

June 2001

SEGMENTS

Journal of the
Scientific Expedition Group



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

PO Box 501, Unley, SA 5061

MINNAWARRA PROJECT

RICHARD WILLING

The inaugural Minnowarra survey was held over Easter in fine, warm autumn weather. This was the pilot in a series of twice yearly studies to study the alteration in biodiversity in native vegetation after exclusion of farm grazing animals.

Minnawarra is the Willing family farm situated a few miles southeast of Myponga. More than 100 ha of native vegetation has been made over to a Heritage Agreement which ensures its retention as scrub in perpetuity. Fencing of these areas has occurred in the last few years, and is now almost complete. The aim of the exercise is to record any changes in biodiversity in these areas over time. The initial stages occurred last year when a small army of SEG committee members and families gathered for the weekend and installed and capped 48 permanent pitfall traps at eight sites. The weekend before last Easter more volunteers gathered to identify these sites and clear the run for the wire fence which crosses the traps. On the Thursday before Easter the traps were opened and the wire fence erected. Elliott traps were installed in the 8 sites as well as cage traps at each end of the run. Peanut butter and rolled oats were used as bait. At each site there were 6 pitfalls, 15 Elliotts and 2 cages.

Vegetation was surveyed by selecting the predominant species at each site then counting numbers of each along a 20 to 30 metre traverse close to or across the pitfall line. A bird count was conducted by two observers at each site for half an hour each day. A more detailed account of the findings will be published later, but the following is a brief summary of the trapping results to date. Many Bush Rats (*Rattus fuscipes*) were caught at most sites, marked, measured, sexed and released. A few Swamp Rats (*Rattus lutreolus*) were caught, mainly close to water. A significant number of Yellow-footed Antechinus (*Antechinus flavipes*) were trapped, the majority being males. Because of their mating habits, fewer males would be expected in spring. One persistent visitor to a cage trap at one site was a Grey Shrike Thrush who obviously enjoyed peanut butter so much that he was caught four times. The pitfalls yielded a small number skinks and froglets. Details of the mammal, vegetation and bird surveys will be published later when the figures are collated.

This expedition was not widely publicized this time as it was a pilot study. The only expeditioners were a school group from Thailand consisting of 5 students and 3 teachers who camped in a large shed and the SEG marquee. They were fortunate to have such beautiful weather during their stay, which they enjoyed, and would have done many things that their fellow students back home will never do. Other extra-curricular activities for them included

visiting a dairy to watch cows being milked, searching for kangaroos at dusk and looking for birds in Springmount Conservation Park. Two of the teachers were even taken to McLaren Vale for wine-tasting. Setting this project up required a large amount of voluntary labour. Most of the SEG committee were involved in the initial pitfall installation last year. This year thanks

are due to the Thomas family, John Love, Trent Porter and various members of the extended Willing family for rejuvenating the trap lines and helping to clean up afterwards, as well as Duncan McKenzie for checking and recording the traplines twice daily, Geoffrey Bishop for the vegetation survey, and Clare Gifford and Frances Taylor for the bird surveys - not to forget Gwen Willing

for putting up with large numbers of people traipsing into the back of the house over Easter to use the toilet and bathroom.

The next survey will take place in spring, but dates have not yet been finalized. It should be an interesting few days for SEG members as well as other expeditioners.

In Search of New Colonies Easter 2001 Paul Wainwright

When a request is made for SEG expeditioners, I normally have to struggle with a time management equation which invariably favours work and hinders play. However, the opportunity to explore a new area, in search of a mocha coloured macropod with a bandy tail and an athletic reputation is incentive enough. Welcome to Gammon Creek, a group of comedians and four days of pure bliss!

Our exploratory trip was the brainchild of Christine Arnold, a wallaby spotting pro and participant in previous GRASP trips. Her heli-survey work with DEH indicated the presence of Yellow Foot colonies to the north and north west of our regular monitoring transect. With a view to answering questions about interrelationships between our 'regular' colony and those close by, we thought a visit on foot would be useful to confirm suspicions, stretch hamstrings and restore karma.

Amongst the group were veteran and raconteur Trent Porter, Chef Annie Bond and seafood lover Christine Arnold; accompanying were Shannon and Paul. Music tastes shocked the younger brigade who had never heard of the likes of Barry White and Julio Iglesias. These artists were tenderly plucked from a bag of aging cassettes enroute.

