Volume 20 Number 1

June 2004





The Early Years of SEG

A few words from Richard Willing, current President of SEG

In January 1984 the South Australian Branch of the Australian and New Zealand Scientific Exploring Society (ANZSES) ran a successful five-week scientific expedition to Coffin Bay. Shortly after the expedition there was an acrimonious split between the SA Branch of ANZSES and the national office in Melbourne. After this mutual severing of ties, it seemed a pity to dissipate all the assembled talent involved in SA. After Warren Bonython agreed to be president, the Scientific Expedition Group (SEG) was born at a public meeting on 20th August 1984, when Richard Willing was elected chairman.

Over the last twenty years SEG has coordinated many affordable scientific expeditions for young people to numerous locations across the state, and operated on a minimal budget.

(article continued on page 2)

SEG 2004 Calendar

July

July 21 to 25 GRASP trip

August

August 9 to 22 SA National Science Wks

August 20 SEG AGM

August 21/22 20 Year Celebration
August 27 Deadline for September

issue of SEGments

September

Mid September SEGments Vol.20 No.2

October

GRASP trip (date TBA) Minawarra Trip (TBA)

November

November 26 Deadline for December

issue of SEGments

December

Mid December SEGments Vol. 20 No. 3

SEGments is the authorised journal of the SCIENTIFIC EXPEDITION GROUP INC. PO Box 501 Unley SA 5061

SEG AGM & Weekend of Celebrations

SEG is Celebrating 20 Years on August 20, 2004

SEG AGM

When: Friday August 20, 2004

Where: Unley Civic Centre (behind

the Oxford Theatre, Unley Road)

Guest Speaker: Dr. Rob Morrison

Topic: "Extinction as a Fashion

Statement"

Business at the AGM will also include reports by the Chairman and Treasurer, election of the 2004/2005 Committee, membership subscriptions, and any other business. Supper will be provided.

SEG 20 YEAR CELEBRATION

To celebrate 20 years of SEG, we have secured the use of a holiday shack on the waterfront of the Coorong, close to the scene of our first Expedition. Come and join the SEG Committee on August 21&22, to renew old acquaintances, meet some new members and have a relaxing weekend.

Accommodation and/ or camping, cooking, BBQ and toilet facilities are available as well as fabulous scenery, lots of bird life, and a couple of boats to take us across to the ocean beach.

For more information and to register your interest, please contact Trent Porter on 8278 9078 or trentasaurus@bigpond.com

In this issue

1&2 The Early Years of SEG SEG 2004 Calendar

SEG AGM & Weekend of Celebrations

3 & 4 Minnawarra Autumn Biodiversity Survey Report – April 2004

5 to 8 A Brief History of GRASP GRASP ANZAC Weekend Reports

9 All about ANZAAS and ANZSES Kids Corner

10 SEG membership details

The Early Years of SEG

continued from page one

One of the problems of a minimal budget is that SEG did not own any equipment in the early years and had to borrow everything. The recent departure of our old Toyota one-ton farm truck after 20 years of devoted service reminded me of the early days of SEG when the truck was used on several SEG expeditions, piled high with gear and usually overloaded. Late one night in 1991 near Pt Augusta the transfer case gave out and the advance party, on the way to Expedition Lake Newland, was left high and dry with a well-loaded and broken down vehicle. Next day the main party caught up. By repacking gear, compressing humans and leaving some non-urgent articles behind little time was lost. After repair the truck carried the remaining gear on with the next wave of vehicles passing. This was the first SEG expedition catering for separate phases of young and "mature" participants.

expeditions were secondary and tertiary students along with a handful of leaders and scientists. An early sortie was a camp on the Coorong. Several yachts carried the starters from the Goolwa wharf to the campsite on Younghusband Peninsula. We were allowed to use the barrages for transport, so support vehicles drove to Tauwitcherie Island and unloaded the gear onto rubber duckies. Expedition Chowilla, in 1985, was also water-based with canoes on the River Murray. Other expeditions to Canunda, Gammon, Flinders and Gawler Ranges, Kangaroo Is., Eyre Peninsula, Coongie, and Witjira have followed.

In May 1986 Expedition Freeling Plateau (the area is now know as Freeling Plateau) in the Gammon Ranges proved a most successful event. It was combined with the launch of the northern end of the Heysen Trail and Youthtrek 150, celebrating the sesquicentenary of South Australia. SEG helped install a commemorative plaque on the top of Mt Babbage. Seventy people, including VIPs from Adelaide and local station-owners, gathered on the mountaintop to witness the historic event, probably the largest crowd ever assembled there.

