVITIES

Sun 8 Mar 09: Early morning walk up Cassia Hill, Simpsons Gap. Meet 7 am @ Flynn's Grave Memorial on Larapinta Drive. Contact: Connie Spencer on 8952 4694.

Sat 21 Mar 09: Native Plant Sale @ Olive Pink Botanic Garden as part of Miss Pink's birthday celebrations. 8 am – 11 am.

Sat 28 Mar 09: An early morning wander around the *Eucalyptus intertexta* dry jungle, near Ilparpa claypans. Meet 7 am at the information bay opposite the Old Timers Home, South Stuart Hwy. Bring breakfast or morning tea for afters. Contact: Connie Spencer on 8952 4694.

Easter 10-13 April: proposed trip to Newhaven. Leader required.

We have a newsletter editor!

Emily Findlay has returned to Alice Spring and offered to resume this role after a break of a couple of years. However, Emily is a bit preoccupied at present and this may also be the case around the time the next newsletter is due out so best keep forwarding material as below for the time being.

Deadline for articles for the next newsletter 23 March 2009. constans@bigpond.net.au

Congratulations

Congratulations to Emily and Robbie and a big welcome to **Fynn Jacob Henderson**. Fynn was born on Thursday 26 February weighing in at 6 lbs 11oz.

Our membership just keeps on growing!

No general meeting last month

Following Mark Carter's outstanding talk, people were enjoying supper and chatting. The Committee made a snap decision not to hold the general meeting as there was no business that could not wait until next month.

Bank balance at the end of January was \$3537.60 (thank you Rosalie B.).

Finding your inner fish

Mark Carter, Senior Interpretation Park Ranger, NT Department Parks and Wildlife Department

Report by Rosalie Schultz

What an intriguing title – the talk was a celebration of 200 years since the birthday of Charles Darwin on 12th Feb 1809. Events worldwide are marking Darwin's work and theory.

Mark Carter was such a knowledgeable and entertaining speaker about the work of Darwin and his successors. Our quaint little meeting room at Olive Pink was packed. Mark spoke as an enthusiast, not an evolutionary biologist.

Darwin's theory of evolution changed natural science forever. With Darwin's insight, natural history ceased being a hobby like stamp-collecting, and became a rigorous biological science. Mark had been inspired by a book called "Finding your inner fish" by Neil Shubin – recommended reading (and in the Alice Springs library). The book provides evidence through examples of the process of evolution.

Darwin was a naturalist on the Beagle, which sailed around the world between 1831 and 1836. He had never been outside England, so it was a tremendous journey.

In Patagonia he noted the rhea a tall flightless bird like a small ostrich or emu. Darwin had seen pictures of these other birds, but the rhea was previously unknown to him.

In Chile he saw evidence of the recently extinct giant ground sloth, a source of food for the local indigenous people in recent times prior to its demise. The concept of species extinction was new.

In the Galapagos Islands were a series of creatures that were not easily explained by Darwin's knowledge of the animal kingdom. Variations from mainland creatures separated from their counterparts by thousands of years – and changes in anatomy, physiology, diet – but still identifiable as relatives of the mainland varieties. Giant tortoises – bigger than a toddler – dominated the islands, in the absence of mammals. An amazing array of finches was there, each slightly different from its mainland counterpart.

After his return to England Darwin developed the theory of evolution. He published "On the origin of species by means of natural selection, or the preservation of favoured races in the struggle for life" in 1859. It was an instant best seller. The publication changed the way we see the natural world. It should change the way we see ourselves within the world.

Evidence for evolution is all around us. An example is the natural selection of anti-biotic resistant bacteria – such as the dreaded MRSA – in hospitals. The selection force of antibiotics leads to microevolution of resistant bacteria in the hospital environment.

Darwin drew a tree of life – technically a phylogenetic tree. The branches of this tree symbolise the evolutionary diversion between different organisms. From the fossil record, evidence of common ancestors can be found and transitional organisms. These are rarely seen when fossils are studied. This may be because there are few of them, or because they are not wellpreserved. Examples of living transitional organisms include the lungfish and Japanese salamander. These have features between fish and amphibians. A fossil found in the arctic, Tiktaalik, provides direct evidence of evolutionary process between fish and amphibians. (The animal lived in tropical conditions; the rocks it is found in are now in the arctic.). Tiktaalik has a primitive neck where the fish has none, and amphibians have distinct necks. Tiktaalik has simple rib- like structures where the fish has only vertebrae. As fish have no lungs to inflate there is no need for ribs to protect them. The upper limb bone structure of all vertebrates except fish is first demonstrated in the tiktaalik. Mammalian inner ears have evolved from the lateral lines in fish, which respond to movement in fluid. The little bones in the inner ear which transmit sound waves have their earliest representation in the gills. There are things resembling these bones in mandibles of other vertebrates; while mammals have fully developed inner ears with these bones.