After a night with our Arcoona Creek dwelling colleagues, we drove around to Anzac Bore and found an unused track which allowed us to leave the vehicle a couple of kilometres to the South West of Gorrie Hole. Our intention was to explore anabranches of Gammon Creek, predominantly those on the southern side, which handle drainage from the Arcoona bluff massif. These creeklines are spectacular, with vertical walls of ochre rock, bowl shaped plunge pools, overhanging ledges, caves and exposed ripple marks. This terrain sends a wallaby observer into raptures; true three-dimensional terrain with hanging chasms and caves provides ideal protection from predatory foxes and cover from the scorching rays of summer sun.

Each day we selected a number of creeklines to explore, biasing to those indicated on the map with unreadable contours (ie. Vertical sides). We found a sandy embankment in Gammon Creek which acted as a base camp. It wasn't perfect, but in the absence of much else, performed its role well! Late each afternoon, hungry, scratched and sore, stoves were fired into operation and dinner preparation began. Annie had a Japanese menu prepared - miso soup, a selection of teppanyaki and tempura courses and nori rolls being the highlight. Wasabi paste, soy sauce and Saki complemented the dishes. Christine preferred seafood

and now holds the record for the amount and variety of canned fishies ever consumed on a GRASP trip. Tuna, herrings, mackerel and lungfish just to name a few.

The weather stayed warm to hot for the duration, winds were slight and nights were exceptionally mild. Wallaby hunting is an energy-zapping pastime during cool weather, under the hot midday sun Christine spent time mopping the brows of her tender volunteers. Rock scrambling, poo analyses and a love of heights are just some of the requisites of an observer. (A three-year apprenticeship at goat school!) At night time, bleating could be heard from Mr Porter's abode.

If we were to evaluate our search based on numbers of wallabies seen, then we failed badly. However the presence of wallaby scats in a number of places, and in relatively high densities, suggests that the habitat we explored has been satisfactory in the past. And to that end, is still healthy habitat. We were possibly unlucky not to see a YFRW, but we had a fairly busy schedule. (Wallabies were spotted by helicopter in many of these areas during the winter of 2000.) These places have been marked for future reference and perhaps another foray at some stage.

There are a numbers of interrelating factors which appear to contribute to



‘quality wallaby habitat’. We found areas which appeared perfect but contained no wallaby scats.

Something, apparently, is not right. Is it aspect? Proximity and composition of plant food species? Grazing competitors? Exposure or predation? I’m not sure that anyone can prescribe the ‘ideal wallaby habitat’, since there are still many gaps in our

understanding and significant variability between colonies

Most of the creeklines in the Gammon Creek catchment are truly spectacular, exhibiting (in my opinion) some of the best formation and colour in the Gammon Ranges. Our only regret was the absence of water. In many places we felt like

pioneers, such is the remoteness and inaccessibility of these creek lines. A wonderful opportunity for SEG, and another small expansion to the GRaSP monitoring project. Self gratification abound, the walk was truly worth it. As was the visit to Copley bakery – pies and pastries as good as ever.

Kids Corner

This time the hidden words are to do with the Minnowarra Biodiversity Survey. They are hidden in all directions. Can you find them all?

T	T	N	A	N	I	M	O	D	E	R	P	W	Y	H
B	A	I	T	J	E	S	R	E	V	A	R	T	L	Z
S	U	R	V	E	Y	W	H	Q	U	T	K	Q	A	T
E	L	Q	A	S	K	I	N	K	R	T	R	N	R	R
N	F	E	S	I	C	R	E	X	E	U	S	E	U	A
V	E	G	E	T	A	T	I	O	N	S	U	W	G	P
A	W	I	L	L	I	N	G	D	E	Q	N	T	U	S
G	Y	T	I	S	R	E	V	I	D	O	I	B	A	H
N	F	E	L	L	I	O	T	T	Q	T	H	P	N	E
O	A	R	R	A	W	A	N	N	I	M	C	E	I	R
P	T	G	O	S	E	I	C	E	P	S	E	A	D	I
Y	E	D	I	G	M	T	G	Y	N	Z	T	N	X	T
M	G	E	N	I	L	P	A	R	T	S	N	U	B	A
N	A	T	I	V	E	E	J	H	Z	N	A	T	R	G
P	I	T	F	A	L	L	T	E	A	S	T	E	R	E

WORD LIST

- | | |
|--------------|-------------|
| ANTECHINUS | PEANUT |
| BAIT | PITFALL |
| BIODIVERSITY | PREDOMINANT |
| EASTER | RATTUS |
| ELLIOTT | SKINK |
| EXERCISE | SPECIES |
| FROGLET | SURVEY |
| HERITAGE | TRAPLINE |
| INAUGURAL | TRAPS |
| MINNOWARRA | TRAVERSE |
| MYPONGA | VEGETATION |
| NATIVE | WILLING |

EDITORIAL

In this issue of SEGments we report on the first of the Minnowarra surveys and the continuing efforts of the band of intrepid expeditioners in the Gammon Ranges. Your Editor is intending to take part in a Gammon Crossover as part of the July GRaSP expedition and legs being willing I will be able to report to you in the next edition of the ascent of Benbonyathe Hill and yellow footed rock wallaby surveys.

