CEGSA NEWS

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

Volume 53 Number 4 **Issue 212** **NOVEMBER 2008**

CAVE EXPLORATION GROUP (SOUTH AUSTRALIA) Inc.

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

http://www.cegsa.org.au

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.

2008 Committee

President / Public Officer / Library & Records	Graham Pilkington	(H) 8395 6713 (W) 8395 6713 (E) p-c-h@bigpond.net.au
Secretary / New Member Liaison	Mark Sefton	(H) 8277 9086 (W) 8303 6600 (E) seftons@adam.com.au
Treasurer / Membership	Chris Gibbons	(H) 8258 9847 (E) ragchg@bigpond.com
Training / Safety / Search & Rescue Co-ord	Tim Payne	(M) 0448 147 927 (W) 8259 5724 (E) payne.tim@bigpond.com
Quartermaster / Key & GPS Holder	Paul Harper	(H) 8297 8878 (W) 8222 5615 (E) paul.harper@health.sa.gov.au
Land Manager Liaison	Stan Flavel	(M) 0407 600 358 (E) tadarida@bigpond.com
Peter Horne		(H) 8295 6031 (E) ppuddles1@yahoo.com.au
Museum Representative	TBA	C/- SA Museum

Other Office Bearers

Publications / Trip Log Book / Website Coordinator	Athol Jackson	(H) 8337 8759 (E) atholjax@adam.com.au
Landowner Liaison (records)	Garry Woodcock	(H) 83805154 (E)woodcock.gary@saugov.sa.gov.au
Fundraising	Marie Choi	(H) 8322 0895 (M) 0429 696 299 (E) mariechoi@adam.com.au

Area Coordinators

Eyre Peninsula	Stan Flavel	As Above
Upper & Lower S E, Glenelg River	Kevin Mott	(H) 8723 1461 (W) 8735 1131 (E) jkmott@westnet.com.au
Adelaide & Kangaroo Is.	Grant Gartrell	(H) 8556 9100 (E) blueberrypatch@bigpond.com
Nullarbor Plain, Yorke Peninsula & Murray Mallee	Graham Pilkington	AS Above
Flinders	Eddie Rubessa	(H) 8336 4775

Representatives

ASF	Stan Flavel	As Above
SA Speleological Council	Stan Flavel	As Above

The Nullarbor Karst Project Steering Committee of Western Australia

Paul Hosie (H) 08 9259 5815 (M) 0428 992 109
(E) halocline@bigpond.com

Cover Photograph: June MacLucas exploring blowhole N-2943.
Photo: Peter Ackroyd, 7 May 2004

CONTENTS

Volume 53 Number 4 **Issue 212** **NOVEMBER 2008**

QUARTERMASTERS NOTE.

High usage equipment will now be stored at the quartermaster's residence. Please make arrangements with the QM well in advance of required date for equipment. The QM can be contacted at the telephone numbers on the previous page.

NEWSLETTER MATERIAL

The deadline for copy or background material for Volume 54 Number 1 (Issue 213) must reach the Editor by Wednesday **11th FEBRUARY 2009**. Material not meeting this deadline may be retained for possible use in a following issue. The preferred method is via E-MAIL to atholjax@adam.com.au as an attachment or on 3.5" IBM floppy disk, in Word or ASCII text format. Of course other forms of communication will still be gratefully accepted. Photographs are preferred to be in colour (jpg format). The views expressed in this publication are those of individual authors and not necessarily those of the Cave Exploration Group (South Australia) Inc., its Committee or the Editor.

PRESIDENTS SPOT

Is caving a passing fad?

The 'fifties was when caving caught the imagination of many of the world's youth and caving clubs sprang up like weeds. What is surprising is that they nearly all wanted to be known as "speleological societies" even though the members were primarily interested in caving. How many "old" people (that is, people over 30) took up this activity back then? Not many. Recently, most of our recruits fall into the "very old" category (that is, over 40).

It appears then each generation has to find its' own "new" thing to do. And it must involve something to cause an adrenaline rush, even if inherently safe if conducted properly – youth feel impervious to death but still want to repeat the fun they've just had. Today's youth have latched onto computer games, it's something that they can do without their parents putting a stop to it because it's "too dangerous". With the parents of today having only 1 or maybe 2 children, the defence of them has escalated beyond what is good for the long-term welfare of their children.

I have seen the results of this over-protection. The youth that I now take underground tend to be very hesitant to try simple safe manoeuvres whereas decades ago my main task was to restrain them from going beyond what was safe to do for inexperienced people. This withdrawal from physical activity not only applies to caving but to all outdoor activities.

The subject of dwindling membership of outdoor activity clubs, especially caving, has been brought to your attention many times, with the usual response being "we need a recruitment drive". Obviously this will not work if the potential recruits do not exist. Maybe we should change our tack and simply make sure that we can robustly exist with fewer members. There will always be a few that take up an "expired" activity after most people have moved on to the latest fad, hence we should still be able to maintain an existence.

This might involve changes to the way we appreciate caving. For instance, we could focus on fewer activities and get back to pure exploration just for the fun of it. This appears to be happening anyway. We need to re-orientate caving away from a bunch of individuals collecting together for mutual benefit (the creation of a viable underground team) to a group of friends going away for an entertaining outing. If the entertainment includes contorting oneself to get a good compass bearing or lying down for hours painting glue into bones, that's all part of the fun.

But we should not be asking new members to join in with what we do, but instead adapt our Group to join in with what the new members want to do – they're the ones who will be running the Group a few decades from now when most of us ancient ones have finally got out of the way.

Graham Pilkington.

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

CEGSA PROJECTS

CEGSA has the following long-term projects in the offing. Please contact the people named alongside each project if you are interested in taking part.

SOS/S102 connection (Mark Sefton and Gary Woodcock).
Reynella Quarry Cave survey (Grant Gartrell and Gary Woodcock).
Ongoing Sellicks Hill digs (Grant Gartrell).
Mythbusters 2 Dig (Grant Gartrell).

The Beekeepers survey has been virtually completed by Ian Lewis and colleagues and is therefore no longer appropriate for a long term Project.

TRIP REPORTS

Back 2 Back — Nullarbor April/May 2004

Trip dates: 23 April – 12 May 2004

Party: Peter Ackroyd, Ken Boland, Daryl Carr, Ray Gibbons, Marg James, June and George MacLucas, Laurie McKinlay, Miles and Rhonwen Pierce (first two weeks only), Graham Pilkington (till 8 May), Roger Taylor. Also, for last four days of the trip: Paul Devine and Eve Taylor with Eve's sister Noeline and her friend Patricia.

