

CEGSA NEWS

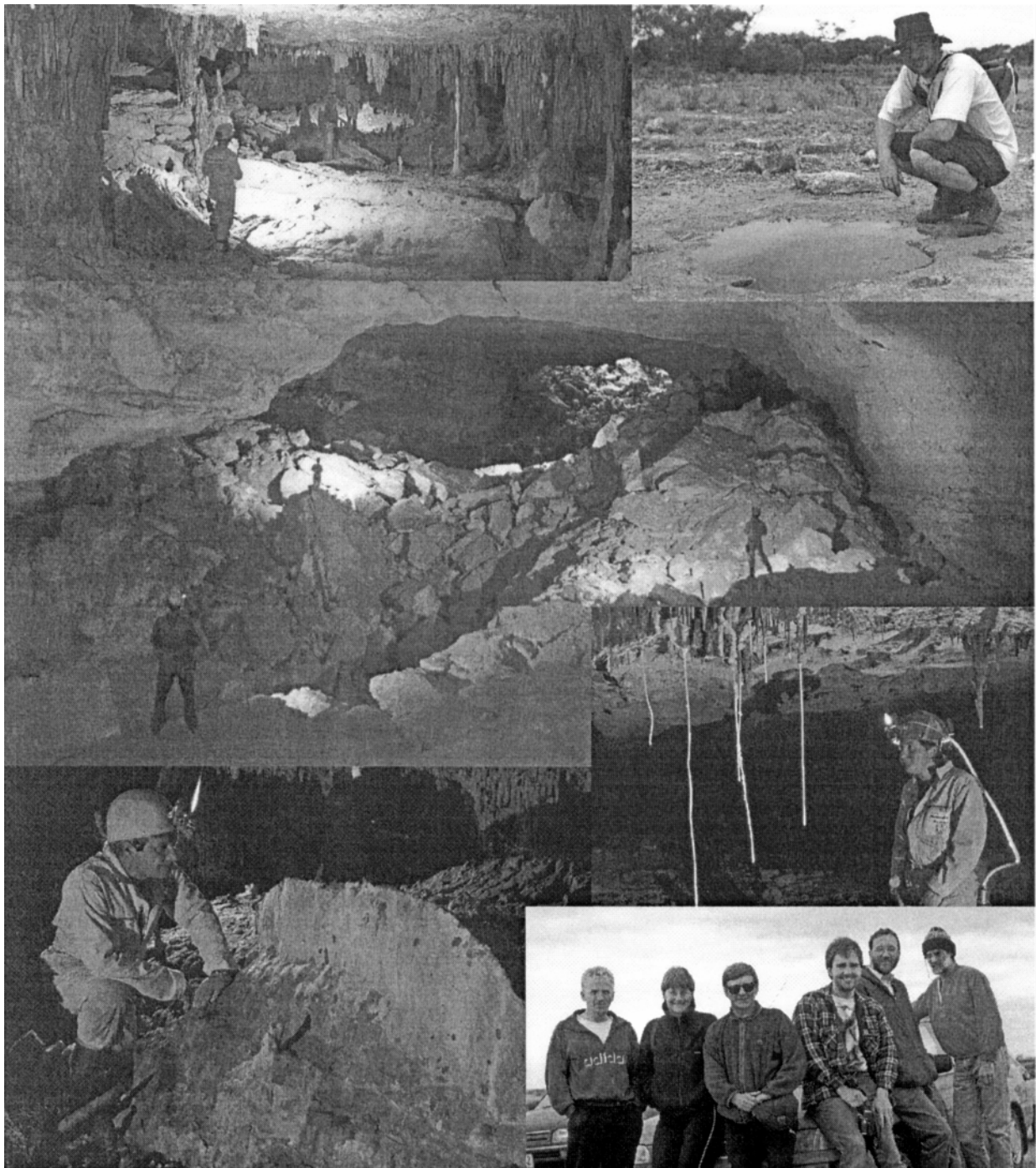


Newsletter of the Cave Exploration Group of South Australia Inc.

Volume 42 Number 1

Issue 165

FEBRUARY 1997



CAVE EXPLORATION GROUP SOUTH AUSTRALIA Inc.

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

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

1997 Committee

President	Janine Kraehenbuehl	(H) 8278 4531	
Secretary	Peter Horne	(H) 8295 6031	(F) 8295 6031
Treasurer	June MacLucas	(H) 8261 4180	
Training	Marie Choi	(H) 8322 0895	(W) 8326 1777
Safety	Frank Hankinson	(H) 8322 4300	
Quartermaster / Visitor Liaison	Pam Alvaro	(H) 0412100671	
Research Coordinator	Steve Milner		(W) 8303 8904
Museum Representative	Neville Pledge	(H) 8272 5483	(W) 8207 7454

Other Office Bearers

Public Officer / Membership	Graham Pilkington	(H) 8396 3044	(W) 8396 3044
Key Holder	Simon Kendrick	(H) 8331 3750	(W) 8223 5544 (F) 8223 5347
Librarian / Records	George MacLucas	(H) 8261 4180	
Publication	Athol Jackson	(H) 8337 8759	
Trip Liaison (Logbook) & Refreshments	Fern Raintree	(H) 8388 6441	(W) 8212 6030
Cave Access Records	(to be appointed)		
Speaker / Presentation Coordinator	(to be appointed)		

Representatives

Australian Speleological Federation	Janine Kraehenbuehl	(H) 8278 4531	
(four positions, two vacant)	Graham Pilkington	(H) 8396 3044	(W) 8396 3044
S.A. Speleological Council	Graham Pilkington	(H) 8396 3044	(W) 8396 3044
(two positions)	Janine Kraehenbuehl	(H) 8278 4531	
Caving Leadership Standards			
Working Group	Marie Choi	(H) 8322 0895	(W) 8326 1777
Cave Management Committee	(to be appointed)		

Front Cover Photographs - all by Steve Milner (clockwise from top-left):

1. Sleepy Lizard Chamber in Bug Hole 6N1426.
2. Nigel Dobson-Keeffe at Rockhole 6N1429.
3. Gallop Chamber in Carlisle Cave 6N707.
4. Deb Limbert admiring halite straws in Bug Hole 6N1426.
5. Trip members (from left to right): Steve Milner, Deb Limbert, Howard Limbert, Nigel Dobson-Keeffe, Mark Sefton and Max Meth.
6. Howard Limbert and Stegamite in Bug Hole 6N1426.

CONTENTS

Volume 42 Number 1
Issue 165
FEBRUARY 1997
CONTENTS
Page
EDITORIAL

Athol Jackson 3

LETTER TO THE EDITOR

Max Meth 3

TRIP REPORTS

A Successful Nullarbor Caving Trip Steve Milner 4

Lower South East – Cave Photography Training Trip Dave Glowacki 13

Upper South East – The Unexplained! Damian Grindley 13

 Lower South East – Xmas Party at Whiskas Marie Choi and
Damian Grindley 14

Nullarbor – With WASG Damian Grindley 15

Upper South East – The Extraction of the Holy Cow Peter Horne 16

TECHNICAL AND OTHER ARTICLES

Bat Lyssavirus and Cavers Terry Reardon 19

Library and Records Update George MacLucas 20

Nostalgia Corner Max Meth 21

Membership Graham Pilkington 22

Index To Volume 41 Kevin Mott 22

For Sale Damian Grindley 26

The deadline for copy or background material for Volume 42 Number 2 (Issue 166) must reach the Editor by Wednesday 14th May 1997. Material not meeting this deadline may be retained for possible use in a following issue. The preferred method of submission is on IBM compatible floppy disk.

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

EDITORIAL

Welcome to a brand new year and volume of CEGSA NEWS. I hope you all had a good Christmas and New Year and did lots of caving so that you can submit lots of articles for the magazine.

The Annual General Meeting has been and gone and we have a new committee to guide us through the coming year. We wish them well and thank them for their commitment to the Group. We also wish to thank the past committee for the work they put into the group over the past year.

The miracle of miracles has happened – we have at last, after about two years, received an issue of AUSTRALIAN CAVER, the journal of the ASF. It is somewhat biased toward Tasmania but this is due to the material available to the new editor at the time. Future issues should have a much broader base as he receives articles from around the country. Maybe we will at last be able to get some return for our ASF fees, as there has been very little return in the past couple of years.

Over the past few months I have been binding the past issues of the CEGSA Newsletters and Annual Reports. This is now almost complete except for one issue, which is missing. At this stage I have not been able to find a copy of the missing issue. The missing one is February 1968, edited by Bernie Dunn (I think). If someone has a copy to lend me so I can copy it or supply me with a copy I would very much appreciate it and it would make the records complete.

The Royal Society meeting room will not be available for the May and November meeting dates so if anyone knows of a cheap meeting place in the city that may be available could they please let a committee member know. If you have not been advised where the May meeting is could you please contact a committee member as to the location. We will attempt to advertise the November one in a future issue of CEGSA NEWS.

Don't forget the ASF Conference at Quorn, in the Flinders Ranges from the 29th of March until the 3rd of April. It should be a good bash. See you there.

Athol.

%%%%%%%%%

LETTER TO THE EDITOR

Dear Athol

Some thoughts on trip reports.

Under Rule 10(b) , "a written trip report must be submitted to the Committee within three months of the completion of the trip." I think we have all been guilty of not writing trip reports at one time. But without trip reports, any appearance that CEGSA is a scientific organisation is pretty precarious. I think (seriously) that trips should be divided into 2 categories, at the time they are put in the Log Book. And Rule 10 would need to be amended.

(a) Trips where it is proposed that a trip report will be written.

(b) Tourist trips where there is no realistic expectation that a trip report will ever be written. No one on it intends to do any recording of the events.

That way, the CEGSA committee can have a way out of the dilemma that currently exists, namely, that they have to reprimand trip leaders that do not submit reports.

But seriously, it would be preferable that trip reports be submitted for all trips. Maybe trip leaders that have not submitted reports for past trips should be barred from leading any future trips. But that would mean there would be no more trips.

Just what is the expectation of members ??

And there is nothing to stop any member of a trip from writing a trip report. It is NOT a privilege reserved for the trip leader.

Cheers

Max Meth

21 Jan 1997

TRIP REPORTS

A Successful Nullarbor Caving Trip, October 1996

compiled and edited by Steve Milner

Introduction by Steve Milner

"Boys" he said, "I'm sorry, but I'm not going on." This quote was from M. Keith Quartermain's account of the December 1951 - January 1952 Nullarbor Expedition called *The Inland Sea*. But who would guess that nearly 45 years later, very similar words were spoken and resulted in the loss of a vehicle and a valued team member.

Way back in 1951/2, the expedition loaded the truck with all the gear, the supplies and the petrol and headed out to the Nullarbor. Only when they were halfway out and they lost a tyre did the owner-driver unilaterally decide that he was going home. So, they dumped some gear, and went home. The driver went his merry way, but the stalwarts bounced back in an ancient and inadequate car but completed a most successful expedition, breaking new ground on the Nullarbor.

In 1996, the circumstances that resulted in the modern-day owner-driver turning around at Port Augusta were somewhat different, but the outcome was the same. A laden trailer was left at a Roadhouse in Port Augusta. The plan was to return to Adelaide, dump the car, replace it with another and restart the Nullarbor Trip, losing only 24 hours. That was the plan, but the owner-driver spat the dummy and stayed at home.

Nigel Dobson-Keeffe, who had travelled down with the nameless driver, quickly collected his own car, some of the gear, then rescued the trailer and saved its bloated guard (Mark Sefton) from boredom and over-eating in Port Augusta. A few hours later, they rejoined Steve Milner, Howard Limbert and Deb Limbert who were waiting at Max Meths' place in Ceduna. Early on Sunday the 6th October 1996, the Trip started in earnest.

Even though we lost a full day and had only six days left on the Nullarbor, we had a most successful trip. We tagged 17 new karst features and explored, surveyed 2.5km of cave and photographed five significant caves in the vicinity of the Mundrabilla Property.

This report of the October 1996 Trip to the Nullarbor includes:

- *A Daily Account of the Activities of the Group by Max Meth.*
- *Cave Description and Survey of Kangaroo Kruncher Cave by Nigel Dobson-Keeffe.*
- *Cave Descriptions and Surveys of Swift Hole, Bleeding Pit, Bug Hole, Skases Delight Cave and Carlisle Cave by Steve Milner.*
- *The Discovery and Exploration of Carlisle Cave by Dave Hall.*
- *Concluding Remarks on the Exploration of Nullarbor Caves in October 1996 by Steve Milner.*

Daily Account of Activities by Max G. Meth

Sunday 6th October to Sunday 13th October 1996.

Max Meth, Steve Milner, Nigel Dobson-Keeffe, and Mark Sefton: CEGSA

Howard Limbert and Deb Limbert: Northern Cave Club, UK.

