



SEGMENTS

Journal of the
Scientific Expedition Group



SEG AGM

Friday August 25, 7:30pm
Fullarton Park Centre
(Corner of Fullarton Rd & Fisher St)
Guest Speaker yet to be announced.

Minnawarra Biodiversity Project, Autumn Survey, April 21 to 25, 2006

Information provided by Richard Willing

The 2006 autumn survey was held over a long weekend including Anzac Day, with a working bee to erect the pitfall fences on Easter Sunday. Good mammal trapping reflected the recent lush spring. Two inches of rain just before the survey kept a few of the pitfalls closed for a couple of days while the ground water receded, but all were operating for the last half of the survey. Skinks were more common when the weather warmed up. Bat traps were not available and the vegetation was not surveyed this time. Claire and Frances will complete their bird survey after the main survey. Micro pitfalls for invertebrates were forwarded to the SA Museum for identification.

Strong support from the Thomas, Furler, Pahl and Willing families made sure the pitfall fences were erected before the rains came. Mammal processing was in the care of Christine Pahl, Richard Willing and Janet Furler, ably assisted by members of their families and a dozen volunteers. Before, during and after the survey 18 helpers contributed 390 hours of voluntary work.

*******SEG 2006 Calendar*******

July

July 14-18 GRaSP Crossover Trip

August

August 25 SEG AGM, Fullarton Pk Centre

September

September 17-29 SEG Boolcoomatta Expedition
End of Sep. Minnawarra Spring survey

November

November 24-18 GRaSP End of Year trip

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SCIENTIFIC EXPEDITION GROUP INC.
PO Box 501, Unley SA 5061

Minnawarra Biodiversity Project cont.

After the rain during the preceding week, the whole period of the actual survey was beautiful, gradually warming as the days went on.

A total of 225 mammals (excluding escapees) were trapped, well above the numbers of last autumn (194) and twice as many as last spring (103). These were weighed, sexed, marked and released.

Yellow footed antechinus (*Antechinus flavipes*) were prominent with 35 new animals, 43 recaptures and 1 escapee. Males and females were about equal (19M, 16F), usual for this time of the year. Bush rats (*Rattus fuscipes*) were most frequent with 53 new (23M, 30F), 37 recaptures and 4 escapees. Swamp rats (*Rattus lutreolus*) were less common with 11 new (3M, 8F) and 11 recaptures. Site 7 produced 10 house mice (*Mus musculus*) with a few scatters at other sites.

Site 1 was by far the busiest with 66 captures. This is on the edge of a swamp in the NW corner of the property, and produced most of the Swamp Rats. Sites 7 & 8 combined produced 63 captures. Most of the Antechinus were trapped here. These sites are south on a creek bank and a swamp of a tributary of the Boundy River.

The cool weather inhibited frogs and skinks in the first couple of days, but the final number was 29, the majority being the common garden skink (*Lamphrolis guichenotii*). Five brown froglets (*Crinia signifera*) and one scorpion were trapped in pits. One grey shrike-thrush was caught in a cage trap – it just loves peanut paste.

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Easter Bunker Range patrol

Written by Christine Arnold

The Bunkers Conservation Reserve trip was again a success with Janet and Phil Davill, and Trent with Rae. It was fun travelling up from Port Augusta on Friday with Trent and Rae. The highlight was overtaking a convoy of Landover of various ages with some funny characters driving them. Our favourite was a fellow in a stockman's hat and Sherlock Holmes pipe from his mouth, in an old left hand drive model. We were too late for the wallaby walk, so popped down to Pinnacle Bore to retrieve fencing wire, gripples and Bunkers Conservation Reserve car magnets.

We then enjoyed camp ambience while another member, Tony (accompanied by his father and uncle) were setting up their camp some distance from ours. We got stuck into the fence patrol on Saturday with about 8.5km of good fence walked, and where only minor repairs were needed, between Wilkawillina trail head carpark area, and Pinnacle Bore. Once again, too late for the wallaby walk, so 3 of us helped at the southern mulga revegetation enclosure, by rolling out about 900m of barbed wire, while the other 2 retrieved the vehicle from the morning's starting point.

