CEGSA NEWS

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

Volume 47 Number 3 Issue 187 AUGUST 2002

CAVE EXPLORATION GROUP (SOUTH AUSTRALIA) Inc.

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

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

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

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	Marie Choi	As Above
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	Marie Choi	As Above

Cover Photograph: Ray Gibbons with Thylacoleo carnifex skeleton in a Nullarbor Cave.
Photo: Ken Boland.

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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 47 Number 4 (Issue 188) must reach the Editor by Wednesday **13th November 2002**. Material not meeting this deadline may be retained for possible use in a following issue. The preferred method is via E-MAIL at atholjax@senet.com.au as an attachment or on 3.5" IBM floppy disk, in Word or ASCII text format. Of course other forms of communication will still be gratefully accepted.

PRESIDENTS SPOT

Well, what an interesting and exciting couple of months it has been with the discovery of the fossils out on the Nullarbor. Every cavers dream, well almost. Congratulations to those involved and the way they handled the initial find. We have been reminded in the past by the paleos to take just photos not the bones, as it can often be the material around it that's more important and much of the significant data can be lost. So congratulations to Ray Gibbons.
How exciting to go back with the museum and help to recover those bones and other materials, a once in a lifetime opportunity. Its just a pity that for such an exciting discovery that the advertiser here thought it was only worth a few lines in midway through the paper, when other states gave it front page headlines with colour photos. Apparently it wasn't as important as what team Wayne Carey was looking at joining or the rumblings within the Democrats.
For those with an interest in old bones Liz Reed will be co-ordinating some activities down at Naracoorte which will include helping with a dig, sifting silt and sorting. See inside the newsletter for contact details.
Welcome to Karren Laudernbach, the new ranger with Forestry at Mount Gambier. Karren has taken over from Trevor Wynniat and joined us recently on a trip to a few of the caves that come under her control and I believe had a great time. If you are running any trips to that area and there's a place on your trip you may wish to open it up to her. I think we may have another caver.
If you check the calendar you will see that there are several trips planned over the next few months to both Corra Lynn and the South East. Feel free to attend but make sure you are financial and that you confirm with me that you are attending.

Marie Choi.

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CEGSA Meeting with Shadow Minister for Environment and Heritage

On Thursday 25th July, CEGSA representatives met with the (Federal) Shadow Minister for the Environment and Heritage, Mr. Kelvin Thomson MP; as a result of correspondence we had received from the Leader of the Opposition (Mr. Simon Crean) inviting us to discuss aspects of mutual interest. Kelvin was attending a number of meetings in Adelaide that day and he met Marie Choi, Graham Pilkington and myself along with Grant Gartrell outside of the steps of Parliament House before we all headed to a nearby cafe, where we commandeered a quiet, shady corner (appropriate for meeting Shadow Ministers I thought!).

Thanks to some preliminary discussions we had undertaken before the meeting (as well as a brief but very useful 'dot-point' list of primary topics that Grant had written up), we were able to present a fairly good overall expression of concern about key issues such as cave and karst protection, ownership and access, insurance and liability matters, tourism, biomedical and other research and other related topics which we hoped could be positively influenced by the Federal Government as well as the State Government. Kelvin was very friendly and energetic, and he listened intently to everything we had to say, indicating that many issues were also of interest to him and suggesting that we pursue these issues further with his Party.
I believe the meeting was a very worthwhile event for both CEGSA and Mr. Thomson, and an hour well spent. An additional positive aspect was the fact that Kelvin mentioned he was keen to do a bit of caving at some point in time too, so hopefully in the near future we might be able to help him to see the hidden beauties of OUR "shadowy ministrations" personally!

Peter Horne.
Secretary.