Features visited - listed in the order visited:

South Australia: Warbla Track #1 5N176 bh, (Warbla Track #2 5N177 bh), 5N525 bh.

Western Australia: (6N979 c), 6N1421 bh, Weebubbie 6N2 c, 6N24 c, 6N1422 rh, 6N1423 rh, Swift Hole 6N1424 c, 6N1425 d, Bug Hole 6N1426 c, Siberian Yak 6N1427 c, Stinking Rift 6N1428 c, 6N1429 RH, 6N648 d, Piston Wind 6N1430 c, 6N1431 d, 6NX611 rh, Kangaroo Kruncher 6N1432 c, Bleeding Pit 6N1433 c, 6N1434 bh, Carlisle 6N707 c, 6N206 c, 6N1435 c, Skases Delight Cave 6N1436 c, 6N1389 d, 6N1437 c, 6N972 bh.

Key: () = not located, c = cave, rh = rockhole, d = doline, bh = blowhole

In numerical order: N2, N24, N176, (N177), N206, N525, N648, N707, N972, (N979), N1389, N1421-1437, NX611.

Sunday 6 Oct 1996

The six of us set out from Ceduna and arrived at the border of WA at 2pm. There is a fruit checkpoint at the border now. We headed along the old Eyre Highway to the Sixteen Mile Tank then headed north stopping at Warbla Track #1 blowhole **5N176** to take a photo. Tag.

We missed seeing Warbla Track #2 blowhole **5N177**. On the Old Coach Road we also stopped at blowhole **5N525**. Tag.

The reason for travelling on this road was to locate a cave reported by Harry Wheeler on 24 June 1973. It was numbered by him as QW302 = **6N979**, and had been discovered from an aircraft by Helen Gurney in 1971 (H. Wheeler, QW List, QW302, 24Jun73). Harry's location for it was 0.2 miles south on the border then 0.2 miles

SW over a saltbush claypan. It is described as a small cave in a 20 yard diameter doline. This cave has not been located by cavers, nor did we find it on this occasion despite a thorough search. In hindsight the location of the cave is likely to be about 1km further west near the junction of the track north to the Deakin railway siding.

In searching we did find and tag a blowhole **6N1421**, about 600m west of the border. It is 0.45m x 0.4m, at the top and 3.6m deep. It contained the nest of a kestrel with 4 eggs.

We camped the night near **Weebubbie Cave 6N2**. There was a group of about 15 divers camped there, and dive gear was spread through the cave. We saw at least a dozen underwater scooters and 2 dozen air bottles as well as wetsuits. And a power lead to the surface gave dazzlingly bright light.

Max removed some prickly bushes from the nearby doline of unnamed cave **6N24**.

Monday 7 Oct 1996

In the morning we had a swim / snorkel in Weebubbie lake then drove down the highway to Mundrabilla. It was not until Friday that we learned that a rockfall that resulted in the collapse of two-thirds (60m x 20m) of the entrance had occurred the day after our visit and buried some of the dive gear.

We said G'day to Bob Eglinton at Mundrabilla then headed up the scarp. Nigel's car had a bit of trouble towing the trailer up (only a 1600cc Nova). We drove along the main track 6km west of Jinnagoodra Bore and set up camp 5km south on a track that descends the scarp.

[Bob now charges \$5 per person per day for caving on his property, for the maintenance of the tracks. Bob asks that all visitors pre-arrange trips and that they call in at the Homestead before climbing the escarpment - Steve Milner].

At Easter in 1995, an area of Mundrabilla Station was searched using an ultra-light aircraft by Plane Caving Inc. (PC), a Perth-based group affiliated with WASG. On their trip 50 karst features were found.

The area we were camped in had not been searched by PC and we set out on foot, west of the track, to see what we could find. Our haul for the afternoon was 2 rockholes, a cave and a doline and socks full of grass prickles. It definitely would be easier if we had used an aircraft. We found:

Rockhole **6N1422** - about 2km west of camp, a very small rockhole, but holding water. Tag.

Rockhole **6N1423** - about 0.8km SE of 6N1422, another very small rockhole, also holding water. Tag.

Swift Hole 6N1424 - midway between the 2 rockholes, a blowhole 0.6m x 0.45m x 0.9m @ 060° of irregular shape. This led to a 10m long cave with 2 small chambers and a dead kangaroo. Tag. See the description of the cave later in this article.

Doline **6N1425** - About 0.6km NNE of 6N1422, and 90m north of a derelict EW fence. It is 38m x 25m but only 0.4m deep with a rock pavement area of 11m x 3.3m. A fissure across the middle had no breeze. Tag.

Tuesday 8 Oct 1996

Deciding that searching for new caves on foot was not very rewarding, we went to look at some features that had been found by PC (PC) in April 1995. We drove back along the main track to the homestead and stopped 5km east of Jinnagoodra bore.

We then walked south battling the Spear grass *Stipa nitida*. This grass looks very scenic as the long seed stalks wave in the breeze, but when you brush against them the seeds dislodge. A needle sharp seed case with a 5cm long tail that curls up. They stick in ones socks then work their way through to your foot.

Also, they clump together and form a dense mat covering the car radiators. Even after driving on the track the previous day the vehicles still collected more seeds. And they have to be removed, because there was a real danger of them catching fire. As it was there was a strong burning smell evident.

First seen was **6N1426** = PC95-36, 1.5km south of the main road. A large rock in the entrance was covered in orange/grey insects so we named this **Bug Hole**. It was described by PC as a "3m diam. hole with a lead north west with a very strong breeze". Sure enough there was a strong breeze, and after a couple of rocks were removed access into a cave was achieved. Steve went in about 40m and reported a strong draught. We then left, intending to explore a nearby feature and to return later to explore and survey the cave. Tag. [Bug Hole also seemed to be a good name because it could be named Bug(ger)-All cave if it did not go! - Steve Milner]

About 1km east was **6N1427** = PC95-35. This is 1.3km west of the NS fence on which Witches Cave is located. The PC description was, "Cave is an oval chamber 5 x 4m with a strong breeze in a tight crawl 8m long to north west". Again, this was confirmed, and we also managed to get into the cave beyond the crawl. Nobody could think of an apt name for this new cave. In jest Max suggested **Siberian Yak Cave**, partly because there was no possible reason for this particular name. But it was immediately pointed out the name WAS relevant. While waiting in the draughty passage it was freezing, and we had to put up with the usual inane conversation. You know what I mean, "yak yak yak". We left this hole for later survey and exploration and continued on to explore a nearby feature. [Actually, the name bears no relevance to anything, except the fossilised yak bones next to the sabre-tooth tiger skeleton - Nigel Dobson-Keeffe]. Tag.

Next was back about 200m north of Bug Hole. This was **6N1428** = PC95-37 which was named **Stinking Rift Cave**. The entrance was a somewhat unusual rift in the bedrock, and the cave contained a recently deceased kangaroo. This deterred all but Nigel from entering. Perhaps next trip things will have improved. This cave needs a better look (and map) when the maggots have cleared, it does go on further... ! Tag.

On the way to the next feature, a large rockhole was found about 0.9m x 0.8m with 0.4m of water and silt floor. It was photographed and tagged. **6N1429** = PC95-38.

Nearby was PC95-30 which was described by PC as, "twin depressions 20m apart @055° with a very strong breeze in ENE depression". This was verified and it was numbered as **6N1430** as investigation got under way. Tag. After a while Mark had got into the cave, which led down and to the east in rather awkward conditions. With the breeze blowing dust in his eyes, Mark suggested the name **Piss 'n' Wind Cave**, apt, but I suggest Piston Wind may be more politically correct. [Bugger political correctness - in times of freedom of speech Piss 'n' Wind Cave is fine. Furthermore Mark Sefton named this cave most appropriately as it blew and promised lots but did not deliver - Steve Milner].

Deb looked at the south depression. This too had a strong breeze and she managed to get into a small cave **6N1431**.

As well, Howard and Steve also had a quick recce at PC95-31 and PC95-33. As the day was nearly over we returned to camp, fully intending to map these new caves the next day.

Back at camp Max went for a walk about 0.6km south to doline **6N648**. This is located on the east edge of the graded track. It was reported by Bob Eglinton as having first appeared about 1980. It is still in the process of fairly rapid erosion with steep clay sides about 1.5m high. Time has not blocked the hole at the bottom, an observation reported on 28 April 1993 (CEGSA News 38(3) p50) An EW rock ledge has been further revealed and the breeze comes from a low passage to the east.

Wednesday 9 Oct 1996

Today we drove 3km east of Jinnagoodra and parked the car near the dam that is about 0.5km south of the main road.

From here we walked south. On the way Max noticed a covered rockhole **6NX611**. This was holding water in 2 tiny holes.

Deb, Howard and Steve mapped **Bleeding Pit** cave **6N1433** = PC95-33. See the ASF Grade 54 survey and description later in this article. Tag.

Mark Max and Nigel mapped **Kangaroo Kruncher Cave** **6N1432** = PC95-31. This has 5 blowhole entrances in a line (3 large and 2 small) all dropping into a roomy chamber. The mapping took most of the day, and we were helped by Steve's group, who had finished their cave. See the ASF Grade 54 survey and description later in this article. Tag.

On the walk back to the car we found blowhole **6N1434** = PC95-32. This is only 1m deep, but there is a breeze issuing from a very low passage which can be seen heading north for about 2m. Tag.

After finishing the survey, Deb, Howard and Steve moved on to **Bug Hole** to survey and to continue exploration. After 200m they entered a sizeable well-decorated chamber. Kindly, they returned leaving more to explore and survey the next day

Thursday 10 Oct 1996

All six of us returned to complete the mapping, exploration and photography of **Bug Hole** Cave **6N1426**. This took all day and all leads were pushed. See the ASF Grade 54 survey and description later in this article.

Friday 11 Oct 1996

All but Max drove to **Carlisle Cave** **6N707** (Max had a sore shoulder so took a rain check on the 21m climb into Carlisle, besides he had already seen that cave). The objective was to map the cave and to explore any side passages that may exist. This task was duly completed, see the ASF Grade 54 survey and description later in this article. At the terminal boulder choke, Howard and Steve climbed all the way up to the roof (approx. 20m) to follow the breeze. In spite of the breeze, all the leads were impassable. On the way back to the camp the team visited **Thampana Cave** **6N206**.

Max went for a walk to investigate features close to camp. First, doline **6N648** was tagged.

About 2km north of camp and 65m east of the track is **6N1435** = PC95-07 which is a large blowhole 1.75m x 1.6m. A lack of breeze was indicative of a small cave, and silt had blocked off access leaving only a 4m long cave. This contained a very fine specimen of a lily of Lomandra species (genus unknown) which had small blue and yellow flowers on metre long branching flower stalks. Tag.

The next feature was a doline **6N1436** = PC95-06 located 400m west of the track about 500m further north. Later named **Skases Delight Cave**. A GPS machine certainly makes finding features like this fairly easy. I noticed this doline about 50m before I reached it because of the white rocky area that surrounds it. And at

about that distance I heard it as well. Air escaping from 3 or 4 places in the doline was clearly audible from that distance. I must say that I have not seen all that many dolines with a breeze as strong as this. And yet the PC description made no mention of a breeze. A small cave about 4m long appeared to me to block off so I left it intending to bring the others for a look in the morning. Tag.

700m north and 300m west of the track is the doline **6N1389**. Tag.

900m east of the track is **6N1437** = PC95-16. This is another small cave blocked off by silt. The cave is 7m long. Tag.

Saturday 12 Oct 1996

Our last day. We decided to follow the feature with the best potential and one that was not too far from the camp. We decided to try to dig into **Skases Delight Cave 6N1436**. Three potential entrances were found in the doline. The middle one yielded a lot of low passage, which Steve explored. He returned after 30m of cave to gather the rest of the team so that they could share in the exploration. Mark and Nigel started exploring while the rest started the survey. Because of the deep choking dust, the cave was named Skases Delight Cave. Certainly no place for someone with breathing difficulties. Following exploration and mapping (see the ASF Grade 54 survey and description later in this article), the team went back to break camp and head off back to Ceduna and then to Adelaide.

At Eucla, while the others were having a shower and Nigel was having a seed removed from his eye, Max found the blowhole **6N972** = QW134.

We drove to Ceduna arriving about 11pm.

Sunday 13 Oct 1996

Return to Adelaide.

