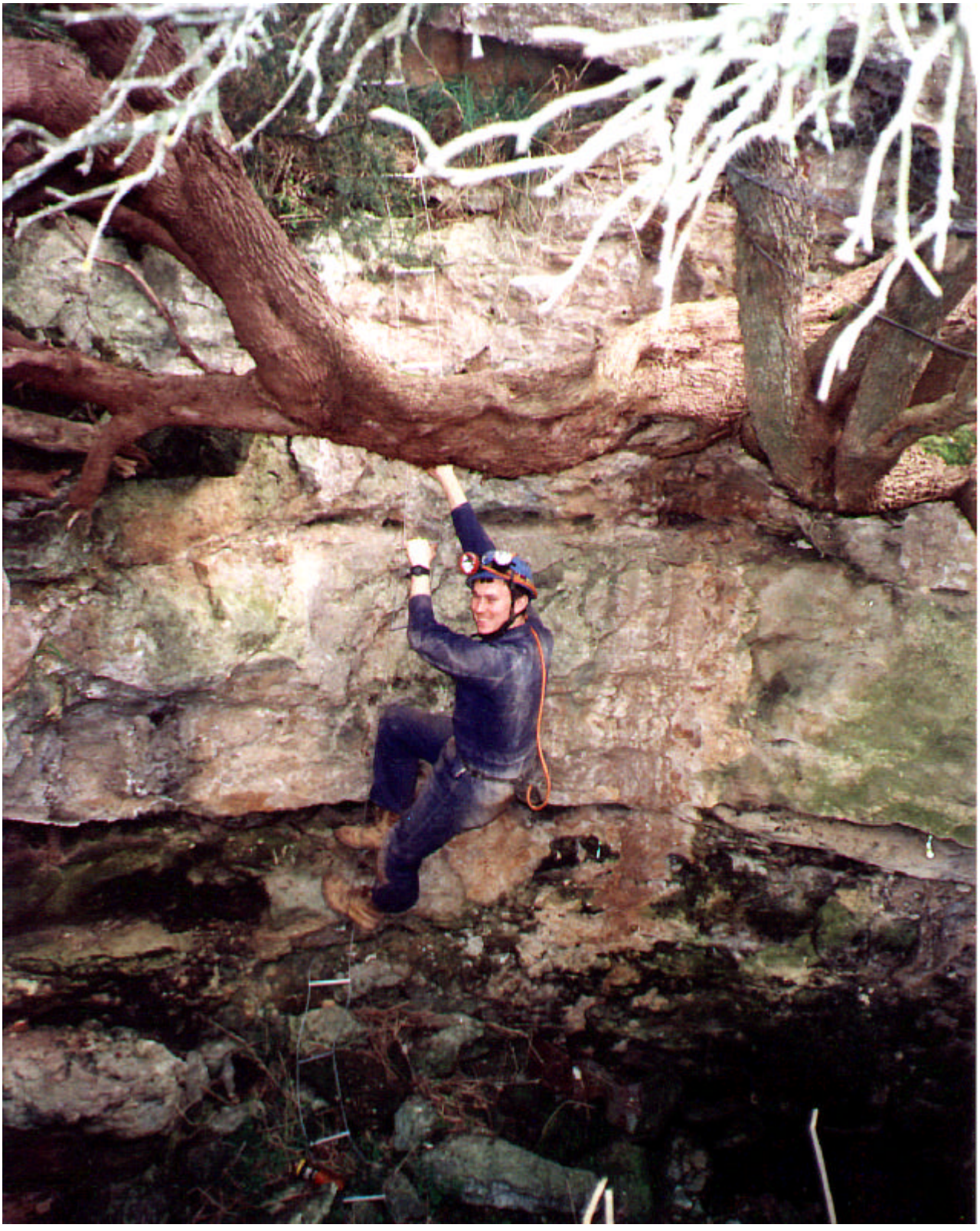
CEGSA NEWS

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

Volume 45 Number 4 **Issue 180** **NOVEMBER 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.

2000 Committee

President	Marie Choi	(H) 8322 0895	(W) 8326 1777
		(M) 0429 696 299	
		(E) battymariec@picknowl.com.au	
Secretary	Vacant		
Landowner Liaison Coordinator	Michael Caruana		(W) 8231 2850
		(E) mcaruana@sabaptist.asn.au	
Museum Representative	Neville Pledge	(H) 8272 5483	(W) 8207 7454
Publications	Athol Jackson	(H) 8337 8759	
		(E) atholjax@senet.com.au	
Quartermaster / Search & Rescue/ Keyholder	Frank Hankinson	(H) 8322 4300	(M) 0413 428 078
		(E) speleospice@telstra.easymail.com.au	
	Paul Harper	(H) 8270 2359	
		(E) pharper@mail.rah.sa.gov.au	
	Pam Payne	(M) 0402 315 178	
		(E) tppayne@one.net.au	

Other Office Bearers

Public Officer	Graham Pilkington	(H) 8395 6713	(W) 8396 3044
		(E) pch@chariot.net.au	
Treasurer / Membership	June MacLucas	(H) 8261 4180	
		(E) junemacl@senet.com.au	
Safety & Training	Simon Kendrick	(H) 8331 3750	(W) 8223 5544
		(F) 8223 5347	
		(E) soc@scoutnet.net.au	
Librarian / Records	George MacLucas	(H) 8261 4180	
Trip Liaison (Logbook) / Research Coordinator	Steve Milner	(H) 8278 3784	(W) 8303 8904
		(F) 8232 3381	
		(E) steve.milner@adelaide.on.net	

Area Coordinators

Nullarbor Plain, Eyre Peninsula	Max Meth	(H) 8625 2700	
		(E) maxmeth@arcom.com.au	
Upper & Lower S E, Glenelg River	Kevin Mott	(H) 8723 1461	(W) 8735 1131
		(E) kmott@deh.sa.gov.au	
Adelaide	Grant Gartrell	(H) 8556 9100	
		(E) bluebree@dove.net.au	

Representatives

Australian Speleological Federation	Peter Kraehenbuehl	(H) 8278 4531	
		(E) krunchy@bigpond.com	
SA Speleological Council	Graham Pilkington	As Above	
	Marie Choi	As Above	
Caving Leadership Standards - Working Group	Peter Kraehenbuehl	As Above	
	Marie Choi	As Above	

Cover Photograph: Daniel Fletcher laddering in Cave Park entrance.
Photo: Marie Choi.

CONTENTS

Volume 45 Number 4 **Issue 180** **NOVEMBER 2000**

CONTENTS	AUTHOR	PAGE
Presidents Spot	Marie Choi	83
Website Review	Marie Choi	83
Committee Resignations and Replacements	Committee	83
Cave Rescue Training Weekend	Marie Choi	83
S102 and SOS Restrictions	Committee	83
TRIP REPORTS		
Nullarbor – April, May 2000	Paul Devine	84
Murray Plains – 20 August 2000	Graham Pilkington	89
Photographic trip along Bunda Cliffs – 9 Sep 1989	Max Meth, Athol Jackson	90
5Y1 – 27 August 2000	Graham Pilkington	92
Nullarbor – Sept, Oct 2000	Graham Pilkington	92
Naracoorte 19/20 August 2000	Marie Choi + Others	95
TECHNICAL AND OTHER ARTICLES		
Membership	June MacLucas	97
Getting to know our country members – Elery Hamilton-Smith	Peter Ackroyd	97
Errata	Max Meth & Fred Aslin	98
Access arrangements for Corra Lyn Cave 5Y1	Graham Pilkington	99
Library and Records	George MacLucas	99
Marriage – Fred Aslin and Jeanette Nearmy	Kevin Mott	100
Accident Report of Joe Ivy Death in Texas, USA	Peter Sprouse	101
Nostalgia Corner	Max Meth	106
Notice of Motion	Committee	106
AGM and Dinner	Committee	107
Cartoon	Robin Gray	107
Calendar of Events		108
Lost and Found etc.		108

QUARTERMASTERS NOTE.

High usage equipment and gate keys will now be stored at the (acting) quartermasters residence at 7 St. Helens Court. Woodcroft. Please make arrangements with Frank well in advance of required date for equipment and keys. Frank can be contacted at the telephone numbers on the previous page.

NEWSLETTER MATERIAL

The deadline for copy or background material for Volume 46 Number 1 (Issue 181) must reach the Editor by Wednesday **14th February 2001**. 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 (please, no text formatting) or ASCII text format. Of course other forms of communication will still be gratefully accepted.

ANNUAL REPORT

Would all office bearers and area representatives please have their reports etc. in to the editor by the **24th of January 2001,** (which is the General Meeting night) so that the Annual Report can be ready for the AGM on the 10th of February.

PRESIDENTS SPOT

Well its hard to believe, but another year is almost over and another interesting year it has been as usual, We have some of our members return from an extended time overseas and some who have gone back. We have also included a regular number of pub meetings and joint club trips, which appear to be popular.

Its good to see we have had a number of new people join the club and some past members rejoin and its great to see them all. Its also good to see some of our newer members take on active roles within the club such as Paul Deer taking on the web site and Daniel Fletcher and Beckki Bulger sharing the General Meeting minutes taking role.

I hope every one has a safe and Happy Xmas and New Year and look forward to all the holiday caving stories.

Marie Choi.

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

WEB SITE REVIEW

I'm not a great web surfer but I do look up a number of caving sites both club and gear related. The Inner Mountain Outfitters is one of my favourite sites from which I have ordered a range of gear from that is not available here. It is well laid out and easy to use and out of all the equipment sites I have been to it has the biggest range. I started checking out their site after I bought my new helmet from them whilst I was in the US in 1999 and they are the only ones who I can find which stock it. They also have a good range of videos and CD ROMs on caving as well as novelties such as key rings and stickers. Check the site out at www.caves.org/imo -its well worth it

Marie Choi.

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

COMMITTEE RESIGNATIONS AND REPLACEMENTS

It is with regret that we have had to accept the resignations of Simon Kendrick and Tracy Colhoun (secretary) from the committee. Their efforts will be sadly missed. The position of secretary is vacant so if you feel that you can fill this position until February please see someone on the committee. Paul Harper and Pam Payne have offered and been accepted to fill the other resignation and the already existing vacant position that was not filled at the last election. Welcome aboard.

The Committee

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

CAVE RESCUE TRAINING WEEKEND DECEMBER 2nd 2000

CEGSA Members are invited by Mark Somers of CCV, VSA and the Victorian Cave Rescue group to attend a multi team rescue weekend at Cave Ridge in Western Victoria. The weekend will be attended by cavers, Victorian Police Rescue, Paramedics, SES and other emergency service groups
The area has 11 identified karst features and the scenario will involve a search and subsequent rescue at this site.
It will be commencing on site at about 10am on Saturday the 2nd of December. Accommodation is available at Mt Gambier Scout Hall for $2.50, which has a shower. Please Contact Me if you wish to attend on 0428 810 010 or e-mail me at battymariec@picknowl.com.au.

Marie Choi.

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

S102 and SOS Restrictions

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.

TRIP REPORTS

Nullarbor April - May 2000

List of clubs and members met throughout the trip.
23rd-28th April CEGSA: George, June and Aaron MacLucas, Ray and Chris Gibbons, Graham Pilkington, Kerry Ninnes, Aaron Draxler.
29th April-3rd May SRGWA: Ric Brown, Pat and Howard Richardson, Vicki Bresnan, Michael Whitworth, and Norm.
4th May -18th May VSA: Ken Boland, Peter Ackroyd, Darrel Carr, Margaret James, Rudy Frank, Greg Leeder **(VCC),** Jose Curras , also Rob Klok and Dawn Graves from **(CLINK).**

15 /4/2000. Departing Kalgoorlie at late in the afternoon I traveled out along the Trans track, which was still fairly rough due to the very wet summer experienced in the area. A couple of the holes left as a result of trucks being bogged had diversions around and were in the region of 4 or 5 feet deep! I rolled out the swag at around midnight and 45 km west of Rawlinna.

16-17/4/2000. I called in to see (Pop) David Thomas Snr at Balgair and after staying the rest of the day and overnight, I setoff the next morning taking a scenic route via the east boundary fence and a disused track which runs NE to Haig. From Haig I traveled east then cut up Northwards towards Haig cave. Camping about 6 km's to the south of 6N55.

18/4/2000. Locating the Nurina track I headed Nth then veered 500m east of the track to 6N143 which is a broad shallow doline in calcretous soils. After taking measurements I headed cross-country NE of 143 in the region of NX326. This is a feature noted by Graham Pilkington in 1987 as being around 5km@160deg from Haig cave. Most of the day was spent hunting for features in this area. I revisited 6N1551 then found 6N1655 a broad calcretous soil sided doline with holes in a central exposed rock island in the base. This feature is probably 6NX77 noted by Harry Wheeler in 1956, but it could also be 6NX326 as no feature was found in the surrounding km or so around the listed position of 6NX326, although there still remain areas to be searched between the two positions. From here I visited the Haig cave entrance taking a few photos.

19/4/2000. Traveling NW from Haig I located and logged 6N1656, which was mentioned in 6NX681. 6N1656 is 1m deep 50m broad soil doline with a 5m deep joint opening which is in exposed rock under a clump of low shrubs, A few km further up the track is BH 6N1657 (6NX681) and again to an irregular doline with holes 6N1658 (6NX80).