Introduction

This was the second attempt by Nullarbor flier, Ken Boland, to carry out an aerial survey for karst features in the area to the immediate east of Madura Plains Station and just north of Mundrabilla Station. The first attempt the previous year had been cut short after Ken suffered a collapsed lumbar disc (L4–5) early in the trip and, despite valiantly hanging on, was finally obliged to truncate the trip and return to civilisation for treatment (Ackroyd, 2008).

On this present trip, Ken, now fully recovered, intended to complete his systematic overflight of this particular corner of the Nullarbor while we, the ground crews, followed up his reported sightings to check, describe, tag and photograph the resultant karst discoveries.

Back Again

The first day (Friday, 23 April 2004) was spent at the top of Kuthala Pass near Mundrabilla Roadhouse, where Laurie, June, George and I helped Ken assemble his Flightstar ultralight aircraft. Whilst we were thus involved, Lynton Gurney (son of the late Cyril Gurney of Koonalda station fame) came along and had a chat. Once the plane had been assembled and tested, Ken flew off to the L4–5 campsite we'd established the year before (ibid.). The remaining members of the advance party proceeded to the same point, at a much slower rate of progress, and via a more tortuous route, in our vehicles.

Joining us this year was Laurie McKinlay, a gliding friend of Ken's and a well experienced 'bushie'. He was in his seventies but did not look it. He had everything that was needed, including the oldest GPS on the trip — a Garmin model 55, manufactured around 1992. He had also brought his home-made trailer, which went very well until we were on the short track into the campsite, where there was a rather catastrophic collapse of the axle. The trailer, carrying the bulk of our water (about 500 litres), was abandoned for the day and the final 2km to camp completed without it.

Peter Ackroyd in his solar powered "karst office" in the back of Ken's trailer. Photo: June MacLucas, 1 May 2004.

Saturday was camp establishment day, readying it for the arrival of the bulk of the party. George and I used this time to stamp out what felt like hundreds of cave number tags, but in fact was only 60 cute aluminium discs with the State code, area code and four-digit cave numbers hammered deeply into their surfaces. There was to be a co-ordinated dispersal of up to five different cave tagging teams at any one time so prior planning and cave tag preparation was essential to avoid errors. As it was, a couple of teams ended up applying new tags to existing (i.e. already known and tagged) features, but this was fortunately rare.

Also at this time, I set up the 'Office' — a cave documentation area in the back of Ken's empty aircraft trailer. This office had my solar panel and battery, computer, printer, GPS interface cables and all necessary support systems to keep the records straight or, as a last resort, to pick errors up early if they did occur.

In the afternoon Laurie and I headed back down the track to his abandoned trailer where, with the judicious use of ropes and planks, we offloaded the two enormous water containers from the stricken trailer and hauled them up into Laurie's now empty four wheel drive vehicle. The trailer axle was bent at right angles on one side with the result that the wheel and tyre had become a wee bit damaged. Laurie wished to have a bit of a think about his next move so we returned to camp with the water but without the trailer, which acted as a confirmatory signpost for the remainder of the crew as they rolled in later that day.

Laurie with shredded trailer tyre.
Photo: June MacLucas, 2 May 2004.

After a couple of days' thought, Laurie went out, removed the axle, then, using good old bush know-how, and a really, really hot fire, fettled it back into an approximately straight piece of iron again. He took it out to the trailer, reassembled everything, and brought it triumphantly into camp. At the end of the trip he was able to tow that trailer all the way back to his home town in central Victoria without mishap — not a bad effort.

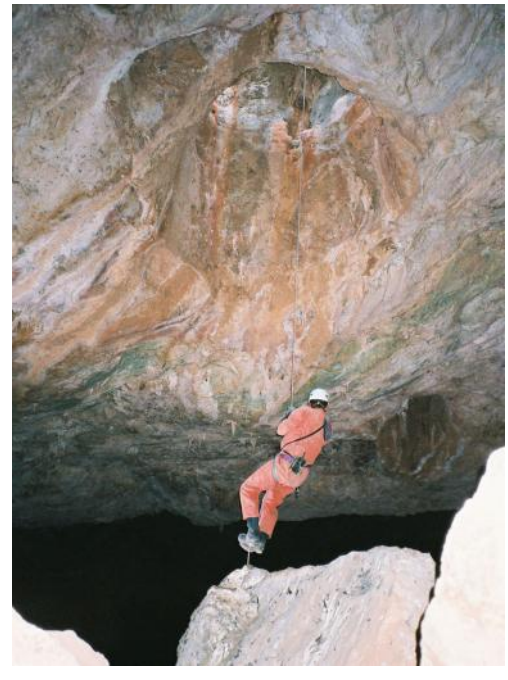
The Real Work Begins

There were now 12 people in camp and work began in earnest. Each day, dependent upon the weather, Ken would fly up to three 'sorties' and return with a stack of new GPS points. Ground teams would radiate out to look at these points and, hopefully, collect and collate their information and make it readily available so that it could be incorporated into the Nullarbor Karst Index, a database available to all cavers.

Some of the more notable finds were *The Drainer* (N-2821), a promising cave that took a lot of water and which proved to be almost 60m deep. Nearby was *Tread Softly* (N-2831), a cave with two roof-hole entrances and a lot of gravity defying rocks. Rockhole discoveries included *Mercungurra Rockholes* (N-2922) and *Tootumbra Rockholes* (N-2942), two very large and significant rockhole complexes, first mentioned by surveyor G R Turner, in 1885.

June and George MacLucas resting after a hard morning's caving.
Photo: Peter Ackroyd, 7 May 2004]

Later in the trip, *Whispering Cavern* (N-2953) was explored using single rope techniques. Good draughts in this cave proved hard to track down once inside its spacious main chamber. A little different was *Hidden Garden* (N-2969), a steep-sided collapse with its own microclimate, plant community and attached cave. A full listing of feature numbers recorded on this trip is included in the appendix.



Roger Taylor on rope in Whispering Cavern (N-2953).
Photo: June MacLucas, 5 May 2004.

It wasn't all hard work however, occasionally time out from caving was taken to 'smell the roses' and simply enjoy being out in the unique environment of the Nullarbor.

