CEGSA NEWS

Newsletter of the Cave Exploration Group (South Australia) Inc.

Volume 45 Number 3 **Issue 179** **AUGUST 2000**

CAVE EXPLORATION GROUP (SOUTH AUSTRALIA) Inc.

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

http://www.users.on.net/smilner/index.html

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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	Marie Choi	As Above

Cover Photograph: Ian Farhill (Victorian Pom No. 2) demonstrating the latest technology in Victorian caving ladders.
Photo: Marie Choi.

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QUARTERMASTERS NOTE.

High usage equipment will now be stored at the quartermasters residence at 1 Hall St. Norwood. Please make arrangements with Simon well in advance of required date for equipment. Simon can be contacted at the telephone numbers on the previous page.

NEWSLETTER MATERIAL

The deadline for copy or background material for Volume 45 Number 4 (Issue 180) must reach the Editor by Wednesday **8th NOVEMBER 2000**. Material not meeting this deadline may be retained for possible use in a following issue. The preferred method is via E-MAIL at atholjax@senet.com.au as an attachment or on 3.5" IBM floppy disk, in Word or ASCII text format. Of course other forms of communication will still be gratefully accepted.

PRESIDENTS SPOT

Well work wise its been a busy few months unfortunately I haven't done much caving recently, my most recent and enjoyable trip was the Mt Eccles weekend with the Victorians. It was good to see a few of our newer members there mixing with the Vics, it was unfortunate that we were outnumbered by the Vics 2-1. A great time was had by all as you can read in the report.

Our new member numbers has not been great over the last few years not for want of trying by some of our members especially Simon. So at our last meeting Simon put forward some suggestions that may improve membership numbers or the retention of members. His initial suggestion was to remove the 2 levels of membership and bring in a student membership fee, for students and that all members are seen as full members. Although most people who attended the meeting did not like this idea it did promote discussion about how we can improve our membership numbers and help newer members feel more welcomed.

Do any of our other members have anything to add to the discussion?

Marie Choi.

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Visitor Indemnity Forms

Club policy requires that all visitors complete a "Visitors Indemnity Form" when attending a Club activity. Good Management practice dictates that copies of these forms are taken on the Club activity, in the care of the Trip Leader, as information on the forms may be required in the case of an accident or medical alert. For legal reasons it is then prudent to retain copies of the "Visitor Indemnity Form" for a period of five (5) years. The Committee strongly recommends all Trip Leaders ask visitors to complete a "Visitors Indemnity Form" and that these are filed with the Records Officer, for storage, after the activity.
Copies of the "Visitor Indemnity Form" can be obtained from the Committee or from the Club's web site.

Simon Kendrick.

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Trip Leaders Please Note

Caves **S102 and SOS** are out of bounds on days when the Naracoorte Pistol Range is in use. Unfortunately we do not have a new program of events at the range yet so please check with Mr. Biggins (landowner) or the logbook officer may have a program by the time you require it for planning. You still must, of course, contact the landowner for permission.

The Committee.

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Thank You

Thanks to all our friends in CEGSA for your kind thoughts and words in regard to the death on 22 July of our son Neil, aged 26. Some will remember Neil from family caving trips. It's not true that he clocked up his first fifty hours caving at Naracoorte before he could walk, but it wouldn't be far off the mark. Your support is greatly appreciated at this difficult time.

Grant Gartrell and family.

TRIP REPORTS

Nullarbor 1999, South Australia - The Bunda Cliffs
By Steve Milner

Introduction

Some 10 years ago, maybe more, several CEGSA members hired a plane to fly along the Nullarbor Cliffs to see what was there. They were armed with 35mm cameras and a video camera to record their unique view of the cliffs. They started filming at the Head of the Great Australian Bight, and followed the cliffs 176km west towards the end of the cliffs near the WA border and Eucla. Throughout the flight they spotted many hundreds of potential cave features and they also saw a fair concentration of caves about 60km into the flight. This new initiative realized a whole new caving area, but the problem remained that all these new caves were difficult to get to.

After the flight, the 31 rolls of slide film were copied, the video was transferred to VHS, and duplicates of all were placed in the CEGSA records, and that was about it. I had heard of the flight when I joined CEGSA in 1990, and I heard people talk about it occasionally since, but there didn't seen to be any real interest in descending the cliffs to check leads.

Many years went by and it took a casual conversation between CEGSA member Terry Reardon and a bunch of climbers from Victoria to set enthusiasm alight. It turns out that the climbers also had caving experience and they decided to mount an expedition to combine climbing and caving. Terry obtained a copy of the video and sent it on to the Victorians. Big plans were made, big prospects were envisaged and the

concentration of caves seen 10 years before was chosen to be the focus area for the 1999 expedition.

The prospects were fascinating, especially as geologists said that the sea level was once lower and that the cliffs may have been accessible from low-lying land (now underwater) as recently as 15-18,000 years ago. Also the cliffs may have retreated with the action of the sea and exposed caves that were once accessible from the top of the cliffs. This opened the possibility that perhaps the dreaming trails that led to the coast, led to aboriginal sites that are no longer accessible. Perhaps the caves at the foot of the cliffs had bones, unique flora, fauna, relics or whatever because of their isolation. No one knew what to expect.

Rod Short was the leader of the climbers and his enthusiasm was infectious. He assembled a film crew, a pilot and ultra-light plane (to relocate the caves from the air), experienced climbers, a member of the SA Museum, cavers and also sought the expert opinions of researchers concerning anthropology, sea lions and caves. The expedition was planned for July because the winds were better for the plane as they were more or less constant and southerly. However, the NPWS (DEHAA) had other plans and refused to grant a permit to access the cliffs for July. Their objections were mostly to do with timing to allow a period of consultation with experts and aborigines, and to avoid disturbing the whales in their calving season. So the team settled for November 1999.

Unfortunately, the aircraft would not be available in November, and some key players were unable to make the newly allocated time. But all was not lost, a scaled down expedition was organised as a reconnaissance trip, so that logistical issues could be ironed out, so that we could be better prepared for the big expedition. However, we did wonder if we could find the caves without the aid of a plane or a boat ...

The 1999 Team (Left to Right): Steve Milner, Terry Reardon, Rod Short, Daryl Hughes, Dave Whitam, Alan Cambell

The 1999 Team:

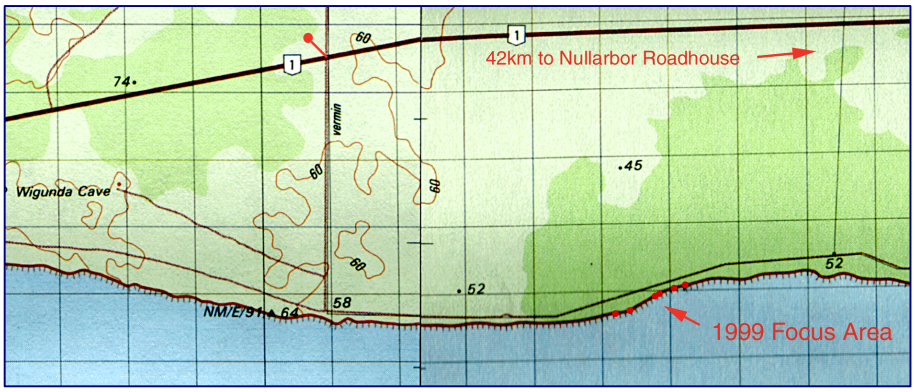
Alan Campbell: Climber and Chief Rigger. (Supplier of quality 4WD transport)
Daryl Hughes: Cook, Abseiler and Cave Digger. (Noted for brilliant damper).
Steve Milner: CEGSA Caver and Scribe.
Terry Reardon: CEGSA Caver, Biologist and SA Museum Correspondent.
Rod Short: Expedition Leader (El Capitan ... obviously likes caving in the ocean).
David Whitam: An Experienced Climber. (Aged 64 and up and down the cliffs like a young bloke ... puts most of you readers to shame!)

Monday 1st November, 1999.

The Adelaide pickup was meant to be around noon but because of trailer problems and some serious re-welding at Bordertown it turned out to be much later and we finally left Adelaide at 5pm. An uneventful journey to Ceduna where we topped up with fuel and added 100kg of rainwater to the already overloaded trailer. We continued driving through the night and had to dodge a huge wombat and also stop for a big stupid kanga. Then 5km after Yalata, at 4:40am, disaster struck and a tyre blew on the trailer, and the weight and the additional forces caused the axle to dismount and sparks flew. We could do nothing except sleep by the roadside and deal with the problem in the daylight.

Tuesday 2nd

We then sought assistance from the Yalata Community. Rod was successful in getting Ken, the local senior NPWS ranger to return with a welder to try to fix up the axle. Unfortunately our generator did not have enough oomph to do the job so we decided to take the trailer back to Yalata and get it fixed. When Ken returned with a big four-wheeled trailer, we put our little one up on it and took it back to Yalata (see the picture above). As nothing could be done that day we left the trailer behind to be fixed sometime during the week. Ken generously organized to lend us the big 4WD trailer for a token hire fee and we were once again on our way by noon.



We made it to the Nullarbor roadhouse for a late lunch before heading for the cliffs. We measured the 42km from the roadhouse before turning south along the old vermin-proof fence and then we set up camp near the cliff edge, about 5km east of the fence. Once at the cliff edge we had trouble working out where the caves were, but we knew that we were in the general vicinity. We did a lot of legwork that afternoon, looking at the rocks in the ocean, trying to find something that we could relate to. We knew that we had a huge task to find the caves seen on the video and it was raining and the wind was bitterly cold. We then retreated to the tent, fired up the video player and TV and replayed the video of the flight. Unfortunately, we could not see anything on the video that related to the cliffs that we were examining that afternoon. Nonetheless, we decided to log the relationship of the caves to one another in the hope that something would click when we inspected the cliffs once again. We actually resorted to counting the frames of the film to estimate the distances involved. Estimates that later turned out to be pretty accurate.

So, it was back to more legwork, and we covered several kilometres of cliffs before Steve found a feature that he remembered from the video. Two slabs of rock at the top of the cliff had slipped and were lying at an odd angle. This didn't seem to be much to go on but it became our reference point and we dubbed it the 'Twin Rocks' [52J 0646273 6504074, visible on the video at 18'58" and at 21'49"].

Now we had to decide whether we going to go tackle the Tonsils or the Garage Door, two cave features seen on the video and the subject of a bet between Rod and Alan. We decided to check out the Tonsils first as it looked as if it would be the easier of the two because there was a rockpile to land on.

Wednesday 3rd

We paced the estimated distance from Twin Rocks and found a suitable place for the descent. We could see the rockpile from the top of the cliff but we were also very cautious, as the top edge of the cliff was rather unsafe. We found that the cliff edge was topped by perhaps a metre of hard rock, and the next layer down, which varied from 8 to 10m of depth, was friable, unsafe and sometimes undercut the top layer. Combined, the two top layers were rarely vertical and frequently had a slope of 45º. Once past the top layers the rock was hard and the cliffs were vertical and much safer.

Alan Campbell at the edge of the friable layer

Once we had 'gardened' the top few metres of rock we tied our ropes to the 4WD (there were no other belays) and set about descending the cliff. The descent to the Tonsils was relatively short (25m) and we were all soon exploring the rockpile. The actual descent was about 50m west of the caves and we quickly headed off to see whatever we could find. The first cave [5N1571] had a large entrance 10m wide x 8m high and was partially obscured by rockfall. The cave was about 10m above sea level and there was approx. 40m of cave. A breathing draught was found in three places telling us that ultimately the passages must connect to sea. We found bandicoot bones, bird bones, and four Chocolate Wattled Bats (*Chalinolobus morio*). Approx. 10m west and slightly higher than 5N1571, a small entrance (1m x 1m: [5N1572]) was found which led to 30m of cave in rift-type passage. A draught was noticed at the end, but it did not breathe like the first cave. A third cave was found [5N1573] about 5m west of 5N1572 and a few metres higher. The entrance rift was very tight rift (1.2m high x 0.3m wide). The passage went almost parallel to the cliff face and then after 3m and a 90º bend went North 12m into the cliff. There was no draught. Overall, the Tonsils proved rather disappointing, but we had managed to cut our teeth on a relatively easy prospect. The Garage Door [5N1574] was going to be a lot harder.

Rod Short at the Tonsils 5N1571 - 5N1573

As we could not see the caves below we estimated the location of the descent to Garage Door based on the distance from 'Twin Rocks'. So we measured a spot on the cliffs 207m west of our reference point and prepared to descend the cliff. Entry into the Garage Door was going to be interesting as there was no landing zone and we had figure out how to get into the cave without getting wet in the ocean. Alan descended first on the 50m rope and reported that the descent was slap-bang in line with cave, and that the cave entrance was large (12m high by 14m wide) but he could not see to the back of the cave. He went as low as he dared, as the surf was very high, he also reported that he was dangling in fresh air about 10m away from the cliff face. Steve went down next with a grappling hook and lightweight lead-in rope. After many tries, and spinning around, he finally got the hang of it: one has to gather sufficient rope in one hand and then swing the hook violently in the direction of the cave. Steve managed to get the hook about 5m into the cave, but it was barely out of the wave zone. As he had been on the rope for a while and was starting to get pins and needles, he prepared to descend into the cave. His aim was to abseil down the main rope while pulling in on the grappling hook, however, when he pulled out the remaining length of rope from the rope bag he found that there wasn't going to be enough rope to reach the cave floor. So, turning around, he tied the grappling hook off by an overhang and went up. By the time Steve got to the top of the cliff, it was late and time for tea.