Cave Description and Survey of Kangaroo Kruncher Cave by Nigel Dobson-Keeffe

Kangaroo Kruncher Cave 6N1432 (= PC95-31) is situated on the edge of yet another Nullarbor Bluebush saltpan, three large solution tubes give access to the high corner of a large (10m x 25m) chamber. The chamber drops down to the NE and forms the start of a large streamway, which becomes the main feature and silt depositor for the rest of cave. To the north the cave enters some smaller phreatic passages before silting up. The main passage, however, trends to the east and soon settles down at about -10m. From the initial large chamber the way on drops into an even larger chamber with a low roof and gravelly floor. The namesake of this cave, two large very dead Kangaroos can be found in the NE alcove, close to the deepest section of the cave, another gravel/silt filled sink. The 3m wide main passage continues to the east, with the final navigable leg heading off northwards. This route is for the girth challenged as it involves some rather flat crawls through some higher level flatteners (unless one takes the new route). The cave ends soon after in a "dug into" silt filled chamber. This cave was 300m long and 10m deep.

Overall, a fine example of what happens when one builds a cave whose dolines are larger than its silt hiding ability :-). The side view of the map graphically shows 3 distant points on the cave nicely silt filled to the same level.

Cave Descriptions and Surveys of Swift Hole, Bleeding Pit, Bug Hole, Skases Delight Cave and Carlisle Cave by Steve Milner

Swift Hole 6N1424

This cave was roughly in the centre of a very large claypan. Looking around from the entrance you would never guess that it is at the lowest point. However, Max assured us that it was. The blowhole was 0.6m x 0.45m x 0.9m deep @ 060° of irregular shape. This led to a 10m long cave with 2 small chambers on a north-south axis. The first chamber contained a nest of noisy swifts and the second a desiccated kangaroo. There is a potential lead from this chamber (an easy dig) with a draught blowing in your face.

Bleeding Pit 6N1433 (= PC95-33)

The entrance of the cave is a pit 2.5m in diameter at the top and 4.5m in diameter at the bottom. A 7m ladder is needed to descend into the cave. As we were kilometres from the nearest car belay, we placed an 8mm rock anchor in the good rock in the entrance doline. At the bottom of the pit, two obvious leads were noted, the larger proved to have been explored for approx. 50m by the PC. The second passage, which was much smaller, had not been entered. Steve Milner and Howard and Deb Limbert squeezed through the Graveyard Crawl gently pushing the bones, mummies and debris to the sides. In the large walking-sized chamber we also noted the remains of many more animals. Guarding one of the passages off the chamber, was a beautifully preserved mummy of a cat, which had simply curled up and died. Whiskas Passage led to many fine formations, fossils of

Sea Urchins, and in a very dry dusty area called Beetle Rise, the wing cases of thousands of beetles. Back at the main chamber, another lead led to fine formations and a sandy constriction and two other leads led back into the area previously explored by PC. In the cave we also came across five specimens of a large carnivorous animal - we had no idea if it was merely that of a dingo or that of something much more interesting.

This cave proved to be 430m in length with a maximum depth of 14m.

Bug Hole 6N1426 (= PC95-36)

This cave always had fine potential. After I explored the first 40m of cave through a steeply descending zigzag crawling passage, the draught was as strong as it was at the entrance. I was even more excited as the passage leading on was making a huge roar through a constriction later named the Howling. I waited for the others to follow and thought about grabbing the glory and pushing on. As no one turned up I did the right thing and went out to find out where they were only to find them making puns about the name of the cave and admiring the bugs! As it was a recce day, we put further exploration on hold until later in the week.

The next day, after surveying Bleeding Pit and a part of Kangaroo Kruncher Cave, Howard and Deb Limbert and I entered the cave and surveyed as we explored. We quickly surveyed down to the Howling, and an easy push through the passage which extinguished our carbides led to a series of low chambers with very fine silt. After 200m we entered the very large Sleepy Lizard Chamber. This chamber was spectacular, it proved to be about 200m in circumference and 70m across but only 2.5m to 4m high. We speculated that the plethora of columns was holding the roof up. Also, there were many fine halite straws, other halite formations and several examples of stegamites. Two of the stegamites were not so well developed, but one was particularly fine. We noted 4 or 5 potential leads off this chamber. As it was late, we headed out to tell the others so that they could share in the exploration.

We returned the next morning with two sets of surveying gear and the photography gear. Photography was carried out by Steve, Howard and Deb while Mark, Max and Nigel started surveying around the chamber. After the photography, Steve, Howard and Deb started surveying around the chamber but in the opposite direction to the first team. When we met, we had trouble finding the way on. Eventually we realised that the draught was simply hard to detect in big wide passages and after a bit of graft and squeezing we found the way on between lots and lots of calcite. The cave had changed character being hands and knees crawling over tons of small broken straws and stals. Progress was slow but then the draught got better and better. We continued for 200m from the chamber but then came to a serious obstacle - a squeeze with a draught just as strong as at the entrance. While Steve pushed this, the others found some curious large mushroom formations in a nearby chamber. Steve pushed through the very tight squeeze but it led to another 30m further on. We decided to call it a day and return some other time.

Some tape was laid around a few delicate formations but there are still areas that need protection in Sleepy Lizard Chamber and in Mushroom Chamber. Please do not walk on the sediments in Mushroom Chamber, as the 'mushrooms' appear to grow beneath the surface. As there is need for track marking in this cave, volunteers would be most welcome to undertake this project (contact the authors).

The cave was 530m long and reached a maximum depth of 18m.

Skases Delight Cave 6N1436 (= PC95-06)

As Max indicated earlier in this article, this is not a cave for the respiratory challenged. It has three entrances under a lip of rock at the edge of a doline. Although the middle one 'went' first they all connected together a little further into the cave.

We found 320m of cave in a complex bedding type passages. Unfortunately, this meant that much of the caving was hands and knees crawling or flat out. This was particularly unpleasant with the deep choking dust. Because of time limitations (we had allowed ourselves only 4 hours to explore and survey the cave) we left several leads untouched. Also, the draught changed direction while we were in the cave making route discovery somewhat confusing.

Nevertheless, this is a most interesting cave and with such a strong draught it must 'go' into something worthwhile. We will return!

Carlisle Cave 6N707

Carlisle Cave is a cave of grand proportions with a 21m entrance pitch and steep slope that leads to the ancient passages below. The cave trends generally southwest for 720m to a boulder choke that blocks further exploration. The passage is large and up to 40m wide and 10 to 15m high. The floor is undulating with fallen blocks. There are a couple of constrictions that force a howling breeze.

Howard Limbert and Steve Milner climbed up the Dead End. In spite of the draught coming through gaps in the rock no way on was found - the way on can only be through the use of a (very) long bar and a stout heart around the edges of the Hairy Scary Rock Pile.

The cave was surveyed in October 1996 with care using sighting compass and clinometer and a tape measure. Every effort was made to protect the delicate coffee and cream formations. All leads were checked out and

several small phreatic side passages were noted, but none of these went any distance. Now that the sides of the main passage have been checked thoroughly, there is now no need to stray from the marked path (red and white reflective track-markers placed by members of WASG). Carlisle Cave (6N707) proved to be 750m long and reached a maximum depth of 92m.

The Discovery and Exploration of Carlisle Cave by Dave Hall

The following account of the cave and exploration is extracted from a letter by Dave Hall (otherwise known as *Max*) from Balladonia:

Gallop Chamber is named after two of John Carlisle's grandchildren (Colin and Brian Gallop), who were with John in the late 1980's when they found this cave. The two of them abseiled in and explored as far as **Gallop Point**. I found this information by chasing them down from their names, which were found on a cigarette packet found at Gallop Point. NOTE their names are written in the dust here, so far everyone has taken care not to disturb these names written in the dust. So it is fitting that the first people to enter this cave were John's grandchildren and John Carlisle himself stayed at the top of the cave (he was in his late 70's at the time).

When I found this cave off aerial photos I did not know that it had been visited by John or his grandchildren. But coincidentally I had brought John Carlisle's motorcycle that he sold when the doctors forbade him from going into the bush alone. I was riding this bike when I found Carlisle Cave (checking various interesting things off aerial photos by motorcycle and GPS).

The **Electric Passage** is so named as the first party to venture into it had 5 carbides and 1 electric lamp and all 5 carbides were blown out and could not be restarted in the wind (NOT breeze) in the passage. The person with the electric light ferried everyone else through this crawl to where their carbides could be relit.

Carlisle Cafe is the chamber that you come into after the Electric Passage. So named on account of the large amounts of Coffee and Cream all over the place. [Coffee and cream are the attractive layers of dust of different colours derived from the roof by salt wedging - Steve Milner].

The **Tombstone** is a large flat sided boulder 4 - 5m by 7 - 8m that looks like a big tombstone, it is even rounded at the top, not very imaginative but quite descriptive. It is in the centre of the passage just before you climb up to the third narrowing of the cave.

The **Dead End** is the chamber at the top of the **Hairy Scary Rock Pile**. Everything was dead in the chamber, lots of dead cockroaches, dead beetles, dead cave crickets, several dead spiders, a couple of dead bats, but not a single living thing. Plus we were rather conscious of the fragility of the rock and dried mud that we were climbing up and wondered if we would end up dead too. And it came to a dead end, so the Dead End.

Concluding Remarks on the Exploration of Nullarbor Caves in October 1996

by Steve Milner

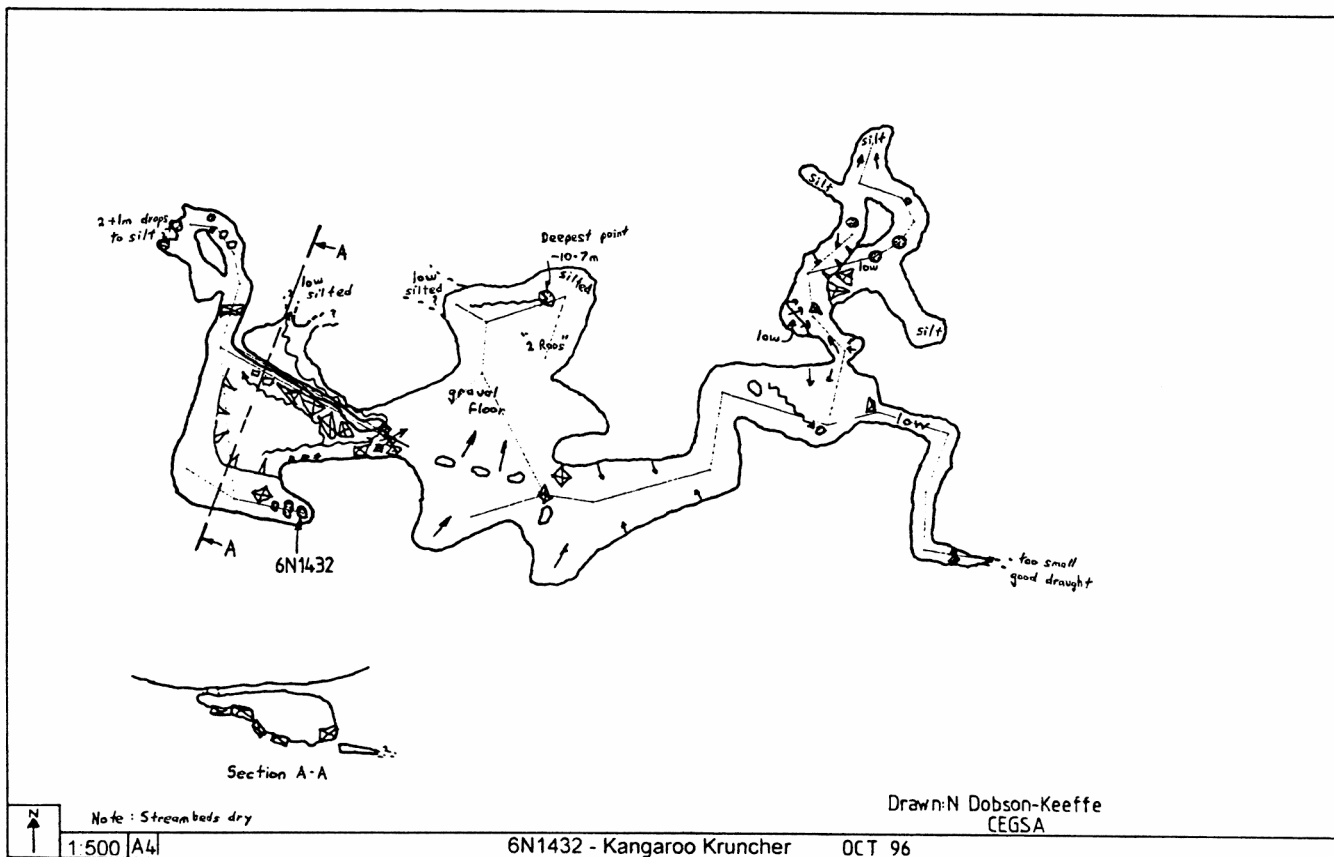
In one short week we had recorded 17 karst features which included the usual blowholes, rockholes, very short caves (e.g. Swift Hole, 10m) and bigger caves. We mapped one that was pretty long (Carlisle Cave, 750m), and four that broke new ground (Bleeding Pit, 430m; Kangaroo Kruncher Cave, 300m; Bug Hole, 530m; Skases Delight Cave, 320m).