After showers, we were finishing our sumptuous meal when a mystery 4WD rolled into camp. Out spilled another BCR member, with his sister in law, her husband and a older ranger from Yorkshire, England, and his wife. They were on a 2 day visit to the Flinders Ranges, and Kaz had decided to introduce them to us, for a bit of local flavour, and to give them an idea of what we and Tony were doing out here. Tony and crew went out doing spotlight rabbit counts.

Sunday, 2 people were dropped off at Saturday's finishing point at Pinnacle Bore, while the other 3 took 2 cars to finishing point at Boulder Bore and brought one car back to the meeting point, a few gullies south of the Willow springs/Bunkers CR gate. This fence we patrolled last Easter, and for the most part it was still in good shape, but further south we came across last year's euro (which had to be shot by another member at the time to extract it from the fence), we fixed another wire breakage in the same fence section that we fixed last year, plus we treated some more lifting droppers with "hanging rock therapy". In general, the netting only required pulling back into place where euros had moved it. So, another 8-

9km was brought back to good standard. Unfortunately we had to extract one dead crisp emu and 3 dead crisp euros from the fence. That was rather sad, as we all thought of what a horribly slow means of death that must be.

Sunday afternoon we got back to camp to again to light the chip heater for hot showers, before we zoomed off at 4pm to do the wallaby walk. This is now a loop walk of about 5-6km, going from camp to Minnitinni Spring, via a hill pass, mallee gully, and the calcified roots of Minnitinni Creek, to the Amphitheatre, where Janet and Trent spotted a yellow-footed rock wallaby, while Rae was photographing, and Phil was showing me how to operate the old SLR camera we had borrowed off Tony's uncle to capture the Minnitinni photopoint with. The mirrors inside had stuck, which was why I couldn't see anything through the viewfinder, despite double checking I'd taken the lens cap off!!

By the time Phil and I caught up the others, the wallaby had scaled the rocky heights and slipped out of sight, so we continued on upstream, and had a look at the petroglyphs on a specky slab of rock I had walked past several times on previous trips without knowing. Now I was in a screaming hurry to get to the photopoint before the light failed in the valley, so I left the others in my wake and hurried across Echidna Flat (no echidnas today, but a very anty smell), past the spring (all animal scratching funnels to water were dry), scrambling up the slope. I quickly took the required photos at the star droppers and sat down to catch my breath, look at the gorgeous view and wait for the others. By the time they came up the slope, the sun was dipping behind the hill, and was 'set' as we reached the little saddle.

It was then downhill and across to another small saddle, before going downhill past a little mine hole and down a creek, turning north and culminating on a small hill overlooking camp valley floor, where more photos were taken, it now being very twilight. As it was after full moon, the moon did not rise until after showers, but everyone still enjoyed the walk. Trent and Tony celebrated the end of the fire season, by having a tiny fire each at their separate camps, from wood brought into the Reserve.

Monday, Phil, Janet and I packed up and, with Trent and Rae; we drove out to the northern mulga enclosure, this time unrolling about 600 m of barbed wire. After that we

enjoyed making a wooden tepee for a fresh marsdenia (bush banana) seedling, and when Tony and crew arrived we all said our goodbyes, leaving Trent and Rae in Tony's hands.

The drive home was uneventful, except for the usual busyness at Hawker at Easter. A great weekend! PS Thanks to Bruce Gotch for the loan of his fence strainer and gripple tool.

Gammon Ranges Scientific Project Trip April 21-25, 2006

Report provided by Leaders: John and Peter Love

Expeditioners included: Felicity Pearce, Ray Hickman, Michelle Ho, Carly Tozer, Nicole Anderson, Amy Broad, Mathew Voller.

Five people and three back packs went in the Subaru and 4 people and 6 back packs, as well as water and emergency food, in the Prado. We left Adelaide on Friday morning. The journey was uneventful and the food at Copley Bakery was as good as ever. We arrived at the base camp near the entrance to the Gammon Ranges National Park in time to change the data loggers at the enclosure pluvio and the stream gauge that afternoon.