Other observations which suggest an evolutionary process are the movement of testicles from their site of early development in the upper chest. In warm-blooded creatures, as development occurs, the testicles migrate down, then outside the body,

where cooler temperatures favour sperm development.

Mark concluded by reminding us how precious is the result of evolution.

Our unique Finke Goby is evidence of isolated development over an extended period. It has unique features which enable it to survive in few waterways in central Australia. It has huge tolerance for low and high temperatures.

Of 5 species of desert bandicoot only one is still alive – the bilby.

The beautiful lemuroid possum, which can only survive in cooler mountain regions of far north Queensland, may be extinct due to climate change. As temperatures have risen, the range of the possum has moved up the mountains – until there are no more mountains to move up to. No possums have been seen for 3 years.

What can we do?

- Get involved in conservation
- Make your decisions for conservation reasons.
- Respect Darwin's amazing discovery

Night Walk around Ilparpa Claypans

Friday 13 February 2009

Some of the creatures seen: Photos by Don Hadden



Demansia psammophis cupreiceps, Yellow-faced Whipsnake



Wolf spider



Cyclorana maini not quite an adult, it still has a remnant tadpole tail.

Also the Gecko, Gehyra variegata, on the front cover

Bird Watching at the Sewage Ponds

21 February 2009 By Connie Spencer

What a glorious morning, especially considering it was February. Members and visitors arrived at 7 am and introductions were made: Bob, Barb, Rhondda, Rosalie B, Rosalie S, Marie, Aliia, Vicki and Gerry with Shirley and Will joining later. How fortunate we were to have some very knowledgeable "birdos" in our midst.

Our attention was first brought to a flock of Fairy Martins. There was some discussion about the difference between Tree and Fairy Martins with the Tree Martin being "black-headed" and the latter being "red-headed" in flight. Their call is also different but they weren't talking to us.

On to the next pond where we were introduced to the sandpipers - the Wood, the Sharp-tailed and the Common Sandpiper with the Marsh Sandpiper and Greenshanks (also a Sandpiper) spotted later. The Sandpipers can be a bit overwhelming for the beginner but with Barb's scope it was much easier to pick up some of the differences especially in their markings. The Common Sandpiper was busy doing what he usually does, that is; head and tail bobbing up and down on the rocks on the edge of the pond. My Slater

Guide described this wader as a "nervous, constantly teetering sandpiper". Bob mentioned that the Common Sandpiper is not all that common here but is in Siberia where it breeds. Also, the Wood Sandpiper gets its name because of where it breeds in the woods also in Siberia.

A Black-winged Stilt with her long coral-pink legs trailing behind flew overhead voicing her disapproval of us being in her territory. We then spotted an adult and young in a pond and a comment was made that the movement of people on stilts was just like that of a Stilt.

The Bird Hide at the ponds is always a good place to stop as the islands with their aquatic vegetation offer refuge and a special habitat. Two Black Swans were taking turns sitting on a ground nest. A Purple Swamphen was a good sighting as they are not so common here also three Black-tailed Native-hens were spotted.

Next we were treated to the sight of three Royal Spoonbills. I've only ever seen one at a time on previous visits. The three were in a row, their bills in the water busily feeding with a sweeping side to side synchronized motion.

A Pacific Golden Plover with its big dark eyes and golden wash was the next bird to have a look at through the scope and what a difference the scope made. With my binoculars I couldn't make out this "golden wash" they were talking about but oh so obvious in the scope.

Then there was great excitement when a Latham's Snipe was spotted. Barb said she first spotted this bird last October (2008) and there was considerable discussion at that time on just which snipe he was as he doesn't belong here.

Will counted the Avocets and estimated that there were about 160 – the most he has ever seen here before.

As we were nearing the end of our walk past a flock of Little Corellas feasting on a patch of paddy melons, it was hard to believe that over 2 hours had gone by but as the saying goes "time goes quickly when you are having fun".

I haven't begun to mention all the birds that we saw, just the ones that took my fancy on this particular occasion. Thank you to all for such a pleasant morning. You might make a bird watcher out of me yet!

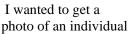


Photo: Latham's Snipe by Don Hadden

Processionary Caterpillars

by Jenny Purdie

Recently I walked out onto my patio and noticed a geometric pattern on the tiles. On closer examination I saw that it was a bunch of hairy caterpillars lying together.





so, wary of the hairs in the case they were of the itchy variety I picked up several caterpillars with a piece of colored cardboard. They immediately coiled up thus presenting their hairs which I presume was a protection mechanism.

Eventually one moved across the cardboard allowing me to get a photo of it uncoiled.

I replaced the caterpillars back on the tiles where they then formed two groups.

I then emailed the photos to Bob, Barb and Connie all of whom told me they were processionary caterpillars. Barb gave me several scientific names - *Ochrogaster lunifer*, *O. contraria*, *Teara contraria* -and told me to look for a cobweb nest containing hairs and droppings at the base of my acacias and eucalypts.

