

SEGMENTS

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Scientific Expedition Group



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"SEGMENTS" is the authorised journal of the SCIENTIFIC EXPEDITION GROUP INC.

PO Box 501, Unley, SA 5061

SEG Trip Report for January 2000

Gammon Ranges Data Recovery Trip Wednesday 26th January to Sunday 30th January 2000

Chris Wright and Chris Iwanicki

We left Adelaide at 06:15 and arrived at Arcoona Creek at 13:45 (7 hours 45 minute journey) without any mishap or delay, and started walking at about 14:20, carrying the replacement pluviometer for the Gammon Plateau, and a small daypack with a bit of water and scroggin. Arrived at Vandenberg Camp at 16:20 (two hours, not bad for mid-summer, but it was not particularly hot). Dumped (gently) the pluviometer, and a bag of tools in the cache cave and then walked up to Grandfield Waterhole to see what fresh water might be available; no water just a muddy patch in the bottom, then on to Sambot waterhole, Lower and Upper both dry. At 17:30 we headed back to the vehicle to camp the night, arrived at 19:15, well exercised. A cool breeze and a few spots of rain on the way back, overcast most of the time, but a few patches of sunlight.

During the night, the wind backed round from south west to south, and strengthened.

Thursday 27th. Up at 06:30. We visited the enclosure pluviometer and exchanged the logger and checked the instrument. Phil Strachan arrived at 08:15, but could only spare the one day to assist us, so we set off, with quick visits to the Enclosure pluviometer and the water level recorder, so that Phil could see what they were, quick stop at Woodcutters Well, again to show Phil, then on to Wild Ass Creek via the shortcut. Collected the photo-monitoring gear at Wild Ass Creek and then on to Vandenberg Camp, arriving at 11:45 for a bit of lunch.

At 12:30 we loaded up the pluviometer and a day pack, and set off via Grandfield Waterhole and North Tusk Hill, across to the Plateau, arriving at 14:45. We replaced the tipping bucket raingauge. There was a slight problem because the new one did not have a cradle for the logger, so we removed the cradle from the old instrument, however, there were no mounting holes on the new instrument, so be used a temporary arrangement with plastic tape. Next trip we need to work out a more permanent solution. The pluviometer calibration check was done, no worries, and we left the site at 17:45, and went back to camp via Noname Creek (heading east from the Mallee photo point), a rather slow and winding route, but we did find several small pools of water, although they were rather far up the creek for access from Vandenberg Camp (a long way to go for a drink). We reached Vandenberg Camp at 18:15, and Phil

headed straight back down the creek, and eventually reached home (Balcanoona), very late, after meeting Paul from Owieandana and stopping for a chat. The two Chris' stayed on at Vandenberg Camp for the night.

Friday 28th. Cold overnight (sleeping bags needed to be zipped up— in summer!!) We made a quiet start and found that Phil Strachan had taken the photopoint numbers back with him in his pack. So we had to make up some temporary ones using the cardboard box for the Pluviometer. There were remains of a camp fire at Vandenberg Camp which we removed by carting the ashes to the creek bed and scattering them. It seems that the camp is starting to become more widely used. We did the photopoints on the slopes of North Tusk Hill, and repainted the dots for the Human Impact monitoring points on the summit. Then a quiet morning

completing the work on the photopoints on the plateau. There is quite a bit of vegetation growing in front of some photopoints. For a bit of variety, we returned via Ecchler Creek, we crossed the saddle towards North Tusk, and then headed north, down into the creek line. This is a reasonably easy walk, and it was interesting that we found a large pool of clear water about 200 metres upstream from the junction with Arcoona Creek. The Sambot pluviometer was serviced, and we left behind a White Rabbit biscuit tin as a tool box. Back to camp, and then a quick trip back to the waterhole to fill the wineskins. Cool conditions continued overnight, with a strong southerly wind.