The base camp for this expedition was on Hamilton Creek and part of the trip involved going up onto the plateau to collect water samples and examine vegetation and wild-life. This provided the germ of the idea that led to SEG establishing a pluviometer on top of the hills a few months later. The Gammon Ranges Scientific Project (GRASP) was born. It was dedicated to Louise Grandfield, a Freeling Plateau leader accidentally killed a short time later. GRASP has now been running for nearly 18 years and has expanded its horizons with the research now providing important information about the local rainfall. GRASP has run 80 to 90 short, small expeditions to service the equipment and conduct other scientific research. The Gammon Ranges have been a happy hunting ground for SEG expeditions, both long and short. Cross-over trips with parties moving in opposite directions and the combination of longer and shorter trips have provided plenty of variety. Weather has always played a part in the Gammons trips from extremes of heat in summer to rain and even light snow in winter.

Expedition Coongie Lakes was SEG's way of celebrating the Australian Bicentennial in 1988. The country was wet from recent rain, but it eased off enough for an illassorted convoy of vehicles to follow the Strzelecki track to Innamincka. Unable to reach the lake because of flooding, camp was made on the banks of the NW branch of Cooper Creek at Kudriemitchie. The lake was reached by following tracks of old shot-lines along sandhills. Scientific projects over the three weeks included surveys of fish and invertebrates in the lakes and river, birds, mammals, soil samples from the bottom of the lake and shot-line regeneration.

Having reached the 20-year mark SEG now needs to review its aims. Initially aimed at young people in the 15 to 25 year age group, this market has diminished as families with increased mobility, schools and university courses make their own field trips. SEG has embraced the "mature age" expeditioner in filling vacant places and helping to keep costs down for young people. The shorter GRASP trips to the Gammons, and the more recently developed Minnawarra Biodiversity Project surveys may play an important role in the future as well as the longer annual expeditions. SEG has a bright future and hopefully will provide a vital link for many to the world of nature and care for the environment.

Minnawarra Autumn Biodiversity Survey Report- April 2004

Richard Willing

The Minnawarra Biodiversity Autumn Survey was held for four days over the Anzac long weekend. After weeks of warm days the weather became cool and showery which restricted the capture of bats and skinks.

Many thanks are due to the thirty-one people who contributed a total of 74 volunteer days to ensure the success of the survey. The Milang Green Corps lent their considerable muscle in helping set up the trap lines in eight different sites. Brendan Tugwell devised an easier way of rolling up the pitfall fences, and specialist help was provided by Duncan MacKenzie, Loraine Jansen and Christina Pahl.

The mammal trapping was a great success. A total of 194 small mammals were trapped including 43 marsupial mice (Antechinus flavipes), 57 bush rats (Rattus fuscipes) and 20 swamp rats (Rattus lutreolus). Excluding recaptures and 43 feral rats and mice, 120 new small mammals were marked with an ear punch and released - the most we have ever had during a survey. At this time of the year most antechinus caught were male. Only one bat was trapped, a chocolate wattle bat (Chalinolobus morio). The cold weather also reduced the capture of skinks, only a few specimens of garden skink (Lamphrolis guichenoti) and one yellow-bellied water skink (Eulampris heatwolei) being caught. A few brown

froglets (*Crinia signifera*) were also trapped. Bird surveys undertaken confirmed the presence of 32 different species, all previously recorded.

This data is valuable in establishing what happens to the biological diversity in native vegetation after grazing animals are fenced out. Already the vegetation has increased considerably, however we continue the surveys to see what happens to the local fauna. The surveys take place twice a year. The next is due in spring, probably over the holiday weekend in early October. This will be confirmed in the September issue of SEGments. Hope to see you there.



The common froglet *Crinia signifera*; Photographer: Greg Lundstrom



The skink Lamphrolis guichenoti; Photographer: Greg Lundstrom



Green Corps crew checking pitfall trap line; Photographer: Greg Lundstrom



Richard Willing tagging an antechinus; Photographer: Richard Furler



Richard Willing talking about the Minnawarra property; Photographer: Richard Furler

A brief history of GRASP

Linda-Marie McDowell

The first question many people ask is 'what does GRASP stand for?' It is an acronym for the Gammon Ranges Scientific Project. It doesn't seem logical, and you maybe thinking where does the 'A' come from, but that is the name that has been used for the last 18 years by numerous groups visiting the Gammons Ranges as part of this SEG project.