The Garage Door 5N1574 (circled) with a neighbouring sea cave just beyond

Thursday 4th

Alan went down first and set up a deviation and a rebelay to keep close to the rockface before entering the cave. Some 70m of rope was needed. The descent was terrific but the cave proved only to be a sea cave, 50m long. It was well worth a visit and we all had a look-see. The cave maintained its dimensions right to the end (12 x 14m), but there was no way on; it was a true sea cave, eroded by the sea. We found many big chunks of chert, and saw swallows and fairy penguins. On the rock floor we saw scratches from the claws of sea lions. Some photos were taken and Rod took some great video footage.

Clearly the Garage Door was not an entrance to a mega Nullarbor cave and so we moved on to the next best feature seen on the video, a dark alcove that we nicknamed the Slot. We headed for this feature, which was some 750m west of 'Twin Rocks' and not far from the Tonsils. We had by now perfected the art of placing the ropes directly over a target but the Slot turned out to be a dark alcove. Steve descended 40m down the cliff just to make sure and then turned around. Rod filmed the descent and obtained some more great footage of some 'thin air caving' over the ocean.

A Banunga to Protect the Rope

Next we had a look at the Banungas. The top one 'Little Banunga' [5N1575] was entered by Rod. He dropped down the cliff only 10m and could see into a cave. Rod tried to enter but found it very awkward, as he had to gain a purchase on the rock while letting out the rope from his rack. In doing so he nearly lost the rope when a bar on his rack decided to slip out. Luckily the problem was fixed before he finally slipped out of the cave as if on a huge pendulum. Clearly a rack was not the best tool for the job (a Petzl Stop or its equivalent is much better). Rod said that the cave appeared open and is well worth following up.

It was getting late and we decided not to descend down to the Greater Banunga, but we gave it a number anyway [5N1576]. We also had a quick look at the nearby feature dubbed the Washaway, but like the Slot it looked as if it was merely a darker alcove in the rock face. Not descended.

It is worth telling a little about camp life. The weather had been consistently cold, very windy and it had rained frequently. The camp was rather exposed and Terry's tent had just collapsed. The bigger tent fared a little better but the camp was not the most pleasant of sites. But thanks to the efforts of Daryl, the culinary sides of things were first class. Daryl works at Rods Bush Food Restaurant in Victoria and produced some terrific meals in conditions that were not easy. Of note, Daryl prepared some award-winning garlic and herb damper, fruit damper and some fruit scones that were worth descending cliffs for.

Friday 5th

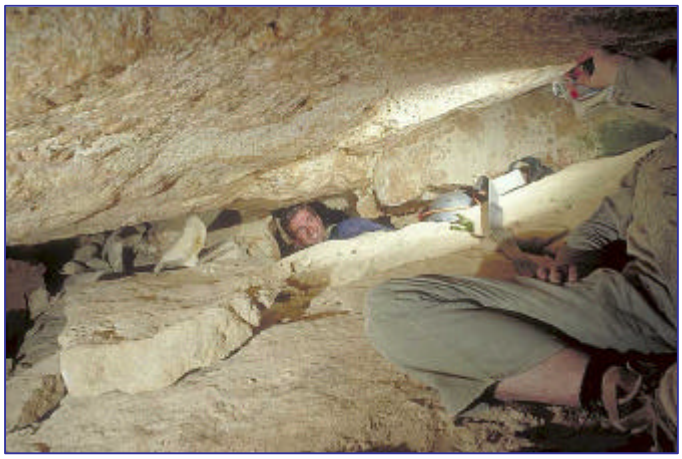
We decided to tackle a couple of caves seen on the video close to the Garage Door. Once again our locating skills proved to be spot on and we descended 35m to a rockpile. The first prospect turned out to be a mere dark part of the rock face, but the second was a cave with a constant draught coming out. This style of cave was quite unlike any other we had encountered so far on the edge of the Nullarbor. We called this one the Tenderiser (named by the cook after beating the rock to gain entry). Actually we very carefully hammered and chiselled a single block for a couple of hours to squeeze through into a low flattener that went for 28m. The cave that we explored was an upper section formed by the collapse of a lower section. It was good dig though. The scenery was great and we saw several pods of dolphins swim by.

The Tenderiser 5N1577

Just around the corner of the cliff from the Tenderiser, a big cave could be seen in the video and we speculated that it may connect to the Tenderiser. Rod duly abseiled down directly over the cave and managed to put the grappling hook down onto a boulder. Unfortunately there was not enough rope (we weren't very good at estimating how much rope would be needed) and he had to come back up again to tackle the cave the next day.

Saturday 6th

Now we come to the story of Rods' exploration of the big cave which we later called 'Wet Dreams' [5N1578]. *Surface account:* We watched Rod descend and do his first downward changeover on the 80m rope and then pull in on the grappling hook rope until he went out of view. We had communications for a while but then they ceased. We weren't too worried at first, as the communication device had been playing up a little. More time passed (another hour) and we still had not heard from him nor could we feel any activity on the rope. As previously agreed we then decided to go into rescue mode and started rigging the spare rope for an emergency descent while working out scenarios to provide assistance should it was needed.



Alan Campbell in the Tenderiser 5N1577

Rod's account: This was it, a chance to explore a mega Nullarbor sea cave. On arriving at the foot of the cliff I pulled in on the grappling hook that had lodged itself on edge of sea boulder. I was pretty close to the sea when the first wave dunked me and this had an electrifying effect as the radio microphone started tingling my lips. I got even wetter when I landed on the boulder and then had to wade in the sea to get into the cave. The water was chest deep for 3-4m and on reflection it was pretty dangerous as I could have been baled over by a wave with full gear on and who knows what would have happened if the gear got snagged underwater. I checked the cave out thoroughly but disappointingly it was only a much larger version of the Garage Door. The entrance was 40m wide and 30m high, the passage was about 60m long and the cave had its own bouldery beach. It was a shame that it didn't go. I had problems on the ascent. I anchored the rope so that I could do a sort of a Tyrolean traverse but it was too low and I dropped back into water. Two seals turned up for a close look at me, young adults with milky white undersides and light grey on top; they were probably laughing. So I tried to rig the rope again, and anchored the rope higher. As I pulled in on the top rope to tighten it, luckily it slotted in a perfect spot (less angle). I thought, "Hooray, there is a God" ... or words to that effect. I left the cave but I am afraid to say that I had to say goodbye forever to the red sling and grappling hook.

Surface: Just as we were packing the first aid gear and putting on the SRT kit, Rods rope pulled tight and he started to climb. That told us that he was in control and saved us a journey to the foot of the cliff. Rod returned completely saturated, and being glad to be back safe and sound, kissed the ground gratefully. So much for wet dreams!

After all the excitement of the day, we decided to do something less strenuous and decided to take a quick look at 5N147 (Wigunda Cave). It was an interesting feature and we obtained a GPS location for the records. We also had a look at the cliffs just south of Wigunda Cave and determined that there was another high concentration of caves just waiting for some one to drop down and have a look-see.

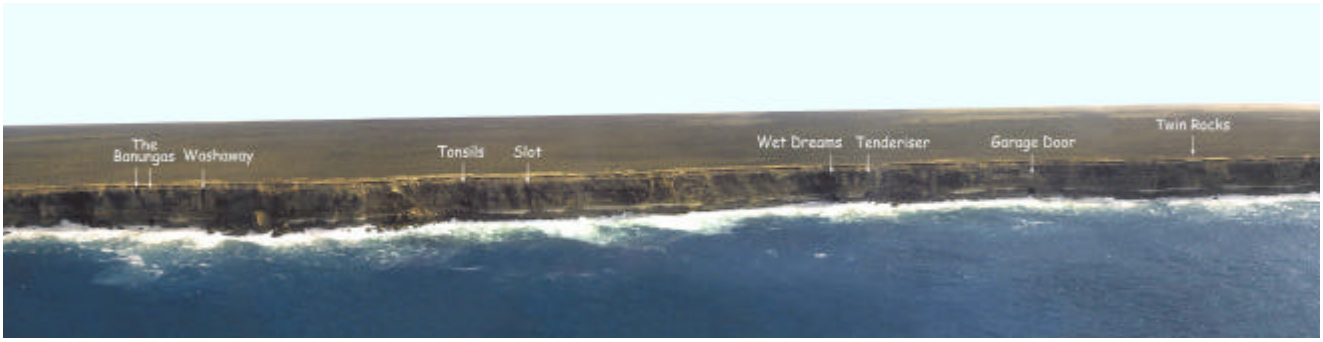
Sunday 7th

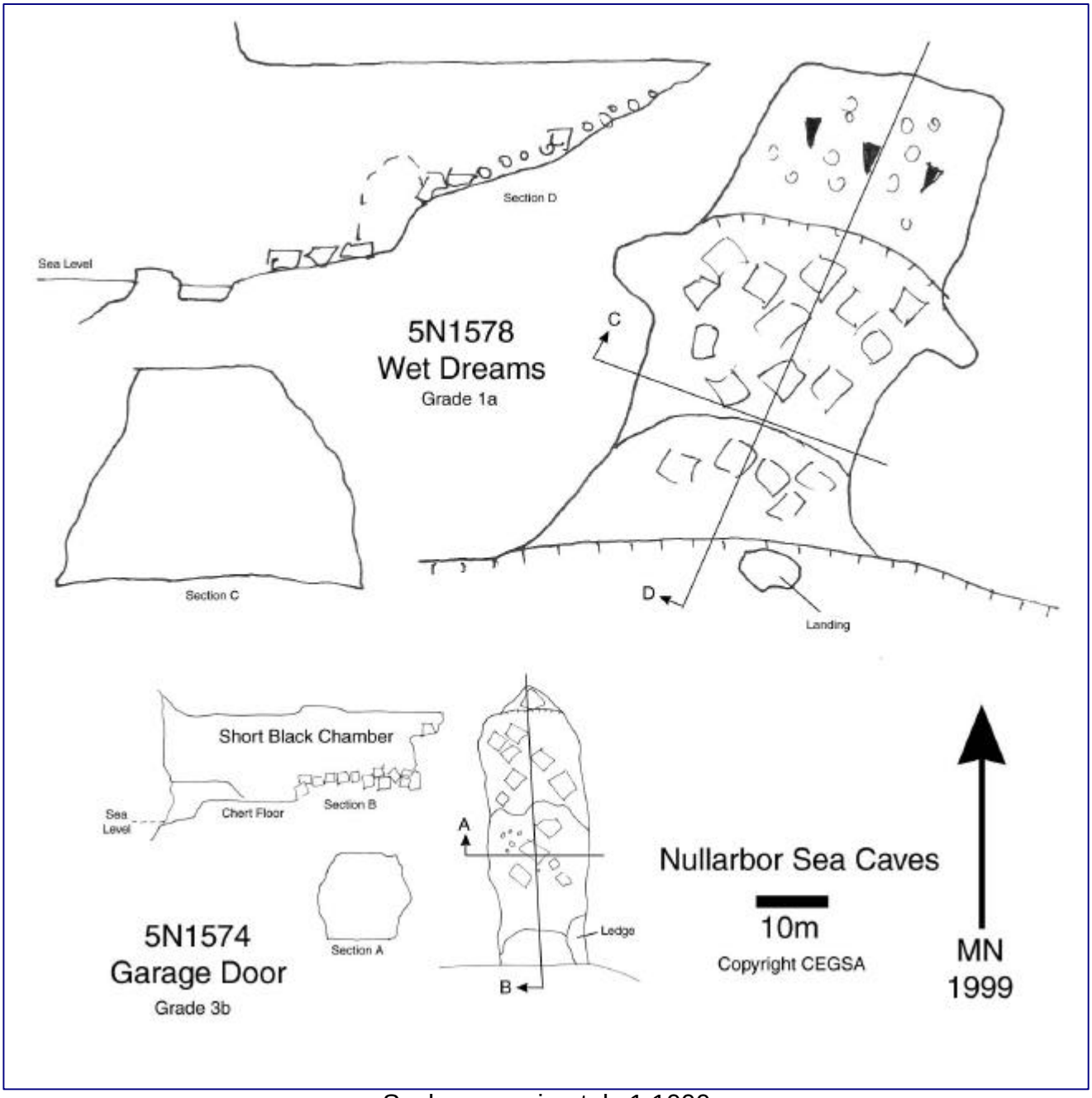
The awful weather continued right up until we left the cliffs, and it rained heavily as we packed the gear. We returned the trailer to the Yalata Community and checked out the repairs on our little trailer. Unfortunately, no repairs were done, so with the help of someone who knew how to weld, we tacked it back together as best we could. We put all the heavy stuff inside the Toyota and only the lightest stuff into the trailer and prayed that it would hold together all the way back to Adelaide and then on to the Dandenongs.