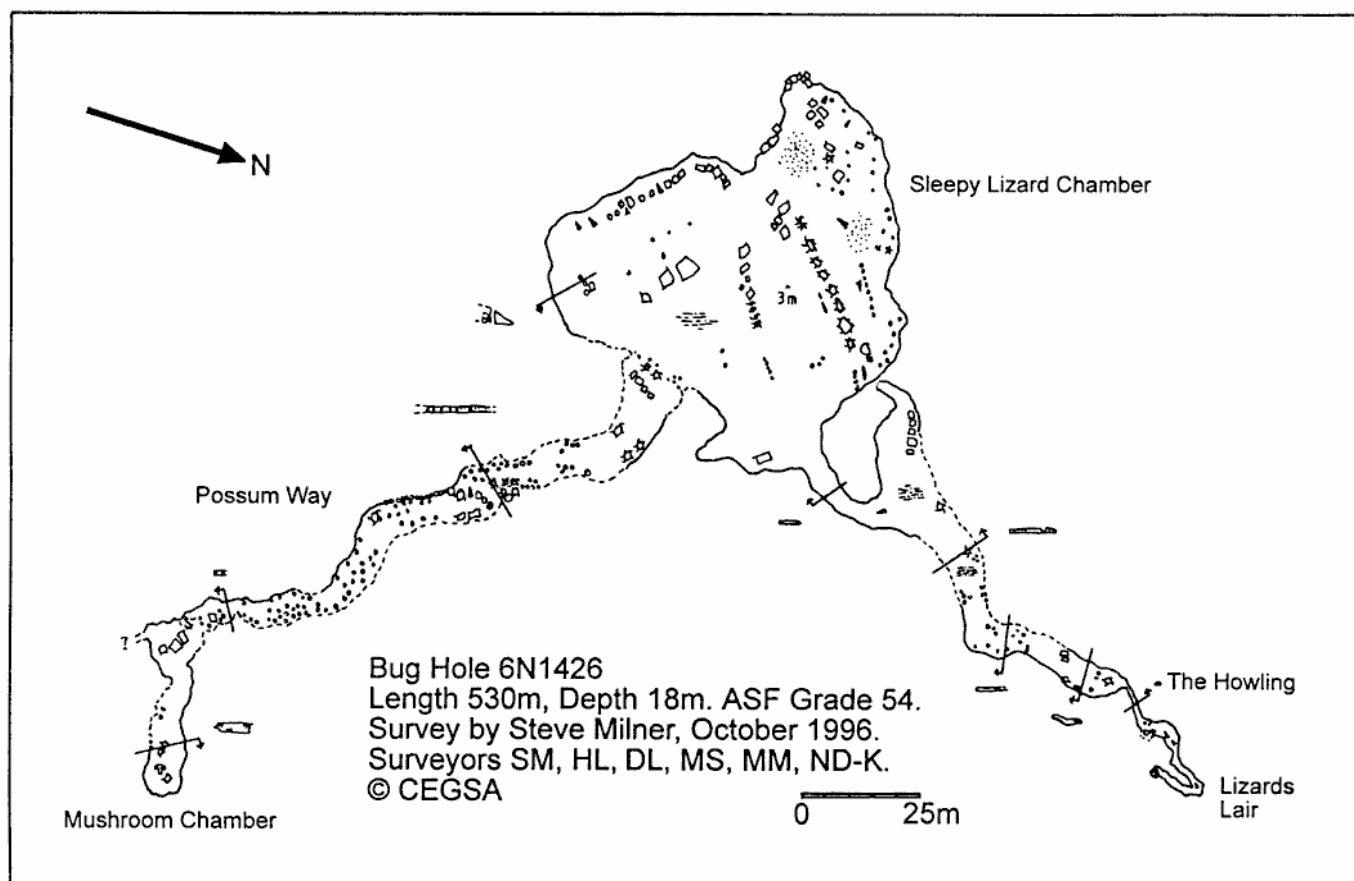
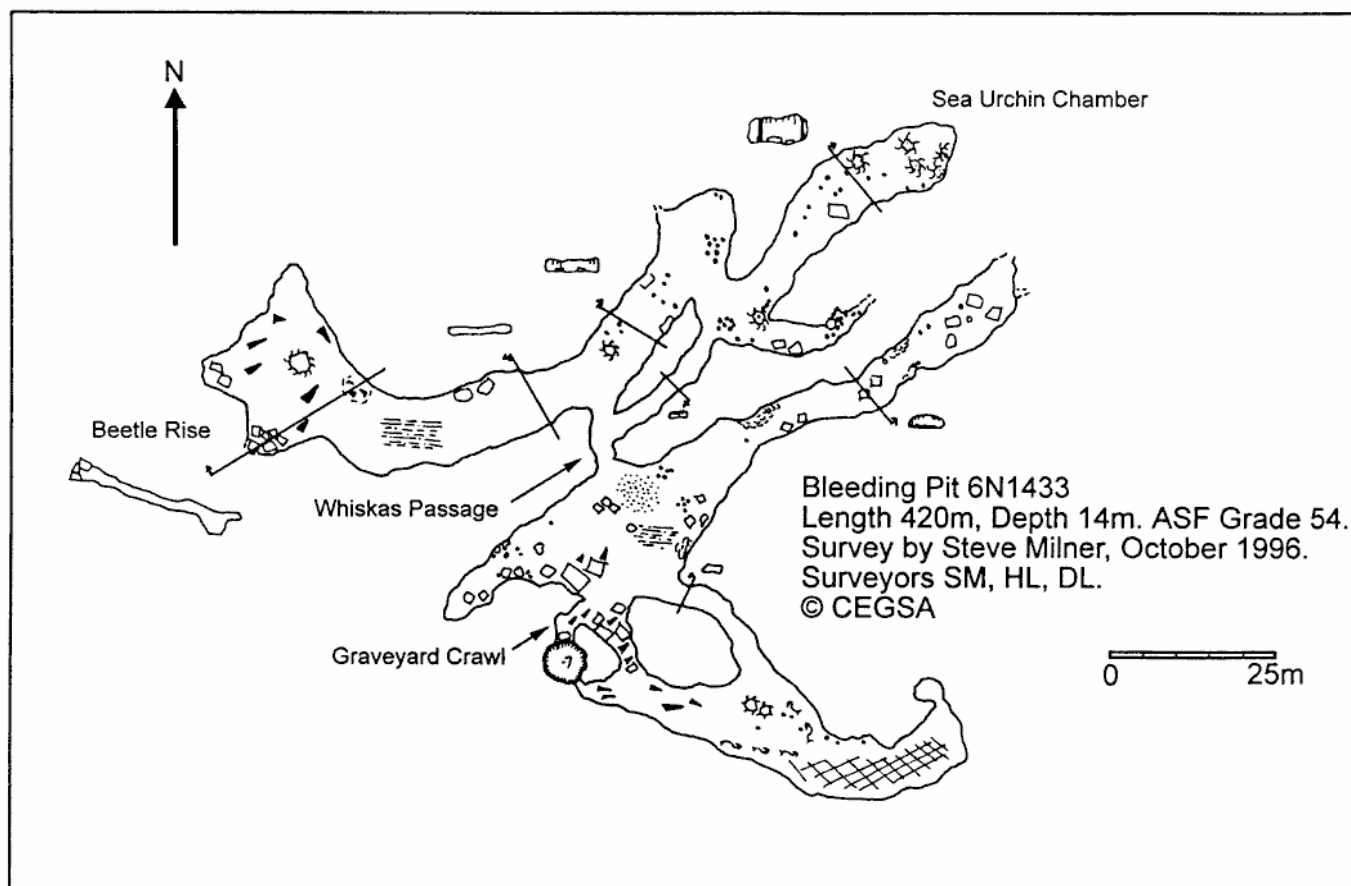
We are indebted to the Plane Cavers for the ground (air) work that enabled us to quickly get to features of interest. The locations of many karst features were recorded by the PC using a Global Position System (GPS) device mounted on an ultra-light aircraft. They then followed up the cave entrances or karst features using vehicles. Many caves were entered a short distance but they were never explored fully, nor surveyed, nor to my knowledge photographed. We generally found PC stickers at the entrances or a little way into the cave. All the features that were noted by the PC had identifying numbers, but these have been renumbered by Max to bring them up to date with the numbering system that is used across the Nullarbor. All the details that pertain to the present work on the Nullarbor, including GPS coordinates and maps have been lodged in the CEGSA records.

We used two GPS unit to help us get around the Nullarbor. What fantastic little devices to use as an aid for navigation. Max was using a hand-held Garmin GPS38 and Steve was using a hand-held Garmin GPS45XL (this is identical but for an external aerial). Both units are the size and weight of a modern mobile phone. On the Nullarbor where there is great satellite reception (like on the ocean) both units performed the same. In practice, when we entered the coordinates of our destination (say a cave) from over a kilometre away, we arrived to within 10m most of the time (4 out of 6 tries) and at the worst to within 30m (1 out of 6 tries). However, if this test was repeated the next day the 'hit-rate' was similar but a cave that previously in the worse case category was found within 10m and one that was previously in the best case category was now in the worse case category. I understand that there is a technical explanation for this variation called Selective Availability. So in general, when we want to go back to a cave with GPS coordinates we can get to within 10 to 30m of the cave, which is excellent. One rarely has to look very hard when one is within 30m of a cave.

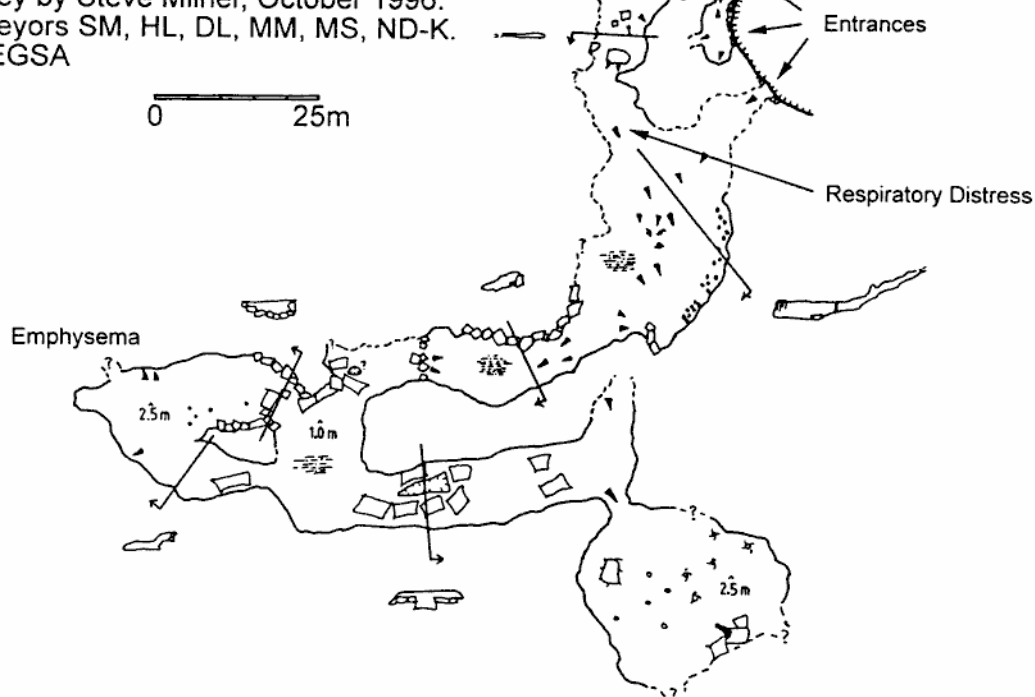
On this trip we were short of time. But we made up for it being well organised and where possible we surveyed as we explored. We worked in teams of three. Usually, the person at 'point' (at the end of the tape) was the first to tread on virgin cave and was responsible for route finding; the instrument reader and the recorder followed closely behind. In practice, surveying and exploring was only a little slower than not surveying at all. Furthermore, the cave never had to be visited again if we did not want to. In this way we felt that we were most productive. Also, we aimed to have the whole thing written up in as short a time as possible (this article) rather than sit on information and data.

We had lots of fun at our camp. High- and low-lights included the ceremonial burning of a stool, fresh beer damper, Mark Sefton searching for Nullarbor-coloured arrows that had missed his archery target, Max washing his feet in a pan, maggots in our chilli, the otherwise good food and lastly great company.