TRIP REPORTS

100 YEARS ON
TRIP REPORT TO COONALPYN AREA

DATE 25 - 26 April 2002

PARTY Fred Aslin, Kevin Mott

HISTORY

This trip was a follow on from several other trips to the area over the last 10 years to document karstic features. These have been recorded on records pages 827, 835, 842-851, 856, 857, 865-871. Interest in this area originated when Fred Aslin came across a reference to "Cave Wells" in a book entitled "Oliver's Diary – an 'andkichef of eirth", edited by Margaret Ragless. This book is the diary of Oliver Ragless returning from the goldfields with his brothers. On 17 May 1851 they camped at Cave Wells, which is now known as Perkindoo Wells.

Fred started tracking down this reference on 16 August 1991 when he spoke with Rita Clark of Meningie who was attending a CWA meeting at Malinong Hall. He was also given several references to caves and collapses. In following up these references new features were seemingly added at an exponential rate. There are now over 130 features covering caves, collapses and cavity bores. All features located on this trip were fixed by GPS.

This article was written, it turns out, 100 years after Oliver Ragless recorded it in his diary. What has taken us so long to find out caves exist in this area? The area still has many more features to disclose. The karst area of Tintinara and Coonalpyn extends over the boundary of Upper South East and Murray Plains. The karst is more closely related to Murray Plains and as mentioned in several annual reports it is probably worthy of redefining as a unique caving area. If this is to be done then it would need to be done reasonably soon before we accumulate too many numbered features and cause confusion with renumbering.

DETAILS

The first property examined was 'Kevbry', section 12, Hd Coneybeer, owned by Brian Videon (son) and Kevin Videon (father). This property has been in the family since 1930 when Kevin's father William first moved into the area. The property had been referred to in earlier reports (pp 848, 870, 871). When the property was visited on 8 September 2001 the owner reported approximately 20 features on the property but time and crops precluded access at that time.

1 Rock filled opening 1.0 x 0.3 x 0.25 deep. A second feature 0.2m diam is located at 1.9m @30^0. This second feature reportedly acted as a runaway point when many acres of surrounding paddocks were flooded in 1985. The owners have a photo of a row boat on the flooded area.

2 A dam, 40 x 20 x 2m deep, north of the house was constructed about 50 years ago. The dam let loose through a hole in the southern end. This hole was plugged but the dam still leaks.
A dam across the Field Road also leaks. This dam, built in the 1950's is on section 16 and is owned by Ray Long. The property was originally owned by Mr Jericho. This dam was plugged with concrete straw and clay. Mr Jericho now lives in Murray Bridge and would probably know of other features.

3 Collapse 0.2m diam x 0.3m deep. Collapsed in late 1960's, early 1970's and was originally 2m deep.

4 Collapse 1.0 diam x 0.5m deep. Slopes down 2m and undercut on SW side. Clay but loose rock in fill. Fell in during late 1970's and was originally 4.5 - 6.0m deep. Old dam used to be located south of this feature.

5 Collapse fell in 3 - 4 years ago. 0.45m diam x 1.3m deep (fenced). Top 0.1m is soil then marl. Appears to be double tube.

6 Collapse 0.6m diam x 0.2m deep fell in during late 70's. Originally 1.0m diam x 2m deep. Hole has self filled.

7 Collapse 3.0 x 2.0 x 0.3m deep oriented 245^0. Fell in during late 1970's and was originally 1.5m deep.

8 Collapse area 3.8 x 0.6 x 0.3 deep. 0.5m diam hole within collapse is located under a paddock fence. Fell in the late 1960's. A crow bar pushed into the hole does not reach the bottom. Still takes water.

8a Collapse area 1.0m diam x 0.5m deep fell in during early 1980's.

9 Group of three collapses within a depression in a remnant mallee copse.
a 1.0m diam x 0.5m deep
b 1.0m diam rock filled area
c 20m diam rock filled area

10 Group of five collapses within a remnant mallee copse
a 1.3m diam x 0.5m deep. Fell in during 1960's
b 1.0m diam x 0.25m deep. Fell in during late 1970's
c 0.9m diam x 0.35m deep.
d 0.2m diam
e 2.7 x 2.0 x 1.0m deep. 0.5m diam hole in NE corner drops a further 0.1+m. Marly rock under the clay at -1.1m.