Near the end of the trip, we were joined by Paul Devine and Eve Taylor, accompanied by Eve's sister, Noeline and her friend Patricia. Paul lost no time and was straight down to work finding many marsupial bones, in *The Drainer*, *Tread Softly* and *Whispering Cavern*. In the last named he located bones of a thylacine.

By the last day of the trip, 12 May 2004, Ken had logged 604 features from his aircraft and a total of 213 new 'N' numbers had been allocated by the various ground crews. The most successful crew, by far, was the two man team of Graham and Ray. They documented and tagged a total of 95 karst features, almost more than all the other teams combined. Their method was to adopt a systematic, logical approach and not be distracted by 'cherry picking' Ken's list for good prospects. Other teams did, and sometimes fared poorly when what had appeared to Ken, while in the air, to be a great feature turned out to be just an impressive doline or, worse, a wombat warren.

Appendix: Listing of features examined and karst numbers allocated

New 'N' numbers allocated, tagged and documented: 6N-2518–2547, 6N-2644–2647, 6N-2649, 6N-2806–2969, 6N-3000–3013. (Total = 213).

Existing 'N' numbers visited, data collected and feature tagged (when no tag found): 6N-43, 6N-129, 6N-1240, 6N-1317, 6N-1318, 6N-1319, 6N-2162, 6N-2308, 6N-2416, 6N-2433, 6N-2595, 6N-2596. (Total = 12).

Temporary 'NXK' numbers allocated from the air: NXK-1150–1753. (Total = 604).

Temporary 'NXK' numbers visited and checked on the ground: Total = 189 (i.e. 31%).

All available cave information was entered into the CEGSA Nullarbor Karst Index (now KIDSA) in mid 2004 and so is accessible to all cavers.

Reference

Ackroyd, Peter, (2008) Nullarbor, May 2003 — Back With a Vengeance. *CEGSA News* **210 (Vol 53 No 2)** pp 18-21.

Peter Ackroyd, 3 November 2008.

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

Naracoorte: 23rd/24th August 2008

Participants: Mark Sefton, Alistair Sefton, Daniel Riddell, Graham Pilkington, Eddie Rubessa, Grant Gartrell, Frank Hankinson, Steve Milner, Neville Skinner, Andrea Gordon, Davis Fielder plus (on the Saturday) four of the Naracoorte Caves Reserve staff (Steve Bourne Barbara, Susie, and Andrew).

Eleven CEGSA members gathered at Wirreanda on a cold Friday night. Over the following two days, various cavers, led by Grant, continued with the dig at the U230 entrance. On the Sunday, Graham and I went to Beekeepers Cave to assess the feasibility of installing a gate at the entrance while Neville Alistair and Daniel went exploring further in the cave. But the main purpose of the weekend was to investigate Blackberry Cave beyond the gate. This was to be the first such trip since the completion of the Blackberry survey by Steve Milner some 12 years earlier. Steve Bourne had spent many hours prior to this trip, wrestling with the badly corroded lock which eventually yielded to much hammering and key jiggling.

On the Saturday morning, Steve Milner, Eddie Rubessa, Andrea Gordon, and myself (CEGSA), plus Barbara, Susie and Andrew (National Parks) made their way in past the gate. We were accompanied by Steve Bourne as far as the first large chamber where Steve Milner had established the first of several photo monitoring points throughout the gated section of the cave 13 years earlier. These were set up to provide a record of how the cave would change over the years following the major re-landscaping of the surface above the cave. In particular, a pine plantation had been removed from above the far reaches of Blackberry and it was surmised that this would eventually

allow more water to reach the cave from the surface. Steve took a new set of photos from this first photo monitoring point while several others tried their hand at digital cave photography – with varying degrees of success. From here, Steve Bourne left for the entrance while the rest of us headed deeper into the cave – or so we thought. Twelve years had dulled our collective memories somewhat, and 10 minutes later we had circumnavigated the big chamber back to where Steve was heading out. With our tails between our legs, we retraced our steps and eventually found the way on – a low crawl to a second chamber. Here again, we had to check out several possibilities before Steve Milner found the continuation. This was the beginning of a set of narrow crawls and squeezes which, thankfully, had been widened somewhat over the years and were not as awkward as I had remembered. Finally, the cave started to open up a little and before long we were at the second photo monitoring point – a welcome excuse for a break.

Beyond here, the cave was pretty easy going and, although we made a few more navigational errors, it was not long before we were at the chamber with the five metre straw. Despite the passing years, the various features of the cave seemed little different to how we had remembered them and, although some of the straws were perhaps a little more active, there was no water on the floor up to this point. Past the straw, we reached the final set of photo monitoring points and it was here that we noticed the biggest changes. Where there had previously been masses of fine tree roots (presumably from the pine trees), these had now largely, though not entirely, disappeared. There were signs of what looked like termite trails on the roof – perhaps taking advantage of the decaying organic matter generated by the removal of the pines above. In any case, there was little evidence of such matter on the floor. After the last of the photos, Steve and I went to the very end of the cave. Here, as throughout the latter part of Blackberry were numerous pristine speleothems of all shapes, sizes and colours. Finally, it was time to head out. This was the best part of a two hour journey, due partly to the size of the group and the many bottlenecks in the cave, but also to the fact that all of us were 12 years older than last time! It was the longest caving trip several of the participants had undertaken.

Apart from us being able to continue the photo monitoring of the cave, the trip made us all realise that having such a long period between trips was a mixed blessing from a perspective of protecting the cave. On the one hand, infrequent trips means that the outstanding features of the cave will be preserved for much longer. On the other hand, however, we found ourselves occasionally taking a wrong turn and traversing sections of the cave unnecessarily as a result of fading memories. In this regard, producing a route map and placing track markers in some places, together with maintaining a corporate memory of the cave will facilitate more efficient future trips here and enable the management of the park to continue monitoring the effects of surface changes on one of the most splendid caves on the park.

Mark Sefton.

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

Southern Fleurieu Peninsula

14 September 2008

Party: Grant Gartrell (L) Frank Hankinson, Keren, Mark Sefton, Bill Binks, Neville Skinner, Peter Ashenden, Katrina Ashenden, Alex Ashenden, Eleanor Ashenden

Most South Australian cavers will have heard of caves at Sellicks Hill, whether they have been in them or not, and many will have visited Corra-lynn Cave at Curramulka. Fewer will appreciate that the caves in each of these areas share the central section of the same Cambrian limestone beds which extend from a small outcrop on the north coast of Kangaroo Island well up into the northern Flinders Ranges.