20-21/4/2000. I decided on taking the scenic route, which due to the recent rains was very overgrown. This had caused the countryside to look rather out of place and quite a sight (Grass over a meter high with a generous number of wildflowers in what is generally a dry, bare area). I traveled via Sleeper camp and out along the Creek Donga track swagging overnight somewhere in the region of Johnny's Donga. Then on the following day toward the Loongana - Big Donga track finding BH 6N1659 along the way. The next features were the large RH's 6N1180 and 6N1181 that had been described by Quartermaine - Wheeler back in the 60's but the position they had been noted in was almost 3 km out. They are located in fairly undulating country, and both features where full to the brim from the recent rains. Many orange chats were seen taking the opportunity, bathing and drinking at both RH's. The general area where these features are located looks interesting, and I would guess still hold's more to be found. The next feature is a RH 6N1660, which was found on a steep western slope in the north end of a complex Donga that the Loongana track passes through. And again another small RH 6N1661 was found on the west edge of the track, around 20 km to the south.

22/4/2000. One thing I had been noticing on the track as I had been heading toward Loongana was a large number of cairns beside the road. Maybe it is for vague old rabbiter's tracks or it may indicate features nearby. Around 15 km to the south of 6N1661 there are a couple more cairns beside the track. These two indicate the position of RH 1177, which lies near a dead twisted tree at around 200m west of the track. Traveling to the south of this feature I decided, probably unwisely in hindsight, to take a short cut, and to travel cross country down through the area of NX 609, 610. These were reported by Neil Smith in 1985, and which searches for previously have not located the features. The grass was fairly short to start with but once a few kilometers from the track it became a lot longer and the area unfortunately, didn't lack razor-rocks. Hence my pace was very slow and with stopping to scan for features I made only 7 or so km's an hour. Even traveling at this speed I still managed a small dent in the front diff, then destroyed one tyre, and soon after spent an hour updating my tyre repairing skills on a second. The only feature that I encountered - 6N1662, was a small crack that I opened up to reveal a BH around 2.5m deep. It is lined with coralline growths and has blowing impenetrable holes at its base.
Once back on the Trans Track I made good time and swagged a few kilometers short of Old Homestead sometime after midnight.

23/4/2000. Today I joined June and George's CEGSA team (See Nullarbor Trip Report, Graham Pilkington, CEGSA NEWS Vol 45, No 3) so I will briefly list a few points. Arriving early in the morning I found everybody was busy constructing the fifth star amenity at the Old Homestead camp. This was designed as a latrine but was later to also be used for an airport control tower and fuel storage hanger. After setting up camp I took the opportunity to re-fix a tag on 6N1208 that had been left loose under a cairn 6 months before. I also wandered past 6N1214 on a brief cross-country walk.

24/4/2000. Kerry, Aaron D and myself today surveyed a lead in the Officers Mess, which was explored on the Sept 99 trip. No further leads in the direction of the main passage were located, but a small cross joint was found to contain an extensive network of passages.

25/4/2000. Graham and myself dug into a new section in the Froth, Cherry Rip. Further into this new section a junction was reached. We started to explore the left hand lead.

26/4/2000. Traveling to 6N84, Decoration Cave, App 80 km NE of Forrest.. The terrain changes markedly once North of Forrest, it becomes a lot less rocky, so traveling then became a lot quicker.... well everybody else did, I kept finding more things to stop and look at, as it became easier to venture of the track!

27/4/2000. Two survey teams headed underground to continue the surveying. I was teamed with the two Aaron's and we surveyed the new lead Cherry Rip. From the junction (reached on the 25th), the lead to the right was explored and surveyed. It ended up being quite extensive. It was low but there was no end in sight. It was eventually the constraints of lighting that finally forced us to finish for the afternoon rather than the passage end. A noticeable breeze was still prevalent. Later in the evening almost everybody was fortunate to witness a spectacular sky-show, a bright meteor hurtled from overhead toward the western horizon. It lit up the landscape with enough light, to cast moving shadows which were plainly visible on the ground.

28/4/2000. At around midday I parted company from the CEGSA group and headed south with Kerry and Aaron D. I briefly checked out the entrance to Presidential Cave 1218 on the way past, and then we saw a strange sight - the UFO turned out to be a beaming Ken Boland who certainly appeared to be enjoying his maiden flight up from the scarp to Old Homestead in his ultra-light. A little further down the track we met the support crew in the way of Peter, Darrel, and Marg. And little further on again we met Rob and Dawn. On arrival at Uanna dam we turned left and headed towards the Mundrabilla Motel. I parted company from Kerry and Aaron near the top of the scarp; they were to continue west back to Adelaide the next day. After refueling, I called in to see Mundrabilla Bob and then made my way up to the Thampanna Campsite, where I embarked on a little night sky photography before swagging it for the night.

29/4/2000. As I had not met up with the SRGWA team on the previous days travel, I headed back towards Abrakurrie. I soon met up with the crew, and we traveled west via a quick stroll through Webb's Cave before moving on to set up camp at Stegamite. In the afternoon we traveled to Anastomosing where most of the group managed to squeeze down through the rock gap at the base of the entrance tunnel. From the entrance rockpile we followed the main sandy crawls. Pat and Myself ended up in a breakdown chamber which starts at survey point B1. No leads were noticed in the main chamber but off to the left of the starting survey point (B1) we followed a lead which shortly ran out of trog marks it followed the left hand side of the breakdown through a number of crawl passages and low chambers. Eventually, as we weren't surveying I felt obliged to do some digging, this was toward the end of the crawls. Only a minute or so and we broke into a chamber at a guess app 30m X 15m. After a short rest we left the chamber and what looks to be obvious leads unexplored for a survey team in the future. On the return trip we noticed that there was a little water laying in the streamways through the sandy crawls, and also some of the trog marks had disappeared. As we exited the cave through now a muddied entrance we were greeted by clear skies and a few fresh cool cavers who had the rare pleasure of caving in an "active wet cave" on the Nullarbor**!** They had apparently waited for half an hour or so for Pat and myself to return but a great volume of water from a storm above had started to flow into the cave whilst they were waiting, which is when they decided to exit, up through the waterfall, to make sure they were out before it became any worse. Leaving Pat and myself to exit in due time, when it was dry! On the way back to camp I called into Windy Hollow and started digging out the large boulder, which had been blocking the entrance since the last trip in Sept 99.

30/4/2000. We returned to Windy Hollow 6N645 in the morning and after around an hour or so of hammering and digging we had removed the blockage and re-stabilized the entrance. A tour of the cave ensued, and the following spiders were noted, 6 *Tartarus sp.,* 2 *Janusia muiri* and also the shed skins of at least 3 *lowryi* were noted. After windy hollow Ric showed me the doline 6N1383 he had stumbled across on an aboveground walk. Then after lunch we visited Liars Dare and Fern before moving on to Prostrate Pit, again finding more previously untrogged cave.

1/5/2000. Everybody made the trip to Thampanna cave where everyone decided to traverse the drain and on to the railway tunnel. There was water pooled near the top of the Plughole and then there was a muddied start to the drain where flood wash and tide marks were clearly visible near the roof. But the latter half of the drain had

not been affected by water flow. Most of the Railway tunnel, showed signs of water flow in the lower areas all the way to the last Rockpile climb to the Crystal Dome. Nearly all of the party made it to this known end chamber apart from those who became absorbed by the ambience and scenery, or was it fatigue? Also noted was that the *Tartarus* spider noted in April 99 had vacated its web which had been flagged off, located 50m beyond Stags Demise.
From Thampanna a diversion was made by Pat, Vicki, Ric and the author back to Prostrate to continue surveying the section "May - B" series found on the previous day. A cursory stop was made to have a look at 6N208 on the way back to camp.

Pat and Vicki in Anzac Cave.

2/5/2000. Everyone made the trip to Sentinel. On the way there, an unknown RH was found about 800m west of the Sentinel / Anzac track. After the usual extensive photography and a little side exploration in Sentinel it was off through the squeeze at Anzac for a look at the forest of old decoration before heading back to camp.

3/5/2000. After packing up camp in the morning I bid good-bye to Ric, Pat and the rest of the SRGWA team who were to head west toward Cocklebiddy for a couple of days before heading back to Perth. I traveled the scenic route via the Thampanna campsite to see if Ken had shifted camp. After which I headed east along the Old Coach Road to near Toolgana Rockhole where I veered South to check out a couple of possibly unlisted RH's then back across country to the North to an area where NX572 is listed as being. After a short scan around revealed no feature I headed NW to log a feature which I had found a year prior (this is 6N1663), a large 4m X 2m and 4m deep BH with a comfortable entrance chamber and unexplored breathing side lead. Then it was back east along a track toward RH 6N985 where 500m to the NW of it I logged a doline with choked BH 6N1664 before heading off Nth again. I reached 6N140 where I camped the night.

4/5/2000. The morning was overcast and due to drizzle and pending rain I hurriedly set about tagging 6N140 before things became too moist. After which due to the prevailing conditions I headed back to the main track without deviating to the new features that the CEGSA team had found on their way to Old Homestead. I also intended finding the new Link track. The Link track was partially formed on the Sept 99 trip from the west end and the remainder was formed by George and June on their way to Old homestead only a couple of weeks before. There still remained some confusion as to the location of the original Sept track. I was hoping to reclarify the original track but I was so intent on looking for a Cairn of rocks that I did not take any notice of the new star picket with attached sheet of tin gracing the side of the road. So after an extra 20 or so km, I cut west across country toward the Old homestead track. Around 4km's to the west I found a shallow Doline and impenetrable BH 6N1665. A little while latter I arrived to a warm welcome at the Old Homestead Camp (Now Flightstar Base) and again set up camp. Ken had been busy with some productive flying in the previous few days. As I happened to have a Laptop on board with the up to date Nullarbor data (in lieu of the then still missing in action Max Meth), I volunteered to download Ken's points which could then be crosschecked against existing information hence they could then be established as new features and allocated N numbers. In the ensuing days it almost became a necessity as the data quickly grew with every flight, and it quickly became apparent that Ken hates flying so much that he can barely stand to be on the ground (Something like that I think). The rest of the day myself and Peter headed up the track toward Forrest where we logged one of Ken's features, a BH now 6N1666 and also tagged the following features; 6N868, (1348 recorrected), 385, 685, 386, 684, 683. Rudy rolled in later that evening whilst the rest of the crew were doing it rough in makeshift swags some 20 km to the west. They had undertaken a walk to a group of Ken's earlier features, at the start of the day.

5/5/2000. After a late start due to data processing Rudy, Peter and myself headed NE of Old homestead a few km and logged 6N1667 to 6N1671 all BH and Doline features these features and another 5 or so were found near two of Ken's spotted features. Needless to say they weren't thin on the ground, considering the number of features known near to Old homestead this is not unusual. The rest of the ground parties arrived back from their trek across country by the late afternoon.

6/5/2000. Again Peter Rudy and myself headed NE this time taking the Old Forrest track south to do a loop around Old homestead visiting and logging the following Ken features along the way. BC 6N1672, through to RH 6N1678 which we came across just on dusk.

7/5/2000. Unfortunately for Ken the day was windy so he was grounded temporarily and joined us in a cross-country meander in the old Luxury, which due to the custom seating arrangements for eight people needed the tyres inflating a little. The only person who didn't ride on board was Greg who zipped across country on his bike. All told around 15 features were located 9 of which were logged and tagged 6N1679 to 6N1687. They

included Letterbox BH, to yet another very small inconspicuous BH, which in this case leads to a complex network of small tubes, of which many have small breathing floor holes. This cave has around 30m of passage with much remaining unexplored. The last feature of the day, going on 7 or 8 pm, was a new 3m X 3m RH, which as Rudy remarked; we "serendipitously" stumbled across in the dark. Ken later reflew the area and nothing more was to be found. Later that evening Jose rumbled in.

Peter, Darrel, Ken, Marg, Greg and Rob at Letterbox Blowhole.

8/5/2000. Ken was airborne again today and the rest of the team headed underground to look at Old Homestead, leaving Peter, Rudy, and myself so we headed out again visiting 18 features of which 12 were logged these were from RH 6N1688 through to, a "RH like" BH in Pavement 6N1699. All of the features were either Ken's spotted features or in close proximity to them. The only passage found was approx 6m in 6N1693 and around 5m in 6N1690 which is close by to the now trig point "Stone Henge" this howling BH took some effort to open up and also build a set of cairns, all to no avail as the feature pinches out at the base of the BH.

9/5/2000. Marg joined the three ground explorers today and we set off East along the link track. The first section of which, thanks to the efforts of the CEGSA cleanup team, had brushed up rather well. After this section though the track seemed very hard to follow for the likes of a few days old track. It was not till the return journey that we realized we had indeed followed the Original Sept track. During the next few days we were to try out the alternate track which had been formed by CEGSA after they lost the original track but soon reverted to the Original track as the tyre damage score was to end up reading Original track 17 vehicles no flats, alternate track including the CEGSA vehicles, 4 vehicles 2 (Possibly 3) flat tyres. Also worthy of note is that the Original track now has a few less bumps that have turned up as track delineators. Today 15 features were located and 9 were logged from Doline 6N1750 through to RH 6N1758. None of the explored features contained more than 3m of horizontal extent.

10/5/2000. Some of the group headed back underground while the remainder traveled to Forrest in the morning where fuel was purchased for the Ultra light, which dropped in, landing across the runway, well almost. After which we enjoyed a revitalizing shower before heading off to utilize the remainder of the afternoon, finding 4 features but only logging 6N1759, which a quick survey of the 20m cave was completed and worthy of note is that 2 suspected *Tartarus sp.* spiders were noted in the depths of the cave. As far as I am aware this is the first sighting of them in the Old homestead area. Both spiders were found on sheet webs but one of the sheets was suspended by a semi cone. The cone was more similar to the type of web built by the southern Tartarus spiders on Mundrabilla.

