

CEGSA NEWS



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CAVE EXPLORATION GROUP SOUTH AUSTRALIA Inc.

PO Box 144, Rundle Mall, Adelaide, South Australia, 5000.

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Meetings held on the fourth Wednesday of each month, except December, at 7.30 PM usually in the Royal Society of South Australia meeting room, Natural Science Building, South Australian Museum.

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Cover Photograph:- CEGSA Member Ken Smith noted for his Cave diving in Florida and Mexico examines the damage to his knees after his unaccustomed dry caving in Fox Cave, Naracoorte on the long weekend SA/Vic Dinner meet, January 23-26th 1999. *Photo by June MacLucas.*

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QUARTERMASTERS NOTE.

The high usage equipment will be stored at the Scout Shop so arrange with Simon to get it from there when required for a trip. We are looking for someone to store the less used equipment as Simon does not have the storage space so if you can help, please let Simon or one of the committee know. It will be greatly appreciated.

Please note: Simon will not be available for two weeks after Easter so if you require gear please arrange it before then.

The deadline for copy or background material for Volume 43 Number 4 (Issue 172) must reach the Editor by Wednesday **12th MAY 1999**. Material not meeting this deadline may be retained for possible use in a following issue. The preferred method is on 3.5” IBM floppy disk or via E-MAIL at atholjax@cobweb.com.au as an attachment, in Word or ASCII text format. Of course other forms of communication will still be gratefully accepted.

The views expressed in this publication are those of individual authors and not necessarily those of the Cave Exploration Group (South Australia) Inc., its Committee or the Editor.



PRESIDENTS SPOT

Caving-wise, the Christmas / New Year period was pretty quiet with only a handful of trips being recorded in the trip log. Nonetheless, there were the significant activities down on the Fleurieu Peninsula, at the Flinders Ranges and in the Lower SE.

Late 1998 also saw the official opening of the new Naracoorte Caves Wonambi Centre. The high profile opening was attended by the SA Premier, all the important people associated with the project, the media circus and also the discoverer of the fossil beds: CEGSAs Grant Gartrell. A report of the opening can be found in the ACKMA Journal (No 33, page 5, December 1998).

Social events seemed to dominate the CEGSA calendar in tune with the festive season and here are a few of note. The CEGSA social event at Woodhouse was enjoyable but not terribly well attended (probably because it was the weekend before Christmas). Some highlights included certain cavers making clowns of themselves on the SRT course, others exhausting themselves on the Commando course and some getting drenched with SuperSoakers and also a great BBQ. At the end of January, the social SAVIC caving event down in Naracoorte took place and I hear that some good caving was done, as well as having a lot of fun. While talking about the social scene ... and it's nothing to do with caving ... CEGSAs closet Star Trekkers attended the opening of the latest Star Trek movie (INSURRECTION) and had a good night out. By the way there's lots of Trekkers in CEGSA, but for now their identities will be protected!

I thought that I'd keep the next bit of news until last. After great deliberation, I have decided that I will not stand as President this year. My main reason is that I am just too busy and need to cut back on a few things so that I can devote my time and energies on my family, my work and *going* caving. So, I'll say here that I wish my successor good luck in 1999, but I'll still be around and be available to take on minor responsibilities (eg website and trip liaison).

I wish you all good and safe caving in 1999 with heaps of great discoveries.

Steve Milner

STOP PRESS.

"Congratulations go to Kevin Mott and Fred Aslin for winning a \$1000 grant from the National Parks Foundation of South Australia Inc. for the study of the *Distribution of Miniopterus schreibersii* in wintering sites throughout the South East of South Australia. This project will involve lots of bat counting this winter and Kevin and Fred will need heaps of help from all the CEGSA membership ... a great excuse for all of us to get together in the SE and go caving and participate in a most worthwhile project."

Steve

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TRIP REPORTS

CEGSA Xmas Do 19th December 1998

This years Xmas show was held at Woodhouse in the Adelaide Hills and was attended by approx 18 people (including kids). Most people took a leisurely stroll around the obstacle course with only Frank and Michael C being the only ones game to try the triple rope swing across the creek,. Frank was so confident about his abilities he stripped down to his jocks before he gave it a go. (very wise decision). Michael on the other hand was very elegant in his trip across the ropes. We all then met at the climbing tower where Steve Milner rigged the ropes for an abseil and traverse and some of our young visitors got to have an abseil.

We then headed for the shed for our BBQ dinner followed by Frank and the MacLucas' s grandson entertaining us with a waterfight I think Aaron won! We all departed around 7.30pm.

Marie Choi

MUNDRABILLA STATION, NULLARBOR PLAIN

Thursday 1 Oct 1998 to Sunday 11 Oct 1998

Participants:

Max Meth, Steve Milner, Mark Sefton, Grant Gartrell, Frank Hankinson – CEGSA

Tom Wigley (USA)

Michael (Trebor) McDonald (UK)

Paul Devine (5 to 10 Oct)

Features visited:

Listed in the order visited:

W AUST: 6N1452 d, 1569 d, 1570 rh, 1463 c, 1459 bh, 1460 c, 1461 c, 1571 Wandering Wombat c, 1457 c, 1458 e, 1465 Monicas c, 1464 bh, 1466 c, 1572 d, 1573 rh, 745 Goat c, 206 Thampanna c, 483 Hurricane Hole c, 1574 rh, 1440 d, 1575 d, 326 c, 1426 Bug Hole c, 1428 Stinking Rift c, 1444 c, 1441 bh, 1576 d, 1369 Prostate Pit c, 1453 c, 1510 d, 1577 c, 1578 rh, 1412 c, 1414 Anzac c, 1411 Sentinel c, 1384 Anastomosing c, 3 Abrakurrie c, 222 d, 415 bh, 2 Weebubbie c, 24 c.

Listed in numerical order: N2 3 24 206 222 326 415 483 745 1369 1384 1411 1412 1414 1426 1428 1440 1441 1444 1452 1453, 1457 to 1461, 1463 to 1466, 1510, 1569 to 1578.

Key: () = not located, bh = blowhole, c = cave, d = doline, e entrance, f = fissure, rh = rockhole.

Objectives of trip:

To further investigate features found by Plane Caving in 1995.

Daily account of activities:

Thursday 1 Oct 1998

The participants left Adelaide with the view of spending the night at Max's place in Ceduna. At around 10pm, Graham rang Max to say that he and Gary had returned to Adelaide with car trouble. Steve, Mark & Michael arrived soon after midnight.

Friday 2 Oct 1998

After failing to run out of fuel Grant's car with Tom & Frank arrived in Ceduna at 4.25am. Plenty of time left for a good nights rest.

Later in the morning, Graham advised that Gary's car would not be leaving Adelaide until after midday (at the earliest) so the rest decided to go on to the Nullarbor without them.

Tom decided to hire a vehicle to help carry the group water and gear. This was Tom's first visit to Australia for many years. Tom has been on Nullarbor trips before, including the Jan 1965 Mullamullang expedition. Tom was a co-author and or editor of the two books, MULLAMULLANG CAVE EXPEDITIONS 1966, and CAVES OF THE NULLARBOR (1967).

Saturday 3 Oct 1998

We left Ceduna at noon. Stopped at the Head of the Bight and saw some whales. We arrived at our campsite near Mundrabilla homestead after dark.

Sunday 4 Oct 1998

Today we looked at several features located south east of camp. These were seen by Plane Cavers in April 1995 but had not been looked at since. Some of the features located by Plane Caving had Plane Caving tags, however, the PC tags did not identify the feature in any way. The PC tags are plastic the size of a credit card and they identify only the Plane Caving organisation, not the cave itself. In 2 cases only was there anything written on the PC tags to identify which karst feature was tagged. These 2 are Sentinel Cave PC8 (6N1411) and Liars Dare Cave PC14 (6N1347). The writing on these 2 tags is in texta pen or similar, and is now very faint to the point of being illegible.

First stop was 500m SE of camp to doline 6N1452. This is small, only 3.5x3m and 0.6m deep with a tiny overhang and no breeze evident. (PC28 of 19/4/95. This has a PC tag). Tag.

A doline 6N1569 was located 50m @255 from N1452. This had not been noted by Plane Caving. It is located 36m east of the track and is 1.2m deep with a fissure 0.2m wide that extends 2m to the north and descends a further metre. Strong breeze. Tag.

About 200m west of N1569 is small rockhole 6N1570. This measures 0.55x0.5x0.25m and it contained water. Tag.

1.1km SE and 35m south of the track is cave 6N1463. A blowhole 0.9x0.9m in a rock pavement area drops 3.2m into the east end of a 20m long chamber. (PC46 of 25/4/95. No PC tag). Tag.

About 500m further SE along the track is a group of 3 karst features.

- (A) Blowhole 6N1459. This is 30m N of the track. A blowhole with a small aperture 0.4x0.3m expands to 1.1m diam. Passage at bottom goes about 1m to south. (PC43 25/4/95. Has PC tag). Tag.
- (B) Cave 6N1460. Located 30m @277 from N1459. A single depression 10x5m has 2 blowholes 1.5x1.3m and 1.2x0.9m that both drop into a low cave. Blowholes are 1.1m apart NS. Cave is about 14m long with streamway heading north. (No PC tag – included as part of N1461). Tag.
- (C) Cave 6N1461. Located 11.5m @332 from N1460. Depression 4x4m and 1m deep has blowhole 2m deep that opens into 6m wide chamber. A streamway enters at S side presumably coming from cave N1460 and crosses to S side of chamber, then disappears into low passage with faint breeze. (PC44 25/4/95. PC tag.) Tag.