Christine Arnold and her assistant, Rob Kelman, arrived at dusk to spend the weekend doing their wallaby survey.

On Saturday Peter led Felicity, Michelle, Carly and Nicole to Arcoona South to change the data logger and calibrate the instrument, while the rest went direct to Wild Ass waterhole. Aquatic biology sampling gear was dutifully carried to Sambot waterhole, in the almost certain knowledge that it would not be needed, and the routine two photos were taken there. The pluvio party arrived at Vandenberg camp late afternoon after digressing a little from the usual route.

On Sunday Peter, Felicity, Amy and Mat changed the Sambot pluvio logger and then waited on North Tusk Hill. Having failed to find site 72, the photo party went on to site 71, did the necessary there and bypassed site 73, meeting the others on the summit of North Tusk. The whole party went on to the Plateau, where the four photo points and the pluvio were attended to. The photography on North Tusk summit and sites 73 and 72 were done on the return walk.

After taking the human impact photos at Vandenberg and returning the gear to the Wild Ass cache on Monday, Peter, Mat,

Felicity, Amy, Michelle, Carly and Nicole returned to base camp along the ridge of Arcoona Bluff, arriving at dusk, while the other two had a leisurely walk down the creek, arriving at lunch time.

David and Chris Kemp, Chris Davill and Rebecca Hatcher were in camp, having completed their work upgrading the pluviometers at North Moolooloo and Pfitzners Well and having laid a concrete base for the stream gauge in Arcoona Creek. Chris K, Chris D, and Rebecca did the wallaby walk that afternoon, seeing one wallaby and an echidna. Christine and Rob returned to camp a little after dark, making a dinner party of fifteen! The Arcoona Bluff pluvio data logger was not changed.

Return travel arrangements on Tuesday for the pluvio and photo party were similar to the outward journey. There were no mishaps.

The most interesting feature of the trip was Peter Love's sighting of a yellow-footed rock wallaby in Arcoona Creek near Vandenberg camp, about eight kilometres up-stream from the park entrance. A pair of eagles was seen over Vandenberg camp and again over base camp – presumably the same pair. Nine euros, 9 goats and 1 rabbit were seen during the walk. A small, skinny, bold feral cat came scavenging into base camp on Friday evening. It had obviously been fed by other campers and expected more.

All photography was done in stereo. The camera mounting devised by Ray Hickman worked well.



Photograph supplied by John & Peter Love.

GRaSP Trip April 21-25 2006 – CDMA Installation Team

Report written by Chris Davill

The group included: David Kemp, Chris Kemp, Bec Hatcher and Chris Davill (Trip Leader)

Trip Objectives

- Install/service CDMA Modem/Data loggers at North Moolooloo and Pfitzners Well Pluviometer sites
- service/tidy up Maynards Well site.
- Tidy up/modify Arcoona Creek Water Level Gauging site.

T

I would like to introduce myself and Rebecca. I work with Chris Wright at the Bureau of Meteorology as a technical officer. I am also Phil and Janet Davills' son. Rebecca is my partner who has just started teaching Indonesian at Primary/Secondary schooling.

April 21

Bec and I picked up David and Chris at approx 07:30. We traveled up to North Moolooloo station via Orroroo. We weren't traveling all that fast since we had a very heavy load in the trailer.

We arrived at North Moolooloo station approx 15:00. After a quick check to see if the station owners were home (they were not throughout the weekend), we headed over to the pluviometer site.

At the site we removed the pluvio from its existing base and carefully removed the drain-tubes. Next we began the hard task of digging two holes for the new pluvio and CDMA logger stands. The holes needed to be 700mm deep. The ground after digging down about a foot could best be described as concrete. So everyone took turns with the crow bar and the post hole digger.

With the holes almost completed and the sun beginning to set, we headed back to the shearers quarters where we had arranged to stay for a couple of nights.