While all these wide ranging occurrences of the same limestone beds were formed at the same time around half a billion years ago, they have developed distinct regional histories since that time, so that although they may remain reasonably flat bedded at Curramulka, and somewhat more broadly folded in the Flinders Ranges, they are found to be steeply dipping, strongly faulted and even overfolded at Sellicks Hill, and steeply dipping and metamorphosed on the Southern Fleurieu Peninsula around Delamere. There are a number of significant caves known at Curramulka, including Corra-lynn, which is currently South Australia's longest cave, a complex multi-level boxwork maze, which owes its

shape to the near level bedding and well developed jointing in the rock. As well there are substantial cave systems in the Flinders Ranges, and promise of much more waiting to be found. We have video footage to prove that large cave systems have been formed at Sellicks Hill, and strong indications that more are yet to be found.

Do we have similar large cave systems at Delamere, do I hear you asking? The simple answer is "Not yet". What we do have at Delamere is a number of stream sinks and a few collapse dolines. We also have steeply dipping limestone and a fair bit of height. Most of the stream sinks are over 250 metres above sea level.

Several of these sinks are known to take quite substantial quantities of water after heavy rain, and have obviously been doing so for a very long period of time. However the sinks characteristically disappear into rock-piles and so the thought is that if we can dig our way through enough rockpile we may eventually emerge into negotiable passage which would make the whole exercise worthwhile.

There are currently two types of trips to Delamere. One sort is at short notice, after heavy rain to watch water flowing into sinkholes, and the other sort is what we did on the 14th of September, which is to go and pull a few rocks out of a few sinkholes on the off chance that one day we will unearth a dark void.

The first property we visited has an impressive sink at the base of a cliffy rockpiley sort of thing. Pretty much all we could do on this occasion was to look at it and think deep thoughts. Quite a large catchment drains into this feature, and after sustained heavy rain, large flows disappear into it without any appearance of it backing up, indicating the likelihood of significant cave development beyond. A sustained dig at this site is clearly warranted, but the instrument of choice would be a 12 tonne excavator. We left it for another day and headed over the hills past a couple of other features to a small sink on another creek where it was deemed worthwhile to dig out some dirt and pull out some rocks. This sink has some promise for this type of digging, and already has a dark zone with 6 metres of tunnel. We haven't yet come to grips with what is going on with the drainage. This feature and the previous major stream sink are about 750 metres apart.

Stream Sink

Mainly because the day was a familiarisation for people who hadn't been to the area before, we tore ourselves away from this interesting dig and headed to another property a couple of kilometres away to do some gardening instead.

This property also includes a couple of substantial stream sinks, which like others in the area seem to attract blackberry bushes. The timing of our visit was excellent, as Jim, the owner, had set fire to some blackberries a week before around one such entrance and achieved a pretty good burn. I had brought my brushcutter just in case. While I tried to get it started, Frank Hankinson took everyone else over to a different sink nearby. They returned a short while later to report that it was full of water. It tends to block up with sticks and vegetation from time to time. Hopefully a carefully placed crowbar in the middle, later in summer, will unblock it again. In the end, thanks to Jim's efforts with the matches, the brushcutter wasn't really needed, which was just as well, because it wouldn't start. Ten minutes

Pruning with Matches.

Dig that crazy cave!

with a pair of secateurs exposed a hole which impressed those who hadn't seen it before, and before long we had a ladder down the hole and a bucket team hauling sticky mud. This is potentially also a promising dig, but a certain amount of clay loam from the hillside slumps down from time to time. Some times it can take a lot of water, but this winter some clay plugged up the bottom and it filled with water for a while. The water has since drained away again, but the digging will be a lot easier by late summer when the soil dries out.

Not far from this sink, there is a recent collapse that Jim fenced off, and alongside this a very small but diggable rockpile chamber, which we had lost temporarily in bracken and blackberry. Luckily Jim had a few more matches. Somehow he managed to burn the blackberries but not the pine fence posts, and before we knew it we had relocated another dig and pulled some more rocks out as darkness fell. We are starting to think that both this and the adjacent collapse and the dig that needs the ladder may all be part of the same large rockpile, and that somewhere underneath there may be a some solid walls. All very mysterious. I wonder if we will ever find out.

Because we were having so much fun, we ran out of time to check out a few other holes in the district, but everyone voted the day a success and vowed to return, so there should be other opportunities.

Grant Gartrell.

. **%%%%%%%%%%%%%%**

Visit to Corra-Lynn Cave Y-1 and Curramulka Town Well Cave entrance Y-2.

Visitors: June and George MacLucas
Date: Sunday 5th October, 2008

As our prospective trip members dropped out due to flu and family commitments, June and I decided to make this trip an Art and Photography day. We only ventured to Grand Central and peripheral areas.

Prior to the arranged visit to Corra-Lynn Cave and due to Grant Gartrell once again emphasizing the on-going problem at the last CEGSA meeting, we decided as we were in the vicinity, we would take a look at the nearby heavily fenced off entranced to the Curramulka Town Well site. We were surprised at the deterioration since our last visit to this area. Although the original cement and Iron Gate entrance are still intact, right beside that entrance is evidence that the soil has been washed away exposing quite a large and dangerous hole.

At the September CEGSA meeting, Grant stated that he had been writing and talking to the local council of the area about the site being secured. It was good to confirm from Grant that he understood about the flooding that can occur. Previously there had been no drainage setup from the surface area to the well and with Grant's highlighting of this problem hopefully now this concern will be accommodated.
This flash flooding of the area was witnessed by me and other CEGSA members on 20th February 1992. At that time, an incident occurred involving myself whilst being belayed when ascending the 30 metre climb up a wire ladder. The top belayer thought he heard the command "pay-out" when in fact he was hearing the water from the Heavens and surrounding area roaring down the entrance of Town Well. At the time, this event resulted in considerable consternation of the why and wherefore this mishap had occurred.

After completing our Corra-lynn Cave trip we went site seeing to the Curramulka Cemetery to check out some history on early families of the area; Sparrows, Goldsworthy, Parsons and Thomas were prominent.

George MacLucas.
Photographs of Town Well Cave entrance by June MacLucas.

. **%%%%%%%%%%%%%%%**

Past Trips from General Meetings

August 2008.