Graeme Oats is busy planning the re-enactment of the ascent of Mount Brown in 1802 by Robert Brown of Matthew Flinders’ expedition in the “Investigator”. The re-enactment will take place exactly 200 years after the original climb. See the article on page 6.

The Annual General Meeting is to be held on 7th September 2001 and this is an opportunity for you to join the committee and help plan some of the wonderful expeditions which are occurring and are being planned all around the State. Details of how to nominate are on page 8.

I enjoy making the Kids Corner word find puzzle each issue but I need lists of things from which to make them. I would appreciate it if readers could email me lists to be included. It is best if the lists include words ranging in length from three to fifteen letters.

Feedback on any of the articles or comments on the layout and content would also be appreciated.

Alun Thomas

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 (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)

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

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FUTURE PROGRAMME

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

GRaSP

Gammon Ranges Scientific Project (GRaSP) is now in its thirteenth 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. Other activities include feral animal counts, fox baiting and yellow footed rock wallaby counts. Expeditions are being planned for July, September and December 2001.

Contact Chris Wright 8278 8818

Minnawarra

SEG is running a biodiversity project in the Spring Mount area near Myponga based on a number of Heritage Sites on Richard Willing's property, Minnawarra. For information contact Richard Willing on mobile phone 0408 807 517 and see the article on page 1.

Future Expeditions

An expedition to Eyre Peninsula is in the early stages of planning. For information contact Richard Willing on mobile phone 0408 807 517

Yellow-Footed Rock Wallabies at Aroona Sanctuary

Here's an opportunity to become active!

The Adelaide Zoo has invited SEG to help with their research into the Yellow-footed Rock Wallaby colony at Aroona Dam. Animals were initially released in 1996, and the population is now estimated at 25-30 individuals. Eleven of these animals have radio collars.

Volunteers are needed to help with a scat survey, which will help to assess the dispersal of the current wallaby population.

Young males released in 1996 should be approaching sexual maturity, and will be trying to establish territories. This is likely to affect the dynamics and structure of the population. In the future, it is likely that population counts will be done by helicopter. Scat densities indicate preferred habitat, and promote efficiency when it is time to survey from the air.

Survey dates : Monday 24th September – returning Monday 1st October

Accommodation and food have been provided for. The Zoo have a house in the Leigh Creek township, which is approximately 5km north of Aroona Dam.

So, if you'd like to:

- ☺ Hang out with some great looking wallabies
- ☺ Contribute to our understanding of YFRW population dynamics
- ☺ Get some fresh air, plenty of exercise and have a great time

then, put aside this week in September!

Further information? Call Paul : 83592270/ 0402785396. Email: snowpetrel@hotmail.com

Encounter 2002 Ascent of Mt Brown

by
Graeme Oats

In March 1802, Capt Matthew Flinders on his Voyage of Discovery was anchored in northern Spencer Gulf. He sent his Botanist, Robert Brown with other botanists and artists and servants on an excursion to climb the highest peak to the east at the head of the gulf.

On March 10 2002, a small party of botanists, and others will re-enact that first ascent of what we now known as Mount Brown.

Brown's mission was twofold, to see if he could find out if the body of water (Spencer Gulf) continued further to the north. Flinders', Investigator could proceed no further north due to shallow water, and Brown's second mission was to gather plant specimens of the locality.

In April this year, I led a small party of botanists from the Plant Biodiversity Centre and a member of the Friends of the Australian Aridlands Botanic Gardens (AABG) on a partial rehearsal of the walk proposed for 2002.

SEG has been successful in negotiating with the State Government through the Australian Major Events to have the re-enactment included in their Encounter 2002 program. An Encounter 2002 grant application to the State Government has been successful although the full amount

applied for was not approved, but sufficient for the project to continue.

On the April 2000 rehearsal, I was able to ascertain approximate walking times over the flat plains from Chinaman's Creek (Winninowie Conserva-tion Park - where Brown came ashore) and the uphill bit.