Conclusions

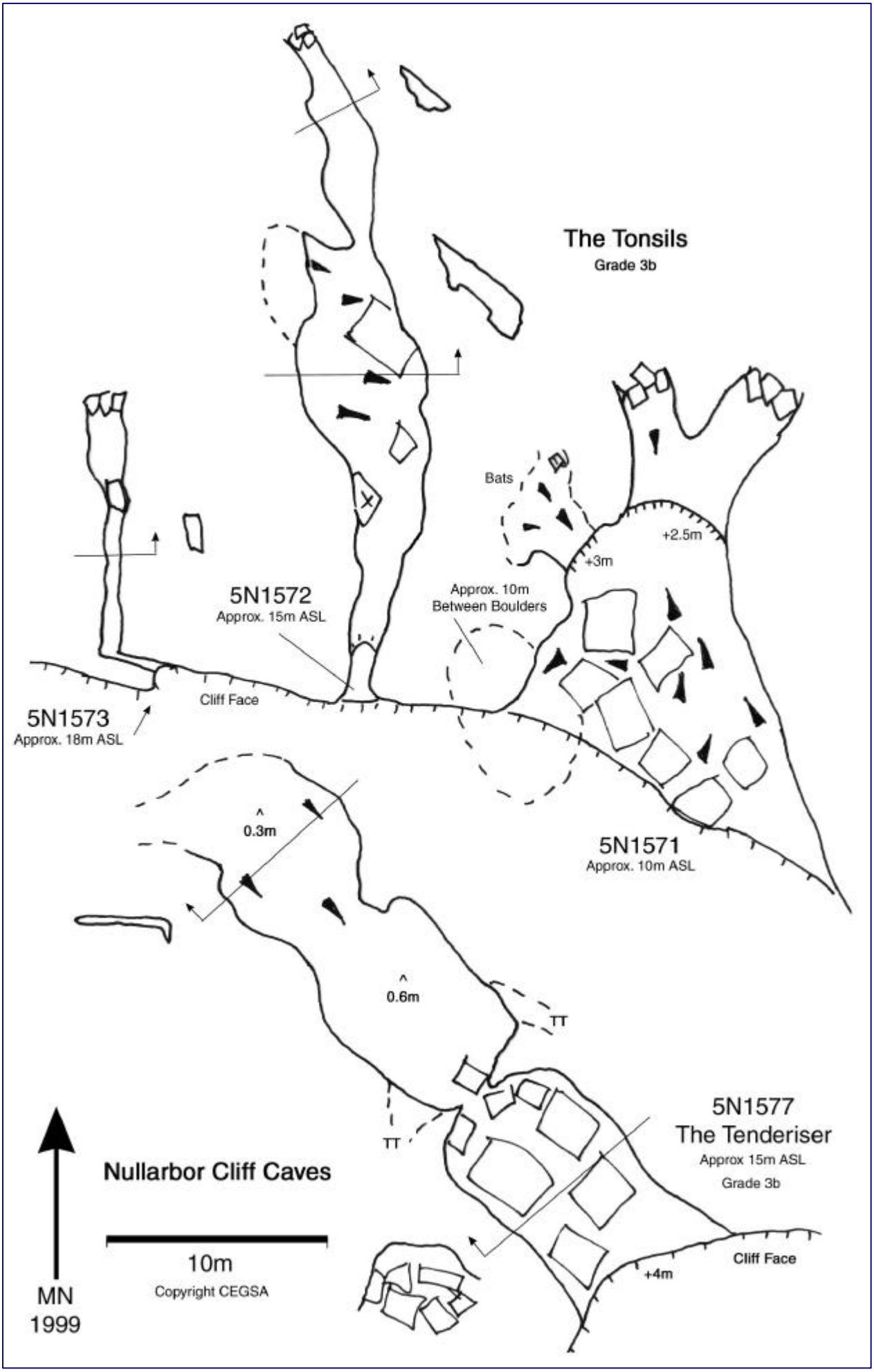
We had barely started looking at the caves at the foot of the cliffs as we investigated only 8 features out of the hundreds that could be seen in the video taken from the aircraft. Two of the features were merely dark sections of cliff, two were confirmed to be spectacular sea caves (Garage Door and Wet Dreams) and a third was likely to be a sea cave (Greater Banunga). The 'real' caves proved to be the Tonsils (3 separate caves), the Little Banunga and the Tenderiser, but unfortunately none of these was more than 40m long. We numbered 8 caves in total (5N1571 - 5N1578) but we did not have enough time to check out three remaining features seen in the cliffs between the Twin Rocks and the Banungas. They'll have to wait until the next time. Our limited experience showed that it is relatively easy to check the caves out, so long as one is fit enough for the job.

The next trip to the cliffs will be a bigger effort and will involve more people and use at least 2 or 3 vehicles to rig the cliffs. We intend to do perhaps 6 to 10 descents in a day, leap-frogging each other as we work our way from east to west. We propose that complete investigations of sea caves will not be necessary unless it is obvious that they go into a 'proper' cave. We reckon that the smaller and higher caves are going to be the most interesting. Any able SRTers out there for the next trip??





Scale approximately 1:1000



Scale approximately 1:250

A Carbonated Cave! South Australia.

By Damian "Pom" Grindley

Well what do you expect a Winemaker to call caves with elevated carbon dioxide levels!.

Background

This Saga starts back in 1998 whilst we where exploring a series of caves found by David Glowaki in the Furner area. A clinically blind guy came hooting along the forestry track on a big red ATV and almost piled straight into Marie Choi's parked car. It was very, very close. Clearly (or maybe not so clearly!) he had enough peripheral vision to ascertain the trees at the edge of the normally empty track and enjoyed ripping around the forest now he was no longer licensed to drive on the road. I think he must have mentioned this harrowing experience to the rest of the family because they soon rocked up to check out what we were up to. This was the Varcoe family and as kids many had popped their heads down the local holes in the area. They soon showed us a rat infested cave hidden under a rusty 55 gal drum just across the track from the cave we were surveying. This later became Sacrat cave. (Ratsac is a brand of rat poison in Australia!).

The Varcoe's also mentioned a cave they had been lowered into on a boatswain's chair some twenty-five years ago around the lower slopes of Mt Grahame. Described as fifty foot deep to a large chamber containing water. This description matched none in the caving records for that area.

Never one to leave a lead unexplored, the tenacious Fred Aslin followed this up. The Varcoe's unfortunately could not remember the exact location. However they did put him on to Mitch Williams (now the local Member of Parliament) who had also been on that earlier trip. Mitch was able to walk Fred directly to the cave and as a bonus showed him another nearby hole. Some mention was made of bad air however this seemed at the time likely to be non-caver exaggeration. This whole process had taken to early 2000. Fred and Kevin Mott soon mopped up the surface survey linking the caves to known features.

1st Bad Air Trip 12-15 May 2000

With Damian & Amanda Grindley, Marie Choi, Fred Aslin, Kevin Mott

Of course we were up to other mischief this weekend. The first day being spent trying to regain access to 5L309c a significant (for the area) rift system. An alternative solution tube to the original entrance was dropped to -4.8m. A tad short of the postulated -6.5m required intersecting the known system. Unfortunately rain, light and enthusiasm stopped play. It was getting a little tight.

THE AUTHOR EMERGING FROM 5L430
ANYBODY RECOGNIZE THE CRAFTSMANSHIP?
PHOTO: MARIE CHOI

FRED ASLIN EXAMINING
BONES IN 5L430
PHOTO: AMANDA GRINDLEY

Day two saw us visiting another recently recorded feature (5L430c). Bit of a puzzle this really as it is already 'gated' with a bit of old boiler tube and a welded steel lid. Our contacts in the forestry, museum and caving groups all drew a blank. So does anybody recognize the handiwork? Some recent forest detritus was removed from the base of the tube to ascertain the source of the draught. This proved to be an impenetrable bedding plane. Some bones where noticed on ledges within the tube. Suspect these will turn out to be holoceyne, i.e. modernish (Samples taken to SA Museum) so please avoid this insignificant hole until determined.

We also surveyed 5L301c and poked around a doline or two.

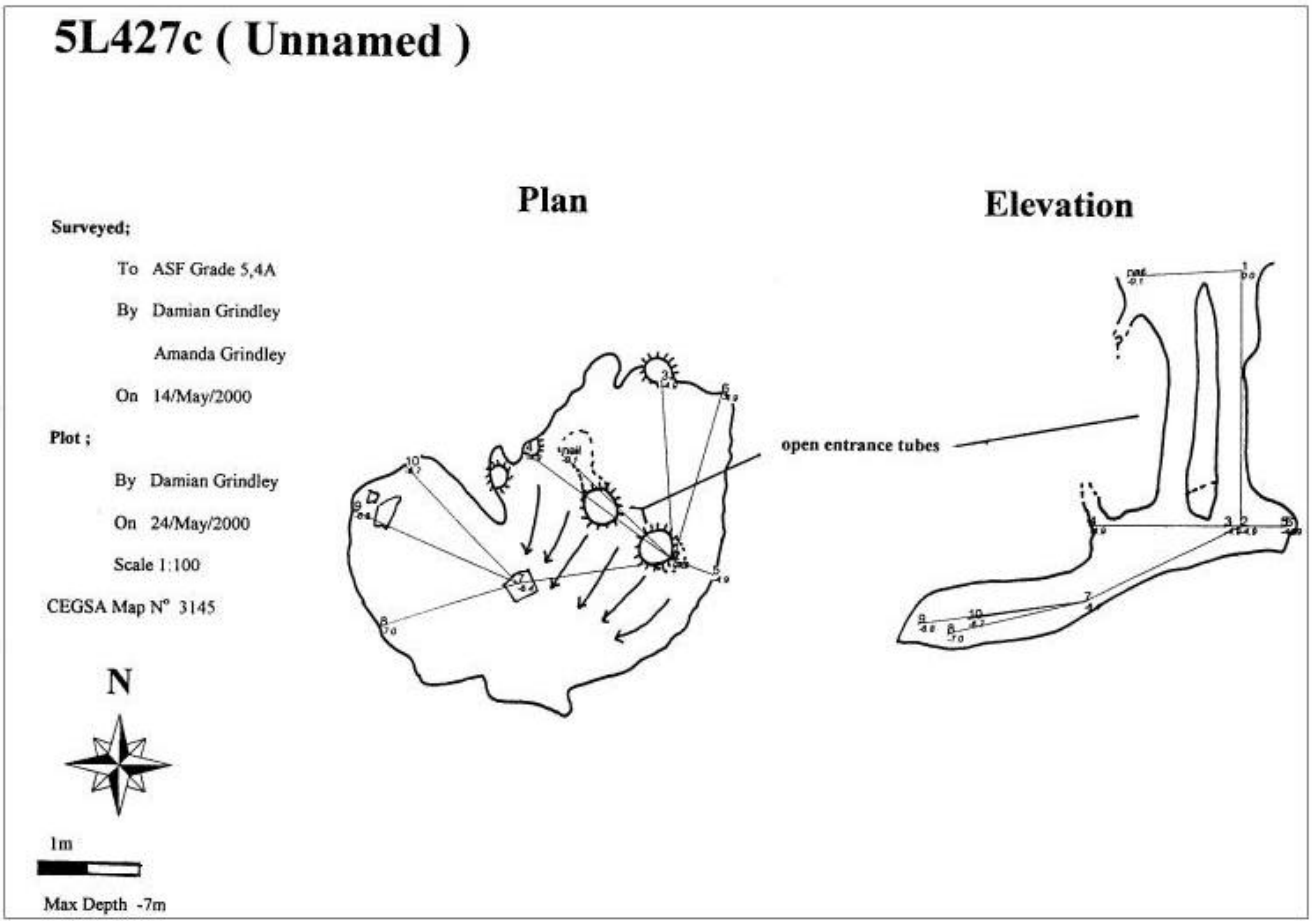
Verily on the Sabbath we doth approach the slopes of Mt Grahame. No wandering in the wilderness for us. Fred and Kevin's map lead us straight to the entrances. Interestingly these had been fenced at some point in the past, so somebody at sometime was aware of their existence. The one lower on the slope (now 5L426c) was soon rigged and consisted of a 12m bifurcated shaft dropping onto a sand slope in a small 7m x 12m chamber. Plenty of evidence of the Varcoe and the Williams clans here in terms of candle smoke graffiti on the ceiling. All the dates emanated from the early 70's, particularly 1973. Otherwise things were very pristine with no evidence of further visitation.

AMANDA ENTERING 5L426c PHOTO: MARIE CHOI

ENTRANCE TUBE 5L426c PHOTO: MARIE CHOI

As the survey progressed down the sand slope and through a low arch the cave enlarged considerably. Our previous chamber had in fact just been a space above the bolder pile of this 30m x 50m void. However breathing became noticeably labored even at the very slow survey speeds. By minus 18-19m this was seemingly getting worse and Amanda was feeling disorientated. It was decided to pull the plug and exit the cave. We had been underground for some 20-25 mins.

The upper cave (5L427c) consisted of two open and one blocked body sized tubes dropping -6m to a small 6x7m low chamber. No evidence of bad air here although Williams smoke work was evident. Survey and photographic inventory completed, Mt Gambier's Scout hall hardwood floor beckoned.



QUESTIONS AND DILEMMAS

So did we have bad air? We had nothing but anecdotal evidence to prove this. Carbon Dioxide (CO_2) was suspected, being odorless and heavier than air the symptoms would worsen with depth. But again nothing proved CO_2. Some of us had detected a strange smell in the cave, could this be linked? If the cave had CO_2 where was it coming from? Of the 400+ caves in the surrounding 100km or so, nobody could remember a bad air report. Several of these caves had remarkably similar profiles to 5L426c. Pollution seemed unlikely as

AMANDA + ROOTS IN 5L427c
PHOTO: DAMIAN GRINDLEY

access other than by foot was difficult and the pollution would have had to continued for 27+ years since the last known visit. Rotting vegetation seemed unlikely, as little was evident in the cave. Could the humic acid from the pines react with the limestone producing CO_2? Probably but most of the other caves in the area are also deep in the pines.

Later we learned that the heart of Mt Grahame is a Volcanic intrusion. Could this be the source? We also learned of a CO_2 well East of Mt Gambier. An unusually large pocket of CO_2 had been found some 3000 ft down and was being extracted commercially. However with two sealed aquifers in between seepage seemed unlikely?

Having suspected bad air in the cave do we have a duty to inform the landowner? (In this case Primary Industries of South Australia). If sometime in the future a child or somebody entered the cave becoming harmed by it and it was then proven we knew of the problem but had taken no action would we be culpable? Although we rigged it, the entrance did later prove free climbable.

