

Alice Springs Field Naturalists Club Newsletter



Katydid nymph *Elephantodeta sp.* – see page 2 for more details.

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

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http://www.alicefieldnaturalists.org.au

NEXT NEWSLETTER

The deadline for the next newsletter is **Friday 29th April**. Please send your contributions to Emily Findlay – robbiemily@hotmail.com.

MEETINGS.

Wed 13 April Field Naturalists Club Meeting, 7.00 pm at the lecture theatre in the Higher

Education Building at Charles Darwin University. Speaker: Grant Allen on "Fire in

the Centre".

Sun 17 April Field Naturalists Club Planning Meeting, 3.00pm at Olive Pink Botanic Garden.

The main purpose is to organise speakers and field trips for the next few months. All members are welcome to attend. If you are unable to come but have some ideas,

please talk to one of our committee members.

Wed 11 May Field Naturalists Club Meeting, 7.00 pm at the lecture theatre in the Higher

Education Building at Charles Darwin University. Speaker: Glenn Edwards on

"Camels".

Wed 6 Apr Australian Plants Society Monthly Meeting 7.30 pm at Olive Pink Botanic Garden.

Speaker: Des Nelson on "The John Maconochie era in the Herbarium".

Wed 4 May Australian Plants Society Propagation Workshop – APS Members only

FIELD TRIPS / ACTIVITIES.

Sat 9 April Alice Springs Sewage Ponds Shorebird count. Meet at the locked gate at 7am

sharp. Both experienced birders and scribes needed. Information collected will go into the national data base as part of the Australia-wide shorebird count. Contact

Barb Gilfedder 89555452.

Fri 22 Apr – Mon 25 ASFNC Possible Easter weekend trip to **Newhaven Reserve** – *to be confirmed*.

Please contact Barb Gilfedder to register interest as soon as possible. Ph 8955 5452

Sat 30 Apr – 2 May ASFNC Mayday weekend trip. Access to Mordor Pound seems very unlikely at this

stage. However Morgan is researching an alternative trip to the Winnecke goldfields and surrounding area which would be equally interesting. I will send out more info

later in the month. Leader: Morgan Flint 89532286.

Dates for **Bush Regeneration** field days at **Maynard Park** 2011.

You are invited to attend our bush regeneration field days for season one 2011 at Maynard Park, Head St Braitling, 8:30am till 10am. Dates are, April 9, and May 14, usually every 2nd Saturday of the month. Contact Andy Vinter and vinter@yahoo.com.au

*Cover Picture

This Katydid nymph is *Elephantodeta sp.*, possibly *nobilis* or an unnamed one. It is less than 1cm in body length and camouflaged to blend in with Acacia blossoms. It will grow up to be about 5cm and be Acacia leaf green after several moults.

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Molluscs of the Red Centre -- presented by Mark Carter

Report by Pam Keil

In his presentation, Mark explored the weird and wonderful world of the land snails persevering in the desert environment of Central Australia. There are around 30 known species in this area, and at least 30 more expected to be described. Many endangered species are found in the Palm Valley, Ormiston, and Finke River Corridor in sheltered spots of remnant tropical forests.

Snails are molluscs, which means that they share with other molluscs two main features: 1) an organ called a mantle and 2) a nervous system that lacks a clear "brain" centre. According to Mark, these molluscs are often undervalued and generally ignored (or considered pests), but they are in fact:

Diverse - with over 85000 named species (and at least as many unnamed and undescribed)

Ancient - the group has been around for at least 550 million years

Widespread - found on all continents (except maybe Antarctica) and oceans

Useful - can provide foods, dyes, or even building material

Dangerous - a few have venom, and many are pests or parasites

Keystone species - play an important role in many ecosystems (maybe even here in CA)

Mark mentioned that there are 10 major groupings within the Molluscs but most are benthic sea dwellers and almost worm like. The 4 best known are:

- 1) The polyplacophorans these are the chitons; with a many-plated shell (8 'valves' actually) and teeth made of magnetite which allow them to find their way back to the same spot on a rock after foraging with the tide.
- 2) The bivalves these are the clams, mussels, cockles, and oysters; with a two part (bi) shell (valve); and are often very edible.
- 3) The cephalopods these are the squid, octopus, and nautilus; the "head-footed" molluscs, which Mark claims get enough attention as it is, so nothing more need be said.
- 4) AND the gastropods which is where the <u>snails</u>, slugs, and nudibranchs (sea slugs) come in; the "stomach-footed" molluscs which also have a cool copper-based blood compound c.f. iron-based haemoglobin.