Saturday 29th. We left camp at 08:05 am and were at Wild Ass Creek waterhole by 08:45. We then travelled across the broken country to the south,

to Arcoona South pluviometer, fox baiting en-route, and finished servicing the pluviometer at 11:30. We continued down Arcoona South creek, and arrived at Base Camp, fairly tired, in mid-afternoon. After a brief rest, we completed the fox baiting around the Base Camp, and in the late evening, climbed up Wallaby Creek and back down Evasive Creek, searching for Yellow Footed Rock Wallabies. We did not find any, although there were plenty of euros. A possible sighting of Yellow Footed Rock Wallabies at the saddle was only about a 10% chance! Hopefully the next party will have better luck.

Sunday 30th We made a reasonably early start and had a fairly uneventful trip home except that we burst a rear tyre just outside Hawker. Arrived home mid-afternoon.

REPTILES AND AMPHIBIANS AT WARRAWEENA

Bob Sharrad and Wendy Telfer

Introduction

The Flinders Ranges support a wonderful variety of reptiles. The rocky terrain and warm, dry conditions are ideal for both lizards and snakes. For amphibians, in contrast, there is limited suitable terrain, although a few species do exist in the soaks and springs in the region. Since the survey was conducted in winter, conditions were not ideal for observing active reptiles. Most species, particularly the larger ones, will be resting in burrows, rock crevices, log hollows, trees, bushes or clumps of porcupine grass at these times.

Very little is currently recorded about the reptiles and amphibians in the

Warraweena region. As with native mammals, this is likely to reflect the limited sampling conducted rather than the actual diversity of reptile species present on the property. This project aimed to fill this void of information by surveying the reptile and amphibian fauna of Warraweena.

Methods

The pitfall lines and traps used to catch mammals were also used to catch reptile species. When traps were checked each morning and late afternoon, any reptiles in the traps were recorded and released. Since reptiles are difficult to determine the sex of, two individuals of each species were anaesthetised, set in formalin and liver samples taken in liquid nitrogen.

Reptiles and frogs were also caught by searching in potential habitats such as under logs, iron sheets, in trees and in soaks. This searching was conducted both in the vicinity of the trapping sites and opportunistically throughout the property.

Results

The SEG survey of Warraweena yielded a surprising number of reptiles. While few of these heat loving creatures were active during our Winter survey, diligent searching by expeditioners resulted in a healthy return. Only three species were caught in pitfall traps (all were terrestrial geckos), however, hand captures brought the total haul to 17 reptile

species and one frog. Individuals of each species found were anaesthetised, their livers removed and samples kept in formalin for the SA Museum.

The most commonly found reptiles were those revealed by turning over rocks, logs or rubbish near buildings or ruins. The species found most often included the Tree Dtella, Binoe's Gecko, Eastern Striped Skink (very common under old sheets of iron), the Common Snake-eye and the Dwarf Three-toed Slider.

The Tree Dtella was the lizard most often seen during the survey - dozens were found under rocks, the bark of trees and old iron or other rubbish, and many more were found by spotlighting soon after dusk, particularly on the stumps of Cypress-pines (*Callitris glaucophylla*) cut down long ago; the

stumps retain much of the original bark which seems to provide the ideal home for the geckos. Geckos were observed on these stumps even when the temperature was quite low (12°C). It should also be noted that the precise taxonomic status of some dtellas is a bit uncertain - some individuals may be assigned to another species (the yet to be described 2N = 44, sometimes called the Southern Rock Dtella). We decided to keep them lumped together as *Gehyra variegata* for now as some individuals were difficult to determine. Some that appeared to be "Rock Dtellas" were associated with trees!

The tiny Streambank Froglet (also known as the Flinders Ranges Froglet) was very common at the many sites of permanent water in the area. The frog is noteworthy because it alone of the

vertebrates observed during the survey is confined to the Flinders Ranges.