11 Collapse 2.7m diam x 2m deep. Rock filled. Fell in during 1960's.

12 1.2m diam rock filled collapse. When fell in during late 1980's was 0.6m diam then belled out with a depth of 2m. The stone fill was originally left as a mound on stones but is now level with the ground.

13 Collapse 4.8 x 2.7 x 0.6m deep @ 20^0. Fell in during 1970's and was filled with rocks. Still takes water (Rec p871) and appears to still be collapsing.

14 Two collapses 1.0m diam, 2.0m apart. Collapsed in early 1970's to a depth of 2m then gradually blended together. Now filled with dirt and composted weeds. Takes minor runoff.

15 Header dropped into a hole in the early 1960's. Hole was 0.8m diam x 3.0m deep. Located 20m from fence. Water used to lay in the area.

Section 1, Hd Coneybeer

Cavity under E leg of ETSA power pylon 2138. Hole for pylon leg was 6.1m deep. The cavity was 4m diam and between depths 2.5m - 4.5m. Brian Videon descended the hole. This property reportedly has other features (rec p 869) but it has been suggested the owner may not be co-operative. The land is owned by LF Schilling Nominees P/L (Malcolm Schilling) of PO Box 10, Coonalpyn.

Several survey pegs for the proposed natural gas pipeline were located by GPS.

We then visited the next property to the east to find out if the collapses extended that far. This is section 11, Hd Coneybeer and is owned by Mervin Raymond Freund. His family have owned the property since 1937. Mr Freund and his son showed us around the property. He stated that they plug any collapses with clay and poly twine and that seems to effectively seal the collapses.

1 Collapse area 2.0m dim x 0.1m deep with 150mm bore casing jammed in hole. Originally 1.5m diam x 3.6m deep. Still takes water.

2 Hole in NE corner of 20 x 40m dam collapsed about 4 years ago. Was about 1.0m diam x 4.0m deep.

3 Stone filled collapse area 2.5m diam x 0.5m deep in bottom of long shallow depression. Originally 2.4m diam x 3.6 - 4.6m deep when collapsed 15 years ago. Filled with 10 tonne of rock. Collapsed with a catastrophic flow. Still active.

4 Collapsed about 6 years ago. 0.6m diam x 1.2m deep. Sealed when fell in.
Tube like shape at bottom reminiscent of tree roots.

5 Collapse 1.0m diam x 2.1m deep occurred about 15 years ago. Located 15m from east side of former dam (now filled with rocks and clay. Banks of dam used to fill holes.

Mr Freund informed us that the next property east also has collapse features and we should contact Mark Cassanova. On the way to the Cassanova property we looked for the collapse near the junction of McIntosh Way and Cold and Wet Rd (rec p 870) but could not find it at the location suggested. Mark Cassanova was not home at the time but Betty Cassanova agreed to show us around the property located on sections 10, 18, 19, Hd Coneybeer. Address is Box 224, Coonalpyn.

1 Collapse area 3.5m diam x 0.4m deep with a hole in the NW corner 0.6 x 0.35 x 0.5m deep. Collapsed at end of winter 2001.

2 Collapse area 2.0m diam x 0.2m deep filled with logs and located 43m @ 34^0 from NW corner of dam. Fell in 50+ years ago.

3 Very old collapse area approximately 15m from fence. Filled with rocks and levelled approximately 20+ years ago. Apart from surface rocks there is little sign of the collapse at present.

4 Collapse of age unknown. Cow fell in and died about 25 years ago so hole was filled in and covered with wood (still visible). Presently 1.5m diam x 0.3m deep.

5 Former dam (age not known) developed a hole in the bottom and would not hold water. Dam was filled in about 1970.

We then moved on to section 52, Hd Coneybeer to check out a tube previously reported (rec pp 835, 849, 869). Simon Calvert turned up while we were talking to his wife and agreed to take us to the tube. His address is Box 141, Coonalpyn.
He thought the entrance had fallen in during the intervening years. The tube is in light regrowth and is covered by sheets of galvanised iron to prevent stock falling in. The entrance is 1.2 x 1.3m and drops 3.3m to a floor sloping to the SW. This floor drops 1.0m to a vertical face 2.4m high. The lower chamber is 4.0m x 1.6m x 2.5m high oriented at 293^0. A small passage leads off the upper chamber for 1.3m @ 316^0. Several spiders and a dead shingleback lizard were found in the cave. Total depth is 7.1m. The entrance is still the same size as that reported when it was originally found.