Consequently a decision was taken to inform the ranger, Trevor Wynniat, of our suspicions and seek permission to return with the relevant monitoring equipment to ascertain whether a situation did indeed exist. It was felt we where in no position to advise. But able to gather and present the scientific facts making decisions of others more informed. Permission granted the return trip was planned.

To help narrow down the source it would be necessary to monitor both CO_2 and Oxygen (O_2). If the CO_2 was being added it would replace the other gasses in the air in proportion to their ratio's in air. i.e. 79% Nitrogen 21% Oxygen. Hence a 10 % rise in the CO_2 would see a 7.9% drop in Nitrogen and a 2.1% drop in Oxygen. However if the CO_2 was being generated by a process that used up the Oxygen you might see a drop in the Oxygen corresponding to the rise in the CO_2.

ACIDOSIS THE FACTS

The condition of blood Ph being below the normal 7.35-7.45 range is called acidemia. The underlying process being acidosis. Respiratory acidosis occurs due to the inability of the lung to remove CO_2 from the blood. CO_2 normally moves from areas of high concentration such as the blood to areas of low concentration such as the air (Lung) . Humans expire air containing approximately 5.6% CO_2. However if the CO_2 in the air is already in the 5-6% range there is less of a partial pressure gradient and thus the CO_2 will build up in the blood rather than be removed. Retained CO_2 combines with water to form excessive amounts of carbonic acid (H_2CO_3). The raised acid levels drop the PH, which in turn affects many of the metabolic and neural pathways.

Hyperventilation occurs due to CO_2 being an important stimulus for respiration. Increases in blood CO_2 causes the brain to increase both the rate and depth of breathing.

SUCK IT AND SEE TRIP 3rd JUNE 00

T'is amazing how these things snowball. Turns out CEGSA had a resident physiologist, Stan Flavel, complete with monitoring equipment. He had been interested in cave instrumentation for some time. Being non-portable his system required power. Luckily Fred had access to a generator. Then at the last minute we discovered the Oxygen detector inoperable. A few frantic calls on Thursday night and a portable O_2 unit was secured courtesy of Daniel Fletcher. Suspect we had better not publish where he got it from! Origin energy had heard of our find and wanted us to fill air bladders whilst in the cave for later spectroscopic analysis. They apparently had sniffer units dotted all around the area looking (unsuccessfully) for gas seepage from below. Water samples were to be taken and sent to the Australian Water Quality Centre for analysis. Soil samples taken to Flinders University Medical Center as part of ongoing analysis into actinomycetes in caves. Between Jules Gheude, Frank Hankinson, Stan and myself we managed to codge together three sets of scuba gear. Trevor the ranger plus local cavers Dave Glowacki, Bill Binks, Dave Trehearne and Steve Bourne all wanted in on the act. So by the time we rocked up at the cave we had quite a road show.

It all came together. The cave was rigged, Generator and instrumentation tents erected (It was raining). Stan had brought 120m of plastic tubing to enable the gas to be drawn back to his machine from within the cave. This sampling process took some two minutes. First job was to lower the tube down the entrance pipe and BANG we where straight into CO_2 5% and 16% O_2. Clearly the CO_2 was directly replacing the O2. Amanda and myself just looked at each other. How long had we spent in the cave last time? (30 mins at that concentration can be very problematic. See Appendix one). Time to don scuba gear. This unfortunately limited it to those who knew how to use the gear. (Frank, Jules, Dave T, Stan & myself). Luckily Grant Gartrell was doing some work in Narracoorte (Another Saga) so people were able to disappear and not get too bored.

Table 1; 5L426 Monitored Gas levels. 3/June/00

Oxygen %	Carbon Dioxide %	Location / Depth
21%	0.3%	Surface
16-17%	5.3%	(A) Base of pitch -12m
16-17%	5.3%	(B) Low arch –15m
17%	5.75%	(C) Past arch –18m
17%	6.2-6.4%	(D) Water level – 25m
17%	6.4%	(E) Rubble slope –21m

PREVIOUS VISITATION 5L426c PHOTO: DAMIAN GRINDLEY

As the exploration progressed beyond the low arch the CO_2 levels increased to the 6-6.4% range, but generally seemed quite homogenous in the main chamber. Of course these levels where but a snapshot in time. They may fluctuate particularly in the entrance area depending on the time of day and passing of various highs and lows. A more portable CO_2 meter would be required to ascertain this. The various samples were taken and survey completed. Until these results have been collated we are still no clearer as to the source of the CO_2. Interestingly an older set of graffiti was found relating to an older generation of Varcoe's and Willians Circa 1933/36. Like father like son I suspect.

What next? Or to gate or not to gate. The survey is complete, There is no evidence of bats and indeed the shape of the entrance probably excludes them. There seems to be no paleontological deposits and limited prospect of Dive potential. Consequently what need is there to enter the cave? I personally have no objection to a gate as long as it is designed such that the weta's found in the entrance pipe can continue their nightly forays. I am sure others have differing opinions however it is nice to see a gate to protect people from a cave and not vice versa.

Following the trip we came across the Australian Speleological Federation guidelines on entering foul air. These are appendixed for interest. Seems we were pretty much covered. However they do make extensive use of the naked flame test. This test has been used for many years to detect foul air in caves and in the absence of any other form of measurement is as good a test as any. But it is far from perfect, and some understanding of its limitations is useful. Simply it is measuring the Oxygen and thus is not a reliable test of CO_2 concentrations, which is the real danger in the majority of cave atmospheres. It is not until below 15% Oxygen that matches and candles will extinguish (Match heads still flare). At 15% O_2 butane lighters can easily be lit and stay alight. Although humans can readily survive at these O_2 levels, indeed the air we exhale at 15% O2 can be used for resuscitation. Unfortunately at 15 % O_2 the CO_2, depending on the source, may have reached 6%, well in the range of acidosis.

It's not all doom and gloom. This was the first time in 15+ years caving that I had suspected elevated CO_2 levels. If well informed it is no worse than any of the other dangers in caves.

Further piccies from the trip can be found at http://www.geocities.com/cavin_pom/index.html
You might need to get a yahoo password but it's free.

Appendix 1 **Effects of CO_2 at various concentrations.** Individuals may differ.

0.03% Concentration in air. No worries.

0.5% 5% increase in Lung ventilation.
Most Countries safe level recommendations for an 8 hour day in 0.5-1% range.

1.0% Mild symptoms, fatigue, anxiety, clumsiness and lack of concentration.

2.0% 50% increase in Lung ventilation, headache after several hours exposure.
Prolonged exposure at this level or greater will cause acidosis. Loss of energy even after leaving the cave. Recovery may take several days.

3.0% Lung ventilation doubled, much heavier after exertion, headaches, dizziness and possible vision effects.

5 - 10% Violent panting, fatigue, headaches. At 5% prolonged exposure may result in irreversible health effects. At > 6% may lead to unconsciousness and death.

10 - 15% Uncontrollable hyperventilation, severe headaches, rapid exhaustion. Unconsciousness after a few minutes.

25% - 30% Coma and convulsions within one minute. Death.

30% - 100% Asphyxiation Death. Level unlikely in cave environs.

Appendix 2 ASF (Australian Speleological Federation) cave safety guidelines

9 CAVING IN FOUL AIR

9.1 General Comments

Foul air is an atmosphere which contains greater than 0.5% CO_2 and/or lower than 18% O_2 by volume.
Brief exposure to foul air will cause a rapid increase in the heart and breathing rates.
Prolonged exposure may have some or all of the following effects on party members:
a) Increased heart and breathing rate, b) Lack of attention to details, c) Clumsiness, d) Fatigue, e) Anxiety, f) Severe headaches and in some cases nausea
Exposure to atmospheres containing greater than 6% CO_2 and/or less than 11% O_2 can result in unconsciousness with prolonged exposure - leading to suffocation and death. These gas concentrations may vary a couple of percent, depending on the tolerance of the individual, however nobody is immune to the effects of foul air.
The above physiological signs are a good indication of foul air. The flame extinction test is a simple test which can confirm the presence of foul air which is dangerous to human life. The relative O_2 concentration by volume that will cause a flame to extinguish is approximately 15% or less. In general a low O_2 concentration which will not support combustion is associated with an elevated CO_2 concentration. An elevated CO_2 concentration is generally the most life threatening foul air scenario found within limestone caves.
The **flame test** can be undertaken by lighting a match or butane cigarette lighter or carrying a lit candle into suspected foul air. If the flame is extinguished, foul air is present. Where possible a butane cigarette lighter should be used to reduce unpleasant fumes emitted from matches burnt by people testing air quality in the confines of a cave.
9.2 As soon as foul air is suspected, a test should be made by striking a butane lighter. If it will not remain alight, then the party should immediately begin to exit, but should NOT PANIC OR RUSH.
9.3 If ascending vertical pitches, great care and thorough checking should be carried out to ensure equipment is properly attached.
9.4 If abseiling into a cave suspected of containing foul air the following procedures should be followed;
a) The first person down should use a trailing ascender held open or a similar device which will lock if the person is overcome by foul air. Alternatively the person can be slowly lowered by a single top rope.
b) The abseil or lowering rope must be able to be changed to a retrieval system in the event that the abseiler is overcome by foul air.
c) The first person down the pitch should have foul air experience. They should make regular checks by stopping and lighting a butane lighter every few metres of descent and communicate constantly with those above.
9.5 Beginners or others suffering fatigue and /or anxiety should be guided, watched and encouraged until out of the cave.
9.6 All cavers, and most particularly Party Leaders, should recognise the fact that exposure to foul air has an effect on a person's ability to function normally. The likelihood of an accident is therefore greatly increased. All care and precautions should be taken.
9.7 Under special circumstances such as search and recovery operations, exploration and scientific work, it may be decided to enter into foul air deliberately. Under such circumstances the following is recommended:-
9.7.1 In mild foul air where breathing rate is up
a) A CO_2 tester should be carried - if nothing else is available, use a lit candle or frequently test with a butane cigarette lighter. If the flame goes out - get out slowly.
b) Cavers with no experience of foul air should be introduced to it gradually by an experienced leader.
9.7.2 In foul air where the flame test fails only experienced foul air cavers should enter these regions. In addition to the recommendations in 9.7.1;
c) A CO_2 tester must be carried eg. a Draeger Gas Analyser.
d) An "oxygen rebreathing" apparatus should be taken (one kit to four people). The rebreather set should go down the cave with the first person.
9.7.3 In cave atmospheres containing greater than 6% CO_2 and/or less than 11% O_2, self contained breathing apparatus is necessary and all the precautions against equipment failure taken in mines rescue and cave diving should be followed.

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PUNYELROO AND RIVER ROAD CAVE, Saturday 17th June 2000

PARTY: Daniel Fletcher, Bekki Bulger, Allison Young, Lyndon Zimmerman, Jane Boroky, Stephen Boyle, Abby Boyle, Frank Stomski, Stuart Reedman, Wayne Palmer Simon Kendrick.

The bulk of the group met in Norwood around 8.30am and then convoyed to Swan Reach where we met Lyndon and Jane. At the deli we grabbed a quick drink and discussed the program for the day before heading down to Punyelroo Cave. At the entrance we went through the introductory safety and minimum impact chat, mainly for the benefit of the 5 prospective members that were with us. As an introduction we focused on the squeeze(s) near the second log and the main eastward passage. Terminating our exploration at the *Fallen Sword of Damacles*.

It was a very dusty group gathered outside the Swan Reach deli for lunch. Many subjects were discussed over lunch including home made beer and wine.

It was a pensive group that followed Simon into the entrance of River Road Cave (a.k.a. Gloop Cave) and with good reason. An hour later it was a very muddy group that pensively entered the cold waters of the River Murray to clean up.

One comment hear afterwards*, "When you work in an office full of accountants, where a paper cut is considered a major event, this was one hell of a way to spend a day."*

Simon Kendrick

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PUNYELROO CAVE, Wednesday 24th May 2000

PARTY: Simon Kendrick, Melinda Mulley and students from Mercedes College.

It was an early start for Melinda and Simon with a quick drive to Swan Reach to meet a bus load of Mercedes College students at the deli.

After introductions and now obligatory chat about caves, minimum impact and acceptable behaviour it was down to the cave. Only an hour and a half was available to introduce the students to squeezes, changing sea levels, cave breathing, no lights, cave formation and answer all their questions.

Then it was back to the entrance for a quick breather before a second bus load of students arrived. An hour and a half later we had gone through everything for the second time and were heading back to the vehicles.

Simon Kendrick

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RED CROSS SENIOR FIRST AID

PARTY: James Donnelly, Marie Choi, Cathy Melen, Linda Deer, Paul Deer, Allison Young, Simon Kendrick, Tracy Colhoun, Kirsty Kitto, Ngaire Carter, Phil Key, Helen Wishard, Deborah Callison and Paul

This was a Red Cross Senior First Aid Course with an outdoor flavour organised in conjunction with Red Cross Trainer Sheila McVeigh. The regular Senior First Aid Course assumes the ambulance is minutes away, while on this course the focus was on stabilising the patient while help is organised. Sheila has many years experience in outdoor adventurous activities and this along with the varied experiences of the participants made for a good course. The Scout Outdoor Centre made their first floor area available for the Tuesday night introductory session. James who drove down from Mambray Creek on Friday, completed his intro session with another group at Daw Park. The Scout Association made the old Linden Park Scout Hall available, free of charge, for the weekend sessions. While their generosity was appreciated, being in an old Scout Hall on a cold, wet and windy winters day was a trial. Extra heaters, hot cups of coffee and layers of warm cloths was the order of the day.
Special thanks must go to Sheila for her persistence in trying circumstances. Congratulations to all participants for a 100% pass rate. Groups represented included CEGSA, Scout Caving Group, Flinders Uni Speleo Society, Mission SA and the manager of the Annapurna Outdoor Shop.