300m E along the track we noted a blowhole 6N1571 that had not been noted by Plane Caving. The entrance is small, only 0.45x0.35m and is close to a mallee tree and so would not have been visible by air from the southern side. The blowhole leads to a 30m long cave that we named Wandering Wombat Cave due to the finding of a wombat skull in it.

The track ends 300m further east at a pair of blowholes that are 15m apart @160.

- (A) The north one 6N1357 is in a depression 12x10x1.6m. The blowhole is 0.55x0.4m and drops only 0.7m into the north edge of a 20m wide spacious chamber. (PC42 of 25/4/95. PC tag). Tag.
- (B) The south one 6N1458 is in a depression 25x15x1.5m. The 2 depressions are 11m apart. This blowhole is 0.55x0.4m and drops 4.2m into the centre of the chamber of N1457. (No PC tag). Tag.

200m west of N1463 a side track heads to 2 other karst features.

- (A) 800m SW is 6N1465 Monicas Cave. Named because on arrival the blowhole was blowing strongly. In fact this blowhole is a little unusual for the Nullarbor. It has no depression around it. Instead it is located in a rock pavement area, and the blowhole tapers from its large entrance size of 2.1x0.9m to body size at 4.1m depth. This is probably a rockhole that deepened and eventually intersected a cave. In fact access to the cave required removal of some rocks that blocked the base of the blowhole.
The cave is about 50m long. (PC48 of 25/4/95. Has PC tag. Described as being a blocked blowhole with a good breeze). Tag.
- (B) 700m south of N1465 is blowhole 6N1464. This is in a depression 10x10m that is 0.3m deep. The blowhole is 0.55x0.45m and 2.6m deep. 1m long cave at bottom. (PC47 of 25/4/95. PC tag). Tag.

Last feature visited for the day was cave 6N1466. This is located 2.8km SW of our camp and reached by following the NS fence that descends the scarp 3km west of our camp. In a depression 5x5x0.8m is a blowhole 0.9x0.7m that drops 2m into a cave. It has an awkward overhanging entry. The cave is 59m long and has a total depth of 11m.

(PC51 of 25/4/95. Has PC tag.) Tag.

Steve, Michael and Max decided to walk directly back to camp. A shallow doline 6N1572 was found. This had not been noted by Plane Caving. See 8/10/98 for description.

Monday 5 Oct 1998

Today we all headed to Goat Cave 6N745. This involved a 23km drive. Near Jinnagoodra Bore we investigated a low stony rise that I had observed many times before, but had never stopped at. I was somewhat surprised to find a significant rockhole there. This is 6N1573. There are 3 rockholes, 2 holding water.

At Goat Cave, the cave was investigated. In particular, a site where a strong breeze issues from a fissure against a wall received attention. The breeze appears to come from the north, and the known cave only extends to the south. We did not find a way past the blockage, and resolved to return the next day.

As a comparison, a check was made on the breeze at Thampanna Cave 6N206 which is located 4.7km from Goat Cave. The breeze was as strong as I have ever seen it. At Hurricane Hole 6N483, located 1.1km from Thampanna Cave, the breeze was stronger than it had ever been known. Since Thampanna Cave has a proven passage length of 3km, it is hypothesized that both Goat cave and Hurricane Hole should be far longer than their current 200m and 50m respectively.

Tuesday 6 Oct 1998

Paul Devine had arrived during the night. Our group divided into two. One lot going to Thampanna Cave, the other going to Goat Cave.

At Goat Cave we at last got past a constriction in the very breezy fissure. Only to be confronted by a myriad of ways to go in rockpile, none large enough to fit through.

Elsewhere in the cave, Paul had followed a streamway between gigantic blocks until it disappeared under a low section of roof. He was able to get through and thus was the first to get into a new portion of the cave. This was disappointingly short, only about 50m. It is essentially a lower portion of the main passage along the east wall. Various places can be seen where access to the upper (entrance) chamber used to exist, but have now become blocked. A quantity of bat guano is in the lower chamber.

5km south of Number 3 bore we located a rockhole 6N1574. This had 3 rockholes, the largest being 0.5x0.35m and holding 0.2m of water.

We also located doline 6N1440 about 2.5km west of Jinnagoodra bore. This is PC5 found on 16/4/95. It has a Plane Caving tag. The doline is 6x6x0.9m and has a rabbit burrow sized hole heading east for about 2m with no breeze evident.

A mere 36m to the east was another doline 6N1575. This was smaller 3.5x2x0.9m but a breeze indicates an underground connection of some sort.

It was getting on for dark and we were already late for tea and Paul wanted to check out cave 6N326. Paul spent half an hour then returned and drew a sketch map of the cave. It warrants further attention.

For the remainder of this trip see Part 2 of this report in the next newsletter.

Max G Meth
2 Feb 1998

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UPPER AND LOWER SOUTH EAST

Author: Julius Gheude
Trip dates: Friday 18th December to Tuesday 22nd December.
Trip members: Julius Gheude, Bill Binks, Tom Krieg and Carlo Cocci.

Three intrepid adventurers Jules, rockclimber Tom and glider pilot Carlo set off from Adelaide mid Friday. We met up with Bill (and coincidentally Dave Glowacki) at Bill's new place in Naracoorte later that day. From there it was down to the pub to do some serious trip planning over a few beers. We crashed at Bill's place that night.

The next day the 4 trip members decided to first tackle S102. We met up with the landowner and received permission to do the cave and also a warning to be on the lookout for brown snakes. After rigging the ladders and abseil line, I was the first to descend. Sure enough, on the bottom there was a disturbingly active brown snake just over 1 metre long, inquisitively examining the coil of rope below me. I locked off 2 metres above the ground and, while hoping the snake hadn't any SRT skills engaged in some serious conversation with anybody listening some 7 metres above. After some deliberation it was decided to shoo the snake away armed with an opportune 2m long rod. After some gentle persuasion with the rope and rod, the snake took refuge in under the still decaying but mostly skeletal remains of the now infamous Cow, which had blocked the cave some time ago. I safely completed the descent and with no more snakes visible was followed shortly after by the others. This was Carlo's first non tourist cave.

Putting the snake behind us we went on to explore the cave. S102 comprised of relatively young limestone which was quite porous and contained numerous sealife fossils. The caverns were quite large and moving through it was easy. We visited all the lakes we knew about and after a few hours we made our way bravely (except Bill) back to the entrance. With me cautiously leading and Bill taking up the rear we again confronted the snake. It had overcome its shyness, ventured away from the Cow, and was again sussing out the coil of abseil rope. (Was it getting lonely?). Repeating the exercise I gently convinced the snake that under the Cow was a better place to be. We all exited the cave without incident and then had a few words with the landowner before we departed.

Next stop was Smithys Dive and Surf at Port MacDonnell in order to obtain some dive gear for a night dive of Ewens ponds. We hit the local pub for a meal and waited for the Sun to go away. When it was unanimously decided that it was dark, we cruised off to Ewens. We were all keen to test the assertion that you could see stars at night from the bottom of Ewens. When we arrived it was overcast and raining and there were millions of moths flying over the ponds.

We all geared up and took the plunge into the first pond. The water was crystal clear and quite cold. Unfortunately Carlo had blocked sinuses and could not dive, so the rest of us continued on. We did the first pond, saw a few Marron type cray fish and then went through the first race onto the second pond. Saw an eel on the way. After cruising the second pond for a while we then mistakenly tried to swim upstream into the third. Night diving without a compass has its hazards. Realising our mistake we passed through the second race into the third pond. We explored this pond (and cave entrance), saw a few more eels and then exited. We made our way back and greeted a disgruntled Carlo. Still raining we jumpstarted Bill's car and headed to Mt Gambier Caravan Park for a cabin for the night.

The next day, Sunday, we went on to locate 5L262 (Loftys), 5L263 (Haydns) and 5L119 (Snake Hill). Having found these we decided to leave them for another day and go and see Little Blue Lake. At Little Blue a snorkel was the order of the day, after which we had a look at Golding sinkhole and then headed for a pub in the Mt for dinner. After dinner Bill headed back to Naracoorte while the rest of us put up again at the Caravan Park.

On Monday we organised our permits for a snorkel of Piccaninnie Ponds and then went on a public tour of Engelbrecht Cave (a bit pedestrian I know but the others enjoyed it). Searching for things to do

we headed for Nelson. We stopped off at Princess Margaret Rose Caves, did another tour (quite spectacular decorations !!) and then headed for Piccaninnie Ponds. At the ponds we sussed out camping facilities (quite good), and then headed back to the Mt to meet up with Bill. That night we camped at the Ponds. Next morning we geared up for the Ponds. We were the only people booked for the day. We snorkelled the ponds and had a ball. Duck diving down to the entrance of the Chasm some 8m down is a blast, as is the view of the sunlight streaming in above. Also in the shallow surrounding wetlands you can see a lot of fish, some long neck tortoises and heaps of plant life.

After the Ponds and armed with access permits from PISA we headed for 5L263. Rock Climber Tom made the first descent into 5L263 using a belay stitch plate as an abseil device. The rest followed in a more conventional manner. 5L263, although fairly small has a lot of decoration and a few short but interesting passages. We exited and headed back to Bills place in Naracoorte.