11/5/2000. Ken was grounded today by strong winds but remained at camp optimistic of any change. Again after a data entry session Peter, Rudy and myself headed off to find 8 more features of which 3 were logged Doline 6N1760 to Doline BH 6N1762 and a partial 15m cave survey of 6N1761 was completed. Partial, as due to the rains earlier in the year, there was large pool of water laying through a tight dip, and with the howling breeze through the narrow gap above the water, nobody was game despite attempts, to brave full immersion.

12/5/2000. Greg set off riding back to Melbourne today. Darrell, Marg and Jose headed of to check out some features closer to Old homestead, and Ken again braved the misfortune of high winds and remained grounded at camp, Whilst Peter, Rudy and myself headed out to locate 15 features of which 7 were logged, RH 6N1763 through to 6N1769, of which 6N1764 had app 8m of passage and also contained a suspected *Tartarus*.

13/5/2000. Ken again was forced to remain grounded today. Darrel, Marg and Jose set off to look at a group of features which ken had found near the one logged earlier as 6N1666, whilst Peter, Rudy and myself headed off to locate another 16 features of which 7 were logged. 6N1773, The Drainpipe is around 7m deep and has howling holes in a clean flood wash chamber at the end. It also contained a *Tartarus* spider.

14/5/2000. Jose set off in the morning heading back to Kalgoorlie. Ken much to his delight thanks to calmer weather resumed the air search for more features. While the remainder of the group decided on a walk to a couple of Ken's earliest features which Darrel had visited previously by motorbike. These weren't too far from the Old Forest track, a little east of Old Homestead. A couple of kilometers of walking spread out across a relatively high ridge. The rest of the group was hailed by Peter who had found what looked like, at first, a small calcrete doline but closer inspection revealed a BH in the base through which very little reflected light could be seen. A couple of rocks thrown through the opening had guesses ranging from 12 to 21m of depth. As no ropes

were on hand the feature was logged before continuing on to BH 6N1777 and BH 6N1778. A further couple of features were located nearby, but for the time being remain unlogged. From there the party walked further east then back via along the west side of the ridge to the vehicles. Darrel and Marg set off back to camp while Peter, Rudy and the author drove back to 6N1776, to finalize the bet wagered on how deep the feature was. After descending on SRT the depth from the BH lip to the floor was found to be 17m exactly. The entrance tube has a Thampanna like drop through the middle of the roof of the cave chamber. A survey ensued of the obviously effective dog and cat trap now named Skinnbone Pit. The horizontal extent was not quite as extensive as hoped, being a single chamber of around 20m X 11m and varying in height from 1 to 2.9m. Once back at camp, and after another (Thank you to the chefs) excellent feast, I started another round of data processing.

6N1776 3D Model.

Darrel Carr Peering Down The Entrance to 6N1776

15/5/2000. Ken set about flying again, whilst after more data entry which was still continuing this morning due to Ken's enthusiasm and good fortune of finding around 75 features the previous day, everybody piled onto the Luxury and headed cross country again finding 13 features of which 6 were logged and a quick sketch survey was completed of 6N1779, which has approx. 15m of passage.

16/5/2000. Ken again was airborne today. And thanks to a slight reprieve (Ken only found 65 features the previous day!) an earlier start ensued. Again the Luxury was loaded and headed off across country. This time finding 7 features and logging 6N1785 to 6N1788. Whilst a survey of the last feature was being completed Ken's flying escapades finished an hour or two before schedule as his undercarriage failed on landing. Fortunately no major damage resulted and a retrieve team soon launched into action.

17/5/2000. Most of the day was spent disassembling and packing the ultralight for transport. Although time was made to visit 6 features of which 5 were logged 6N1789 to 6N1793.

18/5/2000. A further four features were visited and logged in the morning these were 6N1794 to 6N1797. Good-byes were said and it was time to part, as Ken and the rest of the group had a long journey back to Vic. I traveled back to up to Forrest where I purchased a little fuel. A little fuel costs a lot of money at $1.40 a litre. (This was previously thought to be a ludicrous price but... I wonder what it is now)

19/5/2000. I spent most of the day with a few side deviations traveling back along the Trans to Nurina, then back up toward Haig Cave finishing near 10 or so Km short where I rolled out the swag for the night.

20/5/2000. I did a little exploration for features in the region of Haig cave again, then traveled back to a feature which I had visited and tagged in August 1998, the previously unnamed 6N142, "Pernics Vista". This cave was estimated to have around 20m of passage. I popped underground to inspect the entrance chamber for fauna, which I had not done previously when I spotted a side passage that was breathing. I recall seeing it but had not entered it on the previous trip. After around 15m of passage which passed through one small chamber the cave suddenly opened up into an extensive breakdown chamber, at a guess from what I could see, around 25m X 15m and 2 to 3m high. Unfortunately I was on my own, so I ventured no further than the start of the chamber.

21/5/2000. I made my way back to Haig and then on into Balgair finding BH 6N1798 late in the afternoon.

22-24/5/2000. Part of the day was spent looking for features, which is when I located BH 6N1799. I later caught up with Pop and Tony along with two visitors they had from Kangaroo Island and spent the next couple of days giving them a hand drafting sheep. I located two more BH's during this time 6N1648 and 6N1649.

25/5/2000. I spent a bit of time showing the visitors from Kangaroo Island a couple of BH's. Unfortunately I could not find one easily enterable for them but they enjoyed the excursion anyway. Later in the day I revisited

three features that I had stumbled across whilst riding cross-country on a motorbike. These features were 6N1800, a 7m deep BH with around 12m of Passage, 6N1801 that is around 11m deep, and has a length of about 8m, and 6N1802 which is a BH with around 2m of passage.

26/5/2000. I gave Pop a hand to muster the House paddock in the morning stumbling across two features both BH's and recorded positions so as to return another time. After the muster was complete I said good-byes to Pop and headed off back to civilization.

A brief summary of the trip: A Combined effort of many people on the ground resulted in approx. 100 new features (of these 42 were logged as 6N Numbers), approx. 480 new features were found by Ken Boland utilizing the "Flightstar" (of these 57 were logged and tagged as 6N Numbers), giving a total 580 new features known of which 99 were logged as 6N Numbers.
During the course of the trip the author visited approx. 160 different features.
Many thanks to George, June, Pat, Ric, and Ken, and all others whose organization of the trips from CEGSA, SRGWA and VSA, made my part in this trip possible.

(A note of caution some of the distances traveled on this trip were only possible because I started the journey with 320ltrs of fuel on board. Fuel at Forrest or Balgair can be made available for purchase but it must be arranged beforehand. Also traveling cross-country in the Northern regions is not recommended, unless you carry plenty of spares and adequate repair gear, especially in the way of tyres, I destroyed 3 tyres and mended around 12 punctures during the course of the trip)

Paul Devine.

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

Murray Plains, 20 August 2000

CEGSA: Graham Pilkington, Ray Gibbons

Karst features visited: 5M43, 5M46, 5M47, 5M48

We again took a different route to get to "The Gurgler" (M43) and again saw new features. The first item of interest was M46. It appears that the surface had been scraped down to 1m over a 50x30m area and other spots nearby, possible for use on the nearby road. This had removed a calcareous protecting layer

M46 Sth Doline looking E. Photo: G Pilkington.

covering clay at least 5m thick. Subsequently, two holes have formed. The one nearest the road is about 2m dia. and 3m deep whereas the other 25m to the north is a north trending bifurcating rift about 10m long 1-2m wide and 4.5m deep.
The second feature we took note of was M47. It is another rift in dirt trending EW about 3.2m deep and 0.5m wide, on the south end of a depression 21x14m that appears to drain into the rift. The rift looks like it was deeper until recent dirt collapses.

M46 Nth rift looking NE. Photo: G Pilkimgton.

300m away from M47 There is a large depression, M48. It was estimated as 100x50x1m deep. It could be a natural undulation of the landscape but was enclosed and had a rocky rim in places and inner depression

M47, Looking West Photo: G Pilkington

On arrival at The Gurgler, Ray and I had to remove half a metre of new sand fill. At first I thought that this deposit must have been washed in since our last trip but after seeing an echidna watching me from a small hole off the side of the shaft, I realised that our hole had been used as the dumping ground of other diggers. After a few minutes the echidna went off down its' tunnel and left me to mine. We used the jackhammer again and progressed about 2m to reach a small (less than 1m spherical) chamber with three leads off it.

Michael Hodges, the land owner, has paid a few visits to the cave since this trip and reports as follows:

- He dug out the entrance to the end chamber and found an echidna at the entrance to the right-hand lead. On discussing the problem with others of whether the echidna was trapped down there, he decided to install chicken-wire to enable it to climb out.
- On his visit to install the wire he found a dead echidna and removed it. However, another was seen down the cave.
- People visiting the cave had noticed the smell of the dead echidna and informed the Police that they thought someone had buried a body in the cave. The Police visited the cave (after the dead echidna had been removed) and found nothing.
- Michael discovered the second echidna was also dead and removed it. Most people would be aware that trying to remove a live one from a hole just big enough for an echidna whilst lying flat in a tunnel just big enough for a human is not recommended practice. He has installed wire across the entrance to the cave in an attempt to stop further deaths. Visitors must remember to restore the wire after visiting the cave.

Graham Pilkington.

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

PHOTOGRAPHIC FLIGHT ALONG THE BUNDA CLIFFS, NULLARBOR COAST 9 SEP 1989

Party: (in the airplane) Max Meth, Kevin Mott, Ron Lee, Athol Jackson, I recall that the seating order was, Athol (in the copilot's seat), Kevin Ron then Max.

Introduction

Better late than never. This trip report is written 11 years after the event. And as such, contains reference to events that happened afterwards.

This article was belatedly written mainly in response to Steve Milner's article [Milner 2000] in the previous newsletter where he says in his introduction, "Some 10 years ago, maybe more, several CEGSA members hired a plane to fly along the Nullarbor Cliffs to see what was there". That very vague intro is a result of there being no trip report published in CEGSA's newsletter. And so here it is….

Preamble

On 6 March 1987, 3 fishermen survived [Bell & Coops 1987] the wreck of their boat by sheltering for 5 days in a cave at the base of the Baxter Cliffs in Western Australia. That cave, White Water Cave 6N344, named after the ill-fated vessel, was the first sea cave of the Nullarbor cliffs to get in our Nullarbor records.

The finding of that first cave prompted interest in finding out if other such caves existed. At the time, I (Max) lived in Adelaide, so I jumped on the bus to Ceduna. Gary White, a CEGSA member then resident in Ceduna, and I chartered a local Ceduna boat "Overproof" a 13.5m single masted sailing vessel belonging to Peter Betts. On 22 November 1988 we sailed from Ceduna for what turned out to be a five-day voyage [Meth 1989] to look at the Bunda Cliffs in S Aust. On that occasion I noted 21 cave openings in first 26km of the cliff starting at Twin Rocks. Gary spent almost the entire time at sea in his bunk seasick. At first light on the 24th, Gary came up on deck for about 5 minutes, viewed the cliffs briefly, and then returned to his bunk!! Bad weather halted further investigation. And landing at the cliff base using our rubber inflatable boat was nigh on impossible.

That boat trip showed that there were indeed many caves in the cliff. But just how many were there? The Bunda Cliffs stretch for 175km, and I had only glimpsed 26km and that was done from about a kilometre from the cliffs.

In January 1989, Gary White [no report published] flew along the Bunda Cliffs and took 37 photos (one roll of film) that showed about 30 cave entrances. I have copies of these photos. These photos show the entrances in great clarity and also show very good detail of the rockpiles adjacent to many of the caves. It is obviously important to fly at a time of day when sunlight illuminates the south facing cliff face. But there was still no way to locate the caves seen by Gary, as they were randomly snapped along the 175km of cliffs. However, Graham Pilkington managed to locate several of them by comparing Gary's photos with the National Mapping set of aerial photos. A very tedious job. And it required matching the horizontal

aspect National mapping photos with the vertical aspect photos of Gary. A needle in a haystack task. But Graham managed the task and we did get some accurate locations for a few caves.

Prelude to the flight

The Subterranean Foundation (a group of CEGSA members interested in research and publishing) was interested in gaining information on the caves in the Nullarbor cliffs for a possible future publication. The Foundation offered to fund the expedition in exchange for the rights to the information gained. (The Foundation has since been wound up and all funds, materials and information are now vested in CEGSA.) There were various meetings between Graham Pilkington and the four of us that eventually went on the flight. We wanted to get the most benefit from a flight, as it was going to be expensive to get an aircraft all the way out to Nullarbor. We heard that an aircraft would be at the Nullarbor Roadhouse for about a week to be used by the South Australian Museum to conduct a whale survey. That gave us a brief window of opportunity as it meant our cost of hiring the aircraft was only from Nullarbor, and not Ceduna or Adelaide. So last minute plans were put in place. For some reason, Graham was unable to get away so he remained in Adelaide.

Kevin, Ron, Athol and Max drove to the Nullarbor Roadhouse in Max's Kombi van. We organised with the pilot to fly along the Bunda Cliff at a time when the aircraft was not required for the whale survey. We intended to photograph the entire cliff in wide-angle stills, and with a separate camera, photograph cave entrances in close up. As well, two video cameras would film the whole cliff.

The flight

The flight occurred on 9 Sep 1989. The flight covered the entire Bunda Cliffs, from their start at the Head of the Bight to their western termination at the commencement of the Merdayerrah Sand Patch. Note that this terminal point is fully 27km before the SA/WA border.