The reptiles and frogs found are listed in the table below. In addition to those listed, information was given during an open day at Warraweena, of other species in the area. Most notable of these was the Carpet Python (*Morelia spilota*) which were said to live at Sandy Camp not far from the homestead. It was said that Stimson's Python (*Antaresia stimsoni*) can also be found in the general area. Surprise was also expressed by locals when they discovered that we had not found any legless lizards (Pygopodidae) - it was observed that Burton's Legless Lizard (*Lialis burtonis*) is usually quite common near the Warraweena Homestead. No doubt many such species will be found in surveys during the warmer months.

Reptiles and Frogs identified at Warraweena during the SEG Survey 2-17 July 1999.

***PF - caught in pitfall trap**
HC – hand captured

Species	Common name	Family	Observation method*
<i>Gehyra variegata</i>	Tree Dtella	Gekkonidae	HC
<i>Heteronotia binoei</i>	Binoe's Gecko	Gekkonidae	HC
<i>Diplodactylus vittatus</i>	Eastern Stone Gecko	Gekkonidae	PF & HC
<i>Diplodactylus tessellatus</i>	Tessellated Gecko	Gekkonidae	PF
<i>Nephrurus milii</i>	Barking Gecko	Gekkonidae	HC
<i>Rhynchoedura ornata</i>	Beaked Gecko	Gekkonidae	PF
<i>Ctenophorus vadrappa</i>	Red-barred Dragon	Agamidae	HC
<i>Cryptoblepharus plagiocephalus</i>	Desert Wall Skink	Scincidae	HC
<i>Ctenotus robustus</i>	Eastern Striped Skink	Scincidae	HC
<i>Eremiascincus richardsonii</i>	Broad-banded Sandswimmer	Scincidae	HC
<i>Lerista muelleri</i>	Dwarf Three-toed Slider	Scincidae	HC
<i>Lerista punctatovittata</i>	Spotted Slider	Scincidae	HC
<i>Morethia boulengeri</i>	Common Snake-eye	Scincidae	HC
<i>Tiliqua rugosa</i>	Sleepy Lizard	Scincidae	HC
<i>Simoselaps australis</i>	Coral Snake	Elapidae	HC
<i>Suta nigriceps</i>	Mitchell's Short-tailed Snake	Elapidae	HC
<i>Suta suta</i>	Curl snake	Elapidae	HC
<i>Crinia riparia</i>	Streambank Froglet	Leptodactylidae	HC



Beaked Gecko



Red-barred Dragon

GAMMON RANGES SCIENTIFIC PROJECT AUTUMN MONITORING

A BEGINNER'S PERSPECTIVE

Spencer Bergstad

Over the Easter long weekend eight people ventured to Arcoona Creek in the Northern Flinders Ranges. We conducted scientific surveys on the local vegetation, local fauna and aquatic eco-systems, surveyed the Yellow Footed Rock Wallaby, laid fox baits in the catchment area and checked pluviometers. Of the eight people, four including myself were new members to SEG and this was our first opportunity to backpack away from formed tracks and conduct scientific field studies.

It was an interesting trip in a remote area of scenic beauty. As a 'first timer' I learnt many new and interesting skills, and left with an increased appreciation of the natural environment. I asked plenty of questions of our leaders Annie and Paul, always knowledgeable and willing to help or explain. My knowledge grew tremendously since I had never before been in such an arid environment. Some of these skills related to minimum impact camping (how to leave your presence un-noticed); bushwalking, packing my rucksack, cooking with a *trangia* and what to bring with

you. Paul explained how to use a GPS, and how map and compass are combined to work out a bearing on which you can walk. Topographic maps were another unfamiliar navigational tool that I began to understand. I learnt how pluviometers work and their role to help us investigate rainfall patterns in the Gammon Ranges. The photographic monitoring points are very interesting and I helped to continue the long term, chronological series of slides. I was particularly observant of the changes in vegetation and learnt that you have to be tenacious to survive in a low rainfall environment.