Jules

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22nd BIENNIAL CONFERENCE of the AUSTRALIAN SPELEOLOGICAL FEDERATION 1999.

The last Conference for this Century was held at the Capricorn Coast, Yeppoon, Queensland from January 4-8th 1999.

Taking Caving into the next Century with Fun, Unity and Fellowship.

This was a national conference with participation from all over Australia with emphasis on Karst Management as well as Cave Management as they are interrelated. Papers on other areas of caving were encouraged as well as field trips to Mt. Etna, Bat Cleft and Johansen's Caves. Pre and Post Conference trips were planned for Limestone Ridge, Mt Etna, Broken River and Chillagoe.

For me the Conference began back in September 1998 when I decided to send a Fax to Carolina Brook of ISSA, INTERNATIONAL SOCIETY FOR SPELEOLOGICAL ART and SPELEO-ART, both of Leeds, England to see if anyone would be interested in taking part in exhibiting their cave art work at the Conference. Within hours I had a definite yes with responses from UK, Canada, Austria, and Slovakia. As I was the only Australian artist involved I approached Andy Lawrence, Manager of Abercrombie Caves, Abercrombie, NSW. Andy studied art in England before coming out to Australia

in 1983. He accepted the position as guide in Abercrombie Caves in 1987 to pursue his interests in speleology as well as to be close to the Australian bush.

The next move was to approach Peter Berrill, (CQSS) and President of ASF with the idea. I was promptly given the go ahead. Two weeks later the work started arriving from the UK. The cost of transporting the work to Australia had to be met by each individual artist and it can be very costly. It was decided that the work should arrive without glass or frames to make them lighter, cheaper and easier to handle. Eventually with only a few hic-ups all the work (46 pieces) from 11 speleo artists from 5 different countries arrived and I was able to complete my catalogue and send the work off to Peter in Rockhampton. All the artwork in this exhibition was carried out by cavers.

After several attempts to organize a lift with others participating in the Conference I settled on finding my own way there and arrived 3 days before the Conference began.

I was lucky in that Noel and Jeanette Sands and family, members of CQSS, (Central Queensland Speleological Society) made room for me at their home just out of Rockhampton where the view of Mt. Etna fills their kitchen window.

On Saturday 2nd I joined Glen Baddeley (VSA) Bruce Howlett from Bathurst and Dennis from Orange, NSW to have a closer look at Mt. Etna. We had a look at Ballroom Cave 4J-8 and Lost Paradise 4J-7. The ridge is amazing, aesthetically stunning but both Glen and I felt a bit off, as we had not had the time to settle down and acclimatize to the Queensland high humidity.

On Sunday 3rd a few local members of CQSS turned up at Noel and Jeanette Sand's place where tons of gear was stacked into several vehicles, we then all set off to Yeppoon about 40 km from Rockhampton for the Conference. I found my area for the art exhibition and with the help of John Dunkley from Canberra, we set up the work at one end of the sports stadium. Due to the heavy rains and a leaky roof we had to be careful where we placed the work and arranged it accordingly.

The Conference opened on the 4th January with a welcome address by Lana Little (Chillagoe Caving Club) and John Toop (Department of Environment.) The Conference finished with the Cavemans Dinner on the eve of the 8th January 1999. During that period the first Conference Paper to be presented was by Norman Poulter (Speleological Research Group Western Australia Inc.), titled "*Should Speleological Societies and the ASF have a Population Policy?*" Norm pointed out that if we maintain our current annual increase, our population will double by 2050. Norm says that Australia is already suffering major, sometimes irreversible damage to its soils, habitats, waterways, and coastal zone. If our population doubles, the impact on our environment, the economy, and quality of life is likely to be disastrous. Norm points out that Australia uses resources and energy at about 30 times the rate of people in developing countries and that we must halt our destruction of flora and fauna, the congestion of our cities and the nation's contribution to the greenhouse effect. This will be easier if population growth stops.

The 2nd Paper for the day was delivered by Ken Grimes, Hamilton Victoria, titled: "*The Caves of Christmas Island*". Situated in the Indian Ocean, north west of Australia, Christmas Island has a central plateau of phosphate over a pinnacle epi-karst limestone surface and a volcanic surface crest. Using slides Ken pointed out that most of the big caves are at sea level and were entered from the base of the coastal cliffs. Ken was involved with a team who studied the caves and karst and assisted in the preparation of a Management Plan for the National Parks.

The day was broken up with discussions lasting an hour or so that talked about the management of ASF. The first of these discussions talked about Membership within the ASF, its strengths and weaknesses, needs, threats and opportunities and what action was necessary to promote ASF. It was pointed out that ASF and cavers in general were aging, and that we need to encourage young people to stay with the individual clubs. In other words all clubs need to promote caves and themselves to a wider public, otherwise we will surely die.

The last paper for the day was presented by June Maclucas (CEGSA) with Speleo-Art Down Under. June's paper stated that artists have the opportunity to see the corners often ignored in the intensity of exploration and science. June pointed out some of the differences between photography and artwork in caves, and stressed that cave art shown in galleries educates the uninitiated to the awareness and beauty of caves. As part of her paper June invited 11 artists from around the world to

exhibit their speleo art during the Conference. Through organizations like ISSA, International Society for Speleological Art and Speleo-Art, both of Leeds, England, 46 pieces of artwork was exhibited from 5 different countries that included the UK, Canada, Austria, Slovakia and Australia. It was gratifying that 16 pieces of work was sold, with 10% of sales going to the ASF.

Tuesday the 5th, Day 2: The first paper was presented by Ken Grimes on the International Symbols of mapping. As there are a few alterations to be observed, this will be presented in detail in the Conference Papers.

ASF discussion for this day dealt with Communication through the "Australian Caver". Email, Ozcaver and Conferences. All participating clubs complained about the lack of communication and that ASF must find a way to overcome this problem.

From the discussions it was decided that the best option was through email as all but 3 of the clubs had access to this system. Therefore it was pointed out, each club must appoint a representative with email to be their spokesperson and communication will be handled swiftly by ASF representative Angus Macoun 37 Chelmsford Ave., Lindfield, NSW 2070. Tel: (H & W) (02) 9416-2588 (F) (02) 9416-2588 Mobile 0414-776-456. E.mail amacoun@eagles.com.au Cheques as usual go through Chris Riley 5 Reserve Street, West Launceston, Tasmania, 7250.

2nd Paper for the day: "*Foul Air in Limestone Caves and its effects on Caves*" by Garry Smith and presented by Angus Macoun. Although not a significant problem in the majority of caves around the world, this paper points out the dangers of those containing "foul air" which may become a death trap for cavers not familiar with the signs and symptoms of the gases involved.

The next Paper: "*Palaeontology from Mt Etna, Limestone Ridge and Broken River Caves*" by Scott A Hocknull (Queensland Museum) presented by Lana Little and John Toop. This paper talked about the rich deposits of fossil bone recovered from a series of caves in the Mt Etna/Limestone Ridge caves.

Later in the afternoon of the 2nd day we all heard a talk by Peter Berrill of the effect felt by those involved in the Mt Etna dispute. Its impact on their lives, jobs, marriages and families. It was a moving tale told with emotion that was felt throughout its delivery.

During this day we heard a Paper written by Peter Berrill, Clive Kavanagh, and Noel Sands and presented by John Toop. This talk related to the objective to locate and record Ghost Bat sites, record and map pristine cave systems as well as identification and recording of other bat species, cave swiftlets, fossils, flora, invertebrates and aboriginal sites. The group have completed seven expeditions to the area all being successful and productive with the discovery of new cave systems and ghost bat sites.

Wednesday 6th, day 3: Unfortunately the Paper "*Australian Ethnoecology*" by Jim Doyle was not presented. At the last minute Jim and his wife had a sudden bereavement in the family and had to return home immediately. Basically the study of Ethnoecology is the study of indigenous people's use of all natural resources for the purpose of aiding in subsistence of survival, a study of bush foods and bush medicine.

This brought Norm Poulter's talk on the "*Dichroic Caving Light*" as the first talk for the day. This paper discusses the development of portable light and the effects on exploration and mining of caves. Norm relates the advantages and disadvantages of the Dichroic light from his experiences and knowledge and offers his recommendations. This was designed and made by Norm using a car headlight that gives a good light for up to 10 hours. I put in my order straight away.

The 2nd Paper for the morning was on *Mt Etna Rehabilitation Strategy* by Kim Henley, Principal Blasting Specialist- Quarries and Construction Orica Explosives presented by Chris White, Company Manager of Pacific Lime Pty Ltd., on the Restoration Blasting near Limestone Caves at Mt. Etna and Limestone Mine.

Successful rehabilitation blasting on Mt Etna in early October 1998 was carried out by Orica Explosives. The rehabilitation blasting was on old mining faces to ensure that the northwest slopes of Mt Etna were suitable for the re-establishment of flora and fauna. This design used the existing

slope of the mountain as a guide, to produce landform across the area that is typical of the area. On completion of this talk and after a good lunch we all packed into a bus or private vehicle to see for ourselves an onsite inspection of the Mt Etna Rehabilitation area. Eventually given time the flora and fauna in the area should return to as near as possible to its former ecological state.