On the flight many hundreds of caves were seen. Some smaller than one metre in diameter half way up the cliff face. Others were 50m high arches with the sea rushing in.

The flight returned to Nullarbor Roadhouse inland and we flew over Koonalda cave 5N4. This was a spectacular site from the air, with the somewhat smaller Giants Head Doline 5N178 nearby.

However, the photography of the cliff and the caves therein was not as good as our hopes, and overexposure and out of focus problems meant that interpretation of the photos was far from straight forward.

The low quality of both the slides and the video footage of the cliffs dampened our enthusiasm. Hence no trip report was written (until now). And exploration of the cliff caves was certainly hindered. A few cliff features have been added to records since then, but in November 1999, Steve Milner [MILNER 2000] visited 8 cliff caves in a well organised expedition as per the report in the previous CEGSA NEWS.

One direct consequence of the 1989 flight was the finding of Broken Bottle Cave 5N390. This was a cave mentioned (and described) by J M Thomson [Thomson 1952] but for which no precise location was given. Thomson's location for the cave was given simply as 1.5 miles North-East of Roberts Well, and as it had not yet been located, it was not yet in our database. On our return flight to the Nullarbor Roadhouse and while preparing to land, I noticed a cave with a track leading to it. I did not know of any cave in this particular area, so we drove out there. The cave fit the description, broken glass included. And it turned out to be about 1.5 miles due West of Roberts Well. Oh well, close enough!!

Postscript

There are still hundreds of caves in the Bunda Cliffs awaiting attention. And in Western Australia there are the Baxter Cliffs. Does anyone want to go caving?

Max G Meth and Athol Jackson October 2000

References:

BELL P & COOPS R; 1987; White Water Cave a new cave on the Nullarbor; Western Caver.
METH Max; 1989; Nullarbor boat trip to the cliffs; CEGSA Newsletter, V34 #2.
MILNER Steve; 2000; Nullarbor 1999 South Australia the Bunda Cliffs; CEGSA NEWS V45 #3.
THOMSON J M; circa 1952; Nullarbor Caves Location Plans; CEGSA unpublished.

5Y1, 27 August 2000

CEGSA: Graham Pilkington, Ray Gibbons, Frank Hankinson, Beccy Bulger, Daniel Fletcher, and Paul Deer

Karst feature visited: 5Y1

On the beginner's trip that I attended on 12 August, I had noticed a bone deposit that appeared to be of the "old" variety (maybe several million years). Since I was not aware of any record of this deposit, I mentioned it to Neville Pledge to see if he was interested in a sample from it. As expected he said YES.

Fossils, Ledge 1. Photo: G Pilkington

This visit was to collect those samples. The deposit is only a few metres off the "tourist run" to the Skeleton Maze and had been lent-on prior to the earlier trip. This made me keen to collect from the site before more inadvertent destruction occurred. It is doubtful that many cavers would have realised that it was a bone deposit as at first glance it looked like any other rubble-covered dirt. I had had the time to examine it more closely as I waited for the "adventure" team to discover that they were heading down a dead-end tunnel. It looked very like the deposit called "The Koala Patch" of Dreamland viz a red sand left stranded on shelves when the rest of the floor sank and collected cave fill.

Fossils, areas 2&3, mid dig. Photo: G Pilkington.

Because I had determined that the bones were mostly very small (less than 1mm in diameter and 20mm long) I had decided not to attempt to sieve on site. Too many fossils would be missed. This meant bagging up all the sand/soil and removing it from the cave though a few constrictions. We used cotton rock-sample bags with tie strings, borrowed from the SA Museum, so that we could pass the samples caver to caver. Several sizes were used from 1 kg to about 5 kg but we found that packing several bags into a pack that could be dragged worked best. We also used a small trolley and a drag bowl, mainly to move the bags along long cramped tunnels. Ropes tied to both sides enabled them to be re-used quickly without cavers having to shift location. Sometimes cavers sat along the tunnel to guide the bowl over/around obstacles. In all we removed about 400 kg in two trips.

One large deposit was almost completely excavated while six smaller deposits were removed completely. Another large deposit (estimated at 300 kg) was left untouched. It is possible that more deposits might exist in the area but we eagerly await Neville to tell us if the material is of significance.
Frank lent us 6 plastic barrels with large sealing tops. These proved to be ideal for vehicle transport and later storage as they keep the material close to the original moisture content. One of the biggest problems with collecting bones from caves is that the bones dry out and crumble into a white powder.

Graham Pilkington.

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

Nullarbor, 30 September to 15 October 2000

CEGSA: Graham Pilkington, Ray Gibbons

Karst features visited, all in WA: N83, N139, N140, N372-374, N380, N400, N1210-1211, N1213-1214, N1313-1314, N1744-1749, N1763, N1776-1778, NX156 or 157, NXG10-13, NXK41-42

The "NXG" are features seen but unknown to Graham, while the "NXK" are for Ken Boland's sightings.

Saturday 30: We set off from Adelaide at 7am fully loaded with materials to upgrade "Old Homestead Hilton" – the hut at Old Homestead Cave. After calling in to see Max Meth at Ceduna and borrowing maps and tagging gear, we travelled out to the Eucla quarry to camp for the night.

Sunday 1: After getting petrol at Eucla we added half a ton of sand and gravel from spillage at the quarry then headed north to Arachnid Cave N140. Last trip Ray had noticed a strongly drafting hole heading W from the 10m long cave off the S end of the doline and wanted to see what was there. We explored about 60m in small shallow tunnels with the breeze getting very strong by the time that we exited. Both of us are too big for this cave, especially me! The tunnels are through solution pockets with many constrictions that are just the right size for children. Another 10m long passage goes off the E doline wall.

Loaded up on the way to Old Homestead. Photo: Ray Gibbons

Old Homestead Hilton before Renovations. Photo: Rav Gibbons

While in the area we tagged 6N1746 to 1749. These correspond to 6NXG5; a new rockhole 0.15m diam and 0.3m deep in a rock pavement 1.5m diam; 6NXG6: and 6NXG3 (see NEWS 179p68). After a brief surface walk to see if more features were close by, we traversed the Link Track to Old Homestead Hilton.

Monday 2: Ray started building the veranda around the north, south and east walls. I helped where I could (like holding up a post or mixing concrete) but most of the time Ray could do things faster then explaining what to do.

Tuesday 3: The veranda frame was completed and most of the concrete supports poured. Gutters were installed and some roof sheets added. This was the only day that we saw anyone during our two-week stay. Two men (from ANR?) came down from Forrest for a few hours of caving. They did not stop to say hello but did wave in passing.

The Framework is up. Photo: Rav Gibbons

Wednesday 4: The roof sheets were all added and the concrete post supports finished. A new 470 litre tank was installed on a rock wall next to the old fireplace. Ray also added a mapping table to the inside of the hut – it hinges out from the wall and has fold-down legs from an old folding ladder that Ray had brought out to "scrap" for the purpose. This was a very HOT day but we did manage to gather up about 100m of old chicken wire netting that was rotting away in the bushes just to the south. During the trip we scoured around the campsite for a few hundred metres gathering up a heaped trailer load of garbage left mainly in the pre-caving days when Old Homestead was more of a fact than a name. We took all this, together with our own construction scraps, down to the tip at Eucla on our way home.

Renovations Completed. Photo: Rav Gibbons.

Thursday 5: Ray completed the roof by adding those finishing touches like gabling and shed to wall waterproofing. He also fixed up the old shed by filling in holes and patching the wall where someone had driven into it and torn the panelling.

Friday 6: It rained. This was great as it tested out the rainwater collection system. The 2mm fall added about 80 litres to our tanks (one new and one old). For our rest day we went for a walk and found and

tagged N1744 and N1745. N1314 was also tagged but it was not clear which doline was N1314 so we might have tagged the wrong one. With the new accuracy on the GPS readings, these ambiguities should disappear. On our travels we also visited N372 N373 N374 N380 N400 N1210 N1211 N1214 N1313 and NXG13 (4x3x0.3m @095 a blowing hole 0.1m diam in dirt on SE). We found tags on some of these but had to work out later which of the others we had visited by using the original approximate location and feature description.

N1744 is 0.5x0.3x2.1m in a 4x4x0.3 depression. Tube top at 0.6m where it constricts to 0.2m diam. N1745 is a triple blowhole contained in a 14x8x0.2 @080 depression. The west BH is in rubble 1x0.5x0.5m deep. The centre BH is 1x1x0.7m in rubble then 0.4x0.25x1.6m deep, a small tunnel off the bottom @190. The east BH is a joined twin pit each 0.5m diam 2.2m deep with a breezy hole off the bottom @020.

Saturday 7: The extra water gave Ray the idea to start concreting the shed floor. We had brought enough cement but had intended to do the floor on the next trip. Ray pointed out that we had all the materials that we needed, the time to do it, and no one in the way wanting access to the shed. The main reason for not doing the floor had been the lack of sand and gravel but Ray had noticed that the material excavated from digging the toilet on the last trip only looked like clay. In fact the lower part of the dig had been in brown sandy gravel! This meant that we could make the shed floor AND clean up some of the unsightly spoil from the toilet. Two thirds of the floor was made today. A late walk located NX156 or NX157 (0.3x0.2x2? too small to enter) but lack of feature descriptions and the original poor locations made identification impossible. I simply pass the info over to Max for him to deal with.

Sunday 8: At last we went caving. A full day in the Froth added 140m to the main south leg. As usual it does not end. A roof slab that has hinged down blocks the main passage while another passage is constricted by low height. Breezes are still present.

Monday 9: Ray added wire mesh (courtesy of the rubbish) to the toilet under-roof vent space. During the last 5 months the local bird population had become civilised and was using the loo. Unfortunately they could not open the seat lid. I worked out roughly where the end of the Froth was as a GPS location and we placed a star dropper there. The cave map makes a lot of drainage sense when plotted onto the landscape. The toilet appears to be over part of the Officers Mess north of the Lunchroom. (Is this part of the drainage? *ed.*) We still have to locate the passage beneath the hut so that we will know where to put the stove.

Tuesday 10: Another surface day. We visited NXK41 and 42 but these turned out to be rabbits digging under caprock. N1776 to 1778 were located after a 3 km walk off the track. For a change we cleared some of the Link Track then went out to N1763. This turned out to be a rockhole with water. We removed some of the accumulated soil fill as our good deed for the day. Walking around the Nullarbor to find features with a good GPS location has become VERY easy. But I must remind people to still carry a compass (as well as water and food) and keep note of where you are just in case the GPS unit fails.

Wednesday 11: The shed floor was finished. A second new 470 litre tank was installed across two rock pillars close to where the original tank was and the old tank was installed to catch run off from the toilet, now that Ray had added a gutter. We can now wash our hands without having to return to camp, talk about civilised. To help prevent another “mishap” by people trying to park under the veranda and knocking it down, we added protective bollards on the southern side.

Thursday 12: Camp clean up day. All rubbish was loaded onto the trailer, holes in the campsite were filled in and excess rocks removed. Ray then spent many hours doing crazy paving under the north and east verandas. All I had to do was find enough rocks to keep him going. I’m glad that he brought the wheelbarrow along. Later on I continued clearing the track north from the hut towards the Link Track that I had started early on in the trip, reaching 1.4 km from the hut by the end of the day.

Friday 13: Another caving day. This time we surveyed 90m including the chamber and passage that runs south of the Potholes Backdoor. There were four connections noted that led back to the Potholes Backdoor passage. We tied in the first and the last.

Saturday 14: Time to leave for home. On the way we cleared the Link Track between 8.9 to 10.3 km from the hut, that is from the southern Mundrabilla to Forrest Track for 1.4 km. If some track is cleared of rocks and spikes on each trip, then the journey out to OHC will be much easier on the tyres as well as safer. The distance between N83 and Eucla via the Link Track was measured as 122 km, a saving of over 60 km on the Mundrabilla Homestead route. We stopped for the night an hour out from the Nullarbor Roadhouse.

Sunday 15: We returned Max’s maps and tagging gear but he was out to church so we did not stop to chat. The Old Homestead Cave survey added another 230m taking the surveyed length to 28.69km with the Froth now at 1425m.

Graham Pilkington.

Naracoorte 19/20th August 2000

Participants: CEGSA: Daniel Fletcher, Bekki Bulger, Paul Deer, Marie Choi, Pam Payne, Dave Trehearne, Andrea, Dave Glowacki.
Visitors: Steve Bourne Rob Mutton.
CCV: Ian Farhall, Eva, Greg, Steven and Sally Leader, Neil Ritchie, Ros and Susan Quick and some others.

The Weekend began with Paul, Pam and myself meeting up mid afternoon in Adelaide for a leisurely drive to Naracoorte so that we would be there early enough to greet the Vics. Once we gained access to the Scout hall we had visitors and the Vics rock up at various intervals during the night. As with all good caving trips we did not quite get away at the time planned, but that's okay as that gave time for some who had not yet arrived to get there. We split the group in two with Dave Glowacki escorting the group made up of mostly Vics to cave park cave whilst the rest of us headed to S102. As we had a number of our newer members of the club with us I asked Paul Deer and Daniel Fletcher to write up their impressions of the caves

Rebecca Abseiling into S102. Photo: Marie Choi.

S102 Cave - 2 hrs

Participants: Daniel Fletcher, Bekki Bulger, Paul Deer, Marie Choi, Pam Payne, Dave Trehearne, Andrea, Steve Bourne, + the Vics.