Before there were corals, ancient reefs were created by molluscs - called rudist reefs - and were important places in the marine ecosystem. Molluscs are also very delicious for people and animals. Mark described a bizarre snail-eating snake that had an asymmetrical jaw for pulling snails out of their shells, but it only works if the shell spirals the right way... Talk about selection pressure on the snails to switch their shell spiral direction!

We like squid, and so do the giant sperm whales, which dive deep into the ocean depths in search of the giant squid. Then there was the Snail Kite (Mark couldn't give a snail talk without bringing in the birds somehow...), which hunts snails from Brazil to Mexico and has a small population in the U.S., where it is considered endangered.

Now that we know about molluscs - let's look at the ones found in the Red Centre!

Ferals - yes there are feral molluscs! both snails and, believe it or not, slugs have managed to survive here despite hitch-hiking from much milder and wetter climates. Mostly they survive in human environments, like gardens and nurseries, but with the wet weather they may be spreading further afield.

Feral #1: The Reticulated Slug (*Deroceras reticulatum*) which still relies on humans. As it has gotten rid of its safety net (er... shell), it is more exposed to the elements, and thus more dependent on us providing a nice moist environment for it. You can tell them by their fingerprint-like ridges on the mantle (the bumpy part toward the head region). If by chance you want to keep some, they are known to like apple, but be warned, they will slime you when you handle them!

Feral #2: The Mediterranean Snail (*Cochlicella actua* or *barbara*) which have been found living at Tangentyere Nursery. These are tiny, but potentially dangerous, as they have been known to carry a liver fluke in other parts of the world and can destroy veggie gardens.



Reticulated Slug Deroceras reticulatum photo B. Gilfedder

Feral #3: *Cornu* (formerly *Helix*) *aspera* - which are the snails that Mark keeps and brought with him for show and tell. Unlike the native species, these lose water as they breathe even when they are closed in their shell. The local native snails are able to recycle water in dry times, and can survive much longer droughts.

Like all snails, these have their mouth underneath their foot and secrete a mucus to ease their path across the ground (i.e. a slime trail). They also have tusks (also called horns or tentacles or eyestalks), which may have small light-sensitive eyes, but are also used to taste things as they travel. They can close themselves off in their shell and avoid drying out much more easily than the slugs.

Natives - now, feral snails and slugs surviving out here in human modified landscapes may be hard enough to believe, but there are some natives that have survived the drying of the tropical centre and found new ways to live in the desert environments... Amazing! Mark outlined some of the most fun of these for us (with photos and even a bit of snail video).

Mark told us that native snails are divided into two groups - Camaenids and non-Camaenids. Why? Because someone wanted to have a clear-cut division. Mostly, Mark just wanted us to know in case we ever heard the terms... it's a taxonomic thing. It would be like dividing birds in to Parrots and non-Parrots. So the division was probably created by someone who studied the Camaenid snail family.



Another micro-mollusc Eremopeas interioris Photo by B. Gilfedder

Among the non-Camaenids, we have:

- 1) The micro-molluscs (*Gastrocopta* sp.) which are found world-wide and are around 2mm long (i.e. very tiny!). Mark found some of these at Alice Springs Desert Park and even has a short minispail movie!
- 2) The amber snails (*Succinea* sp.) which are often found in swamps and things. Mark believes that these are the commonest snail around Alice, but probably also the least encountered because they only come out when it's really wet. These are the ones we can go on field trips to see. The one found here is called *Succinea 'interioris'* but is

probably at least two separate species - which Mark has dubbed the Swamp Snail and the Mulga Snail. They're slightly larger than the micro-snails, but are still relatively small. See "Looking for snails" report on page 4.

And then we have some Camaenids:

1) The hairy snails (*Semotrachia* sp.) - which are the most diverse genus (at least so far as currently described) found in Central Australia. Unfortunately the only way to officially ID some of them is to dissect them and look at their reproductive structure - and as many are protected/endangered, this is not a good idea. However, they can often be identified by their limited ranges (e.g. *S. jessiana* is only found in a small location near Jessie Gap). "Why are they hairy?" Mark asks.... No one really knows, but maybe to collect dew (for water) or leaf litter (for camouflage). *See last month's newsletter cover picture*.