Later that night we all meet Dianne Vavryn, our guide from National Parks, who took us on tour of Bat Cleft Cave where we witnessed about 130,000 bats leave the maternity site. This was really spectacular. On the way back to camp we were taken to Johansen's Cave on Bat Ridge where John Toop gave us a close inspection of several Ghost Bats. I couldn't help thinking about the images of gargoyles and where bat features figure largely in this. They may not be good looking to some, but I thought them cute.

Thursday 7th, day 4: Due to very heavy rains the speleo sports arranged for this morning were cancelled but later SRT gear was set up for those wishing to try out some gear.

The first Paper for the 4th day was John Kersey (Townsville Caving Club) *"The Christmas Creek Compromise – A Solution to an issue between Mining and Cave Conservation in North Queensland"* read by Peter Berrill (CQSS)

The concept of this paper was to give details of the events beginning in mid 1996 regarding the Christmas Creek Limestone area which is highly cavernous karst ridge which became the proposed site for a major limestone quarry. David Mitchell Ltd., was offered a Compromise Proposal by the Townsville Caving Club, to which they agreed and as well as conditions regarding environmental studies. This has resulted in an amicable relationship for the cavers, the Cave Conservation Council and the Company.

The following Paper was by Arthur Clarke (Tasmania Cave and Karst Research Group, Tasmania) and talks about *"Owl Pellet Remains in Newdegate Cave (H-X7) Southern Tasmania"*. Arthur's paper was quite interesting and different in that it talked about 3-4 known active owl sites, which are located in forested karst areas in the south. Newdegate Cave is presumed a past occupation site in which mammalian bone remains have been discovered. Arthur talked about these discoveries; the research and analysis of identified skeletal material from the "presumed" owl pellets.

This was followed by a Paper titled: *"Geology of the Mt Etna Area"* by Henry Shannon of Launceston Tasmania. Henry points out that Mt Etna remains a puzzle that it has the cavernous limestone outcrop in Australia, yet the caves have developed in a dry sub-humid climate, which would be expected to inhibit cave development.

Straight after the lunch break Norm Poulter gave a photographic workshop with emphasis on the use of bellows and how you can magnify your images even further. Later that night Norm ran some old slides of past and present caving celebrities taken at previous conferences. This was so popular that Norm had a rerun performance for those that missed the first sitting.

The last Paper of the Conference was presented by Evalt Crabb, *"ASF Knowledge Management"*. (Highland Caving Club. Canberra) Evalt talked about intellectual property, copyright and financial enterprises with particular attention paid to copyright issues affecting cavers, caving clubs and the ASF.

This was the last day of presentation of Papers and that evening it was relaxing for most of us to just sit and chat around the bar set up outside near a huge blazing camp fire. This is when I heard that Chris Riley had brought along with him and his son, 2 dogs, a bike and a pet rat with cage, all the way from Launceston, Tasmania. Now that is really taking "home" with you.

Friday 8th ASF Council Meeting.

Tables were rearranged to form a square with the various clubs representatives and ASF Committee present. Unfortunately it was a large area and for those set-up down the far end it was almost impossible to hear.

See Council Meeting report in Technical Articles section.

The Conference came to an end with a splendid Caveman Dinner with large helpings of everything, especially crabs, prawns, Morton Bay Bugs, fish, turkey and everything to tempt the palate.

It was an emotional night with presentations of Awards that brought lumps to many throats and tears of happiness too. There were two nominations for the Edie Smith Award, Norman Poulter and Henry Shannon. Norm with tears in his eyes gave a very moving speech. Henry was also moved. Certificates of Merit went to David Martin, Kier Vaughn-Taylor and John Toop of Department of Environment.

At the end of the evening they held an auction as I had donated a pastel drawing toward ASF funds. This turned out to be hilarious with Kerry Hamilton as the auctioneer. A mango bought by Norm Poulter raised \$26 and almost caused a riot when bidding against Grace Matts. A compass was bought by someone for over a \$100 and Cathy Brown bought my pastel for \$230. Kerry then found himself in trouble, his neck tie was ripped off and auctioned, next his shirt and finally his \$1 Op shop, satin shorts (which still had the \$1 label on them,) this was bought by Grace. When they reach for his jocks, Kerry was off and the auction was declared over and the evening finally came to an end.

Overall, even though the attendance was not quite what they expected, and the weather was unpredictable, it was a memorable week and I for one enjoyed it, as I am sure everyone else did, and I am looking forward to the Bathurst Conference in the year 2001. Speleo-Art has been invited back and plans have already gone into operation for a bigger better showing. Most of us packed up and left but a few stayed for post caving trips to various areas. A week later Angus Macoun returned to Sydney with the artwork to be exhibited at another Speleo Conference in a few months time in NSW.

JUNE MACLUCAS

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SECRET CAVES

M35, M36 AND M37 - EDEN VALLEY

BOXING DAY HOLIDAY 28TH DECEMBER 1998

Participants: George and June MacLucas, Ray & Chris Gibbons, Lance Hoey and Barbara McFadyen.

During a clean up at one of the working bees we found an old news article from the Sunday Mail dated possibly around the late 50's early 60's. It featured a very young Elery Hamilton-Smith and talked about his visit to several secret Aboriginal caves featuring Aboriginal rock art some 50 miles from Adelaide. At the same time Lance Hoey said he had seen these caves recently while on a bush walk with the St Agnes Bushwalking Group. As the following week was the long weekend, those at the working bee decided to go have a look.

On checking the map it showed that the caves were on private property and on the Monday holiday, Boxing Day, we decided to pay them a visit. It was necessary to obtain permission from two landowners, and luckily they were both home. We found 3 caves, the largest one on one property and two smaller caves, one an overhang, on the other. The Aboriginal Heritage Branch of the Department of Environment and Planning have placed approved signs at the entrance to each cave with diagrams and tribal information on the rock art. Apparently the caves and their significance has been known by Europeans for over a 100 years and it is thought that the rock art is at least 200 years old and probably made by the descendants of the Peramangk tribes who lived in the area.

As these caves were not in our records, we promptly surveyed them to a grade 3 standard and took photographs of the rock art. It turned out to be a pleasant bush walk enjoyed by all of us.

Both landowners said that quite a few tourists visit the caves but most do not seek permission. This they found was pissing them off, **so if you do decide to visit, do the right thing and seek permission. It helps for good PR between landowners and CEGSA.**

George MacLucas.

Vic – S.A. Caving Weekend & Dinner

Naracoorte 23rd – 26th January 1999

The weekend this year was organised by members of CCV in particular Ros Quick of CCV and held at Naracoorte on the 23rd to 25th of January. About 50 people attended the weekend with the majority coming from Victoria. All the cavers met at the Naracoorte Scout hall on Saturday morning and after some time groups were organised and various caves were visited on park and off. These included: Fox Cave, Beekeepers, Blackberry, Stick Tomato, Appledore, Little Vic and Cathedral, along with some of the tourist caves and new Wonambi Interpretive Centre. Mean while Athol and myself enjoyed being armchair cavers for the weekend by making ourselves very comfortable in the new "Bent Wing Café" which is run by former cave guide Rennie and her sister. The Café has really added to the atmosphere of the place, the food and prices are excellent and the place is always busy. They make my cappachino just the way I like it!

After a days caving and a clean up every one met at the scout hall for a spit roast dinner and socialising, 2 raffles were held one of my Teddys with some batteries and a piece of Dave Glowacki art and a Laurie light. Linda Deer a member of Scout Caving won the bear and our own Athol won the Light. Both second prizes were won by Victorians, unfortunately I failed to get their names.

Just prior to the raffle draw we bought out a cake for "King Kevin Motts" 50th birthday. (he doesn't look a day over 60) he also received his own Motty bear who I now hear will be attending the AKMA conference. A SRT obstacle course designed by Dave T, Dave G and Bill B was postponed due to possible risks as a result of partying. The dinner broke up around midnight

Sunday saw an earlier start with groups swapping what caves they were going to and a group lead by Dave T going to Sand Cave for a 6 hour, no make that 8 hour trip. The afternoon ended with a BBQ at the caravan park. Oh Athol and I joined by Sherry Mayo and the odd visitor again enjoyed cappachinos at the Bent Wing Café.

More caving happened on the Monday unfortunately I had to return to Adelaide Sunday Night. Thanks have to go to CCV for organising this years dinner and caving, along with Steve Borne for organising Sand cave and permits. I would also like to thank Dave T, Dave G and Bill for planning the SRT course although it didn't happen this time.

Next year is our turn again and it would be good if some people put their hands up to help with the planning and bookings, let me know if you want to help.

Marie Choi

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BEEKEEPERS CAVE U15

NARACOORTE SA/VIC DINNER WEEKEND.
24TH JANUARY 1999

Participants: George MacLucas, Aaron MacLucas, Katherine Rowsell,
Jim, Ashleigh & Brendan Tulloch and Barbara McFadyen.

As leader George rigged the ladder. As there were several beginners on this trip without harnesses it was necessary to swap over the gear after each one was belayed down the ladder by Katherine. Two of the juniors 12 year old Aaron and Ashleigh became soul mates and enjoyed climbing through rock piles, under and over together. They were the first through the drain to the 2nd chamber. The small fossil shells in the 2nd chamber were of interest. The trip through the cave took 3 hours.

George MacLucas.

TECHNICAL and OTHER ARTICLES

Getting Bugs out of Cave Soils

There are many different types of microorganisms growing in soil – different kinds of bacteria, fungi and viruses, and there are usually about a million per gram in reasonably fertile soil.