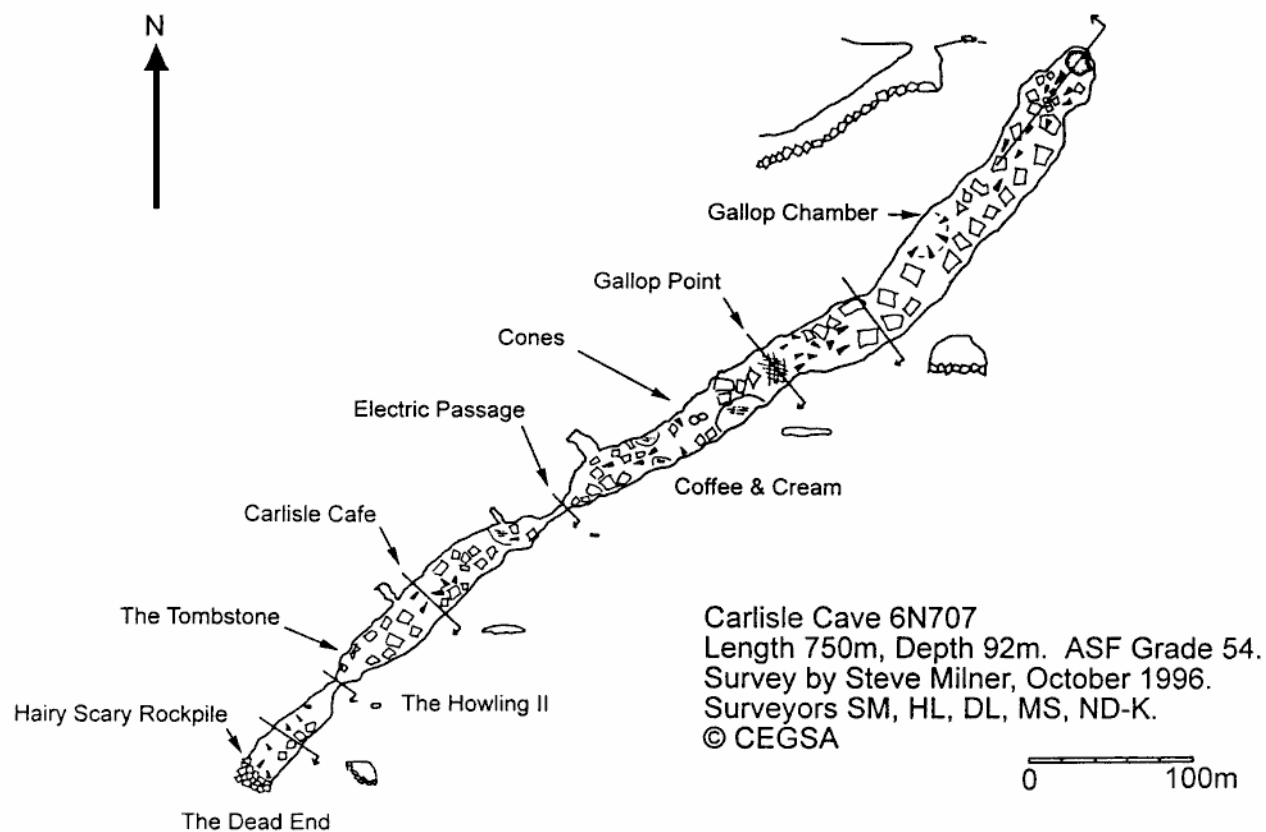




N Skases Delight Cave 6N1436
 Length 320m, Depth 19m. ASF Grade 54.
 Survey by Steve Milner, October 1996.
 Surveyors SM, HL, DL, MM, MS, ND-K.
 © CEGSA



N



Carlisle Cave 6N707
 Length 750m, Depth 92m. ASF Grade 54.
 Survey by Steve Milner, October 1996.
 Surveyors SM, HL, DL, MS, ND-K.
 © CEGSA

LOWER SOUTH EAST – Cave Photography Training Trip – 9th /10th November

Caves visited:- Monbulla / Wrecked Car and Quarry Cave.

Trip Members:- Marie Choi, Athol Jackson, Kevin and Adrian Mott, George and June MacLucas, Jude and Spot Mathews, Pam Alvaro and Dave Glowacki.

Everyone met at Whiskas Woolshed on Friday night, except Kevin and Adrian Mott who turned up on Saturday morning. After a good nights sleep, we all had breakfast and then sat down to a very informative talk by Athol. During the talk we learnt about different types of cameras and what they can do. Athol went on to explain different lighting techniques and the ins and outs of cave photography.

After lunch it was time to go and put what we had learnt into practice. Sounds good on theory. It didn't take long for us to get trogged up, as we were very eager to get underground. Only nine out of the ten of us ended up underground, as Athol pulled a stomach muscle near the entrance. Meanwhile the rest of us ventured off into the cave. There were a wide range of photo's taken and there were more flashes than a thunder and lightning storm and a good time was had by all.

We all headed back to Whiskas where we had tea and were entertained by a brilliant slide show of Wombat Cave showing some nice lighting techniques, which Athol had taken. Some of the other guests staying at Whiskas Woolshed sat in and watched the show as well. Everyone was pretty tired after a big day, so most of us had an early night.

On Sunday we headed for Quarry Cave (5L23) for more photography. The cave has some very nice decoration in two main chambers. The first chamber contains a mass of white tree roots and the second chamber is full of straws. One of the things George and June didn't know, is that there is a high road and a low road to the straw chamber and after taking the low road they came out looking like something out of the SWAMP THING! It just so happens the low road is a squeeze with mud and 3 inches of water on top. Once again lots of photo's were taken. On the way out Pam became somewhat geographically embarrassed but made it out eventually.

We all went back to Whiskas for lunch and packed up our gear. After our good-byes and talk of another photography trip, we all headed for home.

Dave Glowacki.

%%%%%%%%%

UPPER SOUTH EAST – The Unexplained!!!

Marie Choi, Damian Grindley, Dave Glowacki, Pam Alvaro and Tracy Colhoun descend on the upper South East on the 7th and 8th of December 96 and forced ourselves upon:-

Cave Park Cave (5U37)

In one entrance and out via literally a foxes lair, much to the consternation of the resident fox and Tracy who came 'nose to snout'! Not quite sure who found reverse gear quickest. However this exit is not recommended for those of a delicate constitution as it smells similar to Whiskas septic tank and has a charming collection of former life forms – suppose 'veggies' might not be that impressed either.

Otherwise we had a good firkle in the rest of the hole. Damian spotted a possible continuation and dug with the aid of Dave – after 2 metres Dave squeezed through to a small chamber in which we could just turn round. There was no other possible way in but mysteriously in the middle of the chamber was a small blue plastic watch which was heavily gnawed and beside it a long dead rat. Unfortunately being a digital it did not record the time of death but I tell you it's the last time I chew my watchstrap.

Mosquito Creek Cave (5U63)

Short grot hole, nice fossils and an impressive draught. For some unexplained reason somebody has been digging in the wrong place. Also it's a swamp – the mozzies weren't at home when we visited as we had all been looking forward to meeting them.

Echidna Cave (5U65)

Had difficulty getting to the cave as some Scouts had parked their red van (sound familiar) in the middle of the track – so we moved it! Oh, only a couple of hundred feet but apparently the owners weren't very impressed and were somewhat mystified as to how a locked minibus could mysteriously move that far. Strangely and maybe just as well Simon never suspected us, even knowing we had 'Pesky Pamie' and her spare key on board.

For those unfamiliar with the cave it contains numerous sand cones and an excellent sand swim. However the highlight of the trip into the cave was found on exiting. There seem to be four main techniques for getting yourself up the tight base of the solution tube, all of which are quite entertaining.

- The Grindley Technique (cheating). Insert crowbar in between two cracks and haul yourself up – Clever Dick!

- The Choi 'Shimmy Shimmy' Technique (hands at sides). Very stylish!
- The Alvaro / Colhoun Technique. Otherwise known as the vertical assist – mind you, an interesting derivation of legwork was given by Tracy.
- The Glowacki Technique was too quick to properly be recorded, and has only been observed from below.

There have been reports of people standing on the backs of others – sounds painful.

The author will personally buy anybody a beer who can exit feet first unassisted!

Mildara Blass Cave (5U163)

Dave, Marie and Pam surveyed the main drag.

Meanwhile Damian and Tracy tried to find a way back under the entrance boulder pile to reach the postulated continuation. Some success was achieved with 30 metres of mostly standing passage found beyond the previous limit. Mind you it helps having Tracy with you as you only have to dig things half as big as you would for anyone else. Be warned, this area is not for the faint hearted and should only be attempted by those with years of digging experience.

Damian later helped complete the survey whilst Marie gave her shutter finger some exercise.

Damian Grindley.

%%%%%%%%%

LOWER SOUTH EAST - 21st / 22nd December 1996

Trip Members:- Marie Choi, Damian Grindley, Dave Glowacki, Pam Alvaro, Simon Kendrick, Adam Branford, Fred Aslin and friends.

Saturday 21st.

Dave, Damian and myself set off for a quick visit to Snake Hill (5L119). As the weather was very hot we were on the lookout for "Hiss Worms" when we entered the cave – thankfully none were to be found. We proceeded to move from chamber to chamber enjoying the views as daylight streamed through it's many entrances onto the moss, ferns and other plant life. We then passed through a walking passage into the next chamber admiring it when Damian casually asked if that was a "Hiss Worm". Upon turning we saw a very pretty 3 ft. Tiger Snake perched on a rock, hiding around the corner of the passage we had just come through. Damian's next comment was "I thought snakes ran away when humans approached". We watched the snake for several minutes, as it watched us before slithering off down the passage we had just come through. We decided not to return that way and continued for a short time before exiting near the rubbish heap. On to have lunch and then to the next cave.

Damian writes:-

After a quick survey of 5L105 (which involved one whole leg!) we headed to another forest on a "Mottie" hot tip to examine a small solution tube that appeared to be opening up. Yep, it was small – approximately 0.5m across and 2.5m deep. As there was no way to touch your tootsies, digging proved rather difficult, especially as sand continually blew in your eyes despite our best efforts at building improvised wind breaks. Digging involved prodding, followed by inserting a bucket between your legs and kicking the dirt in. Marie proved particularly adept at this method, however, after several shifts Dave put the bar straight through our \$2.00 Woolworths bucket. If a draught had not blown sand back in our faces we would certainly have given up the ghost. A couple more shifts saw Dave (a thinner and braver man than me) pass a ridiculously small undercut. Before exploring it Dave came out just to prove he could, it was that tight! He honourably widened it for the rest of us. Altogether we had dug down some 2.5m or so and had come out at the top of a rubble cone in a 20m diameter chamber. A few areas of straws and flowstone were carefully passed.

At the point where the draught was regained bones were observed literally falling out of the silt bed. As the bones were below a layer of calcite antiquity was presumed. Exploration immediately stopped and we retired to Whiskas Woolshed to consider the matter. That night we were joined by Pam and Simon for an excellent Xmas nosh-up cooked by Whiskas himself. We all got suitably stuffed and well lubricated. I think!

Sunday saw us returning. Marie took a photographic record, whilst Simon, Dave and myself surveyed and barrier taped the cave. Dave, who was joined by Adam examined a nearby cave. Due to the site now being open, a decision was made to remove a few diagnostic bones for the SA Museum for further examination. We followed the instructions in CEGSA NEWS.

We exited to find Pam and Simon sitting in their portable armchairs watching the proceedings. This must be taking armchair caving to new extremes! Fred Aslin finally turned up and reinforced our suspicions about the site's potential importance, by a very informative talk on bone identification and arranged to temporarily secure the cave through Primary Industries.

The samples were passed on to Neville Pledge first thing Monday morning and we eagerly await their report on our return from Margaret River.

Marie Choi and Damian Grindley.

%%%%%%%%%

NULLARBOR 4-7/1/97

Party	CEGSA	Damian Grindley
	WASG	Rauleigh Webb, Adam Minchin and John Cugley
Caves	6N2, 6N37, 6N46, 6N47, 6N48, 6N49, 6N50, 6N149, 6N324, 6N326, 6N74_? (Dragons Lair), 6N1331, 6N1347, 6N1369, 6N1411.	

This was really a Rauleigh Webb lead WASG trip that I scammed my way onto at the last minute. Thus abandoning Frank, Marie and Angelique to the hardships of Margaret River. Beach burns! An action packed couple of weeks saw the following being achieved: -

Surface velocity measurements were taken in a number of the wet caves of the Nullarbor. Readings will be correlated with those of previous visits. However one objective, that of measuring scallops at current water levels was not achieved due to our inability to find a statistically valid sample of suitably defined scallops in the following: - 6N2 Weebubbie, 6N46 Nurina cave, 6N37 Murra-el-elevyn, 6N48 Cocklebidy and 6N49 Pannikin Plain.