The Yellow Footed Rock Wallaby search was carried out in the morning and the late

afternoon. On both trips we saw only one wallaby which was close to the junction of Arcoona and Evasive Creeks. I was given the opportunity to climb and scramble high on the banks of the creek lines, eyes honed for any movement – perhaps just maybe, an inquisitive wallaby.

Throughout the trip it was very windy but the weather was fine. I begged the leaders to leave me behind; such was my enthusiasm and intrigue. The Gammon Ranges have 'sucked –me –in'. I will return to rekindle my passion, to explore, to photograph, to appreciate the simple colours, sounds, smells and sunsets. An opportunity to run free, to escape from my mobile phone (which thankfully doesn't work) and contribute positively to the conservation of our precious natural areas. So, my fellow 'arm-chair huggers', seize the day, make a date and enjoy five exciting days with others who want to help you have a challenging but enjoyable time.

GLUEPOT 2000

PRELIMINARY NOTICE CALLING FOR EXPRESSSIONS OF INTEREST

SEG will be conducting its major expedition in the year 2000, on Birds Australia Gluepot Reserve. The reserve is located 64 km north of Waikerie and is the "jewel in the crown" of Australia's National Reserve System. The property measures 544 sq. km - (52,000 ha), and is the largest block of intact mallee left in Australia.

The Reserve is resident to seven globally threatened species of birds, including the Malleefowl, Red-lored Whistler, Regent Parrot, Scarlet-chested Parrot and Grasswren, and over a third of the known remaining 200 colonies of the critically endangered Black-eared Miner. Additionally, a further 16 species of birds, threatened in one or more of the three Murray Mallee States also occur on Gluepot. There are few areas of the world that support such a concentration of threatened species.

The area is also rich in reptiles and invertebrates, and research undertaken during the expedition will cover birds, mammals, reptiles, invertebrates and flora. Full biodiversity surveys will be undertaken in a number of areas on the Reserve and special projects will include an examination of the gypsum lakes and their associated rare plants; bird banding of select species; work on trapping and recording the bat species on Gluepot etc.

Date of expedition 25 November to December 9th 2000

If you are interested in participating in this unique expedition, please complete and mail the tear-off slip below, or contact:

Duncan MacKenzie
Expedition Leader - Gluepot 2000
4 Edinburgh Avenue. STONYFELL SA 5066
Phone: 8332 1204 Fax: 8364 5527
E-mail: dmackenzie@iname.com



Birds Australia Gluepot Reserve

SEG Year 2000 Expedition to Gluepot Reserve 25 November - 9 December 2000

I am interested in attending this expedition and receiving particulars when they are available

NAME:

ADDRESS:

.....

PHONE: FAX: E-MAIL:

SCIENTIFIC EXPEDITION GROUP

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 will receive regular information on S. E. G. activities and expeditions

SUBSCRIPTIONS

Working adult member	-----	\$15.00
Pensioner student or unemployed	-----	\$10.00
Family membership	-----	\$20.00
Organisation membership	-----	\$20.00

APPLICATION FOR MEMBERSHIP AND MEMBERSHIP RENEWAL

Name.....

Address.....

.....

Telephone (H)..... (W).....

Details of scientific, cultural, 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

Patron: His Excellency, the Honourable
 Sir Eric Neal, AC, CVO.
 Governor of South Australia