1. Mark Sefton (Blackberry Cave), Graham Pilkington (Beekeepers Cave) and Grant Gartrell (U230) described the recent trip to Naracoorte on the weekend of the 23rd/24th August. The Blackberry Trip was a combined CEGSA / National Parks trip to assess how the cave had changed since the last trip – 12 years ago. There were far fewer tree roots now at the end of the cave and some of the straws appeared to be more active but otherwise the cave appeared to be in a similar state to what it was prior to the pine trees on the surface being removed. The entrance of Beekeepers was assessed for the possibility of installing a gate. Good progress in the U230 dig was made, but there is still no sign of this opening up.

2. Ian Lewis described a dive by Richard Harris into Piccaninny Ponds. A record depth of 114 metres was reached. Some samples of limestone containing black material – possibly flint – were brought to the surface for examination.

September 2008

1. Harry and Ken Smith presented a detailed report on their "flamin' Nullarbor" trip. They all had a great time during their cave dives and WA team member Craig Challen had broken Chris Brown's world record penetration by another 120 metres (using a hand-held scuba cylinder); the cave still continues but is extremely small and technically challenging (not to mention that it is more than 6 kilometres from the entrance and more than 2km from the nearest air chamber). John Dalla-Zuanna had driven all the way there from Victoria only to rupture an eardrum a few metres deep as he commenced the dive, and then he broke a tooth while eating a biscuit before driving straight back to Melbourne! Harry and the others successfully "pinged" some key locations and recorded them on GPS, and Ken left one of his pingers in the cave near the end before commencing their trip back to Adelaide. But as they approached Nundroo (about 150km west of Ceduna), Harry noticed smoke in his rear vision mirror and within a few minutes, as he and Ken stood by helplessly (and the local CFS fellow tried to get his fire hose working), Harry's 4WD became a roadside inferno. They

managed to grab the GPS units, a camera and Ken's pinger-locator but they lost everything else in and on the vehicle (scooters, rebreather, drysuits, camera and two pingers etc…). At least they were able to save most of the gear in the trailer (including a G-sized cylinder filled with high-pressure oxygen which probably would have been heard in Ceduna if it had exploded!). It is believed that heavy-duty lithium batteries used for long-duration underwater DPVs and carried on the roof-rack had shorted-out and caught fire. Ken also managed to salvage a brand badge from the wreck, and Harry plans to get it mounted so it can serve as a new CEGSA award – "Caving Under Fire" – to recognise close-calls or "Harrising" situations!...

2. Grant reported on recent Fleurieu Peninsula activities; he had dug another couple of feet of cave "here and there". He felt that the Delamere area still had some potential.

3. Ian reported on a Corra Lynn trip with Mercedes students; he said this was his second trip in the last 30 years and involved 17 kids in three groups! Everyone had a great time.

October 2008

1. George and June MacLucas descibed a tourist trip into Corra-Lynn Cave on the October long weekend.

2. Tim Payne described a diving trip to Cocklebiddy cave several weeks ago. They carried out a surveying program there, and the survey of the cave is now almost complete. There seems to be a relationship between the passages of the cave and the claypan/saltbush contact on the surface.

3. Eddie Rubessa went to the Northern Flinders Ranges and found a couple of new caves. One was quite extensive, with more than 100 m of passage and good decoration. This cave is still not fully explored.

4. Stan Flavel recounted a trip to Mt Simms Cave in the Flinders Ranges some 18 months ago. This cave has a lake where a water monitoring device had been placed by the SA Museum. A more recent visit to the same cave a few weeks ago found the water monitor high and dry. The lake had dropped about half a metre in that time.

TECHNICAL and OTHER ARTICLES

MEMBERSHIP

Change to Members Mailing List:-

8105 Graham Woodward (E) heather.sporton@gmail.com

0702 Andrea Gordon (E) andy-gordo@hotmail.com

MEMBERSHIP FEES

CEGSA MEMBERSHIP FEES become due on January 1st. To ensure continuity of membership and privileges (particularly insurance) please pay before the due date.

CEGSA MEMBERSHIP FEES FOR 2009 YEAR

Full Membership	52.00
Full Country Membership	46.00
Associate Membership	44.00
Long Term Associate	52.00
3 Month Introductory	5.00
Joining Fee (N/A to 3mth Intro)	12.00
Discount for e-mail CEGSA News	15.00
Discount for Country Membership	6.00

ASF LEVY FEE FOR 2009 YEAR

Single	68.00
Family	121.50
3 Month Introductory	20.00
Student	61.00
Journal Subscription	25.00

2009 YEAR FEES

	CEGSA	+ASF	TOTAL
Full Membership	52.00	68.00	120.00
Full Country Membership	46.00	68.00	114.00
Associate Membership	44.00	68.00	112.00
3 Month Introductory	5.00	20.00	25.00

Variation for Family Membership

1st Full Member + 2nd Full Member			
Less $16.00 for only 1 CEGSA NEWS	$88.00	$121.50	$209.50
1st Full Member + 2nd Associate Member			
Less $16.00 for only 1 CEGSA NEWS	$80.00	$121.50	$201.50
1st Associate Member + 2nd Assoc Member			
Less $16.00 for only 1 CEGSA NEWS	$72.00	$121.50	$193.50

Discount for Country Membership and e-mail CEGSA NEWS applies for Family Memberships.

Please make sure your payment of fees includes CEGSA and ASF, if applicable.

Chris Gibbons.
Treasurer/Membership Officer.

Approved CEGSA Trip Leaders

Name	Caving Leader level
Marie Choi	Horizontal, Laddering and Vertical
Stan Flavel	Horizontal and Laddering
Grant Gartrell	Nil
Chris Gibbons	Nil
Amanda Grindley	Horizontal
Damian Grindley	Horizontal, Laddering and Vertical
Paul Harper	Horizontal, Laddering and Vertical
Richard Harris	Horizontal
Lance Hoey	Horizontal and Laddering
Peter Horne	Horizontal and Laddering
Paul Hosie	Horizontal, Laddering and Vertical
George MacLucas	Horizontal, Laddering and Vertical
June MacLucas	Horizontal
Steve Milner	Horizontal, Laddering and Vertical
Tim Payne	Horizontal, Laddering and Vertical
Graham Pilkington	Horizontal and Laddering
Phil Prust	Horizontal and Laddering
Eddie Rubessa	Horizontal and Laddering
Mark Sefton	Horizontal and Laddering
Gary Woodcock	Horizontal and Laddering
Michael Woodward	Horizontal, Laddering and Vertical