A word of warning – Take care driving to and from the North Moolooloo Pluviometer – There is a nasty ditch a few hundred metres from the site, which is hard to see, especially at dawn/sunset. If it were to be driven through, you will probably leave your front wheels and associated bits behind!

April 22

We headed back to the pluvio site and continued to dig the two holes and trench for the conduit. When happy with the holes, we cemented the new logger and pluvio stands using speedset concrete. Next we installed the pluvio and the CDMA logger electronics. A calibration check was performed using the Bureau of Meteorology field calibrator and both reed switches were checked using dual electronic counters.

The earth stake was belted into the ground and earth cable buried under the ground. The termination of the earth cable to the earth stake was wrapped in Denso tape (horrid sticky greasy tape), so this should last for a long time.

We drove back to the shearers' quarters and had our well deserved lunch. After lunch we drove out to Pfitzners Well. We marveled at the golf course at Moolooloo station. A few track repairs were required and going was slow. As wonderful and capable vehicle the L Series Subaru is, it just didn't have sufficient ground clearance for some of the creek crossings. I had two diagonally opposite wheels off the ground at one stage. We arrived at Pfitzners Well around 14:00. The installation of the new equipment at this site was pretty well identical to North Moolooloo except it took much less time. The ground here was much softer.

Dusty, grubby but most importantly well satisfied with our hard work, we made our way back to the shearers' quarters at North Moolooloo.

April 23

In the morning we packed up the trailer and cleaned up our gear in the shearers' quarters. We had one and a half bags of speedset concrete left over, so we left them behind for the station owners to use.

We decided to have a go at getting the Subaru and still heavily laden trailer to Maynards Well via the scenic route along Windy Creek. This was a nice drive although slow going as the track required a few repairs to get the Subaru through. We stopped at the final crossing of Windy Creek to have a look at the old decommissioned State Government river gauging station. We encountered a small grey colored snake in the creek, which involved David and myself running in opposite directions.

When we had finished looking at the old station, we drove to the Maynards Well pluvio where we did a calibration check and tidied up the site. I installed a new earth cable as the original was a bit short; I wrapped the termination to the earth stake with Denso tape as with Moolooloo and Pfitzners. We covered the exposed conduit between the pluvio and the CDMA logger with stones and dirt and removed some old conduit. When finished we headed towards the Arcoona Creek, we bumped into Eddie Nichols at Maynards Well homestead on the way out and had a quick chat with him.

We got a flat tire between Mt. Serle and Owieandana Station, we quickly put the spare on and noticed that the puncture must have been a nail or some wire, and I forgot

some repair plugs! Never mind, we were carrying two spares anyway.

After arriving at Arcoona Creek, where we parked the car we went for a quick walk up Arcoona Creek to check out the river gauging station and a good route to take the wheel barrow. The plan for this site was to cement a level floor in the cave for the 'Rittal' box. On the way back David showed Rebecca and myself the exclusion zone pluvio.

Later that night around 7pm, Christine Arnold and Rob Kelman came back from their wallaby watch. They cooked tea and Christine asked us to do the wallaby walk up to Arcoona Saddle if we had time the next day.

April 24

Once up and breakfasted we packed all the gear we needed into daypacks and the wheel barrow (30kg concrete, 10kg water etc). With around 50kg in the wheel barrow we headed up Arcoona Creek, we cut across the creek with the wheel barrow over to the exclusion zones and up to the stream gauge site. I foolishly volunteered to push the wheel barrow the whole way. Tough work as I am sure people can appreciate, but good fun nevertheless.

At the Arcoona river gauge site, Chris and myself carefully removed all the loose rocks from the cave and lowered the 'Rittal' box down the rock face with a rope. I swept out all the dirt and rubbish while Rebecca, David and Chris looked for good flat stones to cement into the cave. David began to mix the concrete in the wheel barrow and Chris and myself hoisted up the concrete in a bucket with the rope. I worked up a flat spot in the cave using the flat stones and concrete. I placed a garbage bag on the concrete so the 'Rittal' box wouldn't get stuck to the concrete. I replaced the batteries with higher capacity units (2x 12AH) and tidied up the internal wiring. We installed the 'Rittal' box back into the cave and placed large rocks around the opening to disguise the site.