During the rehearsal the botanists were able to gather some of the plant specimens that Brown is known to have collected. It is intended by the AABG to display in their Port Augusta building some of plants that Brown collected (not the original plants of course) during March 2002 when the Port Augusta region hosts the tall ships that will be re-enacting Flinders' voyage.

The details of the plan for the "re-enactment walk" in 2002 are fairly well progressed. It is intended that the walking party will meet at Port Augusta on Saturday 9th March next year, spend the night aboard one of the tall ships and then sail to a point off Chinaman's Point here the party will row into the landing at Chinaman's Point. (Brown and his men actually had to walk a mile or so through shallow water and mangroves hauling their boat before making land fall).

Our party will then walk out of the conservation park in a direct line through private properties to

Woolundunga Creek, passing through and over modern obstacles - fences, pipelines, road, railways etc.

Whilst Brown seems to have walked up following a ridge to the north of Woolundunga Creek (where he found a spring - and is still there today) we will follow the creek system for the first few kilometres before climbing onto the ridge leading to the main range and up onto Mt Brown from the southern saddle. The party will descend back to Woolundunga Creek where it will be collected and taken by bus to Port Augusta for an overnight stay.

Brown's party was not successful in returning to the Investigator before nightfall and spent a cold and foodless night in a gully below the summit, before rejoining their servants the next day.

The current land owners have been very obliging when approached for consent to travel over their properties and in particular the Herde family of Spear Creek.

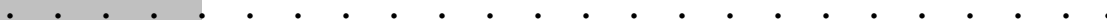
The composition of next year's walking group has not been decided, but it will include several members of SEG, members from the Plant Biodiversity Centre and the AABG. Some indigenous parti-cipation is expected. More details next issue.

JUST A THOUGHT

If you throw a cat out of a window, does it become kitty litter?

When dog food is new and improved taste, who tastes it?

If they squeeze olives to get olive oil, how do they get baby oil?



MINNAWARRA PROJECT



SEG is commencing a new project to monitor long term change in the ecology of blocks of remnant vegetation.

The South Australian Government has financed the fencing of privately owned areas of remnant vegetation in various parts of the State in order to encourage the maintenance of biodiversity. These blocks are known as Heritage Blocks. The idea is to keep stock out of these areas. The fencing will, of course, only keep out the larger herbivores and hence at best can only be partially effective in this aim. Little is known whether biodiversity loss will be halted or slowed or what rates of regeneration might be expected.

This new project will investigate and record changes in the biodiversity over a long period of time in recently fenced blocks on the property called “Minnawarra” near Myponga. Surveys will be carried out every six months in autumn and spring. The project was started last year with the installation of the pitfall buckets and had its first survey over the Easter long week end and will be run again in the Spring.

Volunteers from the Scientific Expedition Group are invited to take part in this project. This is an opportunity to take part in a scientific expedition close to Adelaide. It is a chance for some of us armchair expeditioners to see what actually goes on on a biodiversity project.

The survey involves pitfall trapping to record small mammals and reptiles, vegetation surveys and bat observations. Expeditioners with skills in these area will be especially welcomed.

If you are interested please contact Richard Willing on 8558 6381, mobile 0408 807 517 or email willingr@intertech.net.au for details of when the next survey will be held and a map of how to get to Minnowarra.



ANNUAL GENERAL MEETING

FRIDAY 7TH SEPTEMBER 2001

IN THE FULLARTON PARK CENTRE

411 FULLARTON ROAD (Corner of Fisher Street)

FULLARTON

at 7.30 p.m.

Business will include:

- Reports by the Chairman and the Treasurer
- Membership subscriptions
- Election of the 2001/2002 Committee
- Any other business
- Guest speaker: to be announced
- Supper

ELECTION OF THE COMMITTEE

Nominations are called for election to the 2001/2002 Committee.
Nominations must be signed by the proposer and the nominee and sent to

The Secretary, Scientific Expedition Group,
PO Box 501,
Unley SA 5061,

By Friday 3 August 2001.

The present Committee consists of :
President C. Warren Bonython, A.O.,
Chairman Richard Willing,
Vice-Chairman Alun Thomas,
Secretary John Love,
Treasurer Graeme Oats,
Committee members John Hayes, Phil Cole, Christopher Wright, Bob Major, Trent Porter, Duncan MacKenzie,
Paul Wainwright, Greg Kerr.

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

John Love, Secretary