This group also contains the very exotic-looking "super-hairy" *Semotrachia esau* (after the biblical "hairy man") which may even shed its skin, and is found in the Palm Valley/Finke River area.



Spinifex snail - Sinumelon sp. Photo by R. Breen

4) The UFO snail (*Divellomelon hillieri*) - and yes, it does look like a UFO, but it's also highly restricted in its range and thus highly protected. Also, they don't like to come out during the day (what self-respecting UFO would come out in the day anyway?) and are thus even harder to find, except by an avid snail biologist!

Mark also showed us some pictures of a snail he discovered while leading a tour along the Larapinta trail - Spencer's snail (*Bothriembryon spenceri*), which

- 2) The spinifex snails (*Sinumelon* sp.) which look similar to the feral garden snails. They may burrow under spinifex (of all the unlikely places to find a snail!) and are the last to come up, needing very heavy rains to make an appearance. This group also includes *Sinumelon expositum* (Finke Gorge area) which eats figs! Most of the native snails live on the algae layer that covers our soils and flourishes after heavy rains. *Rosalie Breen found some in on an Alice Springs footpath last month.*
- 3) The blue-horned snail (*Pleuroxia adcockiana*) which, as its name suggests, has blue horns or eyestalks. Very cool looking!



Blue-horned snail - Pleuroxia adcockiana Photo by B. Gilfedder

he was able to take after waiting for it to poke its head back out of the shell. It was a special find of a remnant Gondwanan species and well worth the wait, he tells us. But, meanwhile, his tour group got bored and walked far ahead.... Ah, the problems with being a snail enthusiast and tour guide at the same time.

If you want to find some snails for yourself, here are some of the habitats they like - boulders and gorges with lots of algae, fig trees, alluvial flats with lots of ti-trees, swamps.... or your own garden, especially after a good rain. Just remember that many snails are protected and be careful not to step on them!

The main threats to snails are their limited ranges and very isolated habitat remnants. They are not fire tolerant, so out-of-control fires pose a real threat (as do controlled burns if people don't pay attention to the habitat they're burning). Snails like lots of leaf litter, and fire removes this even if it doesn't kill the tree, so even a small fire through the right habitat can be devastating for these snails. Be careful with fire, and feel free to yell (or report, or calmly explain why what they're doing is bad) if you see anyone burning where they shouldn't (e.g. along the Larapinta trail).

And Mark's final message:

Beat the Rush: Get into Malacology today!

For some great mollusc photos and video visit Mark's Mollusc Picture of the Week site: http://molluscpow.blogspot.com/

And a final side note on snail mating: snails are both male and female (hermaphrodites). And they're often both at the same time (simultaneous hermaphrodite) - so it's boy/girl meets boy/girl... Some species of Camaenid have also been known to be sequential hermaphrodites - the first four times they emerge in a wet season they're male, then on the fifth go, they come out female. This keeps them from mating with their siblings. Cool trick!

SEARCHING FOR AMBER SNAILS Succinea sp.

(Presumably from the Latin Succinum = amber). The species has not been worked out yet.

The small band of snail hunters, led by Mark Carter, climbed through the fence onto/into the sodden edge of the sewage treatment overflow swamp on Ilparpa Road.

My first sighting was of an unreal number of Ladybird beetles; but they turned out to be really unreal as they were on Rosalie's wellies. We did see some really real ones though, perhaps lured by those wellies?

Down to business. Mark quickly found the first snail, tiny, fragile looking, even translucent. Yet these little wonders can survive the lack of water for years, returning from their hideaways in the mud when water returns.

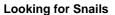
They move happily across your hand, not minding the dry skin.

They are hermaphrodites too, so that in an emergency, only one of them is necessary to get going again.

You have to admire their abilities.

The swamp is also home to the biggest, striplest mosquitoes I have ever seen.

Jim Gilfedder





A wet day in the Macs - by Chris Watson

The trip out to Ellery Creek Big Hole, ostensibly to look for Spotted Nightjar (*Eurostopodus argus*), went ahead as planned despite heavy rain during the week threatening to make the roads impassable. The weather on the Saturday in question turned out to be fine and we set off from the car park at Flynns Grave with high hopes.

These hopes were slightly lessened by the time we got to Roe Creek where it crosses Larapinta Drive. Though not impassable, this floodway was flowing fast and was nearing the level at which the Landcruiser might begin to struggle. Everyone made it through all right but it was an ominous sign – if Roe Creek could be flowing that high what would Jay Creek be like?...and the Hugh River beyond that?