Special permission had been gained to access and assess the rockfall at 6N2 Weebubbie and 6N49 Pannikin Plain from DOLA and CALM respectively. A report on our findings will be passed to the relevant department once complete. In the meantime Pannikin Plain remains closed but access to Weebubbie can be obtained, however at least one months notice is required. (Details from author or CEGSA committee).

All caves visited where examined for stegamites, examples found in 6N74_? Dragons Lair and 6N1369 Prostrate Pit increased the number of caves on the Nullarbor known to contain these formations from seven to nine.

Extensions where made to a number of caves. Most notably 6N74_? Dragons Lair where the 340m added doubled the length of the known cave. It was in this newly found well-decorated series of chambers that the stegamite was observed. Interestingly the exact location of the breakthrough which consisted of a 8m strenuous turtle style sand swim by me was predicted by dousing!!!! This is the first time anyone of us had heard or seen dousing work. We were most impressed and slightly less skeptical. Unfortunately Rauleigh had predicted the extension to be 1m wide not the 30m actually discovered. At 6N326 which is described in the Nullarbor atlas vol II as a blowhole which enters a small flattener that goes 5m south. A large round boulder at the base of the hole was rocked aside by errr me again to reveal 25m of descending low profile passage heading NNE. The passage continues, unfortunately rain stopped play. This cave is not a blowhole but a sink!!

The survey of 6N149 Stegamite cave was finally completed along with 6N74_? Dragons lair (extension included).

Other caves entered include: - 6N1347 Lairs Dare, 6N1411 Sentinel cave, 6N50 Capstan cave, 6N1331 Refrigerator blowhole and 6N324 which is no longer a depression but has been enlarged by persons unknown to cave dimensions. Three untagged caves where stumbled upon. GPS locations to be passed to Max Meth.

Most impressively the expedition photographs which include some unusual formations where developed, mounted and shown the evening of our return to Perth. The following day they where available for general view on the net. See: -
<http://techpkwa.curtin.edu.au/interests/speleology/nullarbor.html>

There is also a very goofy picture of me if anybody is interested.

Thanks to Rauleigh for a wonderful trip and John for some scrumptious catering.

Damian Grindley.

UPPER SOUTH EAST - THE EXTRACTION OF THE HOLY COW A DAY TO REMEMBER IN S102

Party: Ruth "Gutbuster" Lawrence assisted by "Hoo" Ray it's-done-Gibbons, R-"on-belay" Simms, Naracoorte caver David "OmigodwhythellamIhere" Glowacki and Peter "Putrid" (formerly "Puddles"!) Horne

Date: 31 January & 1 February 1997

The facts: five days before Christmas 1996, a mother of a 10 month old, 300+ kilogram Murray Grey steer called out to Mr. Jim Biggins that her calf was missing. Jim counted the numbers in his herd and realised he was one head short. He noticed that the gate at S102 had been left open by a the last group there (lucky he doesn't know who you are?!?) and when he looked down the entrance tube of S102 he saw the steer at the choke, about 10 metres down, lying on its side and presumably dead.

Jim investigated the idea of hiring a crane but they were about \$80 a day and none were immediately available, so he rang Fred Stadter of the Mines Department (who has water-monitoring equipment on the edge the first lake in the cave ... Fred can't stand caving - he went down the ladder with his eyes closed when he helped to install the monitoring equipment). Fred rang the University of Adelaide's Geography Department and spoke to Chris Grivell who then rang Ray, who then rang the President, Janine Kraehenbuehl. The issue then stagnated for the time being amid all the Christmas rush.

Ruth learned about it halfway through January and raised it at the CEGSA meeting at the end of the month. Ruth reckons that Peter Horne put his hand up and said he was the most suitable person for this job, having crawled through dead cows and chickens etc etc over the years during his cave diving projects. However, Peter seems to recall that he saw the looming form of a zealous Dr Ruth Lawrence homing in on him in the foyer prior to the meeting's commencement and saying something like she had heard of his past "interests" in decomposing cave-adapted fauna, and Peter gallantly volunteered to help!

David Lowe, Frank Hankinson (who said he was nowadays more interested in putting things back into the caves!!), Ron and Ray all expressed an interest in helping to get the cow out, so after the meeting we agreed to get more information about the condition of the beast.

Peter contacted Kevin Mott in Mt Gambier but Kevin was too busy to get up to Naracoorte and said he'd try to get a local CEGSA member, David Glowacki, to have a look if possible. David went late in the afternoon around 30th January, some 6 weeks after the calf had disappeared, and said he thought it appeared to be on its side but it was covered in heaps of branch debris.

With this info, Ruth then contacted George MacKenzie of the Mines Department who went out and straddled an aluminium ladder across the entrance and used mirrors to look into the cave - thus producing the Holy Cow map which appears in this article.

Based on this information and others' experiences with cave carcasses, Ruth, Ray, Ron and Peter got their gear together for the job - standard climbing gear, loads of Dettol and water for disinfecting everyone and everything, shovels and saws, spare gloves, buckets, a full-length divers' drysuit, fly-mesh to cover faces, eucalyptus oil to drop in the workers' face-masks, a small scuba cylinder and diving regulator in case the air was too foul to breathe, a big carcass-lifting bag (courtesy of Frank) along with long rubber gloves, lifting straps and throw-away overalls etc - and Friday 31st January 1997 saw our intrepid band entering the nearly-virginal University vehicle, a clean, white Mitsubishi Pajero (just 132 kilometres on the clock) at 6pm.

Our journey to Naracoorte that evening was pleasant and uneventful, with the topics of conversation ranging from road-kill hobbies, projectile vomiting (you'll keep comin' back!), Pauline Hanson and racism issues, and heaps of wildlife death subjects - electrified galahs, bad-breath whales and sea-lions with foul fish-breath, Peter's cave diving stories about disembodied skeletons and unpleasant police diving jobs in wells, the burial of Grant Gartrell in Fox Cave some time ago (he still denies it was him!), home-made terrorist explosive devices and exploding cows in waterfilled lakes. Even the jokes were as bad - the deer with no eyes (no i-dea?), and the three Gnus on the highway (that's the end of the gnus, now for the weather)... but the grasshopper at the hotel joke ("My name's Johnny!") just didn't get a laugh at all. One of the funniest stories related to Kevin Mott's armpits being sniffed by a cold wet cat-nose a few years ago ... but that's another story!

Anyway, we set up camp at the Naracoorte Cave reserve, had a brief astronomy lesson and got to bed late ... but Ron was so keen to get up in the morning that he risked instant death from the Snoring Horne and the equally-slumberous languid Lawrence by banging a garbage bin lid a *la* Mott at 7.30am!! But let's get to the juicy part!...

We arrived at the cave and met Mr and Mrs Biggins there, clearing some loose timber away. Ron and Ray gave a hand and while Ruth headed back to Naracoorte to pick up some lifting ropes from the CFS. Peter decided to assess the situation since the smell wasn't all that bad on the surface and climbed down the ladder with his usual waist-wrapped belay (bowline, Ron!) and caving light to check out the situation as the cow was not visible from the surface. He was so keen that he forgot to put on his overalls! But upon getting to the lower tube's beginning, he regretfully reported back that the beast was indeed still there, albeit buried under lots of soil and in an advanced stage of decomposition (like, one leg ripped right out of the body when it was pulled!!)

Peter found that the body was far more decomposed than we expected and he put the collapsing skull into the bucket for the first lifting. When Ruth learnt of Peter's attempts to disembowel the corpse before the camera had been used to document the effort, she jumped into her gear and made a rapid descent into the pit of death and helped Peter to get sloppy body bits into a bucket. The first bit of video taken showed Peter extracting a cow hoof from the disembowelled remains and placing it into the bucket which was then lifted by Ron under great expressions of threat from below should it be allowed to tip over and cascade over the hapless workers who looked up in terror!

Before Peter and Ruth's very eyes, when one section of soil was dug away, the whole festering mass slowly began to almost majestically slide away, down the plughole (actually it sort of crept or slumped, like a giant hairy smelly slug in a cheap B-grade horror movie!!) About a metre down it stopped, and Ruth suggested that Peter just prod it with his foot to see if it was solid enough to work around. Realising that a 10m sheer tube lay somewhere directly below his feet, Peter gingerly stepped on the mass whereupon it went down another half a metre, and Peter realized that the body was now being torn in two as the heavy rear half was sliding down from the front bit, which had its entire rib cage and innards (all black, glistening and VERY juicy) completely exposed near his head-level. (... and they wondered why he was "panicking"!!)

Sliding ever deeper with his entire right leg into the cold, clammy, white and very sticky remains of God-knows-what body bits, Peter found he could not get any leg support whatsoever and very calmly requested assistance ("SEND A ROPE!!! HURRY!! SEND THAT ROPE!!!!...") and with Ron and Ray frantically pulling on the rope and Ruth lifting his torso with all her might, their combined mighty efforts extricated his 85kg mass from joining the remains of the bovine creature waiting below!

Further preparations for the impending descent into the slimy, drippy tunnel of horror below were made via more removal of the really gross "black tar", which was so bad that we were sure we would have exhibited absolutely perfect projectile vomiting techniques ad nauseum if it had not been for the WONDERFUL insightfulness of Ray in the form of his eucalyptus-soaked fabric facemasks!! This almost liquidy, oily material was shovelled into a bucket as well, and the fear in both Peter and Ruth's eyes must have been evident even to Ron as it hovered precariously overhead, swinging occasionally as he jerked it up the walls! The putrefied mass didn't become any less potent on the surface, where Ray and Ron both put in a tremendous effort against every desire to lose THEIR stomach contents to take the buckets' content "away"!

Peter had an air-break while Ruth did more shoveling and bucket-filling, and then she exited so that Peter could go back in. By this stage David had arrived and at Peter's invitation, he keenly rigged up and descended into the hole as well. However, he declined Peter's next invitation to be the first to descend down the weirdly-glistening, rather aromatic and now outward-breathing solution tube, so Peter (in Frank's beautiful white throwaway coveralls) took the plunge, single-mindedly to the task at hand, noting the very interesting phlegm-like, bright lime-green, almost phosphorescent and still-dripping "stalactites" everywhere down the tube!!

Reaching the "floor" (ie the cow's carcass), Peter bounced off the ribs and landed on a rock which he then realised was about 3 cm from a 2-metre long and luckily rather lethargic Brown Snake! After calling up a warning through his mask in the suffocatingly nauseous atmosphere, Peter moved aside and awaited the arrival of firstly David and then Ruth into the chamber. Ruth, being ever-vigilant under the worse conditions, diligently looked for, and located, a cave cricket which was a solitary male with one of its hind legs missing. Maybe it couldn't get food from outside the cave (S102 was definitely not breathing before the cow disappeared into the depths) and had eaten its own leg, as Ruth has observed before, in Cable Cave.

The next bit is rather horrible to describe - as the three cow-workers lifted and shoved, the body ripped into two more big pieces, one of which still had a grotesquely-protruding hoof sticking out, and the hide was like a layer of carpet on an oozy puddle of black muddy-like material which ran towards the first lake chamber - but I won't go into any REAL descriptive detail here!! Let's just say that at least Peter and David will be very happy to avoid visiting S102 before say the year 2000!

The trio then went to the water-monitoring system at the first lake and then checked to see whether the "Mott-emplaced Danger-Tape" was still in place near the crawlway (it wasn't!). Peter then said he could barely breathe and decided to go back while Ruth and David went on to check whether the monitoring gear could be taken through easily to the second chamber (it couldn't!). While Peter was looking up the entrance tube, pondering his horror-ascent and getting a great big green drip of sludge square in his forehead, Ruth and David also realised that they were carrying the smell ever deeper into the cave and both of them got to the stage where they were having trouble breathing and Ruth became incredibly thirsty, and they started back only 15 minutes after Peter began his climb out from the first chamber.

It was really a tossup between suffocating in the cave or enduring the ascent through the liquid-lime-green-stalactite-covered lower tunnel, but it only took a few seconds for each of them to decide to just "go for it"! It was actually quite difficult to ascend without continually scarping almost every part of one's body against the slimy wall-material!

The smell permeated everything, including the new Pajero (the next driver will have a very interesting journey!). We made a brief shopping stopover at Naracoorte's Woolworths mall - next to the sign which said "Ribs On The Run!" - so that Horne's much-loved and long-used caving sneakers could be substituted for some new sandals and socks.