Simon Calvert's son remembered a small hole near the house. As it was getting dark we arranged to call in first thing in the morning to document the hole. The evening was spent camped in Jeff Klitscher's implement shed.
The small hole at the Calvert's was located between and south of the house and shearing shed. An opening 0.1m diam drops 0.5m. A sheet cavity 0.3m high extends for 1.0m between 42^0 and 142^0. Helicella virgata in the cavity.

We then moved on to "Artimore" owned by Graham and Ian Kempe to investigate a report of two tubes (rec p 850) and a hole reported by John Barrie on 8-6-1992. Ian was busy with tax paperwork so was unable to show us around. He knew of all the features and agreed to mark them on a copy of an aerial photo if we provide him with one. We could then follow up actual locations on a later trip. It would pay to contact them prior to heading up there. These holes would be located on sections 51 & 48, Hd Coneybeer.

He knew the location of the now lost breathing bore on section 49, Hd Strawbridge. There was a stone over the bore when they bought the property in 1974 but it was gradually covered over as the paddock was worked up for crops. It is a chain east of the cattle yards and he provided a mud map to locate it.

A new bore drilled for Jeff Klitscher on section 10, Hd Strawbridge was located with GPS. This bore hit salt water (22000ppm) at 14m.

We then visited "Strawbridge Park" (section 16, Hd Strawbridge) owned by Mark Gordon to have a look at the leaking railway dam (rec p 866). He showed us the dam and an old abandoned well nearby. The well is collapsing and is now 5m diam x 2m deep. When we explained what we were doing he took us to a breathing bore just over the fence on an adjoining property owned by Keith Goodall. This is section 41 Hd Strawbridge. He also knew of a hole on his property (section 15, Hd Strawbridge) but we would need to ask Neville Kernick where it is. We asked at 'Cold and Wet' but were directed to Neville's house "Rangefield" about 8km down the road on the left hand side on section 31, Hd Strawbridge.
He was in Coonalpyn buying supplies and then possibly helping his father with weed spraying. We travelled to where they were spraying but did not see them. We tried to locate a feature previously seen by Gordon Ninnes and labelled Bottled Hole on the 1:100 000 and the new 1:250 000 maps. The only feature we found was a rockhole 0.6 x 0.4 x0.4m deep on section 4, Hd Strawbridge.

An old ruin was noted set against a granite outcrop. We later found out from Bruce Gaskell this was the Kangaroo Flat homestead. The early settlers used the granite to capture and hold rainwater.

We finally caught up with Neville Kernick at "Cold and Wet" and he agreed to take us to the cave. He first visited the hole about 14 years ago while at school. The area had recently been burnt by fires so features were more difficult to interpret. We found a granite outcrop about 2.5m high and from here headed towards a clump of mallee on a ridge line. A hole was found, but not the one he was looking for. This was 0.5 x 0.3 x 0.9m deep. A low passage continues to the south. The feature we were looking for was located at 8.6m at 55^0. The entrance is a tube 0.5 x 0.4 dropping 2.4m to the floor. This leads to a lower chamber 3.0 x 1.5 x 1.2m high. Total depth is 3.9m. Neville then remembered a collapse near the shearing shed on "Cold and Wet" and he had a hole on his home property.

The trips caving concluded by inspecting the leaking dam of Jeff Klitscher and the runaway hole previously noted by Fred on section 13, Hd Coonalpyn (rec p 867). On the way back in to Coonalpyn we located the hole referred to by Mark Klitscher. It is actually 1600m from the intersection of McIntosh Way, not 200m as previously reported. The collapse and adjoining subsidence area have been rock filled.