This question was quickly answered as we came around the bend after the Standley Chasm turn off to find Jay Creek flowing just a bit too quickly to risk the crossing. It was going down but we decided to make the best use of our time (after Meg had been in for a dip) and head back to Simpson's Gap for a look around.

We got to Simpsons Gap eventually, but it wasn't without a bit of drama along the way. As we passed back through Roe Creek, one local got a bit enthusiastic and tried to follow us in his Ford Falcon. The water was much too deep and he stalled out in the middle and required a bit of assistance from the ASFNC recovery service. All in a day's work!

After this brief diversion we got down into Simpson's Gap and were met with quite a spectacle. Many of the group commented that they couldn't remember Simpson's Gap creek ever flowing like it was that day. We went for a look down in the riverbed but it was still a bit light for the frogs to be out and about. We got a brief look at a Peregrine Falcon (*Falco peregrinus*) as it shot overhead and a couple of Nankeen Kestrels (*Falco cenchroides*) were seen hunting high over the gap in the last minutes of daylight. No Spotted Nightjars would likely been seen at this hour of the day so we retired to the car park for coffee and nibbles and resolved to head back down to the gap after dark to see what we could turn up.



alco cenchroides



...And
what we turned up was frogs in their hundreds. The most
abundant were the little Spencer's Burrowing Frogs
(Opisthodon spenceri, previously Limnodynastes
spenceri) hopping around down on the sand. On the bark

of the big River Red Gums were plenty of the tiny, brown, Desert Tree Frogs (*Litoria* rubella). We were hoping to find some of the big, green, Centralian Tree



Frogs (*Litoria gilleni*), tonight they were staying well hidden.

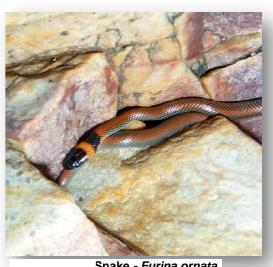
Frogs - *Litoria rubella* but

As we moved onwards along the water's edge further into the gap we discovered a tiny little Orange-naped Snake (*Furina ornata*). This one was seriously only a couple of days out of an egg and was like a tiny little piece of spaghetti as I tried to catch him for a closer look. These are quite common in the more humid weather and although they are venomous they are not dangerous to humans. They are a specialised skink

eater and rarely grow larger than 400mm – this little one was barely 80mm long. As my giant sausage fingers fumbled after him he was just too slippery and he swam off across the stream and away from the searching spotlights of the group.

Two Southern Boobooks (Ninox novaeseelandiae) started duetting somewhere up on the hill and they would prove to be the only night birds evident on the outing. So although it was disappointing not to have seen our "target" species, everyone seemed to have a very enjoyable day. It was just great to get out into the country and see all this water sloshing around.

It always leaves us another day on which to go and hunt down the Spotted Nightjars because one thing is for sure - this extraordinary season is going to keep the wildlife in fantastic condition for a while to come yet.



Snake - Furina ornata

NOCTURNAL WALK AT TREPHINA... - Report by Layne and John Stevenson

About a dozen of us met up with Pam Keil and Michael LaFlamme at the picnic area. Our quest was to look for night birds - Spotted Nightjars, Owlet Nightjars, Southern Boobooks, Bush Stone-Curlew and maybe even a Tawny Frogmouth or a Barn Owl. As the sun was setting we headed off on our evening of hunting...torches and cameras in hand. First stop was the river bank where a number of burrowing frogs were sighted, (jury is still out as to whether they were Spencers Burrowing Frogs or not) and watched as some 'boatmen' swam in the shallows.

We then walked along the track towards the camp ground, Orion, Betelgeuse and Taurus along with the Southern Cross could all be seen twinkling in the cloudless sky. Pam pointed out some Katydids jumping in the long grass and explained the difference between Katydids and others of the Grasshopper family. We saw a Praying Mantis trying to sleep as we shone our light on him, and watched as Goldern Orb Spiders spun their webs. A few bats were seen catching the moths flying in our torch beam. Near the end of the track, John spotted something on the end of a branch, a Southern Boobook (mopoke). It was the only owl sighted on our walk. We made our way back to the picnic area along the roadway. Some called it a night there and returned to Alice while others made way to a camp fire where tales ..tall and true.. were told

while sipping wine and nibbling on cheese and pate. Pam and Michael saw a Long-haired Rat (native) on their way out.