Abseil entrance down a 10-meter solution tube to the first chamber. Some bone material was found in this area against the walls consisting of snakes and rodents. Walked past two very spectacular sand cones to a small lake. Paul and Ian (the pom) crossed the lake to explore the small dry section on the other side. The pond was around 8 meters wide and Ian slipped a few times in the water Paul had stirred up. On the other side Ian and Paul were squeezing up the side of a rock pile only to turn back because Ian was a little bit too big to fit there, also they were gone for a bit too long. Dave, Andrea, Pam, Bek and Dan went to check out another small piece of water called 'Little Blue' named because of it's almost infinite clarity and slightly blue appearance. The entire group laddered out of the cave except Ian who SRT'ed.

Paul Deer.

The group decided to have lunch at the surface and the rest of the weekend's participants who had returned with Dave G from Cave Park joined us. No armchair cricket was played on this occasion however Beck and Daniel had brought a Frisbee with them. It was quite a site watching these guys dive for the Frisbee whilst trying to avoid the fresh cow pats! I am not quite sure what lead up to it but one Victorian, known as the "bloody Legend" did end up covered in a thick layer of cow poo with some assistance from others. Once lunch was completed and energy expended the groups swapped caves with the exception of a few including Pam who wanted to check out the Wonambi Centre at the cave park. Dave and Andrea who went ahead of the rest of us seemed to get geographically embarrassed and were not seen again until dinner at the pub. The trip to cave park also became a mini training session as Ian (Pom # 2) thought he would pass on his expertise in ladder rolling, English style!

Marie Choi.

Cave Park Cave – 1.5 hrs

Participants: Paul Deer, Marie Choi, Ian Farhall, Rebecca Bulger and Daniel Fletcher.

We arrived at the property mid afternoon to be greeted by the landowner and his two friendly dogs. A short walk from the car found us looking into an impressive doline. After rigging a ladder for the four metre drop in, Ian, Paul, Bek and myself descended. Instead of heading east from the doline into the larger part of the cave, we decided to head west into the smaller section. As the party moved into the cave about ten bats were noticed on the roof approx. 50 meters from the entrance. We spent some time exploring the western limits of the cave and searching for any possible extensions. While we were exiting the cave, some of the bats became active in the semi dark section. Before we left the doline, Bek and I did a quick 'count' of the bats in the large southern bat chamber – approx. 2000. As the sun was disappearing, we climbed the ladder to the surface. Little did I know that this was where the real fun started. Bek was rolling the ladder while Ian thought he could do it faster. Next

thing you know, Bek was wrapped up like the sausage in a hot dog with her legs out one end of the ladder and her head out the other. As the sun was now almost set, we headed back to the scout hall for a night of raucous behaviour (by some).

Daniel Fletcher.

Ladder rolling demonstration. Photo: Marie Choi.

Back at the scout hall there was a mad dash for showers, as we all got ready for dinner at the Naracoorte Pub. Dave and Andrea made an appearance here after vanishing earlier. Whilst we waited for everyone to turn up a few of us found a pool table in the bar down the road and proceeded to play very bad 8-ball whilst being coached by a young local lad all of about 10yrs. We stayed at the pub for a few hours gorging ourselves before heading back to the scout hall for slides on Tassie and the usual campfire session. The Frisbee came out again but did not last the night. As a non drinker its interesting observing the change in peoples behaviour as they consume that liquid. It was obvious from the out set that not much caving would take place the next day. The last person left the campfire to hit the sack around 4am but that was not the end of it. The "Legend" had brought a camp bed with a thin foam mattress that looked too comfortable, so due to her refusal to sleep it was confiscated and given to a more deserving person. The disruptions continued in one corner and no amount of beating would quieten some. Some of the group complained of being cold so there was a communal cuddle to keep warm. The last sound other than snoring was heard around 6.30am. Everyone was bright eyed and bushy tailed and awake by 8.30am. NOT!

Marie Choi.

Echidna Cave - 2 hrs

Participants: Ian Farhall, Marie Choi, Steven and Sally Leader, Robert Mutton, Neil Ritchie, Rebecca Bulger and Daniel Fletcher.

Rebecca Bulger in Echidna Ent. Photo: Marie Choi.

We descended through the tight entrance shaft into a large chamber with many small sand cones. Bek found a small blue tongue lizard that had fallen in but seemed in good health. It was removed to the outside world. We made our way to the low flat section (originally cleared of fill by Graham Pilkington?). Here Bek and myself accompanied by Sally, Steven and Robert wriggled though to the second and third chamber. There were distinct black marks on the walls resembling water level lines. The black walls in these chambers seem to swallow up your light! A short amount of time was spent exploring before returning up the echidna trail to the first chamber and out that ever-shrinking entrance tube!

Daniel Fletcher.

Once we exited the caves we found others at the cars and had lunch before heading back to the scout hall to clean up and head home. When we got there a few were still fast asleep. They were rudely awoken as we cleaned up and made our way home. Some were in better shape than others and may make their caving weekends dry in the future. All in all, another enjoyable weekend.

Marie Choi.

TECHNICAL and OTHER ARTICLES

MEMBERSHIP

NEW MEMBERS – WELCOME TO

Full Membership

0012 **FARHALL**, Ian — PO Box 424, BININYONG, VICTORIA, 3357.
Ph: (H)03 5341 5841. e-mail: Ianfarhall@aol.com

Associate Membership

0009 **LEECH**, Shaun Graham — 42 Perserverance Road, TEA TREE GALLY, SA, 5091.
Ph: (H) 8396 1426 (W) 04177 80560.

0010 **REYNOLDS**, Peter John — 34 Haig Street, NETHERBY, SA, 5062.
Ph: (H) 8272 4656 (W) 8204 3672.

0011 **MUTTON**, Rob — 57 Smith Street, NARACOORTE, SA, 5271.
Ph: (H) 8762 1748 (W) 8762 0120 e-mail: rme@rbm.com.au

ALTERATIONS & ADDITIONS:

6701 **LEWIS**, Ian. — PO Box 1055, PORTLAND, VICTORIA, 3305.

0006 **McFADYEN**, Barbara. — e-mail: director@sawriters.on.net

8604 **TREHEARNE,** David. — 3 Oxford Street, HACKNEY, SA, 5069
Ph: (H) 8363 4011

MEMBERSHIP FEES for 2001

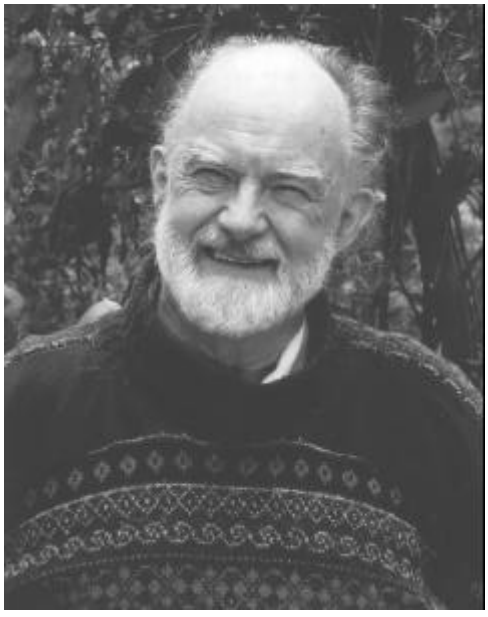
These Fees are due on January 1st 2001.

Full & Long Term Associate Membership	$38	+ASF	$24.50	=	$62.50
Country Full Membership	$32	+ASF	$24.50	=	$56.50
Associate Membership	$31	+ASF	$24.50	=	$55.50
Associate Memb (1st year no *Australian Caver*)	$31	+ASF	$5	=	$36
Family Membership(a) (1Full, 1 Associate)	$69	+ASF	$42	=	$111
Family Membership(b) (2 Full)	$76	+ASF	$42	=	$118
Family Memb(a) (with only 1 CEGSA NEWS)	$45	+ASF	$42	=	$87
Family Memb(b) (with only 1 CEGSA NEWS)	$60	+ASF	$42	=	$102
Life Members (active)	$0	+ASF	$24.50	=	$24.50

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

GETTING TO KNOW OUR COUNTRY MEMBERS

Elery Hamilton-Smith



Elery Hamilton-Smith Photo: Peter Ackroyd

Elery Hamilton-Smith has been a caver and speleologist for almost half a century. When he was a young outdoor education teacher he joined like-minded adventurers to create an informal caving group in the early 1950s — the kernel of what eventually became CEGSA in 1955, with Elery as foundation president. In 1956 he received, as president, a proposal from two Sydney-based caving clubs to form a national federation of the then existing dozen or so Australian caving clubs.

Elery, and CEGSA, enthusiastically endorsed the proposal and went further — CEGSA offered to host Australia's first speleological conference and to organise a major Australian expedition to the Nullarbor. The conference was held in Adelaide in December 1956 and attracted about 80 cavers from around Australia. The Nullarbor expedition that followed in January 1957

was enormously successful. Elery, of course, was deeply involved with both events — each a huge organisational undertaking.
Immediately thereafter, Elery moved to Victoria and joined the caving club he had helped establish in that state. His career altered to take in youth work and then moved into the broader sphere of social sciences. He became a lecturer in leisure studies in the 1970s. During the period 1956 to 1980 Elery held several caving administration positions, including that of president of the Australian Speleological Federation for a record eight years.

Elery became more involved with cave management, an aspect of speleology that grew in stature until it warranted its own specialist organisation. He helped establish the Australasian Cave and Karst Management Association in 1987 and remains its Public Officer.

By the 1990s Elery's international reputation had grown to the extent that he has been asked to advise on cave management issues in South East Asia, North America and Europe. He is a member of several advisory groups within the World Commission on Protected Areas, a commission of the International Union for Conservation of Nature (IUCN). Recently he has taken on the difficult task of reconciling limestone quarrying and karst conservation, some benefits of which we have already seen.

Elery's caving has often revolved around cave and karst biology. His comprehensive bat banding and recording programme of the 1960s and 1970s led him, amongst other things, to deduce the migration patterns of cave dwelling bats in south-eastern Australia — conclusions which have recently been confirmed using modern DNA tracking methods.

His caving exploits are the stuff of campfire tales everywhere. He has caved with, and has a wonderful collection of stories about, the likes of Joe Jennings, Captain Maitland Thomson and Alexander Gallus. He caves still, at age 70, probably putting in more hours underground than many younger cavers. Moreover, he records and publishes what he sees. Papers and articles written by Elery number in the hundreds.

Elery has always encouraged those who would extend caving's horizons. Whether it be the trialling of new single rope techniques (in the 1960s), support for a national karst index database or practical assistance afforded someone recording cave scenes through art, there have been numerous successful ventures in caving and in speleology which have benefited from Elery's enthusiasm and quiet wisdom.

Peter Ackroyd.

(Elery is a Fellow of the ASF and a Life Member of CEGSA – *ed*.)

June MacLucas (Membership Officer)

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

Errata

CEGSA NEWS volume 45 Number 3.

Incorrect cave numbers
pp52-58 The article by Steve Milner on, "Nullarbor 1999, South Australia –The Bunda Cliffs" gives the wrong numbers for the caves visited:
The eight cliff features described are 5N1871 to 5N1878 inclusive and not 5N1571 to 5N1578 as given in the article.
Some other points in relation to the flight 11 years ago mentioned by Steve probably require clarification also. So please also read the trip report elsewhere in this edition of CEGSA NEWS titled "PHOTOGRAPHIC FLIGHT ALONG THE BUNDA CLIFFS NULLARBOR COAST, 9 SEP 1989".

Max G Meth.

p59,61 Mount Graham not Grahame
p59 Holocene not Holoceyne
p61 It wasn't that Fred had access to a generator, he owns it!
p78 Obituary - Stuart Keith McEachern
Both Keith and Jack are buried in the Strathdownie cemetery, not the Dartmoor one. (see p53 in CEGSA N/L V43n2: May 1998 where the location is correct.

Fred Aslin.

ACCESS ARRANGEMENTS FOR CORRA LYNN CAVE (5Y1)

Access arrangements as from March 2001.

INSURANCE
Only persons with a current Public Liability insurance that adequately covers the Slater family and property will be allowed access. Each year a copy of the insurance must be submitted to the Slater family via the current 5Y1 Key Holder. The Key Holder must keep a log of the club/organisation/individual covered and the term of the insurance. The key cannot be handed over to anyone not covered by insurance.

INDEMNITY FORMS
On each trip to the cave, which may span more than one day, everyone entering the Slater property must sign an indemnity form. The completed form(s) must be submitted to the Slaters PRIOR to entry to the property. The completed forms should be left on the notice board by the back door (through the garage) of the main house accessed from the road.
The form should include

- who the TRIP LEADER is and their contact number.
- a CONTACT PERSON (if not the trip leader) and their phone number.
- The time the form is DELIVERED to the house.

Each club/organisation must use their own indemnity form. This should be similar the CEGSA form used in 2000 and have the club letterhead.

TRIP NOTICE
At least one weeks notice must be given for all trips. If the club/group/organisation has not been to 5Y1 before then they MUST submit the Public Liability Insurance cover at least four weeks before the trip. Similarly, if insurance is up for renewal, then the renewed policy must be submitted at least four weeks prior to the use of the new policy. Commercial trips **may** be allowed but must give at least four weeks notice, be covered under a Public Liability Insurance and get direct specific permission from the Slater family after clearance via the Key Holder.

CLOSURE
Corra Lynn Cave will be closed from the first of November to the first of March each year. Access at times between those dates is negotiable. The property and cave are closed whenever a total fire ban is in force for the area IRRISPECTIVE of any prior permission or possession of a key.