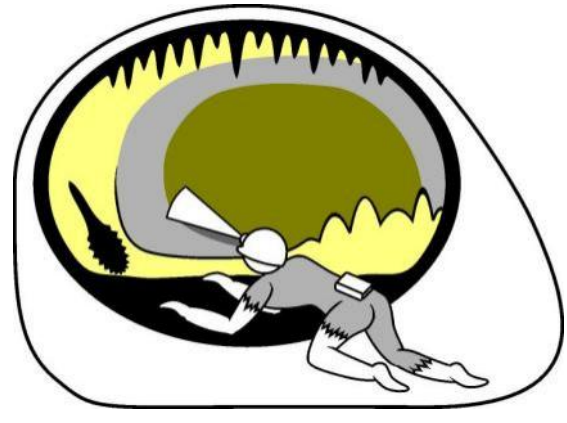
All the above named are also CEGSA Trip Coordinators.
Members may query the classification of any Trip Leader at any time with the committee.
It is a requirement that each trip be organised by an approved Trip Coordinator to be classed as an official CEGSA trip. It is also a requirement that dependent party trips be led by an approved Trip Leader at the appropriate skill level for the cave being entered.

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

Karstaway Konference.

27th Biennial Conference of the Australian Speleological Federation.

4th January to 9th January 2009.
Hosted by: Victorian Speleological Association, Caving Club of Victoria and others.
The Registration form is now finalized and has been placed on the conference website: http://www.caves.org.au/conf2009.



This is the new logo that has been designed by Ken Grimes for the 27th Biennial Conference of the ASF. This represents elements of both VSA & CCV logos and incorporates a caver in a castaway situation.

Australia's Kanawinka Geopark – Volcanoes and Lakes, Limestone and Sinkholes

Ian D Lewis.
Latrobe University (Bendigo Campus, Victoria, Australia).
Geomorphology Consultant to Kanawinka Geopark Board.
Cave Exploration Group of South Australia.
Cave Divers Association of Australia.

Abstract:
Australia's Kanawinka Geopark has recently been declared by UNESCO. It is one of the largest Geoparks, covering over 20,000 sq kms and featuring a large region of volcanoes and lava flows which intersect a broad limestone plain containing unique caves and sinkholes.

Keywords:
Kanawinka, Volcanoes, Lava, Bluestone, Dolomite, Limestone Coast, Sinkholes, Cenotes

A view of the Kanawinka Geopark

The Kanawinka Geopark is Australia's first and extends for over 400kms throughout a wide limestone region and one of the world's large volcanic plains, separated by the long, deep and ancient Kanawinka Fault after which the Geopark is named. The name is an indigenous word meaning "The Land of Tomorrow". This expresses the potential of the Geopark and the aspirations of all those who love it and are working so willingly for it.

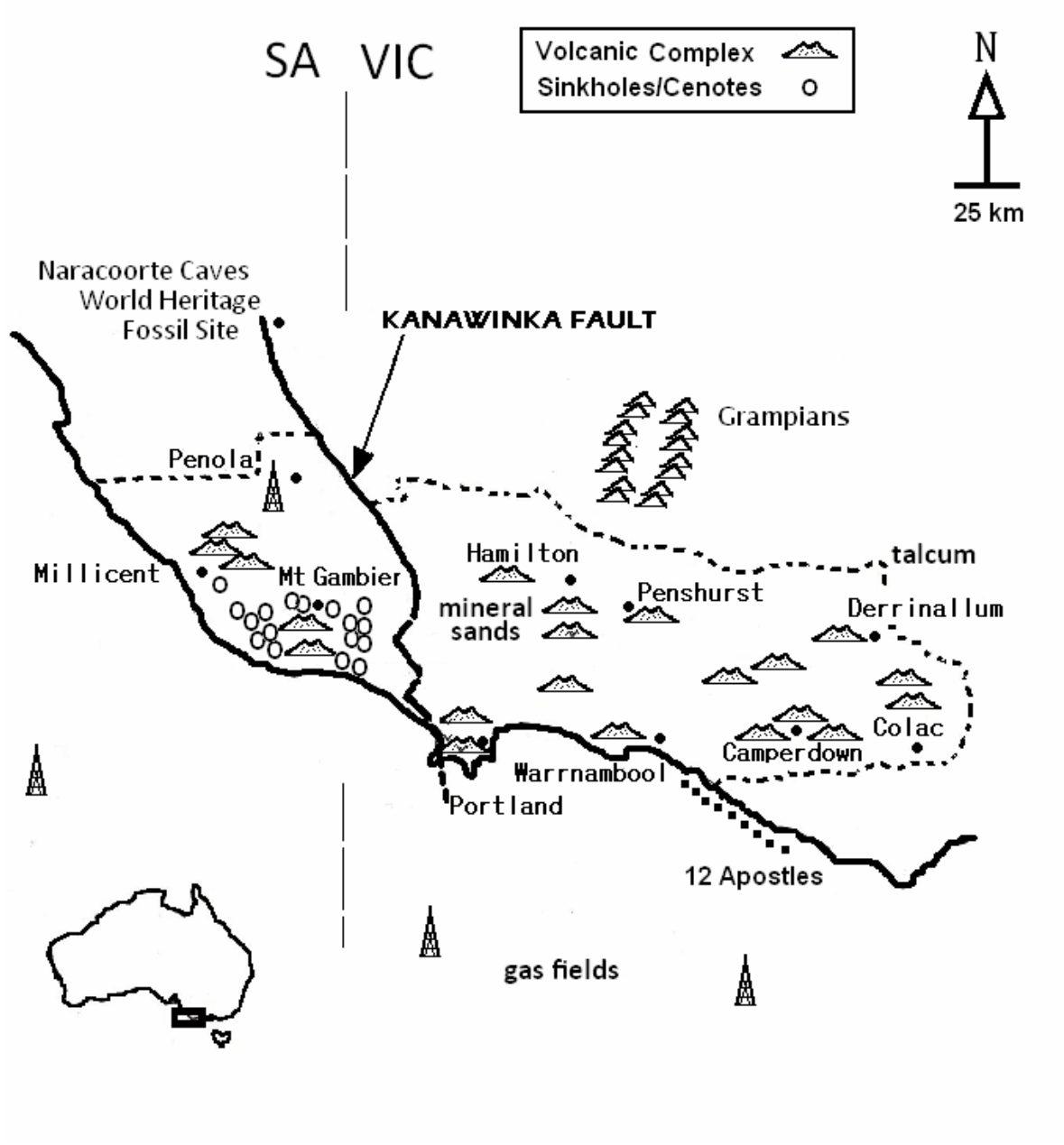
The volcanic plain in the east and the Limestone Coast in the west form the heart of the Geopark. These themes link up just west of the Kanawinka Fault where the youngest volcanoes have pushed up through the limestone plain itself. This paper introduces the Geopark and then separately describes the volcanoes and the limestone regions.