There are good and bad bugs from a human point of view. Some of them work in association with each other and together meet each other's metabolic needs, and some try to elbow out the competition by producing antibiotics. We hook into this process by using the bacteria, mostly streptomycetes, to make the beginning part of the antibiotic molecule, because it is a complicated process, and needs specific enzymes, which would take the chemists too long to do. We then add on an extra chemical bit, so it will be absorbed by a human more efficiently. This year I'm studying one group of the bacteria called actinomycetes which are related to the streptomycetes, so see if there are any unusual ones out there, waiting to be discovered, and possibly producing a different kind of antibiotic, because we are slowly becoming resistant to the current ones.

The smell of freshly-turned soil comes from chemicals known as geosmins, which several bacteria, including actinomycetes, produce. When you go into a cave and you smell this, it tells you that these particular microorganisms are present, even though they are too small to see.

To extract the actinomycetes from the soil, one gram of soil is mixed with 10ml of water, and 1/100th of this is taken (there are lots in there). Only this much, or less is needed, otherwise there will be too many dots on the agar plate to count, when they grow. After incubating for about a week the interesting colonies are taken off with a piece of wire and transferred to isolation plates, until fungus and bacteria, also present in the soil, has been left behind in the selective transfer process. We then see what sort of chemicals they produce by plating them next to some bacteria, and seeing if they produce a chemical which stops, or slows the bacteria or fungus.

If the microorganisms in a cave soil have been isolated from a similar, carbonate-rich soil from another cave a long distance away, they may have evolved different characteristics from one another, even though they came from a similar ancestor. Microorganisms are the fastest-evolving living organisms on Earth, and if even a few can adapt to a change in their environment, then they become the seed population for the future. Even though they may still look the same from different locations, however, their DNA may have changed, and the descendants inherited the changes. Many microorganisms can also exchange some their DNA with one another by picking up plasmids, little extra bits of DNA which sometimes code for heavy metal or antibiotic resistance. This extra piece of code allows them to survive environmental hazards that they have had to overcome in their 'daily lives'. My study is looking at how different these isolated populations have become, and I am comparing the Jenolan Caves with Wirrealpa (thanks to CEGSA), Tasmania, Naracoorte and Kangaroo Is.

Already, the soils have shown quite different populations, even though they are living in a similar ecosystem (limestone soil). There don't seem to be many references about the isolation of actinomycetes in carbonate-rich soil, so hopefully, with the help of CEGSA's cave soils, we can fill in a bit more scientific information on these very interesting and useful little bugs.

Diana Walter

(This is a precis of a presentation that Diana gave to the general meeting of CEGSA in January 1999. – ed.)

MEMBERSHIP

NEW MEMBERS - WELCOME TO

FULL MEMBERSHIP

CF	MATTHEWS Spot	9901 03-5126-1854			
		6A Vale Street	MOE	VIC	3825
CF	MATTHEWS Jude	9902 03-5126-1854	(w) 03-5127-3192		
		6A Vale Street	MOE	VIC	3825

ASSOCIATE MEMBERSHIP

A	SPRINGER Gerret	9903 08-8725-0773	(W) 08-8721-8390		
		30 Lorikeet Street	MT GAMBIER	SA	5290
A	WALTER Diana	9904 8276-9629	(W) 8204-4726		
		38 Mitcham Ave.	LOWER MITCHAM	SA	5062

MEMBERSHIP TRANSFER

F	CARUANA Michael	9716 8277-7627	(W) 8231-2850		
		West End Baptist Mission,			
		212 Wright Street	ADELAIDE	SA	5000

CHANGE of ADDRESS

A	COLHOUN Tracy	9309 8331-3750			
		1 Hall Street	NORWOOD	SA	5067
F	SEFTON Mark	8709			

Seftons@senet.com.au

MEMBERSHIP FEES

Please remember that Membership fees were due on the 1st January 1999. It would be appreciated if members paid on time. REMEMBER WE NEED YOUR SUPPORT AND YOUR MONEY TO KEEP GOING. **PLEASE PAY ON TIME.**

PLEASE NOTE THAT THERE HAS BEEN AN INCREASE OF \$1 ON EACH MEMBERSHIP.

CEGSA MEMBERSHIP FEES

- FULL MEMBERSHIP \$36
- COUNTRY FULL MEMBERSHIP \$31
- ASSOCIATE MEMBERSHIP \$29
- COUNTRY ASSOCIATE MEMBERSHIP \$24
- LONG TERM ASSOC., MEMBERSHIP \$36

VARIAION FOR FAMILY MEMBERS

- 1ST FULL MEMBER \$36+2ND FULL MEMBER \$36
- LESS \$20 FOR ONLY ONE N/LETTER \$52
- 1ST FULL MEMBER \$36+2ND ASSOC MEMBER \$29
- LESS \$20 FOR ONLY ONE N/LETTER \$45

CEGSA MEMBERSHIP DOES NOT INCLUDE ASF FEES

YOU MUST PAY THE APPROPRIATE AMOUNT LISTED BELOW AS WELL AS CEGSA MEMBERSHIP FEES.

AUSTRALIAN SPELEOLOGICAL FEDERATION (ASF) FEES FOR 1999 (INCLUDES INSURANCE)

- FULL/ASSOCIATE/LIFE MEMBERSHIP \$24.50
- FAMILY MEMBERSHIP (2 people with only one Copy of "Australian Caver") \$42.00
- STUDENT MEMBERSHIP \$17.50
- FIRST YEAR MEMBERSHIP (with "Australian Caver") \$ 24.50
- FIRST YEAR MEMBERSHIP (without "Australian Caver:") \$ 5.00

JUNE MACLUCAS
MEMBERSHIP OFFICER.

Report on the Australian Speleological Federation Council Meeting.

The ASF Council Meeting was held on Friday 8th January 1999. The representatives of the various clubs were introduced and the meeting got under way.

Various issues, both big and small were discussed but I will list only a few here.

The Council has adopted the constitutional amendments proposed in the annual report, in that the ASF will register as an environmental organisation and establish a public fund which will be controlled by a number of publicly responsible people. The fund will be separate to the money used to run the Federation, and may contain a number of smaller funds with money allocated for special purposes.

Dean Morgan has retired as editor of *Australian Caver*. Sherry Mayo will be the new Editor.

It was agreed to accept the application to join the Federation of a new group called the Canberra Troglodytes. They are a small group of about 20 cavers, average age of 30 years. They have been attending meetings of the Canberra Speleological Society and they have expressed a desire to work in association with them as often as possible. Another group applying for re-entry into the Federation was NSW University Speleological Society, this was also accepted.

It was brought to the clubs representative's attention that when filling out Insurance Indemnity forms, that you do not refer to visitors as "members". ASF does not cover landowners for visitor's mishaps on caving trips. **The party is covered under a recognized leader, CEGSA is covered, but if someone tries to sue a visitor for an injury or damage to property, the landowners are not covered.**

There were various discussions on the Minimum Caving Code and Code of Ethics with proposed amendments to the ASF Safety Guidelines. The council voted for a review of both codes by August 1999, with the Conservation Convenors for each state and any other interested parties undertaking the review.

The proposed amendments to the Cave Diving – Code of Practice. (which existed as a draft code). These were proposed by the recognised ASF Cave Diving Group and have been discussed by those best qualified to do so. It was agreed that Peter Kraehenbuehl had presented an accurate guideline and that he was the best in this field. The amendments will be addressed at a later date.

The issue on codifying bolt laddering was raised and has been very actively pursued by Arthur Clarke and recently discussed in "*Australian Caver*" and subject to more recent submissions by SUSS and Rauleigh Webb. Arthur Clarke presented the recommended change to the Minimal Impact Caving Code but it could not be agreed upon and after some time was found to be going nowhere. It was decided to leave it for the moment, redraft it and present it again. Arthur had spent some time chasing this aspect and was not impressed at the outcome.

A motion was put forward "*That the ASF adopt the colour coded track marking system (developed in Western Australia) as a nation-wide standard*" Proposed: SRGWA. After some discussion for and against, it was agreed that this track marking system be accepted.

At the appropriate time I brought up the issue asked of me by George MacLucas and Gordon Ninnies on "*Artificial Caves and what are the aims and objectives expected by the ASF*". This created a bit of a laugh as no one present, with the exception of Lloyd Robinson, had heard that this was an area ASF had been dealing with. I presented the information I was given by George and it was decided that as they knew nothing about it, it would have to be discussed at the next ASF Committee Meeting. No further discussion was entered into.

An invitation from ACKMA for ASF to combine our Conference with them in May 2001 was rejected. UIS Congress will be held in Brazil in 2001 and should be held in Australia 2005.

The 23rd Biennial Conference of the Australian Speleological Federation will be held at Bathurst NSW in January 2001 and the 24th Biennial Conference will be held jointly by WA and SA in 2003. Norm

Poulter has been busy working out an idea that the Conference be held in Ceduna, Cave Dinner perhaps at Madura Road House or Norseman with caving on the Nullarbor. This is all subject to change but it could be interesting.

The new ASF Executive Committee is: Peter Berrill, President, with Kevin Cocks, John Dunkley, Phil Lardner, Chris Riley. Continuing Members of the executive: Peter Dykes, Heather Jeffries, Angus MacCoun and Jill Rowling. The next Council Meeting at Cathy Brown's in Canberra 29th January at 9.00am

June MacLucas.