We headed back to the campsite for lunch. Chris, Rebecca and myself packed our cameras, water and basic first aid into daypacks and headed off to do the wallaby walk. On the way up Arcoona Creek we found an echidna, which was tame enough to walk about with us standing 1 metre away! We saw one Yellow Footed Rock Wallaby just before the first waterfall. We were fortunate to get a good look at it as it hopped

from one site of the creek to the other. We took our time to appreciate the fine view from Arcoona Saddle. We made our way back to the camp site and arrived just before sunset. I had brought a 2 foot fleuro lamp which I had converted to 12 volts; we set this up on a rope for people to cook under.

April 25

We had breakfast and packed up the trailer and the car. We dropped into Owieandana Station and gave the station owners the bag of concrete we didn't use and had a quick chat. We stopped in Copley to enjoy the delights on offer.

We traveled back to Adelaide via Orroroo, Clare and Two Wells. We went this way to take a look at the effects of the recent flooding at Spalding. There would have been about 400mm deep water in the main street!

We arrived at the Kemps place around 17:30. Rebecca and Myself went over to my parents place for tea (Phil and Janet Davill), tired, grubby but very pleased with the trip.

I would like to thank David, Chris and Rebecca for all the hard work and help to enable a successful trip. For Rebecca and myself, this was our first SEG trip up to the Gammons, we had a wonderful time and look forward to next trip we attend.

SEG Expedition 2006 - Boolcoomatta Reserve September 17 to 29

SEG invites you to join in on a baseline biological survey of the recently purchased Boolcoomatta Reserve near Broken Hill. The purpose of the trip is to add to the knowledge of the biodiversity of this 63,000 hectare property of complex saltbush and rocky range country.

This is a great opportunity for people of all ages and expertise to observe and participate in professionally conducted field survey work with experienced biologists and natural historians.

The survey will include vegetation, invertebrates (especially insects and spiders), reptiles, birds (including the Plains Wanderer) and mammals, to be trapped by various humane methods, identified, measured, documented and released. There will also be archaeological and historical investigations carried out. An Adventure Phase involving a search for evidence of the presence of Yellow-Footed Rock Wallabies will also take place in the Olary Range area on the property.

Cost: \$500 for transport, food & accommodation. For further information and to register your interest, phone Trent Porter on 82789078 or e-mail trentasaurus@bigpond.com

Moonabie Expedition 2005 Mammals

Report provided by Cath Kemper

The Moonabie survey recorded 16 species of mammals, 14 of which were native (1 monotreme, 2 dasyurids, 3 macropods, 2 rodents, 6 bats) and 2 introduced species (rabbit and fox) (Table 1). No House Mice were captured on this survey. When compared with the Munyaroo survey of 2002, one additional rodent (Bolam's Mouse) was recorded and all bats were new records (Table 3). Two native mammals were not trapped during the Moonabie survey that were recorded in 2002. This reinforces the point that it is important to undertake several surveys (over different seasons and in different years) in order to record all species present. The total species list for Munyaroo Conservation Park and bordering land is 14 native and 6 introduced mammals. One species that we were hoping to record was the Sandhill Dunnart, *Sminthopsis psammophila*. It has been recorded west of the park (see previous report). We placed our sites MUN 10 and MUN 11 specifically in the burned *Triodia* habitat that is known to be favoured by the Sandhill Dunnart in hopes that we could record this threatened species in the Park.

The weather was more amenable to catching bats during the Moonabie survey because it was late spring and bats were likely to be more active then. The trees may also have had more hollows in the western part of the park, particularly in the vicinity of camp, and this would have been better habitat for bats. Bat traps and mist nets caught 30 bats of three species. The single best night was that when Cath and Fran put mist nets over a large dam north of the park and 13 Gould's Wattle-bat were caught, despite it being a bit windy. Many were lactating so had young in a roost somewhere. This was also the best night for the bat detector when 420 calls were recorded during only 2 hours! The bat detector recorded three species that were not caught so having it was a real bonus to the survey. If you are wondering whether trapping and netting is necessary, the answer is 'yes'. The detector was not able to distinguish the calls of the two long-eared bat species and, although it told us that one of the *Vespadelus* bats was present, it could not identify the species with certainty.