GRASP was set up because very little was known about the variability of rainfall in relationship to altitude in the semi-arid regions of South Australia, and as a result GRASP was established as a long term rainfall monitoring program between 1986 and 1988.

A series of rainfall recording instruments called pluviometers have been set up on the Gammon Plateau and on the western side of the Gammon Ranges National Park. Originally there was just the one pluviometer on the plateau and two others in the park, but over the years SEG has added in additional pluviometers to be included as part of the project in order to gain a more accurate picture of the rainfall in the different sub-catchments.

The regular GRASP trips were originally set up for the purpose of exchanging the data loggers on each of the pluviometers. Additional activities such as photopoint monitoring, biological monitoring of water holes and searching for Yellow Footed Rock Wallabies have been included as part of the project in subsequent years.

One of the most recent pluviometer additions to the Gammon Ranges was the CDMA linked pluviometer near Arcoona saddle. This pluviometer is linked backed to the Bureau of Meteorology so the data can be downloaded daily and can then be viewed on their web site.

For further information on GRASP contact:

- Chris Wright long term GRASP Coordinator (8278 8818)
- Linda-Marie McDowell GRASP Assistant (8278 4795)

More contact details are listed on page 10.

Gammon Ranges Scientific Project (GRASP) - ANZAC Weekend Trip 22 to 26 April, 2004

Pluvio Installation Group

Chris Wright

The Pluviometer group included Chris Wright, John Love and Daniel Partington travelling in John Love's Toyota Prado – 'The Bullock Wagon'.

An early start was made from Adelaide on Thursday morning to pick up Linda-Marie McDowell, Christine Arnold and Rob Kelman (Arcoona Creek to Plateau group - refer to next article) in the Subaru, a tight squeeze because we didn't have the trailer, but we used the pack-rack on the roof. We met up with John Love and Daniel Partington in Clare, and continued the journey to Hawker to pick up fuel and last minute stores. We had a quick look at Seismograph at John Teague's Hawker Motors. His shop is very well stocked these days, with all sorts of pictures and books and semi-precious stones with direct relevance to the Flinders Ranges, plus plenty of camping and motoring apparatus. On to Copley for lunch (quandong pies and cheesecake, but no Kangaroo and Claret Pies!!). The group split up at this point.

The Pluviometer Group headed out on the Balcanoona road and turned right shortly afterwards for North Moolooloo, arriving at the homestead after about 20 minutes. Mrs Ferguson (suffering from the flu) gave us instructions that lan had prepared for us to find the first pluviometer site. After a couple of wrong turns while we got our bearings, we found the site.

Why is SEG/ GRASP setting up more pluviometers in the Gammons?

During 2003 the Department for Water, Land and Biodiversity Conservation (DWLBC) removed numerous monitoring instruments across the state as part of a cost cutting exercise. After Chris Wright returned from 12 months in Ireland he realised that some of the key rainfall gauges had been removed from the Gammon Ranges and set about negotiating to have the gauges re-installed by SEG and maintained as part of GRASP.

Replacing the Pluviometer required us to replace the water pipes that carry water from the pluvio instrument to the drums, which collect the water and allow calibration to be done. We also had to rerun the electrical cable from the data

logger, which is housed in a pit, to the instrument. The instrument has to be set dead-level, using adjusting nuts, which, fortunately had been left in place by Russell Deakin of DWLBC, when he demounted the site last August. The adaptor plate that has to be used tends to buckle when the nuts are done up tight, and shifting the instrument slightly off level. However all went well, Daniel set up the Husky (laptop communicator) that talks to the data logger, configured the logger and did a quick test. We set up the second logger (Hydrological Services instrument that can be exchanged by volunteers) which is mounted inside the raingauge housing, cleaned up the site and left it, hopefully all going well. The CDMA phone worked from this location.

The next site for installation was Pfitzner's Well, about half an hour's drive across open plains, and up over a small ridge into Emu Creek catchment. The track was in good condition, but after rains, the many little creeks and washouts could be difficult to negotiate with a 2-wheel drive vehicle. We used the GPS to assist with navigation, and it worked well. Pfitzner's Well pluvio site was easy to find, close to some stockyards. We had worked out a system where Chris set up the pluviometer, Daniel operated the Husky, and John Love assisted where necessary, took down the serial numbers of the equipment and took photos of the progress. There were plenty of flies, but it was not too difficult to work on the instruments. The CDMA phone also worked from this location.