The Kanawinka Fault is of Gondwanan age and preceded both the limestone and the volcanoes but eventual movements along it generated the World Heritage Fossil Caves at Naracoorte, just on the northern border of the Geopark. The Kanawinka Fault can be seen as a continuous ripple diagonally across the Geopark for nearly 150kms.

The western half of the Geopark is a broad cavernous tertiary limestone plain partly covered by a series of parallel Pleistocene stranded dune ranges which, through dating techniques, have provided one of the world's best preserved coastal records of sea level sequences for the ice ages forwards from one million years ago. The Woakwine Cutting near Millicent reveals the complex sand layering within one of these ranges. The western coastline of the Geopark is a striking continuity of rugged and ornate aeolianite sea cliffs exposing multiple dune layering and a wide range of marine erosion, limestone reefs and karst landforms.

The mid-south section of the coastline (Portland to Port Fairy) features massive black basalt platforms forming the bases of high cliffs, breached volcanoes and islands capped by the old dunes. The nearby continental shelf is responsible for the Bonney Upwelling, a huge krill field which is one of the world's last major feeding grounds for the threatened Blue Whales. The tertiary limestone re-emerges along the eastern coastline in a series of dramatic marine gorges and rock stacks known as the Twelve Apostles. A coastal highway network links all these features along the Geopark from end to end. Offshore are the major gas fields of the Otway Basin.

There are three geological "gateways" at the edges of the Geopark. The World Heritage Fossil Caves at Naracoorte, South Australia, on the northwest boundary feature Australia's most outstanding Megafauna fossil discoveries and Interpretive Centre. The spectacular synclinal sandstone Grampians Ranges stand out just to the north of our main Volcano Interpretive Centre at Penshurst, while the Twelve Apostles and marine limestone gorges stretch away along the southeastern coastline.



Major Geological Features of Australia's Kanawinka Geopark

The Limestone Coast and Mysterious Sinkholes of the Western Kanawinka Geopark

Several volcanoes have emerged through the limestone itself in the west at Mounts Gambier, Schank and Burr forming a direct geo-link between the two themes of the Geopark. They have formed large freshwater crater lakes that have filled with the abundant supply of groundwater from within the limestone. The Blue Lake in the large volcanic complex at Mount Gambier is the most breathtaking example of these. It occupies a large crater where the limestone is exposed all around the lower walls until it is covered by ash layers and lava above.

The vast limestone plain contains over 1000 cave and karst features, including highly-decorated tourist caves at Tantanoola and in the Princess Margaret Rose Cave in the 100km-long Glenelg River limestone gorge. Englebrecht's Cave is an excellent example of water-rounded phreatic passages and the human uses of local caves. There are also world-class cave diving attractions, the Naracoorte Caves Fossil deposits, and in particular the large and unique sinkholes.

The limestone has been used widely in local architecture and industry, and the many famous wineries of Penola and Coonawarra derive their product from the well-drained limestones beneath. The region is fringed by extensive and ornate jagged limestone cliffs along the coastline. Finally the groundwater emerges though deep clearwater springs and caves in several coastal National Parks. All these features have been the themes behind the naming of the region for tourism purposes as "The Limestone Coast".

Recent research shows a second very important geo-link between the volcanoes and the limestone. It is likely that the deep volcanic gases which pushed up through the limestone have acidified the groundwater at certain times in the past. This has helped to generate a striking series of large circular clear freshwater-filled sinkholes (known as "cenotes") which are an international drawcard for scuba divers, scientists and fascinated viewers.

There are about thirty or so "cenotes" – they are spectacular large circular vertical-sided pits dropping into clear dark freshwater lakes. They occur in the deeper limestone zone from Mount Gambier to the southern sea coast, and may continue offshore although now drowned and possibly sanded over by the sea. Many have large vaulted underwater rooms with sunlight streaming down into them, others descend into deep tunnels and one shallow drowned cave system has 7000 metres of complex maze passages in crystal clear water.

These sinkholes are mysterious and controversial. Cave divers have died in them in earlier decades. Hell's Hole is one of the largest cenotes in the world. Indigenous legends indicate long association with them. There are dry sinkholes which are beautifully garden-landscaped or which retain their natural habitats. Some are local swimming holes and others show artifacts of early European settlement. A number of sinkholes which had been used as rubbish dumps are now extensively cleaned and rehabilitated.

They contain an array of aquatic life forms including rare invertebrates such as syncarids and massive arrays of large freshwater stromatolites – almost unknown elsewhere in the world. Even the term "cenote" is a conflict of various unresolved definitions (it is an ancient Mayan term originating in Mexico where other similar features exist). Sinkholes occur on private property, forests and farm lands with a corresponding diverse mix of landowners. At the coast the large coastal springs of Ewens and Piccaninnie Ponds are cenote systems running the Limestone Coast's crystal-clear groundwater into the sea.

An increasing number of the publicly-accessible sinkholes are now receiving interpretive signs. From the volcano summits of Mt Gambier, Mt Schank and The Bluff are excellent views across the karstfield to the coasts. The two geo-themes of volcanoes and limestone in the Kanawinka Geopark are a unique and delightful combination.

Volcanoes and Human Utilisation across the Eastern Kanawinka Geopark

The surface geology east of the Kanawinka Fault is dotted with large rounded tertiary and quaternary volcanoes forming Australia's most extensive volcanic province which also includes RAMSAR Wetlands.

The volcanoes extend from the east across Victoria into the limestone to the west in South Australia and are progressively younger, representing eastward continental movement over a hotspot. Many have formed large freshwater crater lakes (maars) that have filled with the regional supply of groundwater. Lake Bullen Merri at Camperdown, Tower Hill at Warrnambool and the Blue Lake in the large volcanic complex at Mount Gambier are the most well-known of these.

The lava flows cover 23,000 sq km across western Victoria, spreading out across the pre-existing plains, down along former river valleys, forming rough stony hills (tumuli), shield and steep-sloped scoria volcanoes, leaving notable lava cave systems and in places flowing out to sea along the coastline. This area is known as the Newer Volcanics province and features nearly 400 individual eruption points, most of which occurred between 4.5 and 2 million years ago. Estimates for the youngest volcanoes in the west vary from 23,000 to 6,000 years old.