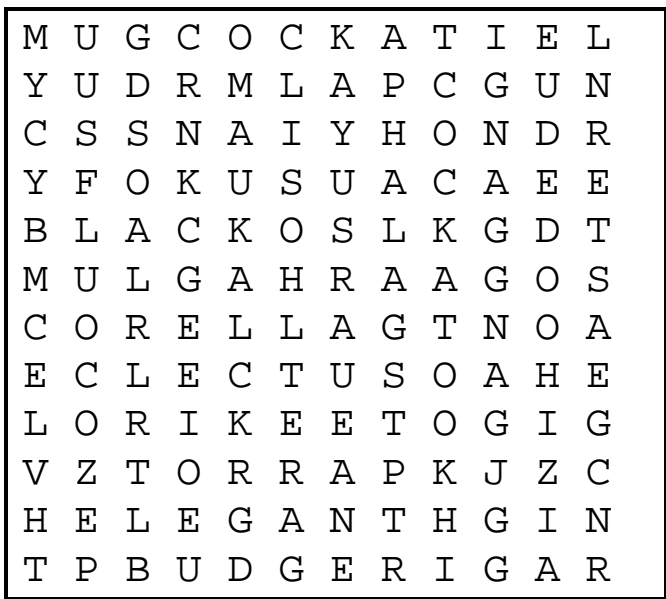
COMMITTEE

Position		Phone	Fax	email
President	C. Warren Bonython AO	8431 1363	8431 1363	
Chairman	Dr Richard Willing	8431 1620	Mob 0408 807 517	
Vice-Chairman	Alun Thomas	82969453	8231 1273	athomas@collison.com.au
Hon. Secretary	John Love	8379 1172		
Hon. Treasurer	Graeme Oats	8278 3179	8278 5577	oatsgd@senet.com.au
Committee:	Phil Cole	8339 3201	83039555	Cole.phil@saugov.sa.gov.au
	Duncan MacKenzie	8332 1204	8364 5527	dmackenzie@iname.com
	Christopher Wright	8278 8818	82785584	cjwright@dove.net.au
	Robert Major	8352 8949		
	Trent Porter	82789078		
	Sarah Hayes	8272 7342		haysan@camtech.net.au
	John Hayes	8204 2870		
	Paul Wainwright	8359 2270		snowpetrel@hotmail.com
	Greg Kerr	8276 5599		greg.kerr@flinders.edu.au
Editor	Alun Thomas	8212 3133	8231 1273	athomas@collison.com.au
			Address:	23 Rutland Ave

Brighton S.A. 5048

Kids Corner

THIS MONTH THE HIDDEN words are names of various types of parrots and similar birds. They are hidden in all directions. Can you find them all.



- BLACK
- BUDGERIGAR
- COCKATIEL
- COCKATOO
- CORELLA
- EASTERN
- ECLECTUS
- ELEGANT
- GALAH
- GANGGANG
- GRASS
- GROUND
- HOODED
- LORIKEET
- MULGA
- MUSK
- NIGHT
- PALM
- PARROT

EDITORIAL

The first stage of a new project for The Scientific Expedition Group has commenced with a committee weekend a Minnowarra, Richard Willing's farm at Spring Mount. SEG is to carry out a biodiversity survey in heritage blocks on the farm. We prepared the pitfall trap lines as described by Graeme Oats in his article in this edition.

The surveys will be carried out later this year and will one again provide SEG to carry out its main role as a field science training facilitator.

This month we decided to try a new format for SEGments. I would be grateful for your comments and suggestions and as always for contributions, pictures and photographs and suggestions for articles.

THE MINNAWARRA EXPERIENCE

GRAEME OATS

Since the inception of SEG some 16 years ago committee with very few exceptions regularly meets on the 2nd Monday each month in the late afternoon at the long table in dining room of the residence of Chairman, Dr Richard Willing in the leafy eastern suburb of Rose Park.

In my ten years with SEG I recall only one other occasion when a meeting was held outside these allowed rooms, at the suggestion of Duncan MacKenzie to meet at the then newly declared Gluepot Reserve north of Waikerie in June 1998. On that occasion we enjoyed our time so much at Gluepot visiting nearly every waterhole and other nook and cranny that we almost did not allow enough time for a meeting. It was finally held in basic accommodation huddled in rugs at the Gluepot "headquarters".