The outside of a pluviometer, Sambot Pluvio; Photographer: Rob Kelman



The inside workings of a pluviometer showing tipping-buckets, Sambot Pluvio; Photographer: Rob Kelman

We returned to North Moolooloo to camp for the night at the shearers quarters, offered to us by Ian Ferguson. He arrived at our camp after we had had supper, to fix up the water supply. We were glad of the tables and chairs on the verandah, but did not bother to use the kitchen, and we slept outside during a warm but windy night.

lan Ferguson arrived the next day while we were packing up the camp. He showed us photographs and a project report that his daughter had prepared on the history of North Moolooloo. John Love gave lan a photo of Margaret Lindsay (nee Love) who used to visit North Moolooloo in earlier times. Ian drove out to the pluvio site and we showed him what it was and how it worked.

He then directed us along the back road to Maynard's Well, this was more or less east, along Windy Creek. The alternative, via the Balcanoona Road would have been very dusty and perhaps not much quicker. We stopped at the main homestead at Maynard's Well but found no one home, continued to the pluviometer site and started work. Unfortunately some of the adjusting nuts had not been left here by Russell, and we had to make up some wedges to support the adaptor plate. This took a while to do. The missing nuts are stainless and approx 3/8 inch or 8mm across the flats. The CDMA phone also worked from this location.

A couple of vehicles passed by while we were working on the pluvio, but nobody stopped to ask what we were doing. We drove out towards the Balcanoona Road and stopped in Deception Creek for lunch, where 4 vehicles passed by and poured

dust into our sandwiches, the last one stopped for a brief chat. Then we continued on to the Mt Serle turnoff, past Owienadana and turned right into the national park.

We arrived at Acroona Creek at 15:45, and leapt out, loaded up with the basics, torches, scroggin and water, and walked up Wallaby Creek to the CDMA Modem and Pluviometer on Arcoona Bluff arriving there just before 17:00. Two live Yellow Footed Rock Wallabies and one dead one were seen on the way to the Pluvio.

We fitted the new cut-off timer switch to the modem, checked that all its little lights were flashing as they should, crossed our fingers, packed everything up and left in the fading light of a lovely evening, at about 17:30. There was just enough light to get down the gullies and onto the flatter surface of Arcoona Creek. We returned to the vehicle in the dark, with the help of Chris' torch, and camped in the old Gammons '96 Expedition campsite. The night was extremely cold.

The next day, after a rather slow start we walked up Arcoona Creek, past the water level recorder, despatching a wounded goat en-route, and then turned south down the main tributary, heading for Arcoona South pluvio. We duly arrived there, despite taking a wrong turn when Chris thought he knew the geography like the back of his hand, and got temporarily lost. All was well however and we had a quick lunch, exchanged the data logger and did a calibration check on the Pluviometer. (100.7 tips for 20mm of water). We were unable to check the voltage on the Cherryville logger, as the multimeter battery went flat and we did not have a spare.

The CDMA phone did not work from Arcoona South pluvio site, nor from other places at higher elevations on the way back to camp. We returned by the western ridge that encloses Arcoona South, and were back in camp well after dark.

On the Sunday, having completed all the required scientific work, we spent the morning demolishing campfire sites and scattering the ashes, in the hope that other visitors might not be quite as keen to light them (fires are not allowed in the Gammons, but there are plenty of recent

fireplaces to be found). John Love photographed and measured the display boards at the park entrance, with the object of setting up a SEG display and brochures, fixed to the side of the main board.

In the afternoon we packed up camp and on our way out, met the other group at around 15:30 and decided to continue to Copley. On a public holiday evening all shops were shut, and the pub was not serving meals. However a bloke called Kelvin runs a take-away place, beside the main street, and the food was as excellent as it was welcome, look out for it if you are passing that way! After some debate we camped beside Emu Creek, about 1 km off the main road, and found quite a nice spot on clear ground. One more extremely cold still night under the stars followed but dawn on the Monday morning was beautiful. Hawker Motors, was absolutely packed with vehicles, hardly a place to park anywhere. We took the road to Orroroo and found the new coffee shoptakeaway to be well worth a stop. Then it was back to Adelaide without further incident.