SAFETY
The trip leader must write the expected time of exit from the property ON THE WHITE NOTICE BOARD by the back door of the house. On leaving at the end of the day, the time of departure should be noted on the board. DO NOT WIPE OUT. The board gives a record of the visit for when the Slaters are absent.
A key to Corra Lynn Cave is to be left with the Minlaton Police.

ACCESS
It is expected that when multiple vehicles will be entering the property that ALL enter at the same time. A suggested meeting place is the town Bowling Green. Vehicles must only drive directly to the cave. Unless special permission is granted, people are to stay in the cave enclosure and not wander over the fields.

CONTACTS
The Key Holder will make all the preliminary arrangements for all trips, including those to be run by the Slater family. Once a trip has been approved, the trip leader should contact the Slaters for any changes or just to say hello. Trip leaders are welcome to ring the Slaters anytime after they have been approved for a trip, EVEN IF their trip is over and they have not been approved for another.
Andrew Slater would welcome anyone who wishes to talk with him while on the property.

Graham Pilkington, current Key Holder.

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

LIBRARY AND RECORDS

Elery Hamilton-Smith, a long time life member, graciously donated to CEGSA library an assorted range of philatelic material depicting cave paraphernalia. Ray Gibbons, CEGSA Records and Library Assistant, has sorted through the pile and listed an assortment of individual, blocks and sheets of stamps featuring world karst and cave scenes and various species of bats. Elery's donation also includes postal labels from Germany, one bank note from Lebanon, 28 Envelopes and First Day Covers and 18 post cards sent from caving areas from around the world, all depicting scenes from cave and karst areas. Ray is compiling this donation into a presentation booklet, along with previous material already donated by Ray. Many thanks to both Ray and Elery.

Peter Kraehenbuehl handed in original update maps on A4 sheets on drawing film.

CEGSA Map No.	Cave No.	Name of Cave.
3100	6N56	Tommy Graham Cave (The Amazing Phreatic Bypass)
3116	5F1	Mt. Remarkable Blowhole
3117	5F3	Mairs Cave (Sth Western Passages)
3118	5F3	Mairs Cave (Nth Eastern Passages)
3119	5F4	Clara St Dora Cave
3120	5F5	Arcoota Cave
3121	5F6	Good Friday Cave
3122	5F7	Mt. Sims Cave (part off)
3123	5F8	Oraparinna Cave
3124	5F9	Wooltana Cave
3125	5F11	Woodendinna Cave (Narinna Lake Cave)
3126	5F15	Eyrie Cave
3127	5F29	Thunderdrum Cave
3128	5F33	Yellow Foot Rock Wallaby Cave

Peter also offers for any new prospective drawer of maps, his symbols that he uses are available and he can e-mail them to you.
Kevin Mott has also been busy keeping us up with news clipping, but as yet we have not had the time to sort through them. Thanks Kevin.
Also thanks to a 'mystery' sending of news clippings that appear in CEGSA mail box from time to time, with articles *"Spotlight on glow-worms"* from *The Australian* dated 4/10/00 and *"Exit Cave gazetted at last!"* from *The Tasmanian Conservationist.* Sept 2000. Keep them coming, the articles are of interest and will go in the files.
Unfortunately due to other commitments there will be no working bee this month but all library and records helpers over the year are invited to a Xmas Get together Saturday December 9th at the MacLucas house any time after 2.00pm until late. Please bring your own drinks. All welcome, please ring George or June on 8261.4180.
George MacLucas

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

Marriage of Fred Aslin to Jeanette Nearmy

For those cavers who visit the South East to cave the long asked question "Is Fred married yet?" has been resolved.

On Saturday 7 October at 1400 hours Fred finally negotiated the ladder pitch of engagement (Fred does not abseil) and married Jeanette Nearmy at St Andrews church in Mount Gambier.

The church was packed with well wishers and friends. To break with tradition the bride came down the aisle twice to enable both sons to have the opportunity to give her away. After a moving ceremony the guests retired to the hall for the wedding reception.

We wish Fred and Jeanette many years of a happy and fulfilling marriage.

And to all those who asked - Fred did not wear overalls although it was rumoured at one stage that Thomas the Tank Engine was to follow the bride down the aisle.

Kevin Mott.

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

ACCIDENT REPORT ON THE DEATH OF JOE IVY IN O-9 WELL, TEXAS, USA. SEPTEMBER 30, 2000

Edited by Peter Sprouse

Contributions by John Fogarty, John Ganter, Rebecca Jones, Dr. Jay Kennedy, Bill Mixon, Alan Montemayor, Bill "Carlos" Nasby, Matt Oliphant, Peter Sprouse, Tim Stich, Bill Storage, George Veni.

Cause of death: Injuries sustained during a fall of 12-18 meters
Time of incident: approx. 1900, 09/30/2000

AID CLIMB PROJECT BACKGROUND

O-9 Well is one of the deeper caves in Texas, around 100 meters deep. From the bottom of the 39 meter deep entrance drop, the downstream section continues down 5 more rope drops to a sump. In March 2000, Joe Ivy and Tim Stich made plans to do a dome lead in the bottom of the downstream passage above the sump, about an hour from the entrance. Joe had seen what looked like an infeeder in the ceiling that he felt might lead to more cave passage. Joe had done some bolt climbs in the past, including one in Pozo de Montemayor which led to a considerable amount of cave.

To begin the climb in O-9 Well, Joe and Tim went to the sump room and set up their gear on tarps at the base of the climb. Joe brought a 12-volt Hitachi cordless hammer drill and several types of protection in addition to expansion bolts. First, Joe drilled and set two bolts at the base of the climb. Onto the hangers of the bolts, Joe attached a Kong Slyde. This shock absorbing mechanism is a small metal plate with holes drilled in it. Then the rope is threaded through the holes such a way that as to create friction (see this device at www.kong.ie). The purpose of the Slyde was to turn the 9mm static rope they were using into a dynamic system capable of absorbing the energy of a falling climber. Threaded through the Slyde was approximately one meter of accessory rope terminating in a stopper knot. Under normal static load this cord would not travel through the Slyde, but upon dynamic load it was set up to slip through the device for up to one meter, at which point the stopper knot would end that travel.

As the bolt climber made upward progress, the rope connected to the Slyde went up through the protection carabiners and then down to the climber. The ascender (or in some cases two ascenders) of the lead climber were the attachment point to the lead rope. An ascender was used in order to conveniently adjust the length of the belay rope, something that in a normal belay system would be done by the belayer. On the first climbing trip Joe and Tim both took falls onto this rigging and it easily absorbed the energy of the fall. On average, the falls were around 4.3 meters including movement through the Slyde. Tim says that in the case of his fall there was around 7 meters of rope below the top piece, making his fall somewhat less than a factor 0.6 fall (see discussion of fall factors below). In both cases they were using a new piece of protection called a removable bolt (RB). These are reusable wired camming devices designed to be inserted into a drill hole, the use of which would reduce the number of bolts that they would have to place. These come in a variety of sizes. Joe and Tim used both 3/8 inch and 1/4 inch RBs on the first climb. Tim took a fall when a 1/4 inch RB pulled unexpectedly, and Joe took a fall on a 3/8 inch piece, which he felt he had placed poorly. It was extremely difficult to avoid getting some water and mud on the RB before it was inserted. This may have adversely affected the performance of the protection. They decided to abandon using the 1/4 inch size RB and stay with the 3/8 inch ones.

THE DAY OF THE ACCIDENT

Joe and Tim made a total of five trips to continue working on the climb over three weekends. On the last weekend (30 September), they had cleared a muddy section that had made progress on the second weekend unusually difficult. Thick, clinging mud made manipulating gear almost impossible. The final section to the very top of the bolt climb, which was about 50 meters off the floor, was relatively mud-free and on what appeared to be good rock. Joe took the first shift on the climb, as he usually set up the Slyde rigging at the belay point.

After making at least 6 meters of progress, Joe descended to the fixed line below him and rappelled to the base of the wall. He remarked that he was going to eat and get something to drink. From time to time during that day's climbing other cavers on the trip visited the bottom room. Some were still there when Joe descended the standing line. Tim got a wrench and some carabiners from Joe and also his adjustable one stirrup etriers, which he had designed himself. Tim preferred these to the standard multi-step ones Joe also had on hand. Tim climbed up to the anchor for the fixed line and then attached himself to the lead rope. The rope had been passed through a vertical line of 3/8 inch bolts to Joe's last protection, a bolt. During this part of the climb they used both wedge and sleeve type bolts of 3 inch length. Tim switched his ascenders to the end of the rope that came down from the carabiner in Joe's last bolt and climbed to where the lead continued.

Along the way he cleaned carabiners and hangers from the protection Joe had placed, leaving the last two bolts. When he reached the top bolt, he transferred the hammer drill and bolt kit that were hanging on the bolt to himself. From there, he continued the climb by the method they had established. This involved clipping his cow's tail into the bolt hanger of the topmost bolt. He then attached the etriers to the bolt carabiner, which also contained the rope. This allowed him to then stand and attach a Fifi hook to the bolt hanger. The Fifi hook is a flat metal hook attached to his harness with a short piece of cord, allowing him to get as close to the bolt as possible.

From there, he adjusted the etriers to a position that allowed him the highest comfortable step from which to drill a new bolt hole higher up. After setting a new bolt, he then hung a carabiner from it. He put one etrier on this carabiner to use it to pull up on. This allowed him to thumb his chest ascender and get slack from the lead rope. Tim then stood up, clipped the rope into the higher carabiner and moved slack down through his two ascenders. Then he could remove his cow's tail and Fifi and climb up to the new, higher bolt. This technique does create a loop of slack not normally seen in a standard belayed climb, where the belayer would be paying out slack as needed by the climber's ascent.

Joe performed these same actions while he climbed. However, earlier in the climbing project Tim had decided to use both of his ascenders on the belay rope, while Joe continued to use only the seat Croll to attach himself to the belay rope. Tim also had decided to use 3/8 inch expansion bolts exclusively. Although the 3/8 inch RBs appeared sound to him, he had enough expansion bolts with him to use for all of his placements. Joe continued

to use the 3/8 inch RBs and had placed one on his first shift. At no time had they placed two RBs in a row, always placing a bolt above an RB.

When Tim finished his shift, he was within 4.5 meters of the top of the climb. A hole 2 or 3 meters diameter could be seen at the summit of the climb. A low crawlway appeared to go off in one direction, although it was possible that it was merely a flat roof with a slightly hollowed out ceiling. He drilled two final bolts and tied a double figure 8 knot to make a standing line. At this point, it looked like the lead rope might not reach the top. In any case, Tim had run out of hangers and was exhausted. He decided to end his shift and let Joe finish the final pitch. At most, it would take 4 more bolts or pieces of pro. This left the two bolts at the top for Joe to climb up to. As he rappelled, he removed hangers and carabiners to give to Joe.

Joe had gotten rest, food and water and was in good spirits. Tim told him he had two bolts at the top of the lead rope and might need another rope. Joe coiled one and attached it to his harness. Joe ascended the rope and disappeared from view into the darkness of the upper dome. The other cavers sounded like they were again visiting the bottom room, and Tim heard some voices and saw flashes of headlamps. He could occasionally see the dim glow of Joe's LED array high above him. Then, Tim heard what sounded like a brief exclamation from Joe and then a loud, resounding crash. Many times in the past, large chunks of mud and some rock had fallen on the climb, but this was much louder. Tim called up to Joe, but there was no response. More alarming still, Tim could no longer see any light above him. Joe must have had an mishap, Tim decided.

What the nature of that mishap was, he didn't know. Tim shouted up to Joe several more times. One of the approaching cavers by the name of Sarah Springer heard the shouting and spoke out to Tim. He told her that he needed help. Sarah passed the word up and in seconds someone was making their way to the surface. At this point, Tim began to hear Joe moaning and trying to say something. Sarah continued descending into the room where Tim was. Tim quickly put on his ascending gear and got onto the standing line. Joe's moaning was coming from a point well below the lead, which frightened Tim. When he finally saw Joe, he could see that he was wedged within a slot above a muddy ramp they had discovered during their previous trips. Joe's legs were slightly raised, his helmet was missing (it was later found and put back on his head), and smears of blood were on the left wall. Joe continually complained of difficulty breathing. It appeared that Joe had taken a fall anywhere from 12 to 18 meters, hit a steep, sloping ledge on the left and then wedged into the slot above the muddy ramp. Tim climbed above the slot and then down climbed to Joe from behind.

Tim noticed that Joe was not attached to any rope. That was the first thing he decided to attend to, as it was very possible that Joe could slip down the ramp and off the wall. He made a quick overhand knot in the rope below him and attached Joe's harness to it. He then asked Joe about his injuries. Joe said, "Can't breathe. Left arm fucked". Tim tried to pull Joe through the slot, grasping his right arm. Joe yelled in pain and Tim asked if that arm hurt as well. "Everything hurts. Do it anyway." With that, he pulled Joe and ordered him to kick if he could. He did, and he eventually came out of the slot and slid down onto the top of the muddy ramp. There is a very uneven ledge at the top of the ramp that is barely large enough to sit on. It is not possible to lie prone, but Tim reasoned that this was the best place to attend to Joe's injuries. The only other alternative was to pass him the 3 or so meters through the slot and immediately rappel to the bottom of the wall. Joe was loudly complaining that breathing was difficult, so Tim focused on that problem first.

The primary reason Joe seemed to be having trouble breathing was that his seat harness had somehow ridden up onto his chest. This was a butt-strap type of harness without leg loops. Normally this type of harness, of a design that Petzl once produced but no longer carries (the Rapide), utilizes an additional strap that goes between the legs, around the butt strap, and comes back through the legs to fasten to a buckle on the harness. Joe deleted this strap from his own harness when he made it, or removed it at some point.