Simon Kendrick

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MOUNT REMARKABLE BLOWHOLE, Sunday 2nd July 2000

PARTY: Simon Kendrick, David Bowey, Ben Bowey, Zoe Grigg, Evie Milka, James Donnelly and David Wilson.

A trip organised to introduce experienced Scout Caving Group Leaders to multi pitch vertical caving, We left Adelaide early on the Saturday evening and gathered at the Melrose Caravan Park well after dark. On Sunday morning we gathered in the damp morning chill to discuss the day ahead and eat breakfast.

Even though I had left my location map at home, we found the general location of the cave straight away, but the exact location eluded us! Finally, Evie found the entrance. While a lazy, cold wind blew up the valley, I rigged the cave and we discussed multi pitch abseiling, rigging and double checked personal gear.

A Snake Sling wrapped around the base of the nearest stunted tree, attached to an Edelrid 11mm rope, took us down to the first rebelay where I tied on a 50m Edelrid 11mm rope and descended down the shaft. After rigging the redirection, I continued down to the second rebelay and finally reached the bottom. The rest of the group quickly followed.

Exploration soon revealed a pool of water with 3 frogs, 2 snake skeletons and another frog in the base of the shaft. Ben Bowey and David Wilson "slipped" carefully into the water and declared that it "went", although this could be more wishful thinking than fact.

All too soon, it was time to exit the cave using single rope technique and once again return to the reality of the surface weather. After de-rigging the cave, we packed up and debriefed. David Wilson checked out a nearby "possibility" and reported that it went for about 4m before being chocked by dirt. It shows potential he declared!

On the walk back to the cars, we met the landowner and followed him back into Melrose. On the telephone, he had spoken about references to Mt Remarkable Blowhole in the Melrose records, and had arranged for these to be available for our perusal.

The Register, Adelaide, Wednesday, January 15, 1902

CAVE AT MELROSE, January 13

About 2 miles south of here there is a vent or blowhole, which from its unpretentious appearance might easily be mistaken for a wombat hole. It has been known for many years, and people have been lowered down short distances, but no interest was taken in it until a few months ago, when by request it was inspected by a Government Surveyor and steps were taken to form a committee. The Commissioner of Public Works lent the necessary plant. Invitations were issued and all necessary preparations made, and today was fixed apon to examine it. It was practically a public holiday, and although the weather was decidedly hot nearly 200 people were present, picnicing and watching operations. At an early hour volunteers were called for. Messrs W.H.Kinley, W.Davis, W.Foot, H.Bacon, J.McIntosh, H.S.Marshall offered, besides Mr. W.E.Viant, who had charge of the operations. They were all lowered to various depths, and spent some seven hours underground, crawling through holes and exploring generally. They report having found a few small caves, the largest about 30ft in length by 12ft in width. The lowest depth explored was about 180ft. There was evidence of an under current of air, which indicates a subterranean outlet. Some stalactites were brought up, but nothing was discovered to warrant the cave being opened up. Mr. Viant and others are far from satisfied with the trail, as they believe that further caves of large dimensions exist. As the discovery of attractive caves would be of national interest and of benefit to their township, fuller and further exploration will probably be made shortly.

The Register, Adelaide, Wednesday, May 19, 1909

CAVES IN SOUTH AUSTRALIA - AN INTERESTING PLACE IN THE NORTH

IS IT ANOTHER JENOLAN?

Mr. T.C.A. Magarey 32 Waymouth Street, wrote to The Register on Monday: "At present much notice is being given to the caves in South Australia, and the time apportion to call public attention to one which I attempted to get thoroughly investigated eight years ago, as I am fully convinced that it is in the interests of the State that this should be done. At that time the Government assisted to the extent of providing a windlass and wire rope; but the actual investigation was left to the local towns people, and the undertaking proved too difficult for people with no experience of such works. I have samples of the formations in which the cavern exists, near to the township of Melrose, and the following is a copy of the note placed with them, "The formation runs due north and south in a straight line and we traced it for over two miles to a spot about 300 yards due west of the township. At the spot where the samples were taken there is a perpendicular cavern, about 3ft in diameter, the depth of 600ft without reaching bottom. Residents here have gone down by rope to a depth of 80ft and found small caverns containing stalactites. The deep sounds produced by the falling rocks at the lower levels appear to indicate the existence of large caverns at depth, as also does the fact that there is a final fall of three seconds, during which the rocks never strike the sides.

From inquiries made it would appear that this is the same formation which runs six miles west of Laura, and from which a large supply of water is obtained in connection with Beetaloo Waterworks; also that it extends

northward to Quorn. At Melrose the outcrop is probably 1,500ft above sea level." (Note dated August 24, 1901). It will be seen that we have here not only the possibility, but the probability of vast caverns existing in the limestone formation. The great extent of the formation, its great depth, and it supplies large quantities of water, the proved great depth of the perpendicular opening, and the evidence that there is a moving current of air, though no other opening exists in the vicinity - all point to the fact that a little money might be well spent in exploring this remarkable cavern. If, as appears not unlikely, we have here something to rival the Jenolan Caves, or the Mammoth Cave of Kentucky, we should have something of worldwide fame to attract tourists to South Australia. I understand that visitors to the cavern sometimes throw down large charges of explosives, timed to explode at the lower levels; and, should beautiful cavern exist they will be largely ruined, as the largest and best of the Naracoorte caves was ruined in the early days; or the opening may be blocked by falling rocks, and the caves lost for all time. My object in writing is to create an interest in the remarkable cavern, and bring about a proper investigation.
I trust that the matter may be followed up now that attraction is called to it.

The Register, Adelaide, Tuesday, January 31, 1911

.....On the return journey some of the party left the traps and walked to the blowhole, which is situated on a limestone ridge not far from the road. It is a small irregular shaft, barely three feet in diameter, which descends almost perpendicularly to unknown depths. Sometime ago it was explored to a depth of about 100ft, and some several caves were discovered. The air was quite fresh and a strong draught was encountered, which indicates that another opening must exist further on. After having contributed a few stones to the large accumulation of material, which has been dropped down the opening, the party climbed to the top of a neighbouring ridge.....

The trip was a great success and it was a privlige to access these early copies of **The Register**. We extend our THANKS and appreciation to Kevin Mount the landowner for access to the cave and to the articles detailed above.

Simon Kendrick

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LADDERING & ABSEILING, Saturday 15th & Sunday 16th July 2000

PARTY: Tim Bond, Andrew Disney, Rom Stewart, Lyndon Zimmerman, Jane Boroky, Daniel Fletcher, Bekki Bulger, Allison Young, Stuart Reedman, Wayne Palmer, Corey Barret and Simon Kendrick.

We met at Johnburgh just after 10.30am and continued on to the Bagalowie Homestead. After settling in and sorting out gear we crammed into two vehicles and drove to the entrance of Mairs Cave.

Two caving ladders and two belay ropes were rigged at the entrance. After an introductory talk and discussion participants were belayed down the ladders, only to self line back up the caving ladders to the entrance. After a quick debrief a selection of six different abseiling devises were laid out and discussed, along with self belay using a prussic cord. By now a lazy cold wind had sprung up and started to chill everybody. Two abseiling ropes were rigged in the entrance. Everyone repeatedly abseiled into the cave using a selection of devices and self-lining up the fixed ladder. Different techniques, devises, advantages, problems and disadvantages were discussed. Finally it was getting too cold so we spent two hours exploring the main chamber(s) of the cave.

A Vegetarian Spaghetti Bolognaise was cooked and washed down with a selection of red wine and beer. A quiet evening was spent talking round the fire before we drifted off to sleep.

By 9.00am everyone was up and gathered around discussing laddering, knots, abseiling, soft locks, hard locks, soft prussic and ascending. Once again we squeezed into two vehicles for the drive to Mairs Cave. Four ropes were rigged in the entrance and a belay system made ready (just in case). Stuart and Wayne (SES Phase 3 and Cavex members) were bottom instructors so they abseiled half way down two ropes and locked off. After a final talk through everyone abseiled down one of the two ropes, soft locked, hard locked, transferred to soft prussic and exited the cave using the frog method. To finish off the day we spent an hour looking at part of Clara St Dora Cave.

It was 5.00pm before we had clean up, packed up, debriefed and set off on the drive home. The full moon rising over the Bendleby Ranges while the sun set over the Oladdie Hills was really beautiful. As was the lunar eclipse later that night. It had been a good weekend.

Simon Kendrick

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Murray Plains Trip Report, 4 June 2000

CEGSA: Graham Pilkington, Ray Gibbons, Gary and Alex Woodcock
with help from: Michael Hodges and Gerald Marsson

Karst features visited: 5M41, 5M42, 5M43

About a year ago I was contacted by Gerald who knew of some caves on a property between Swan Reach and Loxton. He followed this up on 1 June 2000 with a phone call to contact Michael, the property owner, who was going there Sunday in three day's time. Michael rang the following day to formally invite CEGSA to investigate the features that he knew of.

A quick ring-around and Ray and Gary agreed to go. I had been informed that the largest feature was in the bottom of a drainage area and taking water after heavy rain. It was a walk-in cave that had been about 12m long with a dirt roof. Since this was to be a reconnaissance trip, only simple dirt-shifting gear was taken with minimal rock-shifting hardware.

We arrived about midday and met Michael at "Sid's place" where Sid was holding a BBQ for a ham radio club. From there Michael took us to see M41 and M42 about a km west and 260m apart.

5M41 is a 2m deep depression in clay with a dirt cliff on the north. The doline is estimated to be 20m long and 6m wide. It captures run-off after heavy rain. Trees in the doline indicate that it has been there for many decades. No rock was visible but a runaway hole was present at the base of the cliff.

5M42 was visited and located but no measurements were taken. Estimates are as follows: a 3m deep vertical shaft at the bottom of a 3m diameter by 1m deep doline. The 1.5m diam. doline floor is rock 0.3m thick with a hole 0.7m diam. Under the caprock the hole bells out to 1.5m diameter. Michael and Gerald were of the opinion that CAVEX members had visited the site ?last year and had excavated some soil and bones which were left in a pile close by.

5M43 is about 2km east of the others and a km north. It is at the bottom of a large drainage basin and has been seen taking in large quantities of flowing water. The cave appears to be formed by water dropping down a hole in the limestone. However, the rock is about 5m below ground and the water has eroded the cave by removing the soil covering the limestone. Instead of the cavity stoping up to form a doline, water travelling down the valley has propagated the cavity along the valley under the soil. It looks like the initial collapse was about 30m away from the rockhole. Since then a gully has formed along the valley and the cave roof has collapsed to within 10m of the hole. Gary did a survey of the feature with help from Alex.

M43 Entrance and Collapse. Photo: Graham Pilkington

Ray and I dug out the rockhole. It was initially breathing out but only fist-sized. With later help from Gary and Michael we excavated a negotiable hole down to 1.8m. The bottom is in a sand filled hollow within the rock about 1x0.5m in plan. Since this was only an investigatory trip we did not have the time nor hardware to do a major dig. Next trip we will come prepared for what we know is there and maybe spend a weekend. The six-hour total travel time does not leave enough digging time!

Graham Pilkington.

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Murray Plains Trip Report, 8 July 2000

CEGSA: Graham Pilkington, Ray Gibbons
with help from: Michael Hodges

Karst features visited: 5M43, 5M44, 5M45

This was a follow up trip to continue the dig in M43. Ray and I arranged to meet with the property owner Michael at M43. We took a different route to get to the cave and hence travelled along tracks we had not seen

before. The first item of interest was a suspicious looking hole 14x10x1.4m deep in a clear depression about 50m from the track. It looks like a borrow pit, probably for road gravel.

The second feature 3km further on was on the top of a rise but had natural looking limestone walls. We numbered it as 5M44. It is a doline 20x13x1.5m deep with an inner collapse in the clay/rubble floor sloping down a metre or more from a hole 0.5m diameter into cavity within the doline. Because we had an agreed time to meet up with Michael, we decided not to investigate further.

500m from 5M43 and 70m north of the track we passed 5M45, a shallow depression 25x22x0.2m deep with a rocky rim at the base of a slope. The floor was flat and soil-filled. Mallee scrub surrounds and fills the feature.

On arrival at 5M43 Ray and I dug out a ramp from the inner pit to the entrance so that the sled that Ray had built could be used to effect. Michael arrived just in time to help us set up the generator and power cables for a jackhammer. The rest of the day was spent removing rock and sand. The pit had been left at the end of the last trip 1.8m deep where it had dog-legged into a sand-filled cavity. Further excavation of the cavity showed that the water (when flowing!) swirled back under the rock that we climb down to. Removal of another metre of rock took the top off a side tunnel that when in about 2m from our pit. At that point the void is 0.2m wide and 0.1m high but the floor is a clay and sand filled vuggy rock matrix. Michael was not convinced that that was where the air was coming from. We handed him a candle and lighter so that he could see the flame tip over with the draft. This did not work because as soon as he moved the candle towards the end of the passage it went out, and not due to lack of oxygen!

Graham Pilkington

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Nullarbor Trip Report, 17 April to 2 May 2000

CEGSA: Graham Pilkington, Ray & Chris Gibbons, June & George & Aaron MacLucas, Kerry Ninnes.
Paul Devine from 23 April
CEGSA Visitor: Aaron (Azza) Draxler

VSA: (26 April to sometime in May) Greg Leader
(28 April to sometime in May) Ken Boland, Peter Ackroyd, Daryl Carr and Margaret James.