Richard installs a bucket

The weekend of 6-7 May this year the committee with spouses and family were invited to the country seclude of our Chairman

"Minnawarra" situated up on the ranges south of Myponga adjacent to Springmount Conservation Park.

From "think tanks" earlier in the year SEG decided on a monitoring project at Minnawarra, as a follow on from our previous project in the Southern Fleurieu Peninsula (SFP) commenced by Duncan MacKenzie in 1998. Whilst the SFP has come to a halt due to lack of funding from Government grants Duncan is still collating the results of five surveys undertaken with students.

So the committee of slaves gathered at Minnawarra on Saturday 6 May for a work/meeting fest (or was it a feast?) Richard and Duncan had spend many hours in the preceding weeks plotting and planning the location of 8 monitoring sites over the 800 acre property a lot of which is covered with natural vegetation and is under registered heritage agreement.



Paul and Chris on the Auger while Alun Supervises

Each site required the digging of 6 pitfall holes in which are placed large buckets. With a petrol driven auger 42 of the holes were completed by nightfall. Overnight which was calm, cool and dry we gathered in a large barn (which is the Willing's temporary home) pending the completion of a new homestead.

Huddled around a large oil burning heater we gorged on barbecue meats and salads and other after dinner delights. Some watching the defeat of the Crows by Essendon (but only just).

Off to bed in various locations, some in the nearly completed homestead, some in tents and the Willings in their caravan. Sunday in bright sunlight we witnessed an amazing view of the valleys full of morning mist. Serene and beautiful.

After breakfast we gathered about the barn for the committee meeting. Eventually all were ready, including the farm dog, Sam who kept his eye on us during proceedings. So without the dining room table we balanced our papers on knees and brief cases. Only the Secretary, John Love enjoyed any comfort, being supplied with a card table.

Throughout the meeting lasting only 45 minutes (instead of 90 plus minutes) the business of the meeting was conducted to the sweet sounds of many birds & the occasional bleating of nearby sheep with lambs. Eventually after almost dosing off in the warm sun the business was done & the meeting declared closed.

Cups of morning coffee and tea then off to finish the remaining 6 pitfall holes.

A unique and enjoyable outing.

ANNUAL GENERAL MEETING

**FRIDAY 1ST SEPTEMBER 200
IN THE FULLARTON PARK CENTRE
411 FULLARTON ROAD (Corner of Fisher Street)
FULLARTON
at 7.30pm**

Business will include:

- Reports by the Chairman and the Treasurer
- Membership subscriptions
- Election of 2000/01 Committee
- Any other business

Guest speaker : Tim Flannery. Recently appointed Director of the South Australian Museum. Tim will speak on some of his adventurous scientific expeditions

Supper

Nominations are called for the 2000/01 Committee.

The present Committee consists of: President Mr CW Bonython, Chairman Dr RL Willing Vice Chairman Mr AW Thomas, Secretary Mr JH Love, Treasurer Mr GD Oats, Committee members Messrs, JC Hayes PJ Cole, CJ Wright, RB Major, T Porter, WDF McKenzie.

All present members will retire and are eligible and willing to be re-elected.

Nominations must be signed by the proposer and the nominee and sent to the Secretary, PO Box 501, Unley, 5061, by 1st August 2000.

John Love

FUTURE PROGRAM

The Scientific Expedition Group (SEG) welcomes enquiries from all members and friends who are interested in participating in one or more of our projects or expeditions. Please contact the leader or convener of the project or expedition that interests you for more information.

We welcome enquiries from anyone from 16 - 60 years (or more) who would like to participate in our scientific, environmental and educational projects.

Current recurring projects

Gammon Ranges Scientific Project (GRaSP) is now in its eleventh year. The project involves a four or five day trip to the Gammon Ranges about four or five times a year. A data collection project involving flora and fauna and rainfall gauging which also involves bush camping and trekking. Expeditions are being planned in July and October 2000.

Contact Chris Wright 8278 8818