Tim was wary of removing Joe's harness since Joe was in danger of falling of the ledge, but he needed to breathe. As it turned out, Tim could not have cut if off in any case as he couldn't find Joe's knife. Joe was still somewhat lodged in the lower recess of the slot, so it obscured the gear hanging from his harness, which included the knife. The angle of the ramp was too steep to allow him to pull Joe up onto the small ledge. Time was short, so Tim decided to get him off the wall altogether, but noticed that there was weight on the rope below him.

Even worse, from where he had down climbed the rope had rested on two rocks jammed into the top of the slot. These rocks were holding the weight of the climber on the rope. He repeatedly pleaded for the climber to get off of the rope, but she replied that she couldn't. Sarah was not familiar with the process of changing over to rappel while on rope. Tim then told her to just keep climbing up, as he reasoned that he couldn't describe how to do a changeover successfully. He then left Joe and climbed the 3 meters to get out of the slot. Once above, he could meet Sarah and let her change over to his part of the rope. This proved impossible, as the rope was deeply jammed within the chock stones and it kept Sarah from climbing to him. Instead, he pulled her through a wide part in the slot below the chock stones and Sarah eventually got onto the small ledge behind him.

Once there, he had Sarah attach herself to the rope above Joe with her cow's tail. By this time, Joe had lost consciousness but still seemed to be breathing sporadically. Sarah and Tim again tried to move Joe to the ledge so they could take his weight off of the harness and allow him to breathe, but Joe's body was covered with slick mud and the only place to grab him was his harness. Tim managed to stem the sides of the small ledge and pulled Joe up several times with his legs alone. This only worked for a time to relieve some weight from Joe's harness, but he would again slip down into a lower position in the slot.

Once again, Tim made preparations to get Joe off of the wall entirely instead of continuing the futile effort to get him onto the small ledge. The rope needed to be removed from the chock stones and passed through the back of the slot and down the ramp. He did that, and then rappelled below Joe and clipped him into his cow's tail with two carabiners. By now it seemed painfully obvious that Joe was not breathing. It would have been very difficult

to administer CPR in Joe's awkward position, and so they didn't attempt it. Sarah is an EMT, and she confirmed that Joe had no pulse and was not breathing. See Tim's .pdf illustration of the fall scene. You must have Acrobat Reader installed on your computer to view .pdf files, you can download it at http://www.adobe.com/products/acrobat/readermain.html .

Regardless of Joe's condition, they were committed to getting him down at this point. Once on the ground, CPR could be given easily. Since the slot was very tight, it was difficult for Tim to see his mini rack, much less manipulate it effectively. He knew that he wanted it locked off when he took on Joe's full weight. He had to guide Joe down the muddy ramp, frequently pulling his legs out from under him and getting him unstuck.

Eventually, Joe slid out and onto Tim's cow's tail. Tim then rappelled with Joe to the base of the wall. The rack held both cavers' weight well and the rappel felt safe. When Tim got to the bottom, he got Joe to a somewhat flat area and quickly looked for a knife to cut his harness off. Charley Savvas and Frank Delgado appeared at that moment and came to assist. Tim knew that Joe was probably dead, but said that he was trying to get his harness off and needed a knife. Charley produced one and they moved Joe to a better spot and cut off his harness and cow's tail. Frank, also an EMT, examined Joe and concluded that he was dead. CPR was briefly given, but it was too late to matter.

Other cavers arrived from the surface with a Sked litter and other rescue gear, and the body was packaged up for hauling. Patrick Lynott directed the rigging of haul systems that were used not only on drops but also in the canal areas. They moved the body up four rope drops to the bottom of the second drop, then left the cave to get some rest at around 0300 on the morning of 1 October.

Calls for assistance had gone out to cavers in central Texas at around 2300 on 30 September, and cavers began arriving at the site before dawn the next day. Law enforcement authorities had been notified during the night, had visited the site, and had closed the entrance with police tape to keep anyone from re-entering the cave until the Justice of the Peace arrived in the morning.

After clearance was received from the authorities, trained cave rescue personnel led by John Green, South Central Regional Coordinator of the National Cave Rescue Commission went in to finish the recovery just after 1200. Besides John, these were Tim Comer, James Davis, Rod Dennison, Tommy Gillis, and Monty Strange. The body reached the surface at 1610, and was loaded into an official vehicle for transportation.

For details on the body recovery, see the report compiled by John Green.

At 1700 Andy Grubbs, Bill "Carlos" Nasby, Peter Sprouse, and Kevin Stafford entered the cave to de-rig ropes and collect and study the equipment left at the bottom from the lead climbing activities. They found much of Joe's equipment laying on the floor, but some had to be located by fishing around in muddy pools. The hammer drill was in the mud bank where Tim had tossed it from above. While Kevin and Andy gathered gear, Peter took photos, and Carlos climbed up the bottom fixed line up the dome to have a look at the ledge area where Joe landed.

From Tim's description they knew this rope was tied to two bolts that had not been affected by the fall. The rope passed up a narrow crack to a steep, muddy slope about a meter wide. Carlos saw Joe's elbow pad and a bolt laying in the mud. The rope went up over a rounded hump to the side, and was fixed to two bolts about 8 meters above the mud ledge. From that point, a smaller diameter rope went straight up out of sight. The bottom end of it was tied to one of the two anchors, the top end was presumably to the two bolts that formed the belay point that Joe was using. The Slyde was not present at the bottom. Carlos tugged on it, and it felt solid, but at that time there wasn't any assurance that this rope would be safe to climb.

On 2 October, John Fogarty, John Green, Rebecca Jones, Missy Lynott, Patrick Lynott, Charley Savvas, Jessica Snider, Peter Sprouse, Kevin Stafford, Tim Stich and Carlos met to analyze the gear that had been retrieved from the base of the climb. Some of this gear was in an abnormal condition, and is categorized below according to what seems to have happened to it.

ITEMS THAT WERE INTENTIONALLY CUT DURING THE BODY RECOVERY OPERATION:

1. The seat harness was cut to remove it from his chest, where it had slid up and was compressing him.
2. The cow's tail was cut for the same reason, it was tangled on his body, and due to the heavy mud it was easiest just to cut it away.
3. The stirrups, and presumably the back up safety line, were cut off of his handled ascender for use in the recovery hauling system.

ITEMS THAT WERE DAMAGED IN THE FALL

1. The belay rope was completely cut in two, half of which was recovered, the other half of which is presumably at the top of the climb.
2. The frog chest loop was cut at the point where it goes through the Croll.
3. The auxiliary hammer drill gel cell battery had a broken case.
4. Joe's Leatherman knife had a broken lanyard cord.

A removable bolt (RB) was found that showed wear; however, Tim felt that this RB was not being used by Joe at the time of the fall and that the wear on it was from normal use and not fall damage. It was loose and had no carabiner attached to it. When the removal tool is used to pull these out of the drill hole, sometimes strands of wire get cut. They had two more of these in use on the climb, so one could have been involved in the fall.

Unfortunately the Croll was not found. This seems to have been lost in the mud as his body was being prepared for removal. No one specifically remembers removing it when the gear was removed from the body, but the body was covered with heavy mud at the time. It would be useful to inspect the Croll for fall damage or rope fibres.

The cut lead rope was immediately seen as the cause of the fatality. The damaged area on the rope had 80 centimetres of exposed core, though due to stress on the core the actual length of this section of core prior to the

damage may have been less. The core was puffy, bundles are separated, and there were lumps where it melted. The sheath was shoved down the core and had noticeable compression for 90 centimetres. Symptoms of this compression were regular raised rings, and reduction of spacing of the red marker strand to 60 percent of the original spacing. It is assumed that the Croll cut the rope under a catastrophically heavy load.

GEAR SELECTION AND BELAY SYSTEM

Joe always looked for ways to improve caving techniques, and for this climb had developed a direct aid self-belay technique. In Joe's experience, more than one of his belayers on dome leads had fallen asleep or dropped him a long way during the many hours a climb typically takes. Self-belayed aid climbs are more common in outdoor rock climbing, but not as common in caving.

One of components that Joe decided to use was the shock absorbing Kong Slyde. This device should have been most effective in a short fall such as the one Joe took, and had worked in previous falls in the dome, however the performance of friction devices of this type is unpredictable due to variables such as mud, orientation of the device at the time of loading, and the amount of friction added by protection pieces and rock rub above the belay.

Rappelling devices work because you can vary the friction on them, but the Slyde is nonadjustable. It should be pointed out that the safety of this system would have been increased if the rope had been tied directly into the anchor as well as into the Slyde cord, so that if the cord failed, which apparently did not happen in this case, the rope would still be attached to the anchor.

In addition to the belay rig, Joe fabricated his own style of adjustable etriers. They employed an adjustable cord looped through the multiple eyes of the Fifi hook in a similar way to the Slyde, instead of sewn foot loops every foot or so. It is worth noting that adjustable etriers are not desirable when used on shaky anchors, because if the adjustment slips, the resulting shock load may cause the anchor to pull out. There was no direct attachment between the etriers and the seat harness.

Joe also had used an unconventional seat harness. This harness was of a type that did not employ individual leg loops, but rather was made up of two sewn webbing bands, a waist band and a butt strap. This explains how the harness was able to ride up his body after a shock load. In this case, the movement of the harness up his body may have been of some help in absorbing the shock of the fall and is not seen as the cause of death, but could have had serious consequences had the rope not broken and left him hanging.

In rigging ropes and belay systems in caving and climbing it is essential to understand the nature of dynamic loads and to consider the fall factor (FF) in any given situation. Fall factor is a simple formula, length of fall divided by length of rope absorbing the fall. If a climber or caver falls from the height of her belay, the length of the fall is the same as the length of the rope, resulting in a 1:1 ratio or a factor 1 fall. If the climber is 2 meters above the belay with no additional protection and falls the 2 meters to the belay point and the additional 2 meters to the end of the rope, this is a factor 2 fall. The climber has fallen twice the length of the available rope, the most severe fall possible. Good examples of fall factors can be seen in the Petzl catalog or at www.petzl.com. Factor 2 falls put a tremendous amount of strain on equipment and climber and should be avoided if possible. In multi-pitch lead climbing, the beginning of the pitch can be the most dangerous because the danger of a factor 2 fall is greatest. If the climber is above the belay point and falls without benefit of a higher piece of protection, she can fall twice the length of the distance between herself and the belay. Even when additional protection has been placed above the belay point, if there is sufficient rock friction in the system, as around a corner, the belay point is effectively raised and the fall factor increased. It is essential when beginning a lead climb to put in the first pieces soon, and make them bombproof. Although counterintuitive at first glance, short falls can in fact be the most dangerous. In rigging drops while caving, it is essential to design and rig anchors with a dynamic load in mind, so that if either the primary or back-up anchor fails, forces greater than fall factor 1 will not occur.

Testing conducted by Petzl shows that an FF2 fall on dynamic rope will generate a force of 9 kilonewtons, assuming a typical climber weight of 80 kilograms. A kilonewton (kN) is defined as the force which gives to a mass of 1000 kilograms an acceleration of 1 meter per second squared. In Joe's case he weighed approximately 114 kilograms with his gear, which would increase that load to 13 kN. Factoring in the fact that static rather than dynamic rope was used, and the force doubles to 26 kN. A paper by Bill Storage and John Ganter (http://nerve-net.zocalo.net/jg/c/pubs/Rlenergy/default.htm) suggests that these forces may be MORE than doubled by the use of static rope, which would increase the kN even more. The fact that the belay rope was not in new condition, and was wet and muddy likely reduced its strength.

FATAL FLAWS IN THIS BELAY SYSTEM

The data in the preceding paragraph makes it clear that using a static rope for a leader belay, where high fall factors are by definition expected, is simply unacceptable. The lead rope Joe and Tim used was 9mm PMI static line. PMI calls this rope 8mm, but since they measure rope diameter under a load, which some other manufacturers don't do, it is actually more like 9mm unloaded. Standard lead climbing practice usually only employs 9mm rope in a double rope system, and even then dynamic rope is to be used. Rope choice comprises one of the miscalculations made in the design of this belay system.

The second problem with the belay system used was connecting the climber to the rope with an ascender. Ascenders are designed for ascending, not belaying. Looking at the Croll on Petzl's website (http://www.petzl.com/FRENG/frascenders/ascendframe.html), there is a valuable chart under Croll Technical Notice, Loading figures. It shows the load under which a Croll will cut ropes of various types and diameters. The Croll will cut a 9mm static rope under a load of 4 kN, which would occur in a very moderate fall. Although Joe may have been aware of the data in the Petzl chart, he did not believe the failure mode of the Croll with the rope diameter he selected would be the complete cutting of the rope. Joe had expressed to Tim that he

believed that the rope sheath would be ripped and bunched while the Croll slid down the rope core. Earlier Joe had an experience using a multi-pulley haul system to drag a truck up a hill where an ascender had cut a sheath in this manner. The core was puffy and separated, but held. In that case, while the pullers did shock load the system by running downhill, they stopped pulling when the sheath failed, while the force in a fall will continue until expended in other ways.