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Corrections to the “Dynamic vs Static Ropes in Caving” Article

All the text is OK but the tables 1, 3 and 4 have a few errors.

For some reason virtually most of the $\leq$ (less than and equal to) and the $\geq$ (greater and equal to) printed as small boxes.

Table 1

1. The row AS 4142.3-1993:-
 - Elongation with 80kg should have been $\leq$ (less than and equal to) 3%.
 - Elongation at break should have been $\geq$ (greater than or equal to) 20%.
 - Breaking load (No knot) should have been $\geq$ (greater than or equal to) 3000kg.
 - Number of falls held should have been $\geq$ (greater than or equal to) 2 for FF1.7.
2. The row EN 1891-1997:-
 - Breaking load (No knot) should have been $\geq$ (greater than or equal to) 22kN for Type A and $\geq$ (greater than or equal to) 18kN for Type B respectively.
 - Number of falls held should have been $\geq$ (greater than or equal to) 5 FF1.0 100kg for Type A and $\geq$ (greater than or equal to) 5 FF1.0 80kg for Type B respectively.

Table 3

Low Stretch (static) column:-

- 2% to 4% elongation under 80kg mass (pre EN 1891). $\leq$ (less than or equal to) 5% elongation under an increase of load from 50kg to 150kg (EN 1891). Should have been less than or equal to 5% not a box.

Table 4

I had some of the test mass figures in the wrong rows.

1. The row EN 1891-1997:-
 - Peak Force & Test Mass (Fall Factor 0.3) (daN) for Type A should have been $\leq$ (less than or equal to) 6kN FF0.3 (100kg) 0.6m fall 2.0m rope and for Type B $\leq$ (less than or equal to) 6kN FF0.3 (80kg) 0.6m fall 2.0m rope.
 - Number of Falls $\geq$ (greater than or equal to) 5 FF1.0 (FF1) for Type A should have been $\geq$ (greater than or equal to) 5 FF1.0 100kg and for Type B $\geq$ (greater than or equal to) 5 FF1.0 80kg.
 - Strength with Figure 8 Loops for Type A should have been $\geq$ (greater than or equal to) 15kN (Fig 8) and for Type B $\geq$ (greater than or equal to) 12kN (Fig 8).

I believe this is all the corrections to the article.

David Trehearne

NOSTALGIA CORNER

NEWS FROM PAST N/LETTERS

10 YEARS AGO [34#1 Apr 1989]

- In 9 pages of trip reports from Borneo, NSW and Tasmania, there is not one word about South Australian caves.

20 YEARS AGO [23#5 Mar 1979]

- Jim Cundy gave us the first news about the limestone mine threat to Mount Etna caves near Rockhampton in Queensland.

30 YEARS AGO [APR-JUN 1969]

- A report of "Blind White Fish" being found in a Nullarbor cave is presumed to be an invention.

40 YEARS AGO [9 Feb 1959]

- Membership fees for CEGSA are | 1 (\$2) and associates 10/- (\$1). Those were the days, my friend. (We thought they'

HISTORICAL ITEM

70 YEARS AGO

- First commercial flight across the Nullarbor in May 1929 via Adelaide, Ceduna, Forrest, Kalgoorlie and Perth.

Max G Meth

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LIBRARY AND RECORDS UPDATE

To start the year I have presented the CEGSA Periodical List completed at the end of 1998 and follows this report for your perusal.

Already the new year has seen the purchase of two new books.

1. *"Malaysian Cave Bibliography"* by Liz Price, A bibliographical detail of worldwide papers related to the caves and karst of Malaysia, including archaeology, flora and fauna, speleo, cultural history and geospeleology.
2. *"Tracks, Scats and Other Traces, a Field Guide to Australian Mammals"* by Barbara Triggs. A very handy book full of comparative pictures of mammals tracks, scats etc. A must, we bought our own copy.

George Driscoll, manager of Scout Outdoor Centre, Adelaide, donated a copy of *"Environment SA"* Vol. 7/No.3, 1998, for our files as there is an article by CEGSA Life Member Peter Horne on South Australian Waterfilled Caves.

I also donated an article for the monographs, *"Cave Women of China- 40 million people live in caves dug into hillsides"*. "These underground dwellers cook, shop, go to school, worship and marry in semi-darkness, yet despite the lack of fresh air, privacy and running water, many who leave their subterranean village, long to return". By Alan Sid.

Thanks to Graham's know how, June can now retrieve references to caves from a CD-ROM - *The Complete National Geographic*, dating back to 1888 (an anniversary present from George in 1997). So far we have;

- 1901 *"Ice Caves and Frozen Wells"*.
- 1906 *"The Luray Caverns"*- Virginia.
- 1909 *"The Ruins of Tsankawi – Cliff Dwellers"*.
- 1911 *"Peculiar Caves of Asia Minor – The Mole Men"* .
- 1915 *"Impressions of Palestine"*.

There are still over a 100 articles to print.

The next working bees will be held on the 13th and 27th March; 15th and 29th May 1999. Please note that there are no working bees in April. All welcome to come along and help.

GEORGE MACLUCAS

LIBRARIAN AND RECORDS OFFER.

PERIODICALS LIST – CEGSA LIBRARY

Periodical	Status	Latest Issue	Exhib/Sub	Type	Title	Organisation	Location	Language
P1		97	E	N/letter	Western Caver	WASG	WA	
P2		98	E	N/letter	Guide Lines	CDAA	Australia	
P3		97	E	Bulletin	Caves and Caving	BCRA	England	
P4		88	E	N/letter	NEWS	National Association for Cave Diving	USA	
P5		98	E	N/letter	Nargun	Victorian Speleological Association	Vic	
P6		98	E	N/letter	Speleospiel	Southern Tasmanian Caverneers	Tas	
P7	Library+ Record s+Bounded	97	G	Annual Report	Annual Report	CEGSA	SA	
P8		93	E	N/letter	Spar	University of NSW Speleological Society	NSW	
P9	cf P103	98	E	N/letter	NSS News	National Speleological Society	USA	
P10		95	G	Bulletin	Ipoantropo	Speleologico aletriologico Gaetane Enicia	South America	
P11	cf P49	97	E	Bulletin	UIS Bulletin	UIS	World : Austria	
P12		77	G	Mag.	Descent	The Mag. for Cavers	England	
P13	defunct	72	D	N/letter	Australian Bat Research	CSIRO	ACT	
P14		96	E	Mag.	Speleological Emiliana	Rivisto Italiano Di Speleologio	Italy	Italian
P15		96	G	Mag.	Mondo Sotterraneo	Mondo Sotte	Italy	Italian
P16		90	G	Bulletin	Bulletin	CROSA	South Africa	
P17		77	G	Journal	Studies in Speleology	William Pengelly Cave Studies Trust	England	
P18		98	E	Mag.	Stalactite	Swiss Speleological Society	Switzerland	
P19		71	G	Journal	The Canadian Caver	The Canadian Caver	Canada	
P20		98	E	Journal	Der Frankische Hohlenspiegel	Forschungsgruppe Hohle und Karst Franken	Germany	German
P21		80	G	N/letter	The Free Caver	The Free Caver	South Africa	
P22		92	S	abstracts	Current Titles in Speleology	BCRA	England	
P23		68	G	Journal	The Caver	Northern Cave Club	England	
P24		98	E	N/letter	Tandanya	Adelaide Bushwalkers Club	SA	
P25		95	S	Journal	Helictite	Speleological Research Council Ltd	Australia	
P26		95	E	N/letter	Speleograffiti	NUCC	ACT	
P27	defunct	97	D	N/letter	Southern Caver	Southern Caving Society	Tas	
P28		86	E	N/letter	N/letter	Central West Caving Group	NSW	
P29		97	E	N/letter	FUSSI	Flinders Uni Speleological Society	SA	
P30	CF P70	98	E	N/letter	Australian Caver = ASF Newsletter	ASF	Australia	
P31		95	D	N/letter	Troglodyte	Northern Caverneers	Tas	
P32		97	E	Journal	MUCG-Raker	Macquarie Uni Caving Group	NSW	
P33		98	S	Journal	Journal	Australasian Cave and Karst Mang Association	Australasia	