On the way back through Keith we called in to visit Bruce Gaskell who resides at 72 Bypass Road. Bruce used to own property in the area and was referred to by Jeff Klitscher (rec p 868). He did not know of a hole 45 feet deep on his property but certainly had a well of that depth. This well was descended by Perc Burnett (now deceased) but he has no recollection of being told of a cavity in the well.

They knew of the ruins on section 15, Hd Strawbridge as they used to live in it, but did not know of the fallen in well shown on diag book page 46. The Gaskell's never owned section 15. When they were in the area it was owned by the Schotouls (pronounced Schol-teus) family. A second hut was nearby on the property boundary.

The Gaskell's also knew of a collapse in the main street of Coonalpyn. It is between the garage and hotel on land owned by Alf Allen. It took water during a flood in the 1920's but has since been filled. No one living in the town now would remember it. Mrs Gaskell provided a sketch of its location.

At Kangaroo Flat the rockhole is 6-8 feet in diam and 3 feet deep and is located about half a mile from the ruins. If the current owners know nothing about them he would be able to take us there.

Kevin Mott and Fred Aslin. 10 May 2002.

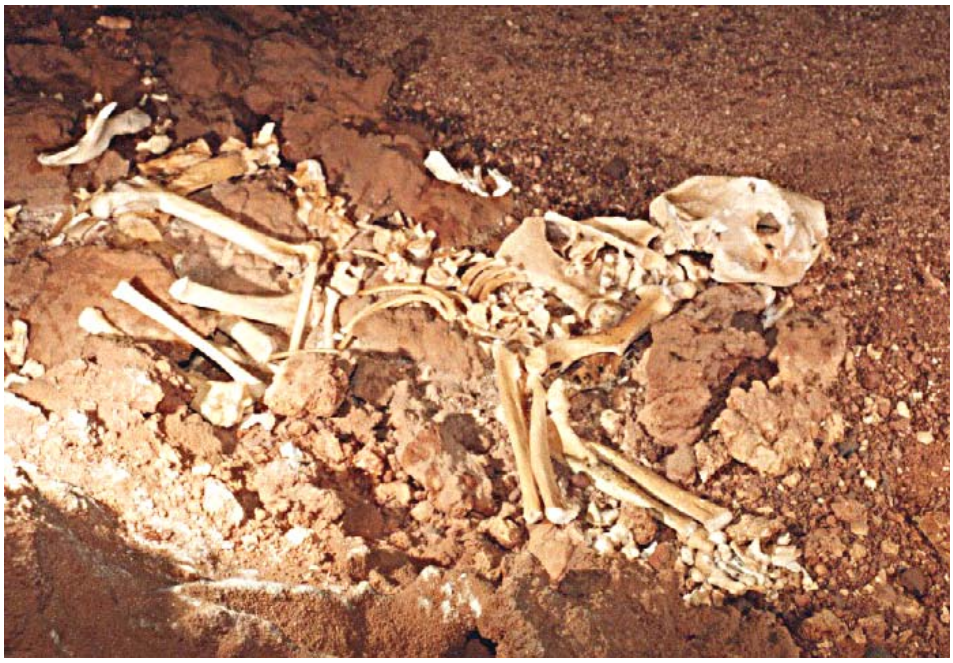
HISTORIC FIND

Fossil treasures unearthed on Nullarbor

(This is the title used for a full three page article that appeared in 'The West Australian', Tuesday July 30th 2002 by Carmelo Amalfi)

In April of this year Ken Boland of VSA, with members of CEGSA and VSA acting as ground crew, took to the air in his ultralight aircraft looking for karst features on the Nullarbor. This was the third trip undertaken by Ken in this manner and although he has recorded an outstanding amount of features, this is the first time that such an amazing discovery of its kind was found.