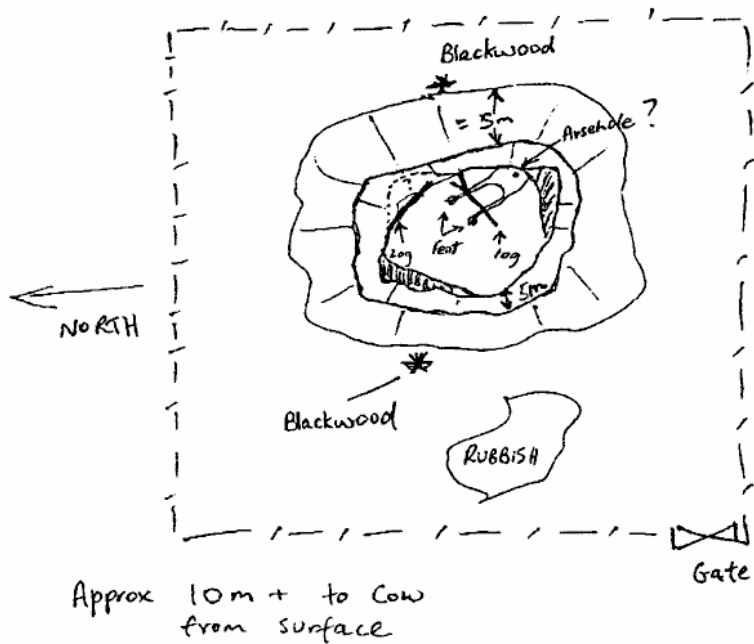
The topic of discussion during the return was an even more graphic chat about suicides and the general death theme until we all basically said "that's enough of this!"

Ah, what a weekend to remember! The moral of this story is ..."Every caver should shut the gate after them"!!!

Peter Horne.

A MINUTE OF HORROR in S102!

DIAGRAM OF 'HOLY COW'



TECHNICAL and OTHER ARTICLES

BAT LYSSAVIRUS AND CAVERS

The following is a brief summary of lyssavirus and its implications for cavers in South Australia. The advice given reflects my personal opinion and is not necessarily the policy of CEGSA.

The genus *Lyssavirus* is a member of the virus family Rhabdoviridae. There are now recognised seven forms of *Lyssavirus* worldwide, and all cause rabies-like diseases in infected animals.

Classic rabies (sometimes called sylvatic rabies) is one of the seven lyssaviruses, and occurs in the Americas, Europe and Asia. It is absent from Australia. It is known to affect a range of animals including humans, dogs and bats. Transmission of classic rabies to humans is usually from bites from rabies affected animals, although there have been reported cases of rabies infection in humans derived from breathing the air in bat caves (Constantine 1967).

Rabies is a nasty disease. The virus moves from the bite site through the peripheral nerves to the spinal chord and the brain. This can take up to five years! Symptoms include fever, uncontrollable salivation ('foaming at the mouth') acute spasms and paralysis. Once symptoms manifest themselves, the disease is always fatal.

There is a vaccine for rabies. In the old days, it used to be cultured in duck eggs, and the contents of about fifteen such eggs, were injected around the periphery of the stomach. These days, the pre-exposure vaccination consists of three 0.1ml injections under the skin of the upper arm, over four weeks (cost is about \$150). If someone is bitten by a suspected rabid animal, there is a post exposure treatment, which if given before the onset of symptoms, usually gives protection.

Lyssavirus in Australian bats was first discovered in 1994 as a byproduct of the search for the natural reservoir of another virus, Equine Morbilli Virus (EMV). You may remember that the Australian horse trainer, Vic Rail, his assistant and 16 horses died from EMV in 1994.

In November 1996, a woman in Rockhampton was hospitalised, and subsequently died, from contracting lyssavirus. I do not know what her symptoms were. Since she was an animal rescuer/rehabilitator, and had been bitten by a sick flying fox not long before the onset of her disease, it was assumed (and reported so in the press) that she contracted the disease from the flying fox. The flying fox was tested and proved negative for the disease. Amongst the other animals in her care that she had been bitten or scratched by, included other flying foxes, an insectivorous bat and possums. Many of these animals were released and were not available for lyssavirus testing. To this date, the source of the deceased woman's lyssavirus infection has not been determined and it is possible that bats played no part at all. No other cases of human infection have been reported since, although several people have been bitten by bats and have undergone the post-exposure treatment as a precautionary measure (5 thus far in SA)..

Biochemical and genetic tests have shown that the Australian lyssavirus is the most similar to classic rabies. In fact, classic rabies vaccines confer protection against the Australian lyssavirus. Although it is claimed that the presence of lyssavirus in Australia does not affect our rabies-free status, the health authorities are treating the disease as if it is rabies.

Testing for lyssavirus in bats has been steady since December last year. Lyssavirus has been found to occur in three species of flying fox and across a wide geographic range, from Darwin down the east coast to Melbourne. Thus far, only one insectivorous bat a Yellow-bellied sheath-tailed bat (*Saccolaimus flaviventris*) from Toowoomba, Qld has been found to be positive. This species also occurs in South Australia, albeit rarely.

There is general agreement among bat researchers and the health and animal authorities that transmission of lyssavirus to humans is an extremely rare event - after all, there has been only one confirmed human case, yet hundreds of bat researchers and animal rehabilitators have been bitten and scratched probably hundreds of times.

Consequently, one view is that the virus has been around for years. Conversely, it is possible that lyssavirus is new to Australia and we are only just beginning to see its effect.

So what does this all mean for cavers in South Australia? Given the potentially fatal nature of lyssavirus, and that at this point in time, there remains much to be learnt about the disease eg what is the range of bat species that carry the disease, whether in fact bats do transmit the disease to humans, if they do, how etc. - then I suggest cavers exercise caution. Cavers do come into contact with cave dwelling bats. It is likely that only sick bats are capable of being infectious and these individuals are likely to be roosting where cavers might be able to pick them up.

My advice is that cavers avoid going to caves where there are bats roosting, at least until we know more about the disease. Since there have been cases of people acquiring rabies from 'infected air' in bat caves, then there is a slight risk by just being in a bat cave (note though, that there have been no cases amongst the millions of people who have visited Carlsbad Caverns where over a million bats roost and amongst which are rabies affected individuals). Certainly, no one should be handling bats unless they have had the rabies vaccination. **If anyone does get bitten by a bat, then they must wash the wound thoroughly with soapy water - and then go directly to a doctor.**

I do not want to sound alarmist about this issue, in fact I have been fighting my own complacency about the real risk of getting infected by lyssavirus. However, there is a potential risk, and I believe that a temporary avoidance of bat caves is a sensible and small sacrifice to make - you don't want to be the second case! And I do not want to make people unduly wary of bats. Having spent much of my time trying to raise the profile of bats amongst the community at large, the advent of a fatal disease borne by bats is a severe setback for me and my colleagues. Bats are wonderful animals, and cavers have had a special opportunity to see and appreciate them.

For more detailed information, check out web sites on the Internet. Search for 'lyssavirus' or find the Australasian Bat Society's home page which has a great summary written by Rick Speare.

References used:

Constantine, D.G. 1967 Rabies transmission by air in bat caves. US Public Health Service Publication no 1617.

Speare, R. 1997. ProMED listserv newsgroup.

Yaldon, B.W. and Morris, P.A. 1975 The lives of bats. David and Charles, London 247pp

Terry Reardon,
Evolutionary Biology Unit,
South Australian Museum

%%%%%%%%%

LIBRARY AND RECORDS UPDATE

LIBRARY CORNER

Snippets from magazines CEGSA has received from December 1996-January 1997.

ADELAIDE BUSHWALKERS 50 YEARS 1946-1996 - 28 PAGES

This memorial magazine looks at the changes over the years in clothing, maps, diversity of walks, magazine changes, track marking, with many historic photos of members on various trips.

ILLAWARRA SPELEOLOGICAL SOCIETY VOL 3 No 4 & 5.

Interesting 6 page article over 2 editions for photographers - "How to become a good cave photographer", by Bob Kershaw.

BCRA MAGAZINE - COMPASS POINTS DECEMBER 1996.

A proposed set of UIS-standard cave survey symbols - (8 pages).

CAVE RADIO & ELECTRONICS GROUP JOURNAL 26 DECEMBER 1996.

"Spinning the Web, what is the web". (page 6)

AUSTRALIAN CAVE AND KARST JOURNAL NO 25 DECEMBER 1996

28 Days of Blood, Sweat and Tears. By Shane Cuneo. Story of completion of 3,000-km bike ride from Adelaide to Perth celebrating the Centenary of Arthur Richardson's crossing of the Nullarbor by bike. 130 people completed the ride. The youngest rider was 21 years old, the oldest was 75 years and 2 couples celebrated their honeymoon on the trip.

CAVER'S CHRONICLE VOL 23 DECEMBER 1996. (SRGWA)

An accident report on abseil that went wrong at a quarry when SRGWA provided their expertise and assistance at the accident scene. (pages 24 – 25)

THE JOURNAL OF THE SYDNEY SPELEOLOGICAL SOCIETY VOL 40 NO 12 DECEMBER 1996.

"Cave Survey Software - An Overview". by Wookey. (pages 203 – 207)

"Vandals Receive their due". Mention is made of three people who vandalised the Floyd Collins Crystal Cave recently. The Mammoth Cave National Parks USA estimate of the value was US\$270,000. Perpetrator 1:

received 33 months in prison, 3 years probation and 500 hours of community service work. Perpetrators 2 & 3: 21 months each in prison, 3 years probation and 500 hours of community Service work. (page 219)

THE JOURNAL OF THE SYDNEY SPELEOLOGICAL SOCIETY VOL 41 NO 1. JANUARY 1997.

"Tasmanian Caverns claim world record" by G D Lyons. (pages 3-11)

Interesting article on long straws found in Newdegate Cave, Southern Tasmania. Article claims most impressive group of straw stalactites ever recorded.

"Sound System ensures bats get a good hearing", by Greg Roberts. (page 19)

Sophisticated electronic and computer equipment invented by a Queensland scientist has revolutionised the study of bats around the world. The calls are played through a ZCAIN computer model onto a laptop screen. The special software, called Anabats, analyses them and displays them on the screen in a series of graphs, or sonograms.

NARGUN VOL 29 NO. 7 FEBRUARY 1997.

Rope Testing 11. by Peter Ackroyd page 51-53.

This article shows rope testing for impact strength. Peter shows results of four different rope examples used.

"Behavior of caving ropes". by Brian Carter. (pages 53-55)

"A Solid state backup lamp for caving lights". by Geoff Hammond. (page 56)

"Who is he then"? In a feature article on prostitution in The Age Extra on Saturday 9th November 1996 (page 5), we learn that one "working Girl" claims to have had a "speleologist" for a client. According to NARGUN, there can't be too many people in Melbourne who could claim to be a speleologist and even fewer who would make such a claim. So then, fess up - who is it? (page 64)

George MacLucas

%%%%%%%%%%%%%%%%%%%%%%%%

NOSTALGIA CORNER

NEWS FROM PAST NEWSLETTERS

10 YEARS AGO

- 22 Jan 1987, Neville Pledge actually went into Corra Lynn cave on a bone collecting trip for the SA Museum.

20 YEARS AGO

- Feb 1977, Ian Lewis (Nullarbor Caves Recorder) numbered 8 blowholes in the Cook and Ooldea area bringing the total number of documented karst features on the Nullarbor to 190.
- A list of the longest caves (in SA and the Nullarbor) shows 14 caves exceeded 1km. Only 4 exceeded 2km, namely:

6N37	Mullamullang	10.0km	5Y1	Corra-Lynn	5.4km
5U1	Victoria	3.1km	5U16	Sand	2.2km

30 YEARS AGO

- Jan 1967, the connection in Mullamullang cave between Franks Station and Easter Lake found on a trip attended by Tom Wigley, Peter Hawkes, Alan Hill and Peter Bridge.

40 YEARS AGO

- 3 Feb 1957 Elery Hamilton-Smith resigned as CEGSA President when he moved to Victoria.
- 27 Feb 1957 new president R T (Bob) Sexton.

HISTORICAL ITEM

370 YEARS AGO

- 26 Jan 1627 Pieter Nuyts and Francis Thijssen in the Dutch ship Gulden Zeepard (Golden Seahorse) were the first recorded Europeans to sight any part of South Australia. On that day they named the islands of St Peter and St Francis near Ceduna and they had been the first to see the Nullarbor cliffs.

NOTE: This item was reported by J R Dunkley in *Caves of the Nullarbor* p2, in which one island is incorrectly named as St Paul. Pieter and Francis named two islands not after themselves, but after their patron saints! A nice way of avoiding being labelled as egotists).