The only species of special note on the Moonabie Survey was the Greater Long-eared Bat, *Nyctophilus timoriensis*. It is

listed as Vulnerable under the *National Parks and Wildlife Act* because the habitat in which it lives is patchy and limited. The species is often caught in mallee woodland that has large trees and many hollows. It is sometimes caught in pitfall traps, presumably because it spends some time on the ground while foraging.

Comparing the mammal species richness between sites showed that MUN15 (7) and MUN16 (9) had the most species. However, these results are biased by the fact that the bat detector was placed at the sites. If only small mammals captured in traps are compared, again site MUN16 had the most (3 species) and MUN9 and MUN10 had none. The lack of captures at these latter sites is surprising since *Triodia* grassland often has a rich small mammal fauna.

UPCOMING GRASP TRIPS

July Crossover Trip- Gammon Ranges July 14- 18

This trip is likely to involve two groups, starting at either side of the ranges, leaving vehicles at each end and walking across. We will be visiting each of the Pluviometers and the Arcoona Creek gauging station and may be doing some work on them. This will probably require 3 or 4 days bushwalking, with no facilities, carry everything.

Leaders: Chris Wright (h) 8278 8818 (w) 8366 2669

(m) 0414 789 220

Trent Porter (h) 8278 9078 (email)

trentasaurus@bigpond.com

November (End of Academic Year) Trip- Gammon Ranges

24th to 28th November

This will be a routine SEG trip with checks on all the Raingauges, and some photography, Yellow Footed Rock Wallaby monitoring. Approximately 3 days bushwalking, with no facilities, carry everything.

Leader:

Graham Blair (w) 8463 6979 (email)

blair.graham@saugov.sa.gov.au

David Kemp (w) 8343 2534 (email)

avid.kemp@transport.sa.gov.au

Brief adventures in tropical Queensland

Written by Richard Willing

In early May, Gwen and I had the opportunity to spend a few days looking at some of the creatures of Far North Queensland. Rain forest to me is an acquired taste with its clammy, dense greenery full of itchy, bitey, buzzy, stingy things. I prefer desert environments such as the Australian outback and Antarctica. On this occasion, though, we were rewarded with many sightings of birds and animals endemic to the region.

Our first impressions were of the mind-boggling amount of damage caused by the

recent cyclones Larry and Monica that ravaged not only the coastal areas but also well inland, so that huge areas of rain-forest were stripped, and large trees blown over or snapped off. Clean-up operations were continuing, iron from sheds was strewn across paddocks, and many houses were still awaiting new roofs. Dairy areas inland from Innisfail, Darwin's main milk supply, suffered badly, with mastitis, sick cows and vastly decreased milk yield. The rain continued on most days that we were there and it was very muddy. The locals were complaining bitterly about the late wet season and the lack of sunshine - we did not bring home a suntan. While some parts of Queensland are still in drought, there is so much water lying around here that the wetlands are almost deserted of waterbirds. The savannah country to the west gave us a little relief from the dampness. In spite of this we still saw a large number (120+) of different species of birds without really trying too hard.

Kingfisher Lodge is near Julatten, a small town inland from Mossman. It provides comfortable basic accommodation in the rain forest, which teems with bird life. Bird feeders near the veranda bring some of the locals around making it easy to see Macleay's, Lewin's, Yellow-spotted and Graceful Honey-eaters at close range. Orange-footed Scrubfowls and Brush-turkeys wander through the surrounding forest, as well as various Bower-birds, Catbirds, Figbirds, Bush-hens and other endemic species such as Atherton Scrubwrens, Grey-headed Robins, Bridled Honeyeaters and Lesser Sooty Owl. We sighted 70+ species in a couple of days.