P34		98	E	N/letter	Cave In	CAVEX	SA
P35		97	G	Journal	Hostelling	Youth Hostel Assoc	SA
P36		98	S	Mag.	Underground Photography	BCRA	England
P37		95	E	Journal	Now and Then = SEVAC	Endeavour Caving and Recreational Club	NSW
P38		98	E	Journal	Journal	Axbridge Caving Group	England
P39		98	E	N/letter	Trog	Kempsey Speleological Society	NSW
P40		97	E	N/letter	Cavers Chronical	SRG of WA	WA
P41		98	E	N/letter	Annual Report	Chillago Caving Club	Qld
P42		98	S	N/letter	Compass Point	BCRA	England
P43		98	E	N/letter	N/letter	Illawarra Speleological Society	NSW
P44		97	E	Journal	Oolite	Blue Mountains Speleological Club	NSW
P45	OF P137	97	E	N/letter	N/letter	Hills Speleology Club	NSW
P46		95	E	N/letter	Calcite	Highland Caving Club	NSW
P47	P129,138	98	E	Journal	Journal	Sydney Speleological Society	NSW
P48		98	E	Bulletin	Bulletin	SUSS	NSW
P49	cf P11	96		Journal	Die Hohle	UIS	Austria
P50		98	G	Journal	OCARSTE	Grupo Bambui de Pesquisas Espeleologicas	Brazil
P51		97	G	Journal	Pholeos	Wittenberg Uni Speleological Society	USA
P52		98	S	N/letter	Cave Radio and Electronics Group	BCRA	England
P53	Library+ Record s+Bounded	98		N/letter	NEWS = N/letter	CEGSA	SA
P54		98	E	N/letter	N/letter	Chelsea Speleological Society	England
P55	cf P97	97	E	N/letter	Hybrid	Field Naturalist Society of SA	SA
P56		96	G	N/letter	Inside Earth	Reflektor	Germany
P57		76	G	Journal	Inside Earth	The Speleo Press	USA
P58 ?		83	D	N/letter	Grothadda	Campbelltown Caving Club	NSW
P59		88	E	Annual Report	Annual Report	SA Underwater Speleological Society	SA
P60		95	G	Journal	Scout Caver	Scout Caving Group	SA
P61	cf P122	95	E	Journal	Journal	Metropolitan Speleological Society	NSW
P62		94	D	Bulletin	The Bulletin	South African Speleological Association	South Africa
P63		94	E	Mag.	The Explorer	Central Queensland Speleological Society	Qld
P64		96	G		South Australian Outdoors	Foundation SA	SA
P65		95	G	Mag.	Environment SA	Conservation Council of SA	SA
P66		97	G	N/letter	N/letter	Friends of the Flinders	SA
		98	G	Journal	Back Packer Essentials	YHA	Australia
P68		98	G	catalog	Wildsports	Wildsports	Australia
P69		97	D	N/letter	N/letter	International Society for Speleological Art	England
P70	CF P30	62	D	N/letter	Cave Management N/letter	ASF	Australia
P71	defunct	70	D	N/letter		Newcastle Speleological Association	NSW
P72		79	E	N/letter		Canberra Speileological Society	ACT

P73	defunct	71	D	N/letter	CAVE	Newcastle Uni Speleological Society	NSW	
P74	defunct	77	D	N/letter	Bermagui Caver	Bermagui Caving Club?	NSW	
P75	?	96	E	N/letter	Mulga Wire	Barrier Rangers (Broken Hill)	NSW	
P76	defunct	62	D	N/letter		Darwin Speleological Group	NT	
P77	defunct	86	D	Journal	Chunder	Adelaide Uni Mountaineering Club	SA	
P78	defunct	82	D	N/letter	NIUGINI CAVER	PNG Caving Group	PNG	
P79	?	71	D	N/letter	N/letter	CRG of Great Britain	England	
P80	defunct	69	D	N/letter	Speleologist	DCR Publishing	England	
P81	defunct	75	D	Bulletin	Bulletin	Peninsular Speleological Group	NSW	
P82	defunct	79D		N/letter	Aragonite	St George Area Caving Team	NSW	
P83 ?		67	D	Journal	Caves and Karst =Caves Notes	Research in Speleology	USA	
P84?		59	D	N/letter	The Australian Amateur Mineralogist		Australia	
P85	defunct	47	D	Journal	The British Caver		UK	
P86 ?		78	G	Journal	NOTIZIARIO	Roma Speleological Club	Italy	
P87 ?		82	G	Mag.	ECOS	CSIRO	Australia	
P88		92	E	Journal	Speleopod	Savage River Caving Club	Tas	
P89 ?		81	D	N/letter	Bull and Bush	Monash Uni Bushwalking Club	Vic	
P90		81	D	Mag.	Caving International	Caving International Mag.	Canada	
P91		78	G	Mag.	Habitat	Australian Conservation Foundation	Australia	
P92		86	G	Journal	Wilderness News	Wilderness Society	Australia	
P93		81	D	N/letter	Natural History	Natural History Society of SA	SA	
P94		82	D	N/letter	The Fund for Animals	The Fund for Animals	Australia	
P95		82	D	Mag.	The Living Australia	Bay Books	Australia	
P96	CF 162	85	G	Journal	Environmental Planning	Department of Environment and Planning	Australia	
P97	cf P55	96	G	Journal	The SA Naturalist	The Field Naturalist Society of SA	SA	
P98		84	G	Journal	National Geographic	National Geographic Society	USA	
P99		56	D	Mag.	Walkabout	Australian Geological	Australia	
P100		83	D	Journal	Sound	Australian Geographic Society	Australia	
P101	defunct	78	D	N/letter	N/letter	Australian Conservation Foundation	Australia	
P102		98	E	N/letter	The Doline	Caving Club of Victoria	Vic	
P103	P9,P14 2	98	E	Journal	Journal of Caves and Karst	NSS	USA	
P104		96	G	Journal	Speleologia	Semestrata della so ciete speleologica	Italy	Italian
P105		97	G	N/letter	Between Friends	Friends of Buchan Caves	Vic	
P106		93	D	Bulletin	KIDSA	CEGSA	SA	
P107		93	D	Journal	Laichiyer Mchlenfrend	Zeitschisfd fur Karst und Hohlenkunde	Holland	
P108		67	D	N/letter	Victorian Naturalist	Field Naturalist Club of Victoria	Vic	
P109		68	D	N/letter	Naturalist News	Western Australia Naturalist Club	WA	
P110	P116-111	60	G	Bulletin		Geological Survey/Dept of Mines	SA	
P111	P110-116	66	G	Journal	Mining Review	Dept of Mines	SA	

P112		61	G	Bulletin	Bulletin	Dept of Geology ?? State Maryland	USA	
P113		54	D	Journal	Soils & Land Use	Division of Soils, CSIRO	Australia	
P114	defunct	78	D	N/letter	CTCG N/letter	Capital Territory Caving Group	ACT	
P115	defunct	83	D	N/letter	Downunder	UQSS	Qld	
P116	P110-111	67	G	Annual Report	Annual Report	Dept of Mines	SA	
P117		81	D	Journal	Transactions	BCRA	England	
P118		78	D	Bulletin	Bulletin	BCRA	England	
P119		63	D	Journal	Biological Records	CRG of Great Britain	England	
P120		83	D	N/letter	Labyrinth	NSWITSS	NSW	
P121		95	G	Bulletin	Exploration Geophysics	Australian Society of Exploration Geophysicists	Australia	
P122	cf P61	95	D	N/letter	N/letter	MSS	NSW	
P123	defunct	80	D	N/letter	Decent	OSS	NSW	
P124		98	G	Mag.	GEO	GEO Publications	Australasia	
P125		68	D	Mag.	Rucksack	Rucksack Mag.	NSW	
P126		77	D	Mag.	Karst in Barland	Karst Budapest		
P127		97	G	Journal	Australian Geographic	Australian Geographic Society	Australia	
P128		98	G	N/letter	Abercrombie Beacon	Abercrombie Caves	NSW	English
P129	cf P47	98	E	Bulletin	Bulletin	SSS	NSW	English
P130		96	D	Annual Report	Annual Report	SAUSS	SA	English
P131		97	G	N/letter	Outdoor Update	Outdoor Recreation Council of Australia = ORCA	Australia	English
P132		97	G	N/letter	Recreation Mutters	Aust Council for Healthy Physical Ed & Rec = ACHPER(SA)	SA	English
P133		94	G	N/letter	SARA NEWS	SA Registration Mag.	SA	English
P134	cf P9	94	D	Manual	Members Manual	NSS	USA	English
P135		80	G	N/letter	NCSSA N/letter	Nature Conservation Society of SA	SA	English
P136		85	G	N/letter	FOSAM	Friends of the SA Museum	SA	English
P137	cf P45	85	D	Journal	ANTHODITE	Hills Speleo Club	NSW	English
P138	cf P47 & P129	70	D	Abstract	Australian Speleo Abstract	SSS	NSW	English
P139		65	G	Journal	Proceedings of the Royal Society of Victoria	Royal Society of Victoria	Vic	English
P140		70	G	Journal	Proceedings Royal Society of Aust	Royal Geo Aust SA Branch	SA	English
P141		49	G	Bulletin	Transaction of Royal Society of SA	Royal Society of SA	SA	English
P142	cf P9 & P103	65	G	Mag.	Speleo Digest	National Speleo Society	USA	English
P143		42	G	Bulletin	Bulletin of Soils Tasmania	Comm of Aust Council for Scientific & Ind Res	Aust	English
P144		90	D	Journal	Tasmania Cave & Karst	Tasmanian Cave & Karst Research Group	Tasmania	English