Next morning we headed off in different directions, exploring the gorge and its various walking tracks. A wonderful weekend was had by

Bird lists for Trephina Gorge Weekend, 26/27th March 2011

John and Layne saw Australian Hobby, Wedgetailed eagle, Magpie Lark, Budgies, Black-faced Woodswallow, Little Woodswallow, Willie Wagtail,

Diamond Dove, Crow, Southern Boobook, Crested Bellbird, Zebra Finch, Grey-fronted Honeyeater, Grey Shrike-Thrush, Black-fronted Dotterel, White-plumed Honeyeater, Rufous Whistler, Grey Goshawk, Hooded Robin, Galah, Nankeen Kestrel and Whistling Kite.

Jim and Barb Gilfedder also saw Red-tailed Black Cockatoos on the way out. Spotted Nightjar, Barn Owl and Little Button-quail on the way back in the dark.

Pam and Michael saw Black-shouldered Kite on the way out and Barn Owl and Owlet Nightjar on the way back.

ALICE SPRINGS FIELD NATURALISTS CLUB INCORPORATED Minutes of general meeting at Higher Education Building, Charles Darwin University Wednesday 9 March 2011

President Barb Gilfedder declared the meeting open following Mark Carter's presentation, "Molluscs of the Red Centre".

Present: Eighteen members as per attendance book. Two apologies.

Minutes of previous meeting as printed in newsletter accepted by all.

Business arising from the minutes:

- Rosalie Breen purchased "The Butterflies of Australia" which is to go to the library at Olive Pink Botanic Garden after it has been brought along to a few meetings.

General business:

- Thank you to Pam for taking notes and Rosalie for supper.
- Advised of change about bird count on 9 April due to wild dogs. Barb is looking for people with expertise to do a bird count and scribe. There is a list of birds that are to marked off, and the opportunity to learn about birds Interested Pam, Neil and Leigh, Anna, Mark. Starts 7am.
- New picture for thank you card Grey-headed Honeyeater by Don Hadden. Jenny Purdie to print twenty.

Correspondence in:

- Wiser Earth annual update to continue
- Power and Water advising Sewage Ponds closed because of feral dogs. Hope to reopen at beginning of April.
- CSIRO re book "Mistletoes of Southern Australia".(Connie to research.)
- NT Field Naturalist Club Nature Territory Newsletter, Mar 2011
- WA Naturalists Club newsletter -The Naturalist News
- Email from Jacelyn Anderson, new leader of Junior Rangers, expressing interest in meeting Field Naturalists.
- Flicker fest (forwarded to membership)
- P.O. Box bill.
- Insurance bill \$350 same as last year.

Correspondence out:

- Thank you card to Jayne Brim Box for her presentation at last month's ASFN meeting.
- Newsletter and invitation to next ASFNC meeting to Jacelyn Anderson.

Treasurer's report:

Opening balance (end **January** 2011) \$2600.56

Plus Subscriptions 205.00

Less Book – The Butterflies of Australia

Balance: \$2760.56

Trips:

- Easter weekend Newhaven. 22 26 April. As yet no leader.
- Ellery Creek Big Hole with Chris Watson to search for nightjars and "creepy-crawlies" on the way back.
- 26, 27 Mar overnight trip to Trephina. Option to go just for the evening or camp overnight.
- Mt. Sonder contact Rosalie Schultz.
- Mordor Pound Max 6 vehicles, May Day weekend. May not be open due to rain damage to track. It is north of Trephina and needs high clearance 4WD. Also permission from Andy Hayes.
- APS walk Cassia Hill this Sunday. Contact Connie.
- Planning meeting on 17 April at Olive Pink. Need meeting as not many excursions planned.

Other:

- Jacelyn introduced to members She is taking over Junior Rangers.
- Mark Carter can get wholesale rates of books to follow up
- Mark Carter investigating flights from Alice Springs over Lake Eyre.

Bird sightings:

Grey Honeyeater – first bridge on Simpsons Gap bike track – Mark Carter

Mixed feeding flocks – of Grey-crowned Babbler, Magpie Lark, Ringneck, Pied butcherbird – Pam Keil Sacred kingfisher – in Battarbee Street – Barb Gilfedder

Lots of Little Button quail in town area nature strips – sometimes killed by grass mowers – Mark Carter.

Next meeting: Speaker - Grant Allen - "Fire"; Note taker - Rosalie Breen; Supper - Leigh Woolcock