Max G Meth

MEMBERSHIP**Transfer to Full Membership**

Genelle BETTISON 9411
 Pam ALVARO 9503
 Dave GLOWACKI 9510

Legend

No prefix = Home Phone
 (W) " = Work "
 (F) " = Fax Number
 9701 = 1st Member Joined in 1997

Change of contact numbers

Simon KENDRICK 8611 8331 3750
 Ruth LAWRENCE 9208 8362-5778 (W)8303-5649 (F)8303-3772 rlawrence@arts.adelaide.edu.au
 Damian GRINDLEY 9610 dgrindle@waite.adelaide.edu.au

Change of address

Bridget WILKINSON 8205 George St, SOUTHEND SA 5280 08-8733-3862

New Associates

Steve BOURNE	9701 RSD 1066, NARACORTE SA 5271	08-8769-6086
Carlo VIRGILI	9702 GPO Box 1589, ADELAIDE SA 5001	8364-4102 (W)8226-3394
Simon BRENNAN	9703 31 Hill Street, PARKSIDE SA 5063	8271-6013 (W)8226-7958
Jim FERRY	9704 12 Grand Central Ave, HALLETT COVE SA 5158	8381-1911 (W)8401-8216
Simon BILLINGHURST	9705 PO Box 111, WOODCROFT SA 5162	8325-1971 (W)8204-2556
Andy BANDICK	9706 2 / 32 Creslin Tce, CAMDEN PARK SA 5038	(W)8226-3922

Graham Pilkington

%%%%%%%%%

INDEX TO VOLUME 41

Volume 41 contained the following issues:

- 41 (1) February 1996
- 41 (2) May 1996
- 41 (3) August 1996
- 41 (4) November 1996

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

No Trips

FLINDERS RANGES

No Trips

KANGAROO ISLAND

No Trips

LOWER SOUTH EAST

L5	41 (2) p33	M Choi	
	41 (3) p46	K Mott	S
	41(4) p73	G Pilkington	E
L7	41 (1) p22	P Horne	D
	41 (1) p24	P Horne	M
L9	41 (1) p22	P Horne	D

	41 (1) p24	P Horne	M
	41 (4) p72	M Thiselton	T
L11	41 (4) p71	M Thiselton	T
L14	41 (1) p22	P Horne	D
	41 (1) p24	P Horne	M
L18	41 (1) p11	K Grimes	E
	41 (3) p47	B Jansen	
L19	41 (1) p11	K Grimes	S
L21	41 (2) p33	M Choi	E
	41 (4) p73	G Pilkington	E
L23	41 (2) p33	M Choi	E
	41 (3) p47	B Jansen	E
L25	41 (2) p33	M Choi	E
L31	41 (3) p46	K Mott	SR, W
L34	41 (1) p11	K Grimes	D, E
	41 (3) p46	K Mott	
L38	41 (3) p46	K Mott	W
L39	41 (3) p47	B Jansen	
L40	41 (1) p22	P Horne	D
	41 (4) p71	M Thiselton	T
L42	41 (1) p23	P Horne	M
	41 (1) p22	P Horne	D
L42/43	41 (1) p22	P Horne	D
	41 (1) p23	P Horne	M
L47	41 (1) p22	P Horne	D
	41 (1) p23	P Horne	M
L60	41 (3) p47	B Jansen	
L61	41 (4) p72	M Thiselton	T
L67	41 (4) p72	M Thiselton	E
L72	41 (4) p71	M Thiselton	Di
L95	41 (3) p46	K Mott	W
L158	41 (1) p22	P Horne	D
	41 (1) p23	P Horne	M
	41 (4) p71	M Thiselton	Di
L163	41 (1) p22	P Horne	D
L174	41 (1) p11	K Grimes	E
L238	41 (4) p72	M Thiselton	E
L322	41 (3) p46	K Mott	
L335	41 (1) p12	K Grimes	D, E, S
	41 (1) cover		M
L339	41 (1) p11	K Grimes	D, E
L366	41 (3) p46	K Mott	
Crowbar Cave?	41 (3) p47	B Jansen	E

MURRAY PLAINS

No Trips

NULLARBOR PLAINS

N2	41 (1) p4	EH Sangster	E
	41 (3) p53	J McLucas	
N3	41 (1) p4	EH Sangster	
N4	41 (1) p4	EH Sangster	E
	41 (3) p48	J McLucas	T
N17	41 (1) p4	EH Sangster	Tg
N36	41 (1) p6	M Meth	
N37	41 (1) p5	EH Sangster	E, W
	41 (3) p51	J McLucas	E, P
	41 (4) p79	M Meth	D, H, Pa
N38	41 (1) p7	M Meth	D
N39	41 (1) p5	EH Sangster	E
	41 (1) p6	M Meth	D
N40	41 (1) p5	EH Sangster	P
	41 (1) p7	M Meth	E
N41	41 (1) p7	M Meth	E
N42	41 (1) p7	M Meth	
N46	41 (1) p10	M Meth	

N47	41 (3) p52	J McLucas	E, P
N48	41 (3) p52	J McLucas	T
N68	41 (3) p52	J McLucas	T
N69	41 (1) p7	M Meth	
N70	41 (1) p8, 9	M Meth	D, E, H
N75	41 (2) p37	M Meth	
N83	41 (3) p48	J McLucas	E
	41(3) p50	J McLucas	P
N94	41 (3) p52	J McLucas	D, E, S
N132	41 (3) p51	J McLucas	E
N133	41 (3) p51	J McLucas	B, E
N149	41 (3) p49	J McLucas	E
N160	41 (1) p6	M Meth	D, Tg
N164	41 (2) p36	M Meth	D, L
N165	41 (3) p51	J McLucas	P
N195	41 (2) p37	M Meth	
N201	41 (1) p4	EH Sangster	
N206	41 (3) p48	J McLucas	S
	41 (3) p49	J McLucas	P
N266	41 (1) p4	EH Sangster	
N342	41 (1) p7	M Meth	D, Tg
N345	41 (2) p36	M Meth	D
N383	41 (3) p48	J McLucas	
N482	41 (3) p51	J McLucas	
N483	41 (3) p48	J McLucas	
N518	41 (1) p4	EH Sangster	
	41 (1) p7	M Meth	D
N602	41 (2) p36	M Meth	D
N699	41 (3) p52	J McLucas	
N700	41 (1) p8	M Meth	Tg
N731	41 (3) p50	J McLucas	E
N745	41 (3) p49	J McLucas	E
	41 (3) p50	J McLucas	S
N747	41 (3) p49	J McLucas	B, D, E
	41 (3) p51	J McLucas	Bo
N869	41 (1) p10	M Meth	D, L, Tg
N870	41 (1) p10	M Meth	D, L
N872	41 (1) p6	M Meth	D, Tg
N1076	41 (2) p37	M Meth	L
N1077	41 (2) p37	M Meth	
N1078	41 (2) p37	M Meth	L
N1080	41 (2) p37	M Meth	D, L
N1085	41 (2) p37	M Meth	
N1087	41 (2) p37	M Meth	H
N1089	41 (2) p37	M Meth	D
N1090	41 (2) p37	M Meth	D, L
N1091	41 (2) p36	M Meth	D, H
N1224	41 (3) p48	J McLucas	
N1289	41 (1) p9	M Meth	D
N1290	41 (1) p9	M Meth	
N1320	41 (1) p6	M Meth	D, S, Tg
N1321	41 (1) p6	M Meth	D
N1322	41 (1) p7	M Meth	D, Tg
N1323	41 (1) p7	M Meth	D, Tg
N1324	41 (1) p7	M Meth	D, Tg
N1325	41 (1) p8	M Meth	D, L
N1326	41 (1) p9	M Meth	D, L, Tg
N1327	41 (1) p10	M Meth	D, L, S, Tg
N1329	41 (1) p8	M Meth	D, L, Tg
N1330	41 (4) p81	M Meth	D
N1331	41 (4) p81	M Meth	D
N1332	41 (4) p81	M Meth	D
N1333	41 (2) p36	M Meth	D
N1334	41 (2) p36	M Meth	D, L
N1335	41 (2) p36	M Meth	D
N1336	41 (2) p36	M Meth	D, L

N1337	41 (2) p36	M Meth	
N1338	41 (2) p37	M Meth	D, L
N1341	41 (2) p36	M Meth	D
N1342	41 (2) p36	M Meth	
N1347	41 (3) p49	J McLucas	D, E, P
N1369	41 (3) p51	J McLucas	B, D
N1380	41 (3) p50	J McLucas	
N1381	41 (3) p50	J McLucas	E
N1382	41 (3) p50	J McLucas	B, D
N1383	41 (3) p50	J McLucas	E
N1384	41 (3) p50	J McLucas	E
N1385	41 (3) p51	J McLucas	Tg
N1386	41 (3) p47	J McLucas	
N1392	41 (3) p51	J McLucas	
N1393	41 (3) p51	J McLucas	
N1394	41 (3) p51	J McLucas	
N1395	41 (3) p51	J McLucas	
N1396	41 (3) p51	J McLucas	
N1397	41 (3) p51	J McLucas	
N1398	41 (3) p51	J McLucas	
x35	41 (1) p8	M Meth	D
x93	41 (2) p36	M Meth	
x133	41 (1) p7	M Meth	
x135	41 (1) p7	M Meth	
x242	41 (1) p8	M Meth	
U/N	41 (1) p4	EH Sangster	
U/N	41 (1) p8	M Meth	D, S, Tg
U/N	41 (1) p9	M Meth	D, L, S, Tg
U/N	41 (3) p49	J McLucas	E

UPPER SOUTH EAST

U8	41 (4) p74	G Pilkington	E
U10	41 (4) p73	G Pilkington	T
U12	41 (4) p74	G Pilkington	Tr
U17	41 (4) p73	G Pilkington	E
U22	41 (1) p19		M
U47	41 (4) p72	G Pilkington	W
	41 (4) p74	G Pilkington	E
U58	41 (4) p74	G Pilkington	T
U132	41 (4) p74	G Pilkington	E

YORKE PENINSULA

Y1	41 (2) p35	M Papillo	Tr
	41 (2) p35	M Pilkington	W

INTERSTATE & OVERSEAS

Buchan	41 (1) p13	J McLucas	
3B2	41 (1) p15	J McLucas	
3B5	41 (1) p14	J McLucas	T
3B6	41 (1) p16	J McLucas	T
3BR1	41 (2) p33	J Gheude	E
3BR2	41 (2) p34	J Gheude	E
3BR3	41 (2) p34	J Gheude	E
3BR18	41 (2) p33	J Gheude	E
3BR36	41 (2) p34	J Gheude	E
3BR59	41 (2) p34	J Gheude	E
3EB4	41 (1) p15	J McLucas	E
3EB21	41 (1) p15	J McLucas	E
3EB65	41 (1) p16	J McLucas	E
3EB66	41 (1) p16	J McLucas	E
3M3	41 (1) p15	J McLucas	T
3M12	41 (1) p15	J McLucas	

3M14	41 (1) p15	J McLucas	
3M30	41 (1) p14	J McLucas	E
3M56	41 (1) p16	J McLucas	E
3M92	41 (1) p15	J McLucas	
3M125	41 (1) p15	J McLucas	
Drik Drik	41 (3) p46	K Mott	E, S

TECHNICAL AND OTHER ARTICLES

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

Additions to OP5 (L)	41 (1) p39	
Additions to OP5 (L)	41 (1) p42	
Additions to OP5 (U)	41 (1) p42	
ASF Cave Leadership Scheme	41 (4) p76	G Pilkington
Caving Footwear Warning	41 (1) p21	B Jansen
CEGSA quiz night	41 (2) p33	D Wilson
Cenotes comparisons - Mt Gambier	41 (1) p22	P Horne
Fossil collecting in NP caves	41 (2) p20	N Pledge
Fox Cave Map	41 (1) p18	P Kraehenbuehl
Index - Volume 40	41 (3) p62	
Joint club training days	41 (2) p34	M Choi
Karst - computer programme	41 (3) p57	M Meth
Labelling material from caves	41 (4) p78	R Simms
Mullamullang only has one entrance	41 (4) p79	M Meth
New publications	41 (2) p38	E Hamilton-Smith
NORLD	41 (3) p58	
Not really a CEGSA trip (canyoning)	41 (2) p34	T Colhoun
Nullarbor update	41 (4) p75	G Pilkington
Obituary - H Baker/A Sherriff	41 (2) p38	K Mott
Obituary - Keith Quartemaine	41 (3) p58	M Meth
Shutterbugs	41 (2) p35	M Choi
Two years on the road	41 (3) p54	J McLucas
Unsafe Cave Policy	41 (4) p75	G Pilkington

Kevin Mott.

%%%%%%%%%

FOR SALE (Due to closure of tree felling business)

2x SRT descenders	\$135	ONO
1x SRT descender with brake	\$160	ONO
1x SRT hand ascender	\$ 70	ONO
1x PETZL hand ascender (left hand)	POA.	
(ie I don't know yet)		

All are new in original packaging. Prices are apparently a considerable reduction on shop prices even with a discount.

Initially contact Damian Grindley on 8362 8123



"Still, it must have been over quite quickly."