She also recommended that I dispatch them with a dose of pyrethrum. I found a couple of nests, which I had previously attributed to spiders at the base of two sennas and also found a trail of them heading up the trunk of an *Acacia pruinocarpa*. I didn't have any pyrethrum but purchased some the next day and was instantly successful in bringing about their demise.

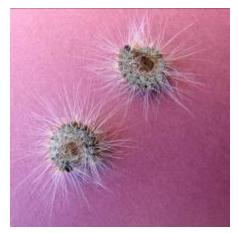
Connie mentioned they are also called itchy grub caterpillars and told me the story of her son, at the age



five bringing one home as a pet! He soon decided it wasn't a good pet when he became covered in red blotchy spots where he had let the caterpillar crawl all over him! Fortunately he remained unafraid of caterpillars.

I subsequently Googled them and found out that during the day groups of 300+ hide together in their nests of silk, leaf litter and droppings (known as frass). As they move around each one lays a trail of silk from the spinneret near its mouth and others follow this trail in a nose to tail procession to look for a new food source or a suitable site to pupate in. The caterpillars feed mainly on the leaves of acacias and can strip the plant of all its leaves.

The adult moths, know as Bag-shelter moths are grey with a yellow banded abdomen ending in a tuft of white hairs and have a wingspan of 4-6.5 cm. It appears that of all the scientific names Barb gave me-*Ochrogaster lunifer* is the current one.





OUT OF PLACE GRASSHOPPER

By Bob Read

On 11/2/2009 I found an unfamiliar grasshopper at the pumping station at Roe Creek. Three days later I found the same species among buffel grass on the bank of Roe Creek. I have tentatively identified it as a Sorghum Bermius, *Bermius curvicercus*. The mystery is that this species, and other similar related species are very much tropical and should not be within 1000 km of Alice Springs!



NT Parks and Wildlife Service and Trek Larapinta are calling for Volunteers

TO JOIN IN AND BE A VALUABLE PART OF THE 'LARAPINTA TRAIL VOLUNTEER MAINTENANCE PROJECT'.

The Larapinta Trail is by far one of the Great Walks in Australia and the World. It provides walkers with a unique and unequalled experience of Central Australia's desert ranges. The Trail's beauty and grandeur leave a lasting impression on all those who venture along its path: it's a journey that will never leave you. By actively participating in this project, you will work side-by-side with NT Parks and Wildlife Rangers and other volunteers to undertake the much needed Trail maintenance works.

Come and Volunteer on the Larapinta Trail:

Due to recent heavy rains throughout the region, there has been erosion to the Trail and a prolific increase in vegetation on the trail, much of it introduced grasses which will make navigation more difficult this coming season. Combined with the increase in Trail users, there is now a real threat of detrimental environmental impacts on the Trail and surrounding area.

Did you know that the Larapinta Trail is almost unique in terms of long distance walks in that no user fees apply to walk the trail, and entry to Northern Territory parks is free

The Project will entail:

\sqcup Clearing of heavily overgrown parts of the trail and restoration of damaged parts of the track.
☐ Erecting or replacing damaged trail markers
☐ Repairing and installing erosion control measures and steps.
\square We will be working at ways to restore parts of the trail now but also be working in ways that will
help reduce future impact from trail users and environmental conditions.
\square To provide an avenue for you and Parks and Wildlife Rangers to work side by side and interact
with the trail in new ways.
So whether you've walked the Trail before or not, being directly involved with this project is a great wa
to give something in return for the trail and the unique West MacDonnell National Park.

'Friends of the Larapinta Trail'

This project will also signify the start of the Friends of the Larapinta Trail group.

It will be for people, businesses and organisations who actively engage in the wellbeing of the Larapinta Trail through donation of time, money or resources and uphold a code of conduct for all Trail users. By participating in this project, you will become inaugural members of his new *Friends of the Larapinta Trail* initiative.

Trek Larapinta

Trek Larapinta is a locally owned business in Alice Springs, specialising in Larapinta Trail guided tours. Trek Larapinta also supports independent Indigenous tour enterprises and is creating community and volunteer project travel for the sustainability of the environment and people we work with. Trek Larapinta will be providing the logistical support for this project and is proud to support the NT

Trek Larapinta will be providing the logistical support for this project and is proud to support the NT Parks and Wildlife Service in the management of the Larapinta Trail.

Project Information

Date: 19th-24th April 2009

Duration: 6 days, 5 nights. We will be based out in various locations in the Larapinta Trail for the duration of the project.

Available places: To ensure a well managed, successful and safe project and to enjoy the surrounding area whilst we work, there are only **16 places available**.

A contribution of \$120 will include all meals, camping equipment and transport whilst on the project. For bookings or enquiries please contact:: info@treklarapinta.com.au