Many of the eruptions were witnessed by the indigenous people of the area over the last 45,000 years and feature prominently in their stories of the dreamtime. They made use of the stones from the lava flows to construct channels linking the wetlands, to build stone weirs and fish traps, windbreaks and stone huts. Excellent examples created by the Gunditjmara people can be found around the Lake Condah region in particular – this land has very recently been returned to the traditional owners in a moving ceremony near the lake. This is generating indigenous tourism opportunities to interpret the lake and nearby Budj Bim volcano (Mount Eccles) from an entirely different perspective to be shared with visitors.

Later, European settlers during the mid-1800s utilised the volcanic stones cleared from the land to construct well-built characteristic drystone walls to enclose farming areas. Some of these stones came from the stone huts of the displaced indigenous owners. There are many excellent examples of the networks of walls across the central and eastern Geopark.

Dark grey basalt quarries across the region have produced a strong and wonderful building stone known as “Bluestone” which features in many early buildings – courthouses, stations and storehouses, shops, docks and forts, pubs and grand homesteads – many of which are open to the public. Equally attractive but in beautiful colour contrast are the same types of buildings faced with pink dolomite formed from limestone baked by volcanic heat in the western Geopark around Mount Gambier.

At the heart of the Geopark is the Volcano Discovery Centre in Penshurst, a local initiative which displays audio-visual depictions of the earlier geological landscapes that are a focal point for school groups. Community efforts to rehabilitate volcanoes such as Colac’s Red Rock complex and Mount Elephant have enabled a distinctive new attraction to be promoted by local Visitation Centres in each town, with a network of walking trails at each site encouraging longer stays by travellers. Further west the basalt breaks have formed the very popular Wannon and Nigretta Falls: these cross-link with the Major Mitchell Trail that follows his original exploration in the mid-1800s tracing rivers through volcanic lands so agriculturally rich that he named them “Australia Felix”.

The Kanawinka Geopark has the capacity to offer unique specialised and imaginative experiences, two of which are trips with a guide into the heart of very different volcanic craters. At Bridgewater Bay near Portland, an inflatable zodiac takes visitors along a giant breached cliff of half a volcano carved away by the sea and then into a spectacular sea cave carved into the ash layers and containing a large sea lion colony. At the Blue Lake in Mount Gambier, a tiny lift takes visitors down to a cut tunnel which suddenly opens out above the turquoise waters of the lake where the huge explosions blew the crater out of the limestone before it flooded with groundwater.

At Tower Hill near Warrnambool, visitors can see wonderful ash layer exposures in crater-side quarries and learn about the Indigenous perspective and history from the Worn Gunditj Interpretation Centre in the bottom of the crater. This is also a Crater of Emus and Kangaroos which can be seen up close. And at Mt Rouse next to Penshurst there is a Crater of Eagles, where in spring the young practice their flying and gliding in safety from one side of the small crater to the other. Geology is the underpinning for many other wonderful visiting experiences across Australia’s Kanawinka Geopark.

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

ANNUAL GENERAL MEETING

The Annual General Meeting of the Cave Exploration Group (SA) incorporated will be held at the home of Mark and Karin Sefton, 22 Hogarth Rd, Panorama on Saturday 14th February 2009 at 7.00pm for the presentation of the 2008 Annual Report and the election of officers for 2009.

The AGM will be preceded by a social get together from 4.00pm and a BBQ tea at 6.00pm. BYO everything.

Please consider your availability to stand for a position on the committee and help further the aims of the Group. The Group cannot operate efficiently without the input from it’s members.

Would all present officers please have their contributions for the Annual Report to the editor by 31st January 2009.

CAVING WORD FIND

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

Can you find these words?

1. **ARTIFACTS**
2. **BATS**
3. **CAVERNS**
4. **COLUMNS**
5. **DROP** rocks
6. **FLOWSTONE**
7. **FUNGI**
8. **GYPSUM**
9. **LAKES**
10. **LAVA**
11. **LIMESTONE**
12. **MICE**
13. **MOSS**
14. **PASSAGES**
15. **RIVERS**
16. **SALAMANDAS**
17. **SINKHOLES**
18. **SKELETONS**
19. **SPELEOLOGY**
20. **SPIDERS**
21. **STALACTITES**
22. **STALAGMITES**
23. Stone **TOOLS**
24. **WALL** Paintings
25. **WATERFALLS**

CALENDAR OF EVENTS

Date	Type of Event	Description	Contact
26/11/08	General Meeting	Royal Society Room, SA Museum, Adel. End of year BBQ	Graham Pilkington
29/11/08	Working Bee	Library and records	Graham Pilkington
10/12/08	Committee Meeting	TBA	Graham Pilkington
04-09 /01/09	Karstaway Konference	Sale, Victoria	See advert
10/01/09	Caving	Post Conference trips – Buchan etc.	
14/01/09	Committee Meeting	TBA	Graham Pilkington
28/01/09	General Meeting	Royal Society Room, SA Museum, Adel. Report on ASF Karstaway Konference	Graham Pilkington
31/01/09	Working Bee	Library and records	Graham Pilkington
31/01/09	Annual Report	Submissions due	Athol Jackson
11/02/09	Committee Meeting	TBA	Graham Pilkington
11/02/09	CEGSA NEWS	Articles due	Athol Jackson
14/02/09	Annual General Meeting	22 Hogarth Rd Panorama	Graham Pilkington
25/02/09	General Meeting	Royal Society Room, SA Museum, Adel. Speaker: Ian Lewis	Ian Lewis
28/02/09	Working Bee	Library and Records	Graham Pilkington
11/03/09	Committee Meeting	TBA	
25/03/09	General Meeting	Royal Society Room, SA Museum, Adel.	
28/03/09	Working Bee	Library and Records	Graham Pilkington
	Training	Ad Hoc training	Training Officer
	Caving	Ongoing Vic Fossil survey	Gary Woodcock
	Caving	Continuing Fleurieu Peninsula Exploration	Grant Gartrell

It is desirable that caving trips involving club members should, where possible, be registered as CEGSA Trips. To do this, the nature and timing of the trip must be nominated to the Trip Liaison Officer and/or minuted at a General Meeting of Members. The member registering such a trip must be an accredited CEGSA Trip Coordinator and must agree to act in this capacity for the trip. There must also be an accredited trip leader with the appropriate skill endorsement to take a dependent party caving.
Also, please ensure that a report of the trip is submitted in a timely manner.