CLINC: (28 April to 1 May) Dawn Graves and Rob Klok

Karst features visited: 5N1, 5N6, 5N21, 6N83, 6N84, 6N139, 6N140, 5N145, 5N146, 5N210, 5N264, 5N265, 6N982, 6N985, 6N1225, 6N1620, 6NXG2, 6NXG3, 6NXG5, 6NXG6, 6NXG7, plus some 6NXK features.

The “NXG” are features seen but unknown to Graham, while the “NXK” are for Ken. Some might be later identified as already numbered – hence the gaps in the above NXG list. Ken had an excuse for not tagging his features but I must follow Max’s orders and carry a temporary-tag kit next trip. I’m too used to Max “tagging” along.

Monday 17: The CEGSA mob travelled in three 4WD’s to Max Meth’s place in Ceduna. The intention was to travel on from there but June had to collect some articles from Max (who was in the Philippines with his wife). Due to a mix-up in communications with Max’s sister who has the key, we did not gain access to Max’s until late. It then took a while to locate the required articles as during Max’s absence, his sisters had cleaned up in preparation for his new bride.

Tuesday 18: An early start for once. The first few days of the trip were devoted to getting June to cave sites that could be of use to her in her studies on Aboriginal art. We arrived at Handprint Cave 5N210 and set up camp. While June studied, the rest of us enjoyed the cave. A breeze coming out of the rockpile at the back of the cave was looked into but proved impossible to follow without some major excavation hence was left for another day. Ray and Graham started mapping the doline.

Wednesday 19: The survey of the doline was completed but the main cave on the south was not surveyed and neither was the small entrance on the north investigated even though it was breathing. N210 doline is a 25x21m rectangle ramping from south to north with a maximum depth of 11m inside a 50x30x1m depression. The ramp down gets steeper and rockier as it continues into the cave. The central portion of the doline is a flat trapezoid with 15m sides narrowing from 13 to 6m down the 18 degree slope. An unmarked survey tag was left on the NE cliff.

We visited Koomooloobooka Cave 5N6 for June’s project. Ray, Chris and Graham went for a walk to the SW but found nothing of significance. Next we went to Wombat Cave 5N264, another of “June’s caves”.

Kerry located the nearby 5N265, which was described in CEGSA's database as a 15m long 5m deep flattener cave off a blowhole in a 2m deep irregular depression containing a 20x10m shallow doline. Kerry, Ray and I discovered that the large doline connected to the blowhole as predicted by Kevin Mott's map of 1981. A breeze was noticed coming from the southern corner of the flattener that you drop into on the west. Following this breeze was fun but squeezey. The path was nearly horizontal in the typical shallow blowhole type caves of the Nullarbor. After about 30m the water washed passage became impassable at a drop-off into rubble. However, the final chamber arced back towards the way in but about 1m lower, and it had a breeze. After re-positioning rocks for a while, Kerry was getting cold waiting behind Ray and myself so she left for sunlight. A way on was looking difficult until the boulder on my right fell away into a 1m deep depression under a roof step. Following the rock pieces, I discovered a 0.2m high flattener continuing on with a floor partly consisting of slabs. This was a good sign, especially with a breeze wafting through the gap. Shortly after this Ray took the lead – YES the passage was now that large that overtaking was feasible. Another 15 minutes and Ray had crossed the low section and entered crawling height passage. I joined him there and we almost immediately entered the top of a chamber with plenty of room to walk. The cave had changed form. It was now of the boulder rockpile type and descending at about 30 degrees. We dropped about 10m into an area with lots of calcite deposits, mostly of off-white to brown colour and in the form of thick stalactites along roof steps. One aven has a massive flow of black calcite. Another aven was 10-15m high. The rockpile continued down through rubble but we had had enough for now and left the cave to report our discovery. 5N265 is now at least 150m long and 20m deep.

Thursday 20: I returned to N265 and surveyed the surface features while the two Aarons investigated the cave. They did not reach the new decorated section but wanted to call the unnamed cave "Never Again Cave". This was rejected for the more appropriate name of "Dark Surprise Cave".

Continuing our westerly progress we stopped at Bunabie Blowhole 5N21. The Aarons climbed down for a look-see using a ladder attached to a vehicle. Next stop was at Allens Cave 5N145 and the nearby 5N146 doline for June to have a good look at. Of course the rest of us didn't have our eyes closed either. Since I was the only one present to have been to Warbla Cave 5N1, and we were driving past anyway, we stopped to enjoy the spectacular view of the doline. Aborigines are supposed to have free-climbed into this doline with its minimum 23m sheer drop. I wouldn't like to witness anyone trying it. After filling with fuel at Eucla we drove north to set up camp for the night. Along the track we saw three rockhole groups including 6N1225, 6N985 and Woodela Rockhole 6N982 which was 1.5m diam containing 1m depth of water.

Friday 21: Travelling up the Eucla-Reid track we stopped at a 100x60m @040 depression 6NXG2, 100m to the west of the track with sides that tapered from 2 to 0.5m high east to west, the clay floor being nearly horizontal!

Next was the newly named "Seeping Cave" 6N139 which is 50m east of the track on a loop track. Being so close to the main route to Reid, the cave entrance has suffered from trash disposal, the major item being a 44-gallon drum. The cave name comes from a patch of water trickling down the wall just inside the cave on the south east wall where a community of ?permanent moss has taken hold. The overhang cave is on the west side of the doline with some low tunnels going off to the north west but these were not fully explored as Ray was the only one ready to trog up. My excuse is that I was doing a survey of the doline. N139 is an irregular hole 8x5.3x4.5m deep in a 34x30x1m irregular depression. Rock pavement is exposed in a streamway entering from 250 degrees while boulders surround the hole and are 1m or more diameter along the south side. The cave has at least 50m of passage and a maximum depth of 7m.

The map showed a karst feature 1.8km to the west of the track. It intrigued us enough to have a look for it. Rather than drive cross-country towing our heavy trailers we left them on the main track and walked out using GPS as a guide to locate whatever it was. Fanning out to increase our chances of finding a feature with dubious location accuracy, team two located blowhole 6NXG6: this is in a 4.5x4.5x0.5m depression and is 0.4m diam 2.1m deep containing a 2m long 1m diam chamber. Team one found blowhole 6NXG3: depression 3m diam 0.6m deep; blowhole 0.45x0.25 @098 corkscrewing down 3.1m.

The map feature turned out to be newly named "Arachnid Cave" 6N140. It is 35x20x9m deep @ 008 in a barely discernible depression. The doline has 5m high trees with many golden orb and other spiders. The sides are mostly vertical to overhanging but free climbable in places. The doline contains many large blocks of rock with the north side looking like a collapsed overhang with the blocks dropping straight down. A large near-surface cave is under the south west corner with a bridge of rock splitting the entrance. Strong breezes were noted. Maximum cave depth was about 12m. A nearby blowhole was found 6NXG5: 0.5x0.3x2.2 @165 in a 3.5x3.5x0.3m depression. The entrance opened out to 1.2m diam with a side chamber 1.5m wide 1.8m long @ 230.

On driving north we located the start of the track out to 6N140 at 452470E 6545160N (A66 datum). To get to Old Homestead Cave 6N83 we branched off on the Forrest-Eucla track for 14km then drove west across to 6N1620. From there, there is a track to N83, unfortunately it was dark by then and heavy rains had disguised

the track. We ended up travelling too far to the south and encountered more bluebush than we liked. The appropriate track loops north to avoid the bluebush covered ridges and sweeps along the clear claypans. It should be noted that all Nullarbor coordinates/locations are given in the Australian66 AMG datum for consistency and to make map reading easier since all published maps show coordinates with this datum. My GPS was set on the world grid 84 datum which made locating N1620 unnecessarily difficult in the dark since it "shifts" locations by 200m or so. Of course the GPS was only good to that accuracy at the time so previous location shifts had been expected. The deliberate GPS position errors were "turned off" by the USA at the end of this trip.

Saturday 22: We gave priority to construction of a permanent toilet over caving, the Nullarbor being what it is and having mixed company besides. Ray's masterpiece was unstrapped from his 4WD roof and the springs began their gradual recovery. A 2x1m 1" thick slab of prestressed concrete for the toilet floor doesn't weigh a ton but feels like it. The rest of the toilet was also carried on the roofrack, not to mention the new shed door and shelving. By the end of the day Ray had constructed the new door and built the hut shelving. The toilet was just a hole in the ground. Without the use of Ray's jackhammer creating the 2x1x2m deep hole would have taken many days.

Chris had made club banners for CEGSA and VSA. The CEGSA flag was raised to show that we were in residence.

Sunday 23: Ray built the toilet. By now you can get the idea that Ray is good at building things. The rest of us just acted as labourers. He has designed the toilet as a sled. The weight of the floor keeps it in place and it is pegged down for extra stability in high winds. When the hole is full, we can unpeg and drag the toilet over a new hole.

Paul Devine arrived and settled in. Most of use helped clear the track of rocks and fill-in holes near and around the doline. This was in case Ken Boland wanted to use it as an airstrip. The toilet had its vent shaft installed topped with a windsock.

Monday 24: At last. We went caving. Three teams entered the Officers Mess to focus on surveying passage close to The Lunchroom. Ray and June took on a low tunnel to the south that looked like it may go 10m or so. They spent all day there finishing up with 110m and leaving a couple of ? June became a mudball pushing the wet low tunnels – she doesn't normally have this much fun because she keeps clean so as to not mess up her canvas and paint. Paul, Kerry and Azza tackled the extension to the north dug into last trip, completing 117m. Graham and Aaron tackled a dig on the east. The dig opened up into about 250m of passages and chambers with some photogenic selenite forests. They then surveyed 20m down another tunnel leading from the eastern wall of the area following a breeze and water course which just got too low to continue – too much dirt.

Tuesday 25: Down to two teams, both crawling to the east end of the Froth. Graham and Paul removed a constriction in the NE trending tunnel exposing another 100m or so then met up with Ray and Azza who had been surveying the upper tunnels at the east end. After lunch Graham and Paul got past a constriction that had stopped Ray's survey and added another 50m to Ray's. Ray and Azza then started on the lower tunnels at the east end completing 120m for the day.

Wednesday 26: We all took a trip out to 6N84, about 138km to the NE. It was easy to find but close to the cave the tracks currently used are not those shown on the map. Kerry surveyed the cave and Paul tagged it. It has a double chamber; 10x6x3m and 7x3x1m joined on the long axis @110 with a curtain of columns. The entrance is on the NW wall of the large chamber away from second chamber. Both chambers are covered in calcite except for the flat dirt floor and the centre ceiling of the main chamber. On our return, we found Greg from VSA had arrived in camp by motorbike. His food, caving and camping gear were with the rest of the VSA team still two days behind him. Lucky we were here to supply him until they arrived!

Thursday 27: Paul, Azza and Aaron surveyed in the Cherry Rip area of the Froth that we had named the section dug into on Tuesday. The name comes from the tight passages and what that does to the chest. This easterly tunnel gradually descends about 4m over its 130m length. At least two major branches were left unsurveyed.

Ray, Graham and Greg continued the survey of the lower east tunnels of the Froth. After about 90m the main passage "ends" in a narrow twisting rift that has a strong breeze. 4m was negotiated but carrying rocks back out is now very slow work. This rift is about 2m below and 15m away from the "end" of the upper level. A fallen roof slab 0.3m thick and 3m wide stopped progress along the upper level but there was still a breeze passing it.

Friday 28: Ray, Graham and Greg began the sanitation of the track out to 6N1620. The turn off from the Forrest track was marked with a star dropper and cairn while the 5km track across to the other Mundrabilla-Forrest track was made more obvious. From there we located the northerly track to N1620 and guided future

travellers onto the correct path. Most of the time was spent removing rocks, especially those knife-edge ones sticking vertically up like road-block traps.

Ken arrived by plane and buzzed the road workers to say hello. He discovered that the landing field next to the windsock was ideal for him. The toilet had to be officially renamed the landing tower and visitor amenities block. The rest of the VSA arrived a few hours later towing the trailer van that houses the plane for road transport. Ken's plane is a true fixed wing aircraft just "easy" to dismantle. At dusk, Dawn and Rob from CLINC arrived. They were most disappointed to find CEGSA and VSA banners flying when they had none for them. Dawn began constructing one for CLINC.

Saturday 29: This proved to be a very windy day. Ken and Peter spent the day making sure that the plane didn't fly off without a pilot.

Ray and Rob started surveying the southern tunnels off the Froth, finding one unlikely-looking one that was surveyed for 80m and went for another 50m without ending. Graham and Dawn completed the tunnels linking Pick Niche to the main Froth axis tunnel.

Sunday 30: Ken went flying. The rest of us enjoyed the sunshine, some even followed up on Ken's feature locations after he returned with a list. Ken was using a GPS unit and so were the ground crews. This made the technique viable. The Plane Cavers had had a ground crew chasing the plane while it directed them to each feature – that method slowed things down. Luckily they had more than one aircraft. I went for a walk to see what the landscape was like over the Froth and to the S & E of there. It is a nearly flat "plateau" about 8m above the OHC entrance claypan with many flat slabs of rock flush to the ground. One patch 6NXG7 was a rock pavement 9x7m @120 containing two water-filled rockholes: the larger 0.55x0.45x0.2m @050 and the other (? 1m away) had a 0.15m diam entrance dropping into 0.4x0.3x0.2m @160.

Monday 1: Since Ken fit the VIP role as the only one of us to have really flown to the toilet, he was elected to declare the toilet open. He dedicated it to communal caving in the memory of Captain Thomson who knew females could NEVER go caving on the Nullarbor because there are no bushes as required for decency. After partaking in the opening banquette prepared by Chris and June, the Adelaide cavers left for Ceduna.