Acroona Creek to Plateau Group Linda-Marie McDowell

Expedition participants included: Christine Arnold, Rob Kleman and Linda-Marie McDowell.

After parting from the Pluvio installation group, just after leaving Copley we headed in to Arcoona Creek. We arrived at the Acroona base campsite soon after 15:00. While we still had enough daylight we headed off on the Yellow Footed Rock Wallaby search, and Christine and Linda-Marie spotted three animals amongst the rocks in the fading light. We also saw two Euros before returning to base camp soon after 18:30.

On Friday morning we started out at about 09:30 to exchange the exclusion data logger and the water level recorder. We then continued up Acroona Creek to have lunch at Wild Ass Creek waterhole (where there was no water) soon after midday. We did the photopoint monitoring and checked the water cache before continuing up the creek to Vandenberg campsite below North Tusk Hill.

We arrive at the campsite just after 15:00 and set up camp before walking up to Sambot water hole. No surprise Sambot waterhole was completely dry as well. We did the photopoint monitoring before heading back to do the Sambot pluvio data logger exchange.

On Saturday morning we made an earlier start and left camp just after 08:00 for North Tusk Hill. Our aim was visit the photopoints on the way up. We found sites 72B and 73B without too much trouble, but struggled to locate site 71B, so continued up to the summit with the intention of finding the site on our way back down to the campsite.



Preparing for human impact photo monitoring of North Tusk Hill; Photographer: Rob Kelman

After spending the middle of the day on the Plateau at the Pluvio and Plateau photopoint sites we headed back to find the elusive 71B site. But despite our searching and map and compass work, (we had left the GPS back at camp) we

GRASP trip July 2004

July 21 to 25

Looking for something warm to do in July?

How about bushwalking in the Gammon Ranges with other SEG members?

This is a normal GRASP trip that will involve bushwalking up Arcoona Creek to the Gammon Ranges Plateau.

The scientific work will involve changing data loggers, searching for Yellow Footed Rock Wallabies and other botanical and biological survey work.

For Further details contact Linda-Marie McDowell, phone 8278 4795 / o419 423 917.

Pre-trip meeting Thursday evening July 8.

Hurry Places are limited!

didn't find the site until the next morning.

When we came back to find the site the next day we used the GPS and realised that the map we were using to locate the site had the site marked in pen in the wrong place. So for future reference people should always use the maps located in the back of the leaders manuals not the old separate laminated sheets.



Linda-Marie trying to reach the camera for the photo point monitoring at site 73B; Photographer: Rob Kelman

When the hunt for 71B was over we returned to the campsite to pick up our packs and return to the vehicle back at the Arcoona basecamp site. Soon after returning to the car we found the other party getting ready to leave, so we joined them for the trip back to Adelaide, stopping at Emu Creek for the night.

On this visit to Arcoona Creek we saw two eagles near Vandenberg campsite, ten goats, ten Euros and three Yellow Footed Rock Wallabies, and on the drive back to Copley we saw another twelve Euros and six red kangaroos.

Nominations for the SEG Committee for 2004/2005

The present SEG Committee consists of:

President: Dr. Richard Willing Chairman: Mr Alun Thomas Vice-Chairman: Mr John Hayes Secretary: Mr John Love Treasurer: Mr Graeme Oats General Committee members:

Ms Judy Mack Mr Phil Cole Mr Trent Porter Mr Duncan MacKenzie

Mr Peter Bailey

Mr Chris Wright (also GRASP Coordinator) Mrs Linda-Marie McDowell (GRASP Assistant & Co-Editor of SEGments with Mr Matthew McDowell)

All members will retire and are eligible for re-election.

For nomination forms contact John Love. (Contact details on page 10) Nominations must be signed by the proposer and the nominee and sent to The Secretary, PO Box 501, Unley by July 31, 2004

All About ANZAAS and ANZSES

Researched by the Editors of SEGments Thanks to Robert Perrin for providing the ANZAAS information.

ANZSES, referred to in the front-page article should not be confused with ANZAAS, although the acronyms are very similar. Information can be found through following the web site links listed at the end of this article.

ANZAAS, or the Australian and New Zealand Association for the Advancement of Science, to use the full title, is one of the oldest scientific societies in Australia. Whereas ANZSES, or the Australian and New Zealand Scientific Exploring Society (not the Australian and New Zealand Solar Energy Society) is a more recent group that has its Australian headquarters in Victoria.