PERFORMANCE OF RBs IN CAVING CONDITIONS

Joe and Tim used both 1/4 inch and 3/8 inch (http://ww.climbtech.com/climbtech/removablebolt.html) Climb Tech removable bolts on their first trip. Tim took one fall and Joe took one as well when these pulled out. In both falls, they had the benefit of having placed several pieces of protection prior to the RB placement, thereby reducing the fall factor. Tim found the fall he took to be fairly soft. He was able to immediately continue bolting and was not unduly shaken by the experience. As noted earlier the fall factor in this case was estimated at 0.6. Joe similarly was unconcerned about the force of his own two falls and did not see a need to redesign his belay system to handle more energy. Through their experiences of falling, they developed more faith in the belay system, but became more wary of the performance of the RBs. Both Joe and Tim quit using the 1/4 inch variety and Tim quit using RBs altogether, though he blamed their pulling out on mud and water contamination of the hole.

The problem with placing RBs was that it was nearly impossible to keep them clean before inserting them in the drill holes. Muddy hands, random patches on clothing, and the mud and water covering the cave wall made contamination almost assured. The hardness of the limestone varied, as is common, and this effects how well an RB will hold. Whether or not the hole is wallowed out by the hammer drill also affects RB performance. RBs were, however, quick to place and did hold in many cases without trouble. One 3/8 inch RB held Tim's fall in an overhang, which attests to the device's potential performance. This placement was unusually deep in the rock and was very hard to clean once fallen on.

Some aid climbers choose to use some pieces that may only just hold body weight, but marginal pro should only be used with caution and experience. This is especially important at the beginning of a climb when there is the risk of an FF2 fall. Overall, the small time and weight savings in using these devices is questionable, given their unreliability. It takes only a few more minutes to install a bolt.

POSSIBLE ACCIDENT SCENARIO

Joe was alone when he fell, and no one knows exactly what he was doing at that moment. The scenarios presented below are speculative, based on the evidence currently available. If and when it is possible to inspect the actual fall site, a more accurate account may be possible.

When Joe climbed the second standing line to Tim's two-bolt anchor, he had two choices. One was to tie his additional lead rope to the end of the one on the wall, which was anchored at the base of pitch 2, to make a longer rope capable of easily reaching the summit. They had done this in the past in places where they felt they could safely remove pro pieces in the area where the rope-joining knot would be.

The other option was to move the Slyde self-belaying device setup to the highest two-bolt anchor. Joe apparently did this, as evidenced by the absence of the Slyde at the base of the second pitch. Given the short interval of time between the beginning of his ascent and his fall, approximately 30-45 minutes, it is probable that he was only able to drill and set a maximum of two pieces of pro. It is believed that he set one piece, perhaps one of the 3/8 inch RBs, and may have drilled a second hole. Joe had set the RBs in between bolts on the previous pitch, so he may have continued the practice.

Joe's hammer was on his seat harness in the carabiner that held it. His hammer drill was in its pack, which Joe used like a holster to keep mud off of it. An accessory cord secured the drill to Joe's harness. Based on this evidence, it seems likely that Joe was not drilling at the time of the fall. One possibility is that Joe drilled and placed one 3/8 inch RB, put a carabiner with etriers on the RB, and stood up to pass a loop of slack from the lead rope into the carabiner. He ascended to the RB, put his Fifi hook into it and then readjusted and stood in the etriers. He then drilled a second hole, put a bolt in with a hanger and carabiner and may have again thumbed his Croll to get slack in the rope. The RB below that he was hanging on then pulled out and Joe took a fall with very little rope out. This would result in a short fall of great force that may have reached a fall factor of 2, depending on whether or not he had already pulled out some slack to clip the second piece.

An alternative scenario is that Joe was still hanging from his Fifi hook on his first pro placement, the 3/8 inch RB and it pulled out before he got his drill out of his bag to drill his second hole.

As Joe reached the end of his rope and began to decelerate, the first thing to fail was the chest harness, which cut at its attachment point to the Croll. This chest harness, more properly called a lift harness in the Frog system, was of thin webbing not intended as a life support component by design. It was likely cinched up tight to hold him as upright as possible while climbing, and since it was thin and subject to a sharp angle where it went through the top eye of the Croll, it cut quickly. Joe's body then slipped through his seat harness, which rode all the way up to his chest. Since the fall site has not been visited, there is no way of knowing how much of the one meter accessory cord, if any, travelled through the Slyde. The somewhat wet 9mm static rope may have stretched as much as 3-4% or more. However, not enough energy had been lost in these events, so the remaining energy caused the cam on Joe's Croll to cut the lead rope he was attached to. He then fell 12 to 18 meters.

CONCLUSIONS

A mechanical ascender should never be used as a primary part of a belaying system, no matter how many subsequent devices are added to absorb the energy of falls. Dynamic rope of 10mm or larger diameter should always be used for belaying leader climbs, static rope is unacceptable.

RBs, if used at all, should be used with extreme caution, as they seem to perform poorly under the often wet/muddy conditions of a cave.
The fact that some falls of lesser force had occurred before the accident led the climbers to feel that the belay system was adequate, however these falls were too few to actually validate the technique. Planning an ascender belay that was believed would "only" result in the stripping of the rope sheath was poor judgment from the start. Joe's death was due to his own actions and the judgments he made in designing his belaying system. No piece of gear failed in a way that was not known to happen. The belaying system design was perilously flawed in that it did not allow for the force of a fall factor 2 fall. A belay system should be designed to handle the maximum fall possible, which is an FF2 fall. The good performance of the belaying system on gentler falls prior to the fatal fall helped foster a sense of complacency in the climbers. Overconfidence kept them from continually questioning their system and methods.

This report and further information and pictures are available at the website:
http://www.texasroperescue.com/library/09report.html.

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

NOSTALGIA CORNER

NEWS FROM PAST NEWSLETTERS

10 YEARS AGO [36#1 Mar 1991]

- Three committee members resigned during 1990. Darren Crawford (due to study), Max Meth (moved to Ceduna) & Kevin Mott (moving to Mt Gambier).

20 YEARS AGO [25#4 Mar 1981]

- Kevin Mott reported that the Naracoorte hut had been demolished just before Christmas.

30 YEARS AGO [FEB-MAR 1971]

- Trevor Maddock reported on a study project in Bat Cave at Naracoorte. And Peter Chappell gave a lengthy report of a Xmas 1970 trip to many caves near Naracoorte.

40 YEARS AGO [Dec 1960]

- R T (Bob) Sexton presented a three page report SUGGESTED CAVE SURVEY STANDARDS to the ASF. This used 7 grades (1 to 7) for the bearings and distances, but did not include a grade for wall and internal details.

HISTORICAL ITEM
120 YEARS AGO

- 19 Oct 1880 surveyor James W Jones report presented to South Australian Parliament. Based at Eucla, Jones had crossed to the northern edge of the Nullarbor in SA on three separate expeditions undertaken in 1880.

Max G Meth

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

NOTICES OF MOTION

2 motions will be moved and voted upon at the General Meeting held at The Royal Society room at 7.30 PM on Wednesday 24th January, 2001. The proposed changes are as follows.

Motion 1.

To alter the Rules of the Group.
"Delete rule 4(b) and replace with:
4(b) Visitors may attend official Group trips at the discretion of the trip leader. Except where otherwise authorised by the committee the number of visitors is not to exceed the number of group members present with the exception that this proviso does not apply to members of scientific organisations, other recognised caving societies and government instrumentalities."
Reason: When CEGSA has come-and-try days or takes school groups etc. on basic caving trips it is not always necessary or practical to have a one on one level of attendance. This change allows the committee to approve, in special circumstances, what has been common practice, and make those situations legal insurance wise.

Motion 2.

"That all CEGSA Annual Fees be increased by five percent (5%) (rounded to the nearest 50cents) per year every year from 2002 inclusive until rescinded."
Reason: To prevent the value of our membership fees being eroded by inflation.

AGM and DINNER

The Forty Fifth (2000) Annual General Meeting will be held at the

OLD QUEENS ARMS HOTEL

88 Wright Street, ADELAIDE

on February 10th 2001 at 8.00 PM

for the presentation of the ANNUAL REPORT

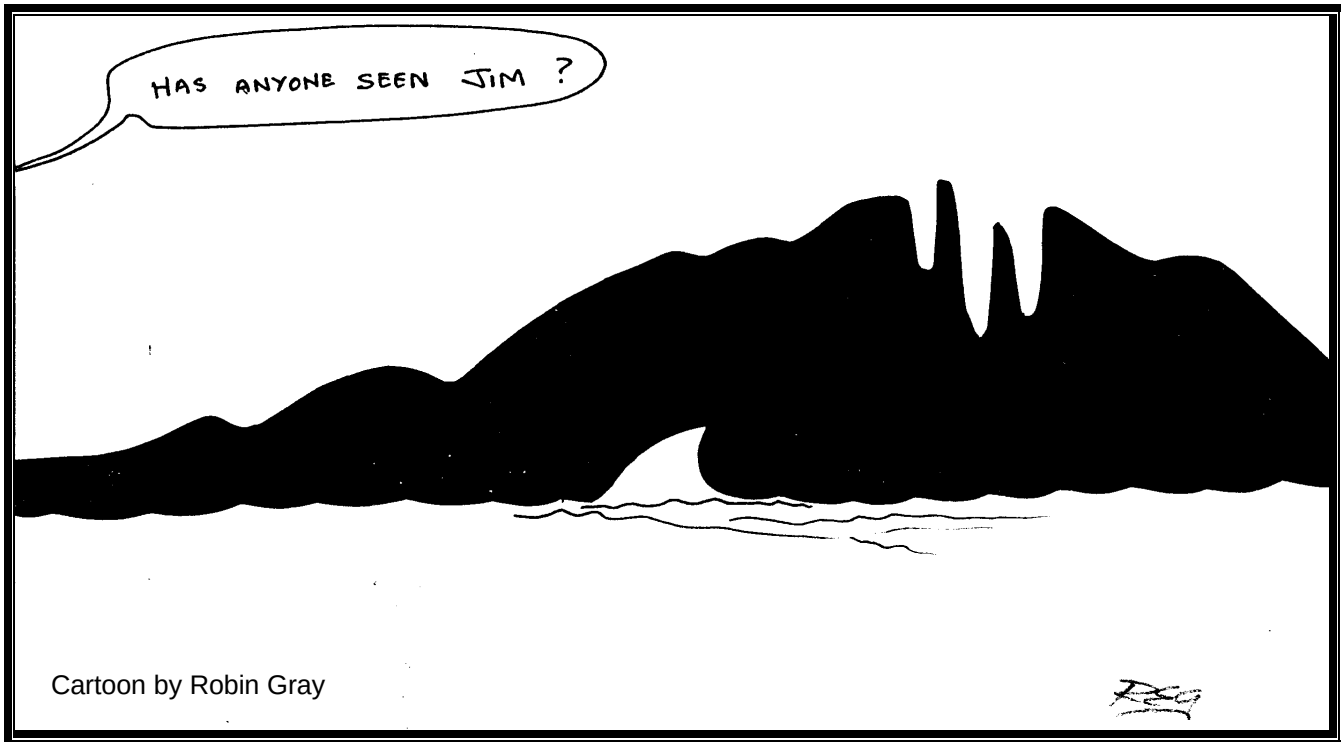
and the election of the Executive and Committee

The AGM will be preceded by the

ANNUAL DINNER

(order from the Menu)

Commencing at 6:30 PM after drinks from 6 ish



Cartoon by Robin Gray

CALENDAR OF EVENTS

Date	Type of Event	Description	Contact
22/11/00	General Meeting	Old Queens Arms Hotel, 88 Wright St. Adel.	Marie Choi
25/11/00	**No Working Bee**		
02/12/00	Training	Cave Rescue Training, Cave Ridge, W Vic.	Marie Choi
09/12/00	2PM Party	Library & Records helpers Get Together	George or June
13/12/00	Committee Meeting	Old Queens Arms	Marie Choi
20/12/00	Drinks etc	Old Queens Arms 7.30 Instead of Xmas Do	See below.
27/12/00	**NO GENERAL**	**MEETING IN DECEMBER**	
28/12/00 03/01/01	ASF Conference	Bathurst, NSW	
30/12/00	**No Working Bee**		
10/01/01	Committee Meeting	Old Queens Arms	Marie Choi
24/01/01	General Meeting	Royal Society Room. Everest Video	Marie Choi
26-28/01	Caving	LSE, Cave Ridge & snorkel Ewens Ponds	Marie Choi
27/01/01	Working Bee	Library and Records	George MacLucas
10/02/01	**Annual Gen. Meeting and Dinner**	Old Queens Arms Hotel, 88 Wright St. Adel.	Marie Choi
14/02/01	Committee Meeting	Provisional	
28/02/01	General Meeting	Royal Society Room	
03/03/01	Working Bee	Library and Records	George MacLucas
03-04/03	Caving and WORK	Clean up Australia Weekend	Marie Choi
28/03/01	General Meeting	R.S.R. Visit Museum Palaeontology section	
	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.

XMAS DRINKS

Everyone is invited to come along to The Old Queens Arms hotel on Wednesday 20th December at 7.30PM to have a few drinks and a yak, instead of a formal Xmas Do. We look forward to seeing you there.

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

LOST PETZL HEADLAMP

At the recent Cave Ridge Trip Kevin Mott has misplaced his Petzl Headlamp. He has returned to the area but could not find any trace of it. If anyone picked it up and is wondering who it belongs to or if anyone knows of its whereabouts could they please contact Kevin on 8723 1461 or e-mail him at kmott@deh.sa.gov.au. Kevin would be most appreciative.

GORILLA RAFFLE

Marie will be raffling one of her famous (or infamous) Gorilla Cavers. There is a limit of 100 tickets at $5 each. The raffle will be drawn at the Conference at Bathurst over the Christmas / New Year period. These Gorillas are a work of art and conform to all the ASF requirements. (I am not sure what the regulations are in relation to Gorillas going caving! *Ed.)*