Tuesday 2: We went home. Ken and crew then spent the next week or so flying around looking for caves. Ken literally, the others chasing down some of the features that he had located from the air. I heard that the team noted about 480 new features including those found since Friday, but most have yet to be investigated.

For Old Homestead Cave we surveyed another 247m near the Lunch Room and 560m in the Froth taking the surveyed length of OHC to 28.46km with the Froth now at 1285m.

Graham Pilkington

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Yorke Peninsular, 30 July 2000

CEGSA: Graham Pilkington, Ray & Chris Gibbons
Visitors: Claus Larsen, Helle Embo
Karst features visited: 5Y1, 5Y2, 5Y4

An impromptu trip instigated by Ray to show Claus & Helle a South Australian cave before they return to Denmark. It was also an opportunity to obtain accurate locations for several features now that GPS readings are accurate to a few metres.

Y1 Collapse Pit. Photo: Graham Pilkington

Y4 Second Doline Photo: Graham Pilkington

On the way we stopped off at Price Cave (5Y4) to get an accurate location and see how this dirt cave is evolving. Since my last visit several years ago, the farmer had apparently ploughed over the cave entrances and collapse trough. However, the cave has started to fall in again in at least two places. Low tunnels are accessible but are only about 0.2m high.

At Corra Lynn Cave (5Y1) Ray completed the toilet by installing a seat. It only took a couple of years. Users will appreciate it more after the wait! I took a few pictures of the

collapse pit over Dreamland formed between the stock water trough and paddock fence. I had heard that the pit was collapsing to endanger the trough but I saw no change from when it formed several years ago.

For the morning, we all took a tour of Grand Central. This was a new experience for Chris and Helle. After all her caving trips, Chris has done very little caving, and most of that in walking tunnel. This trip was different. Slippery slopes, crawls, climbs, and even a few low bits. She took them all in her stride, err slide, err side.

For the afternoon Ray, Claus and Graham took a trip to Limestone Bridge via the Wombat Runs. This gave Claus a few new experiences since his caving to date had not included straddling crevasses nor climbing up and down them. Whilst there Ray and I examined The Great Collapse and tried to find a way past/though it but to no avail.

While returning to Adelaide we stopped at Town Well Cave (5Y2). The 2m tall chain and barbed-wire fence looked impressive. It was built to protect people from falling down the shaft since the shoring around the concreted entrance gate is collapsing. It looks like local kids have been having fun climbing over the fence from off the neighbouring stone water tank using a piece of garden hose as a hand line.

Y2 Entrance and Collapse. Photo: Graham Pilkington

Graham Pilkington

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Queens Birthday Weekend June: 10th – 12th , 2000

Trip Participants: South Australians: Marie Choi, Amanda Grindley, Dave Glowacki, Adam Bramford, Daniel Fletcher, Rebecca Bulgar Lance Hoey, Barbara , Dave Trehearne, Andrea Ratcliff, Katrina Springer and Kids. Victorians: Ros Quick, Ian (Pom version 2) Farhill, Eva Leeder, George Christie and Family, Mark Somers &Arianna , Ken Grimes, Derek Somers, Bruce Downes, Helen Altmajer & Colin (Pom #3) , and finally Doug. I think that was all of us!

Areas Caved: Byaduk, Drik Drik and Mt Eccles

Amanda and I left Adelaide mid afternoon on Friday, with the intentions of picking up Dave Glowacki once he finished work. We arrived in Naracoorte as planned did a little shopping then headed to Mt Gambier to meet Adam Bramford. Once we had Adam Dave joined him in his car and led the way. After a couple of very minor miscalculations on when the corners came up we made it to the Mt Eccles Camp ground. Ros Quick was there with a few of the Vics and we were the first South Australians to arrive. We quickly put up our tents and joined them at the camp fire.

It wasn't long before others also began to arrive. We spent a pleasant few hours around the fire making introductions and catching up. Other cavers arrived through out the night.

As usual we had a later start than planned but we eventually headed off to Byaduk. First stop was the lookout at Harmen Valley to see the new interpretive signs that have been put up and to enjoy the spectacular landscape. Although I had been there several years before it was interesting to compare it to what I had seen in Idaho last year. Idaho is still very barren and you can imagine the steam coming off of the hot lava, but Byaduk is green and lush and there were sheep grazing in the valley.

We then made our way to the car park near the caves where we then had Ken Grimes give us an overview of the area as we peered down from some of the viewing platforms. For anyone who hasn't been to the area for the past few years a lot of work has been done putting in paths and platforms. The group them split in two and headed of to visit different caves with the intention of swapping over. The caves we visited included Church Cave 1 &2 and Chocolate Surprise. Most of these caves are infact large lava tubes that have sustained large roof collapses over the years

We had a very late lunch in the car park where we were greeted by new arrivals of Dave and Andrea, and Lance and Barbara. Whilst they went off to cave Dave G had found some tennis balls and Frisbees in my car and were amusing themselves with them. We then invented a new game called armchair esky lid cricket. For those that need help you sit in your chair with your esky lid as a bat, and to make a run you have to take the

chair with you. I was doing well until someone found the extra tennis balls in my car and got me out. I'm not sure what the busload of kids that arrived thought but we had fun.

We then headed back to camp to get cleaned up for tea at the McAthur Pub and a slide show. I not sure when this pub had so many out of town visitors but I am sure they enjoyed the business. After everyone finished dinner Bruce Downes, Ken Grimes and Myself showed some slides. Bruce and I showed slides of various regions whilst Ken focussed mainly on the region we were in giving excellent explanations of the area and its Geology.

Some members of the group then went out to the front bar to play pool, listen to music and get drunk. Everyone was back at the camp ground well before midnight so a number of hours was spent around the camp fire telling bad jokes and caving stories. Some how some tape was produced and some people found themselves tied up or should I say tapped up.

Adam in Drik Drik. Photo: Marie Choi

The next morning a few people woke up a little worse for wear and we headed off to Drik Drik. The first obstacle was getting some of the non 4 wheel drive cars near the entrance because of the mud, Ros opted to leave hers at the gate and ride down in Georges ute. Some of the group opted to reach the waterfall that is 1.7kms into the cave whilst others who were not quite so energetic went as far as they felt.

DD4 has a magnificent doline that requires a long handline to reach the actual cave entrance at the bottom. George Christie arranged a wooden ladder to speed up entering the cave, which was brought out later (see Ian "Pom Version 2" Farhill on front cover). The cave has a narrow outflow streamway passage running the length of it and as a result it is not long before you hit the mud. Dave and I looked at where the stream was heading to see if it was diggable but as we had no equipment with us to shore it up in places we left it and followed the rest thru the cave. The first part of the cave is lightly decorated with some calcite formations until you hit a right hand turn and come to a beautiful flowstone wall. There was a hold up here as this was also the first rock pile to climb since most people had gotten muddy it made climbing very awkward. Some opted to follow the stream under the flowstone wall, this meant almost a full submersion in the water. Some decided to turn around at this point. Adam helped me take some photos of the cave as we exited.

Muddy Amanda. Photo: Marie Choi

Once clean and dry on the surface we waited with my camera poised to capture the rest of the group returning clad head to toe in mud. Once everyone was out of the cave we headed back to camp except for Adam, Daniel and Beck who left us at this point.

On the way back to camp Dave decided to direct me down some side roads that meant we bypassed McArthur. Once the others arrived back in camp we were glad we did as there had been 2 speed cameras in town and a few got pinched., including a CEGSA member who already had had some expensive car troubles on the way.

Massage Parlour Photo: Marie Choi

After most of us had eaten we followed Ken to the large lava tunnel near the camp site where he pointed out some of the interesting anomalies that he had discussed the night before during his slide presentation. We then headed back to the camp fire where we again told bad jokes. There was also a massage round robin with the 2 "pommy" Victorians giving most of us excellent shoulder and neck massages (Damian are you reading this bit, better take some lessons whilst your in the US or we may have to swap you for one of these guys when you come back).

Some of us were up until the wee hours of the morning, so late so that they were still intoxicated when they woke up a few hours later. Ken offered to take people caving however only a few went along as the rest of us

attempted to wake up enough to pack up camp. Most people had started heading home by lunchtime, but not before setting some dates for the next trips. Naracoorte for August 19th and 20th and The Mount Gambier area for November when the Vics have a long weekend.
All in all it was a great weekend a lot of fun was had by all.

Marie

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CORRA LYNN CAVE, Saturday 12th August 2000

CEGSA Linda Deer, Paul Deer, Alison Young, Daniel Fletcher, Bekki Bulger, Graham Pilkington, Tracy Colhoun, Simon Kendrick, Gary Woodcock & family.
SCG Matthew Brinkley
VISITORS Tim Bond, Romola Stewart, Andrew Disney, Sharn, Frank Stomski, Zander Stomski, Ire, Ray Liddle, Raymond Liddle, Chikako, Sue Bray, Nat, Mike Thomas, Shaun Leech, Simon, Paul, Christian, Jeff & Stuart Reedman.

I advertised this trip predominantly as a "COME & TRY DAY" for anybody interested in caving with the primary focus being prospective members. A week before the trip I had 34 booked to attend. While this was a very pleasing response, it presented both a problem and a challenge. Because of the lack of support from CEGSA caving Leaders I had a ratio of 10:1. That was, Graham, Linda and myself with one Full Member, four Associate Members and twenty six novice cavers. Matt Brinkley, Horizontal Caving Leader from Scout Caving Group offered to help out and seven novice cavers pulled out. CEGSA only have eight group helmets so once again Marie Choi came to our rescue with a loan of sixteen helmets and headlights.

We met opposite the Lawn Bowls in Curramulka at (about) 9.00am before driving to the cave. The next half hour was a blur of colour and activity as everyone got changed, fitted helmet, sorted out lights and dividing into four equal groups of seven people. Graham and Linda circulated getting forms signed. Sharn won the fashion award, convincingly, in a rather fetching pair of "pink" corduroy overalls costing $2 from an Op-shop. The next 2½ hours werespent visiting such familiar names as Woodside, Grand Central, Skeleton Crevasse, Beard Squeeze, Bandicoot Bypass, Drumstone, etc, etc. Christian spent about ½ an hour getting through a squeeze (nicknamed Wedding Cake Squeeze by SCG) in Skeleton Maze. Eventually, everyone had surfaced for lunch. In the afternoon, we again spent 2½ hours exploring the cave. Paul Deer, not to be outdone by Christian, spent about ¾ of an hour first getting stuck and then extracting himself from a squeeze (nicknamed Rat Squeeze by SCG) between Drum Crevasse and the Cauldron. A short time later, I'm sure I heard, "My bums too big, it's stuck" coming from the same squeeze. Mike Thomas was born in Curramulka (he can remember when the town water came from Town Well Cave) and even though he lived there for about sixteen years, this was his first visit to Corra Lynn cave. Gary and family were dropping in during the day to do their own thing.

It was a tired, dusty and strangely satisfied group who drifted off around 6.00pm. My sincere THANKS to Linda, Graham and Matthew for leading groups, plus to Marie for helping out with helmets and lights. It had been a very successful day of sport caving, experiential learning and public relations for CEGSA. In the long run, I also hope this will be another step in recruiting new members.

Simon Kendrick.

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MAIRS & CLARA ST DORA CAVES, Monday 14th August 2000

PARTY: Simon Kendrick, Melinda Mulley (SCG), plus 15 students and two teachers from Port Augusta Secondary School.

Another early start, saw Simon and Melinda leave Adelaide at 6.00am for the drive north meeting the Port Augusta Secondary School group at Bagalowie Homestead. After splitting into two groups, Melinda led her group into Clara St Dora Cave while Simon abseiled his group into Mairs cave. After lunch we reversed the caves, with Simon visiting Mairs Cave and Melinda (with the help of a teacher – climbing instructor + SES vertical instructor) visiting Mairs Cave.

This is part of an outdoor education module offered to year 11 and 12 students at Port Augusta Secondary School involving indoor climbing on the schools climbing wall, plus visits to Warren Gorge, Buckaringa Gorge and the caves.

Simon Kendrick.

TECHNICAL and OTHER ARTICLES

MEMBERSHIP

NEW MEMBERS – WELCOME TO

F (fam)PAYNE Tim 0007 (M) 040 231 5179 8259 5724
Lot C Tyeka Drive, ONE TREE HILL SA 5114

A (fam) RATCLIFFE Andrea 0008 8371 0989 8359 2399
1 Florence Street, NETLEY SA 5037

CHANGE OF PHONE NUMBER

CF LOWE Dave 9413 (W) 8951 4325 ALICE SPRINGS NT

F (Fam) PAYNE Pam 9503 (M) 040 231 5178

F MILNER Steve (W) 8354 7773

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GETTING TO KNOW OUR COUNTRY MEMBERS

Ken Grimes & Janeen Samuel (9106, 9107)
from Hamilton, Vic.

Janeen and Ken. Photo: Rod Bird, 1996.

Ken was brought up on a Queensland cattle station, and joined the University of Queensland Speleological Society in 1968 while studying geology. Janeen is an Adelaidian who did her vet degree at Queensland and also joined the UQSS. They decided that their continuing arguments would be more easily achieved if they lived in the same house and have done so ever since. In Queensland, they both explored caves all over the state in the 1970s and 80s. Ken drew maps and wrote cave reports. Not to be out-done, Janeen constructed her own caves! Out of paper mache for displays during the Mt Etna & Texas cave conservation campaigns.

In 1990 Janeen got a job with the Regional Vet Lab at Hamilton, western Victoria, and they both moved south. "Brrrr!" said Ken, "I knew it would be cold, but this wind!!" Ken now works as a consultant geologist, and Janeen (since the Vet Lab was closed) does contract pathology work. They continue to shelter from the wind in the lava tubes and 'soft-rock' caves of the area, and Ken gets occasional cave & karst jobs elsewhere - including Christmas Island in the Indian Ocean.