The year 2004 sees ANZAAS complete its 116th year since its foundation. Past-presidents of the Association read like a "who's who" of Australian science and progress: Professor. Sir William Bragg; Professor Sir Douglas Mawson; Professor Sir Mark Oliphant; Dr. H.C. "Nugget" Coombs; Professor Sir Gustav Nossal, etc., etc.

Science is the bedrock upon which the prosperity of Australia will be built in the twenty-first century, and ANZAAS still provides the only forum in Australia where scientists of differing disciplines, and non-specialists, can meet leading scientists across the disciplines and have important discoveries discussed and explained.

ANZAAS organises symposia, meetings, lectures and talks covering all aspects of science and technology, with attendance and membership open to all. ANZAAS has an extensive program of scientific activities designed to inform and inspire young people. This program includes not just evening meetings but the hugely successful annual Youth ANZAAS Science Forum, which features speakers of international repute.

ANZAAS welcomes all that are interested in the promotion and advancement of science and the integrity of the scientific method.

By becoming, or remaining, a member of ANZAAS an individual not only derives a

great deal of personal benefit and enjoyment, but also the satisfaction of helping to support the unique contribution made to our society, a contribution which will ensure that Australia has the scientific resources and technological expertise necessary to provide an internationally competitive base in research, education and industry. In the political and public arenas, the popularity of science is at its lowest this century; we are living in an age of poll-driven governments and if science does not regain widespread public support then in the long term it will not enjoy the essential financial backing of Government.

For more about ANZAAS http://www.anzaas.org.au

For more about ANZSES refer to http://home.vicnet.net.au/~anzses/welcome.htm

While you are surfing the web also check out www.scienceweek.info.au

Kids Corner

The jumbled hidden words are taken from the article by Richard Willing titled 'The Early Years of SEG'. The words are hidden in all directions. Can you find them all?

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

Word List

TRUCK	CANOES
CHAIRMAN	MAWSON
EXPEDITION	CAMP
PARTICIPANTS	FUTURE
FREELING	NEWLAND
SCIENTIFIC	LAKE
VEGETATION	BANKS
COONGIE	TRACK
GRANFIELD	CONVOY
SANDHILLS	PARTY
CAMPSITE	DRY
FLOODING	ADVANCE



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

COMMITTEE						
President Emeritus C. Warren Bonython AO						
		Phone	Fax	E-mail		
President	Dr Richard Willing	8558 6381	8558 6212	willingr@comstech.com		
Mobile 0408 807 517						
Chairman	Alun Thomas	8296 9453	8223 2588	alun@madderns.com.au		
Vice-Chairman	John Hayes	8234 6017		hayes.john@saugov.sa.gov.au		
Hon. Secretary	John Love	8379 1172		jsp@senet.com.au		
Hon. Treasurer	Graeme Oats	8278 3179	8278 5577	oatsgd@senet.com.au		
Committee:	Phil Cole	8390 0250	8303 9555	pjcole@senet.com.au		
	Duncan MacKenzie	8332 1204	8364 5527	dmackenzie@iname.com		
	Chris Wright	8278 8818		c.wrigth@bom.gov.au		
	Judy Mack	8364 2686		classicjm2002@yahoo.com.au		
	Peter Bailey	8370 2464		elaineeter@picknowl.com.au		
	Trent Porter	8278 9078		trentasaurus@bigpond.com		
	Linda-Marie McDowell	82784795		linda-marie.mcdowell@state.sa.gov.au		
Editors	Linda-Marie & Matthew M	cDowell				
	ph. 8278 4795, e-mail lind	la-marie.mcdowel	I@state.sa.gov.au			
	Address: 5 Roseberry Ave	e, Eden Hills S.A.	5050			
SEG WEBSITE www.communitywebs.org/scientificexpeditiongroup						
SEG EMAIL ADDRESS segcomms@telstra.com						
SUBSCRIPTIONS (Including GST)						
	Working adult member		\$16.50			
	Pensioner student or u	nemployed ·	\$11.00			
Pensioner student or unemployed \$11.00 Family membership \$22.00						
Organisation membership \$22.00						
ADDI ICATION FOR MEMBERSHIP AND MEMBERSHIP DENEWAL						

APPLICATION FOR MEMBERSHIP AND MEMBERSHIP RENEWAL

Name
Address
Telephone (H)
E-mail
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