P145	78	G	Journal	Kras Ispeleologia	University of Skask kalowice	CZECHO- SLOVAKIA	CZECH
P146	92	G	Journal	SLOVENSKY KRAS	ACTA CAR SOLOGICA SLOVACA	CZECHO- SLOVAKIA	English
P147	91	G	Journal	STVDIA GEOLOGICA SALMATICENSIA	EDICONES UNIVERSITY DE SALAMANCO	ITALY	ITALIAN
P148	81	G	Journal	SPES	GRUPO DE ESPELEOLUGOS GRANEDA GRANODINOS	SPAIN	Spanish
P149	76	G	Journal	ENDINS	D'ESPELEOLOGIA COMITE BALEAR MALLORCA	SPAIN	Spanish
P150	83	G	Mag.	LEIZEAK	ESPELEOLOGRAK EUSKO BATZORDEA	SPAIN	Spanish
P151	83	G	Journal	NOTIZIARIO	SPELEO CLUB CHIETI	ITALY	Italian
P152	79	G	Mag.	NVOVA SPELEOLOGIA	CONGIES NATIONAL DI SPELEOLOGIA PERUGIA	ITALY	Italian
P153	81	G	Annual Report	DEPROFUNDIS	GRUPPO SPELEOLOGICO VALSERIANA BG	ITALY	Italian
P154	79	G	Journal	MUIGIA SOTTERIANEA	GRUPPO SPELEOLOGICO MARTINESS FRANCA	ITALY	Italian
P155	84	G	Journal	MONDO IPOGEO	GRUPPO SPELEOLOGICO ALPI MARITTIME CUNEO	ITALY	Italian
P156	90	G	Journal	ILGROTTESCO	BOLLETTINO DEL GRUPPO GROTT MILANO	ITALY	Italian
P157	80	G	N/letter	NOTIZIARIO SOCIALE	CLUB ALPINO ITALOANO VENETO	ITALY	Italian
P158	94	G	N/letter	XANTHOPUS	NATURE CONSERVATION SOCIETY OF SA	SA	English
P159	67	G	Mag.	THE SPELEOLOGIST	DCR PUBLISHING CO LTD	England	English
P160	67	G	N/letter	THE FOSSICKER	ADELAIDE GEM AND MINERAL CLUB	SA	English
P164	98	G	Publ/ctn	INSIDE CLINC	CAVER'S LEEUWIN INC	WA	English
P161	93	D	Journal	RESEARCH GROUP E	TASMANIAN CAVE & KARST RESEARCH GROUP	TAS	English
P162	cf 96	G	Annual Report	ANNUAL REPORT	SANDY BAY DEPT OF ENVIRONMENT & PLANNING	SA	English
P163	98	G	Catalog	CATALOGUE	MARCOM PROJECTS	QLD	English
P165	98	G	Journal	UNDERWATER SPELEOLOGY	NSS CAVE DIVING SECT	USA	English
P166	13	G	Annual Report	ARTESIAN WATER RESOURCES OF SA	GOVERNMENT GEOLOGICAL	SA	English

E=EXCHANGE
G=GIFT
S=SUBSCRIPTION
D=DEFUNCT

BACK TO EUCLA

There is going to be a "Back to Eucla" celebration on the weekend of 29-30 May 1999. The main reason being the Gurney family. They arrived in Australia in 1849 and settled at Eucla and Koonalda and other places. The organiser (who is looking for historical photos and stories) is: Reva Best, Lot 4 Honeyeater Drive, Walligan Qld 4655 phone 07 4128 7943. If anyone has info, they could pass it to me.

Max Meth

INDEX TO VOLUME 43

Volume 43 contained the following issues:

- 43 (1) February 1998
- 43 (2) May 1998
- 43 (3) August 1998
- 43 (4) November 1998

The index is divided into the following categories

Caving activity by region

Technical and Other articles

Key to abbreviations used in this index

B	Biological	Bo	Botanical
D	Description	Di	Diving
E	Exploration	F	Fantasy
H	History	L	Locate
M	Map	P	Photography
Pa	Palaeontology	S	Surveying
Sc	Scientific	SR	Search & Rescue
T	Tourist	Tg	Tagged
Tr	Training	W	Work

CAVING ACTIVITY

Caving activities are listed by Cave Number, Newsletter Reference, Author, and Type of activity.

ADELAIDE HILLS

No Trips

EYRE PENINSULA

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E18	43 (2) p41	D Gillieson	D

FLINDERS RANGES

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F10	43 (4) p103	K Ninnes	
F12	43 (3) p72	B Binks	L, S
	43 (4) p101	K Ninnes	W
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	43 (3) p72	B Binks	L, P, S, Tg
F78	43 (3) p72	B Binks	L, P, Tg
F81	43 (1) p5	E Rubessa	
F83	43 (1) p5	E Rubessa	B
F85	43 (2) p37	K Ninnes	T
F86	43 (2) p37	K Ninnes	T
F99	43 (2) p38	K Ninnes	L, S
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F131	43 (1) p5	E Rubessa	B, D
F132	43 (1) p5	E Rubessa	D, L
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F134	43 (1) p5	E Rubessa	D
F135	43 (1) p5	E Rubessa	D
F136	43 (1) p5	E Rubessa	D
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L9	43 (1) p11	P Horne	T
L21	43 (1) p4	S Milner	T
L23	43 (1) p4	S Milner	T
L23	43 (4) p101	S Bourne	T
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	43 (3) p63	D Grindley	T
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L74	43 (4) p101	S Bourne	
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N1495	43 (3) p66	M Meth	D
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MH 139 (Thailand)	43 (1) p6	M Sefton	D, E
MH 140 (Thailand)	43 (1) p6	M Sefton	D, E
MH 141 (Thailand)	43 (1) p6	M Sefton	D, E
MH 142 (Thailand)	43 (1) p6	M Sefton	D, E
MH 66 (Thailand)	43 (1) p6	M Sefton	D, E

TECHNICAL AND OTHER ARTICLES

Technical and Other Articles list the Title of the article, Author and the Newsletter reference.

Cave names	K Mott	43 (2) p56
Celebation in Abercrombie Cave	J MacLucas	43 (1) p15
Dynamiv vs static ropes in caving	D Trehearne	43 (4) p107
Flinders Ranges update	B Binks	43 (3) p82
Fossil research at Naracoorte	L Reed	43 (4) p114
Gating of Glendene Park Cave (L238)	K Mott	43 (1) p13
Heavy rain in the lower South East	F Aslin	43 (4) p114
Index - Volume 42		43 (1) p20
Jumped from train	F Aslin	43 (4) p106
It's winter and time to avoid bats	T Reardon	43 (3) p76
Naracoorte happenings	S Bourne	43 (2) p41
New caving gear for hire	P Alvaro	43 (1) p16
Nostalgia corner	M Meth	43 (1) p19

Nostalgia corner	M Meth	43 (3) p84
Nullarbor field books (D Lowry)	M Meth	43 (4) p115
Obituary - P Blackmore	F Aslin	43 (2) p54
Obituary - Jack Little	F Aslin	43 (2) p53
Obituary - Meredith Smith	N Pledge	43 (3) p74
Obituary - Harry Wheeler	M Meth	43 (1) p18
Shortcuts for geology in the pipeline	F Sanders	43 (2) p33
Speleo Art	J MacLucas	43 (3) p77
Spirit of Caving - award design		43 (3) p61
The beginnings of CEGSA	E Hamilton Smith	43 (1) p12
The beginnings of CEGSA	G Gartrell	43 (2) p39
The other side of caving (prologue)	F Aslin	43 (2) p42
The other side of caving (pt 1)	F Aslin	43 (3) p73
The other side of caving (pt 2)	F Aslin	43 (4) p106
The sea caves of Talia	D Gillieson	43 (2) p40
The story behind the survey		43 (2) p55

Kevin Mott

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APPROVED TRIP LEADERS

Following is a list of CEGSA members that are approved by the committee to lead trips in the category stated. The categories are H – Horizontal, V – Vertical(ladder) and SRT – Single Rope Techniques.

BINKS Bill	H V SRT	KRAEHENBUEHL Peter	H V SRT
CHOI Marie	H V SRT	MACLUCAS George	H V SRT
GARTRELL Grant	H V SRT	MACLUCAS June	H
GHEUDE Julius	H	MILNER Steve	H V SRT
GRINDLEY Damian	H V SRT	PILKINGTON Graham	H V
HARPER Paul	H V SRT	RICHARDS Ian	H V SRT
HANKINSON Frank	H V SRT	SEFTON Mark	H V SRT
HUBYCZ Anne-Marie	H	SZABO Tom	H V
JACKSON Athol	H V	WOODCOCK Gary	H V SRT
KENDRICK Simon	H V SRT		

These are the only members authorised to lead official CEGSA trips and hire equipment.

If your name is not on this list and you wish to lead trips please see Frank Hankinson to arrange to be approved by the committee. This is a requirement of our insurance that we be competent.

Frank Hankinson

SAFETY OFFICER

CORRA-LYNN

Caving Weekend and B.B.Q.

Saturday May 8th

Come along and cave, meet, eat and be merry. All Cegsa Members and Visitors Welcome. Caving starts from 9am B.B.Q. at 3pm. So come along bring your grub and gear. Frank will be loaning us his large B.B.Q. If you need to hire gear ie: helmets or lights .(batteries not included) contact Simon at the Scout Shop.
A Cost of \$3 per person is required to cover gas, key hire and group gear.

If you require 4.5 volt batteries a small number will be for sale @ \$5 each contact Marie for details.

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GO BATTY WEEKEND

Queens Birthday Weekend June 12th-14th

All Cavers and Caving Clubs Welcome (even some of you old guys)
Help Kevin Mott and Fred Aslin out with a winter bat count in the South East and then get together in the evenings for a BBQ.

Im told its great fun for young and old.

Contact Marie for more details. If you cant make that weekend Kevin and Fred would appreciate your help at other times so give them a call.



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Joint Club Training Days.

FUSSI extends an invitation to all S.A. Caving clubs to join them on the university foot bridge for vertical training and practice. BYO gear and lunch (there are no shops nearby)

If you need to hire gear contact your respective club Quatermasters.

Sunday May 9th 10am - 4pm

Sunday August 1st 10am - 4pm

The footbridge is located near carpark 6 at Flinders University, Just follow the signs. If you need more info contact Marie Choi on

019 696 299