Other Interests: Wildlife, natural history, bushwalking, books, writing (J) and drawing (K).

Ken Grimes

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Spot and Jude Mathews

I have been into Bats and Batty things since my childhood. Spot, initially, learnt to cope with this.... but now, even **He** is Batty. But BATS are the reason for us finding out about caves, caving and all those associated things. We both were struck by the absolute beauty and majesty of caves. We consider it a **PRIVILEGE** to be a caver. Caves have truly become our joy and passion.

On January 4, 1994 our first venture into a cave, we took a visit to Royal Cave at Buchan. Both of us were instantly drawn to the amazing display of Mother Nature's talents.

From here we went in search of brunch, and found a sign for another tourist cave - "*Look* Jude, BATS!" said Spot. So NATURALLY we went there too.
It was here we met Kym Van Dyk, who showed us of "Shades of Death" Cave.....and the bats who inhabit it. Kym then introduced us, to her husband John. This pair are members of the Victorian Speleological Association. They took us under their wing and the rest, as they say, is history. If it were not for the Van Dyk's, we may not be caving now.

Although interested in Bats, I soon discovered my passion to be geomorphology. Spot retained his passion with "the critters". And now, new members of the V.S.A., we soon found that there were many members of the "learn-ed" variety who were keen to teach us. Susan White, John Webb and Raia Wall were Jude's main guides through the Geo-stuff. Ken Grimes explained a lot of the critter stuff to Spot; along with great publications from Stephan Eberhart & Andy Spate.

Where have we caved?

In South Australia: we have caved at Naracoorte, Penola, Mount Gambier.

Victoria; Buchan area, Limestone Creek, Mallacoota
the Granite areas near Melbourne, Melville's Caves
Volcanic areas, Mt Eccles, Byaduk.

NSW: Yarrangobilly, Jenolan, Cooleman Plains, Wyanbene, Wee Jasper, Kempsey, Cave Beach.

Tasmania: Mole Creek & Gunns Plains.

Spot and Jude Mathews

There are some people in CEGSA who have made a big difference to our caving lives. As in: Kevin Mott, June & George MacLucas and Marie Choi.

THANK YOU

Finally, in closing
Just a couple of things to remember if you ever come into a cave with us.....

1) If you are a small person - don't follow Jude into a squeeze.
2) If you are a big person - don't follow Spot into a squeeze.
3) If you can't take a joke - don't come at all.

JUDE & SPOT MATTHEWS

June MacLucas (Membership Officer)

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LIBRARY AND RECORDS

First contribution to records is from Max Meth who is now back from the Philippines.
Max handed in a monograph "*Eocene Coastal Barrier Evolution in the Eucla Basin*" from the Journal MESA, Vol. 18, July 2000. Max claims this is the best description of the Nullarbor that he has read.

Kevin Mott and Fred Aslin handed in their Project Data for National Parks Foundation, "*The distribution of bats in winter sites throughout the South East of South Australia"* . As well the ever industrious Kevin Mott handed in newspaper cuttings from "The *Border Watch"*, "*South Eastern Times", "Naracoorte Herald", "Green Triangle Holiday News", "Sightseeing SA"* and*"The Advertiser".*

Also submitted by Kevin: Copy of article on *"Saudi Arabia's Desert Caves"* from *Aramco World,* March/April 2000 pages 27-38. Article "*Our Hidden Heritage SA's Waterfilled Caves"* by our own CEGSA Life Member Peter Horne *"Environmental SA"* Vol. 7 No. 3 1998 pages 26-27. Also article on "*Cave Woman"* our own CEGSA Member and once CEGSA artist in residence June MacLucas from *"Who Weekly* " 3rd July 2000 pages 70-71.

Kevin passed in a Report from Forestry SA to incorporate awareness and protection of karst features within their planning processes.

Received from Kevin Mott for Records: Location and maps of karst features 5L41, 5L141, 5L285 (CEGSA Drawing No. 3209 and 3210 surveyed by Gerret Springer) 5L427 (CEGSA Drawing 3145) 5L156, 5L289, 5L435, 5L436, 5L437 and 5L438.

Simon Kendrick donated one ADDICT Diving Newsletter.

Ruth Lawrence CEGSA Member from Bendigo, Victoria donated two books “Deep Secrets” by Steven Reams on the discovery and exploration of Lechuguilla Cave in 1999, contains 381 pages. *“Caves of Gunungbuda 1997”* by United States Expedition Members and Mulu National Parks Employees Northern Sarawak, contains 65 pages. I enjoyed reading a list of Nine Commandments and one Axiom
With an explanation why they were written.

1 Thou shall stay on the cut trail rather than assuming that thou knowest abetter route.
2 Thou shall return through the cave when an entrance if found from the inside.
3 Thou shalt not place high trust in the rock.
4 Thou shalt always take thine compass in the forest.
5 Thou shalt not undertake a climb without a rope.
6 Thou shalt not forget to take thy survey tape.
7 Don’t whack it unless thou must.
8 If the rain should pierce thy tent by night, thou shalt don thine underwear before fixing it.
9 Thou shalt not cross a river deeper than thy navel.
10 Axiom: Everything looks big with a Petzel micro.

George MacLucas (Librarian and Records Officer).

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OBITUARY – Stuart Keith McEachern

I am grateful for the opportunity to briefly relate some of the experiences that we have been made aware of with our chats with Keith, which included a recorded interview. It is apparent that he was a true pioneer, not only from the fact of finding Princess Margaret Rose Cave, but also because of some of the exploits in his early days.

He related to us on one occasion that he, Jack Hutchesson & Jack Little decided on a fishing and shooting trip at Lake Bung Bung. What we need to remember here is that it was all on shanks pony, a long step as he related. It took them almost a day to make it there, no success with the duck shooting, they saw them coming, the fishing also turned out a to be a flop, it was bitterly cold and having collected some driftwood from the beach for the fire, they decided to set up camp beyond the sand dunes by the lake among the tussocks. The wood and the fire didn’t last the night, and the two Jacks decided to go back over to the beach to find more wood. Keith being more wiser dug a bit of a hole out of the wind and bunked down and went to sleep. He relates this was about 3-00 a.m. The others came back with the wood, but got lost and couldn’t find him amongst the tussocks, and after lots of shouting eventually woke him up. No fish, no ducks and the long walk back still armed to the teeth with ammunition, which he said could have wiped out the entire duck population.

His father had an extensive lease for grazing some of which included the area where Princess Margaret Rose Cave (PMR) is situated and it was in the early 20’s that Keith whilst boundary riding discovered the solution shaft leading into the Princess Margaret Rose Cave. The depth of the shaft interested him to the point that he used to toss rocks down, of course over the years the debris built up. By 1936 it had got the better of him, so with the late Jack Hutchesson and his two sons Bernie & Alan, they decided to investigate. They tied a rope to a sapling and around Keith’s waist and Jack lowered him down. His lighting consisted of a box of matches and candle. On reaching the bottom and lighting his candle, he spent 2 hours in the cave exploring, came back and declared to Jack & the boys “I think I have found Aladdin’s Cave”.

The rest is history, with much hard slog the cave was opened for tourism in 1941 but prior to that there were many local dignitaries who were privileged to be lowered down the solution shaft by a windlass, a far cry from the civilised steps, which are in place today. Bunny (Jack Hutchesson) continued tours in partnership with Keith charging 2/6 for entry. This partnership continued until 1970 when Victorian Forests Commission took control. Its location is nestled in a National Park and his fervent desire for its protection will be guaranteed. He recently paid homage to all people concerned with protection of the cave since 1970. Today it is recognised as an award winning tourist attraction, attracting visitors from all over Australia as well from over seas. Only this week we have received a booking from Sweden.

This was not the only cave that Keith investigated, across the river now known as McEacherns Death Trap Cave, he investigated this with his brother Jock in we are told 1943. This cave is now classified as significant for bone deposit, and is not open to the public. He also told us he found another cave, which in his opinion had the potential to be every bit as good as P.M.R., but he didn’t put a marker on it, his fear being that some varmit (his words) would damage it. He was unable to find this cave again.

The disappointment to us was the fact that last October Get-a-way had requested when visiting the cave to film, for Keith to be present so they could recall his memories. We know he was looking forward to see this go to air, and I guess it will be something again to preserve (for us an occasion we won't forget).

Something, which is plain to see, was his genuine love of his environment in which he worked, and the words of C.J. Dennis sum up Keith's old stomping grounds perfectly.

The thrush is in the wattle tree, red robin's underneath,
the little blue-cap's dodgin in and out amongst the heath;
And they're singing boy, they're singing' like they'd bust emselves to bits;
While up above, old laughing Jack is having forty fits.
For it's mornin'! mornin'! The leaves are all ashine,'
There's treasure all about the place, and all of it is mine.

Treasure indeed. On behalf of the thousands of visitors who have climbed the steps into Princess Margaret Rose Cave, and for around 23,000 visitors each year who will visit in the future – thank you Keith. Your memory will live on with each cave tour.

Viv and Bob Peters

The above eulogy was written by Viv and Bob Peters and read by Bob at Keith's funeral. Viv and Bob along with Karen Mackereth manage Princess Margaret Rose Cave and spent many hours discussing the history of the cave and the area with Keith.

Similarly Fred Aslin spent many hours talking with Keith and much of the history of caves in the Lower South East has come from those discussions. We all owe Keith a debt of gratitude.

Keith was buried at Dartmoor within ear shot of his mate Jack.

Kevin Mott.

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NOSTALGIA CORNER

NEWS FROM PAST NEWSLETTERS

10 YEARS AGO [35#3 Sep 1990]
• The editor (Kevin Mott) regrets that no trip reports at all had been submitted for inclusion in the newsletter (how very unusual).

20 YEARS AGO [23#5 Nov 1980]
• Kevin Mott reports on the tagging and photographing of many Lower South East caves.

30 YEARS AGO [JUL-OCT 1970]
• A very detailed letter from Fred Aslin details the work being done in the Mount Gambier region both in numerous caves and in conservation.

40 YEARS AGO [Jun 1960]
• Athol Jackson requires volunteers to help make ladders. (They would be collectors items now?).

HISTORICAL ITEM
160 YEARS AGO
• 6th Nov 1840, E J Eyre set out from Streaky Bay by horse drawn wagon on his way west to Albany WA, thus becoming (on 7th Jul 1841 the first person to cross Australia on land.

Max G Meth

CALENDAR OF EVENTS

Date	Type of Event	Description	Contact
23/08/00	General Meeting	Old Queens Arms Hotel, 88 Wright St. Adel.	Marie Choi
26/08/00	Working Bee	Library and records	George MacLucas
27/08/00	Navigation Training	With Terra Adventures	Simon Kendrick
13/09/00	Committee Meeting	Simons Place	Marie Choi
16/09-01/10	Caving	Nullarbor	Graham Pilkington
23-24/09	Abseil Training	into caves, based at Millicent	Simon Kendrick
27/09/00	General Meeting	Royal Society Room ----- Antarctica Video	Marie Choi
30/09/00	Working Bee	Library and Records	George MacLucas
11/10/00	Committee Meeting	Simons Place	Marie Choi
25/10/00	General Meeting	Royal Society Room	Marie Choi
28/10/00	Working Bee	Library and Records	George MacLucas
04-05/11	Caving	Lower S.E. and Western Victoria	Marie Choi
8/11/00	Committee Meeting	Simons Place	Marie Choi
22/11/00	General Meeting	Old Queens Arms Hotel, 88 Wright St. Adel.	Marie Choi
25/11/00	Working Bee	Library and Records	George MacLucas
	Caving	Several trips planned to Flinders Ranges	Eddie Rubessa
	Caving	Regular trips to 5A25 contact	Grant Gartrell

Don't forget to register your trip with the Trip Liaison Officer so that the trip becomes official and is covered by insurance. If it is not registered then it is not covered and you may be liable.
Also, please make sure that a report of the trip is submitted.

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Caving on the Murray Plains between Swan Reach and Loxton. A new caving area with potential that requires a bit of work. Trips organised when people are available. Contact Graham Pilkington 83956713.

Caving in the central Flinders, north of Blinman, again a new caving area with potential that requires a bit of work. Trips organised when people are available. Contact Eddie Rubessa 83364775 a/h.

Caving in the Lower South East and Western Victoria based in Mt Gambier on the 4th and 5th November. Contact Marie Choi for further details and book a place battymariec@picknowl.com.au

Survey work in Victoria Fossil Cave at Naracoorte. Contact Frank Hankinson for further details and book a place speleospice@telstra.easymail.com.au

Basic Navigation training weekend, $30, Sunday 27 August. With Terra Adventures. Contact Simon for further details and book a place kend_sim@yahoo.com

Abseiling off the Novatel Hotel in Hindley Street, Saturday 16th September. This is a fund raiser for Paradise Community Services and will cost $30 for a Jump or 3 jumps for $75.
Contact Michael Steadman 0404 849886 for details.

A vertical (abseiling into caves) weekend following on from the successfull Flinders vertical weekend. Based at Millicent, 23 - 24 September. Numbers will be limited. Note: Priority to those who attended Flinders Trip. Contact Simon for further details and book a place. kend_sim@yahoo.com

Two weeks on the Nullarbor, 16 September to 1 October, with one week at Old Homestead Cave and the other week visiting other features. Contact Graham Pilkington 8395 6713 for further details. It may be possible to do one week out of the two.

For prospective members, please remember that you can attend three activities or meetings before you must decide whether to join or not !!!!!!!