Later we stayed further south at Yungaburra, a small town inland from Innisfail. During evening spotlighting we found several Lumholtz's Tree-kangaroos (*Dendrolagus lumholtzi*). These rare Australian mammals are found only on the Atherton Tablelands. They are of stocky build with short, broad feet, powerful arms and recurved nails to assist in tree climbing. The long tail, which grows up to 70 cm, does not taper, is not prehensile, and is used for balance only, hanging down vertically while in the tree. They feed on leaves, fruits and even maize on the edge of the forest. The only other similar animal in Australia is the rather larger Bennett's Tree-kangaroo found further north near Cooktown.

We also saw several Green Ringtail Possums (*Pseudocheirus archeri*) with their small ears, white bellies and striped backs. The mixture of yellow, grey, black and white hairs produce a green colour to their dense, thick fur. These small leaf-eaters take a long time to digest their poor quality food, like koalas, and have a distinctive odour.

We saw Coppery Brushtail Possums (*Trichosuris vulpecula johnstoni*) which are the largest of the possums found in the area. This sub-species of the Common Brushtail (*Trichosuris vulpecula vulpecula*) is only found in the wet tropics. They are a rich copper colour, and some of the males can be very black. Its leaf diet is supplemented with fruit, buds and bark. A Common Brushtail was also sighted on this trip, as well as a Long-nosed Bandicoot, a Lesser Bent-wing Bat and Spectacled Flying foxes.

The rich, red, fertile plains of the Atherton Tableland confirm that this is a volcanic region. Perhaps the most fascinating area is at Undara, 100 km south of Ravenshoe. The volcano here erupted 190,000 years ago, pouring 23 cubic km of lava onto the plain which now measures 1500 sq km. Some lava formed tubes as the outer part cooled while the red-hot interior kept flowing down valleys. The result is the longest lava flow in the world - a tube that is 160 km long. Inside these huge caverns there is evidence of fluctuating flow resulting in different levels, and 'drip and dribble' effect where the lava has cooled and solidified while dribbling down the walls. The roof has collapsed in places allowing rain forest plants to grow and various types of wildlife to live there. The best known are the bats. At this time the 'microbats' are present permanently. Later in the year 'megabats', who come out in their thousands at sunset, will come here to roost. Hopeful of catching a feed we found a Night Tiger or Brown Tree snake (*Boiga irregularis*) swinging from a tree near the entrance. In the scrub around the tubes were a different lot of macropods such as the Eastern Grey, Euro, Whip-tailed and Black-tailed wallabies.

To complete it we spent a few hours on Green Island on the Great Barrier Reef outside Cairns - interesting fish and coral, but a bit murky with all the recent rain. Good lot of birds, though, such as Reef Heron, Yellow-breasted Sunbird and Yellow White-eye.



SCIENTIFIC EXPEDITION GROUP - Membership

The Scientific Expedition Group came into being at a public meeting on 21st August 1984.

Membership is open to any persons, family or organisation interested in the following aims:

- * The promotion and running of expeditions of a scientific, cultural and adventurous nature.
- * The furthering of knowledge, understanding and appreciation of the natural environment.
- * Promotion of the values and philosophy of wilderness.
- * Enabling people to learn the skills required for planning and running expeditions, and to develop sound field techniques.

Members receive regular information on SEG activities and expeditions

Patron: Her Excellency, the Honourable Marjorie Jackson-Nelson, AC, CVO, MBE, Governor of South Australia

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SUBSCRIPTIONS (Including GST)

Working adult member	-----	\$16.50
Pensioner student or unemployed	-----	\$11.00
Family membership	-----	\$22.00
Organisation membership	-----	\$22.00

APPLICATION FOR MEMBERSHIP AND MEMBERSHIP RENEWAL

Name

Address

.....

Telephone (H) (W)

E-mail

Details of scientific, cultural, and adventuring or other relevant skill or interests you may be prepared to share with the group:

.....

Applications should be addressed to :

The Hon. Secretary
 Scientific Expedition Group Inc.
 P.O. Box 501
 Unley S.A. 5061