From this trip three caves were to yield many fossilized treasures. As part of the ground crew, Peter Ackroyd, (VSA and CEGSA) Ray and Chris Gibbons (CEGSA) checked out the third cave from the surface and noticed it appeared to represent a medium version of Thampanna, a Nullarbor cave Ken has spent considerable time surveying. It was decided by Ray and Peter that Ken should have the pleasure to be first down the cave, as in the last three trips Ken had spent most of his time flying and one of his great loves is to take part in exploring the interior of the caves. On arriving at the site it was decided that Peter, assisted by Chris would belay, while Ken and Ray abseiled down. They were gone for one and a half hours. The rest is history.



Full skeleton of Thylacoleo carnifex. Photo by June MacLucas

From the first sighting Ray was convinced they had stumbled onto something significant and on surfacing informed the others. Peter and Chris realised the risk of contamination and refrained from entering the cave. The seriousness of their find made it necessary to keep it clear of any contamination for as they had suspected, they had found the full skeletal remains of a Thylacoleo carnifex, the extinct marsupial lion that could be from 50,000 to 1 million years old. The only full skeleton of its kind to have been found in the world. The second cave discovered by Paul Devine also of CEGSA, contained partial remains of several megafauna, another Thylacoleo and the Sthenurus, the giant kangaroo. The most generous cave, the first cave, offered a virtual historical zoo of numerous megafauna species.

On their return to civilisation the news of a complete Thylacoleo supported by photographs was reported to CEGSA SA Museum Representative Terry Readon. Terry contacted WA Museum palaeontologist Dr. John Long who responded immediately by arranging for a recovery expedition to take place within a few weeks.

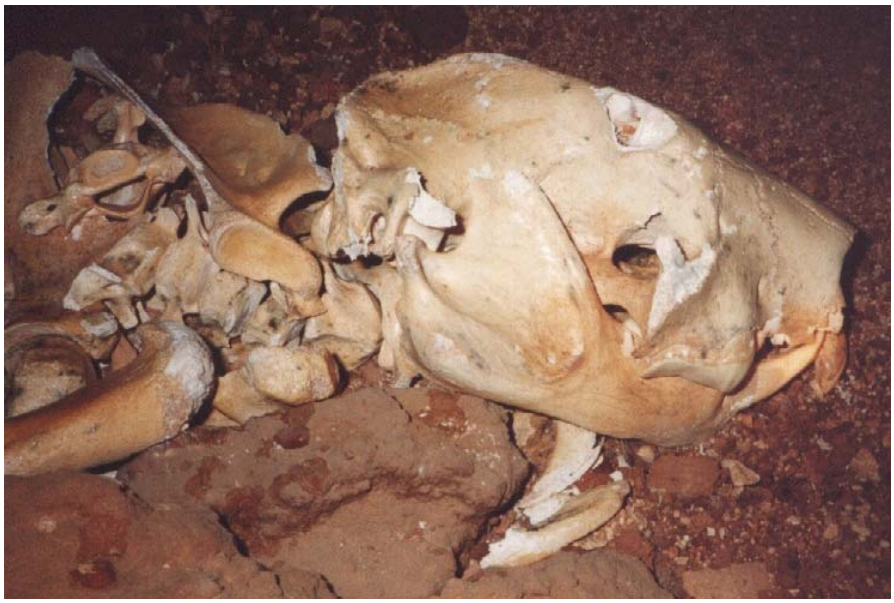
The recovery expedition took place from 6th July until 20th July 2002 and proved to be a great success yielding many outstanding finds. Those invited from South Australia and Victoria to take part in the recovery were - Ken Boland, Peter Ackroyd, Ray Gibbons, and June and George MacLucas. Also as part of the team was Dr. Gavin Prideaux, leading SA palaeontologist with Flinders University, a past member of CEGSA in 1990. They were joined by Paul Devine country CEGSA member and his partner Eve Taylor a WA caver and guide from Yanchep.

The other six members of the party were made up of WA Museum representatives, Dr. John Long, Curator of Vertebrate Fossils, who led the recovery expedition, Nick Mayman from Museum Administration, Lindsay Hatcher and Mark Norton West Australian cavers working as Museum Volunteers and a camera crew from the Museum's Documentary Unit, Clay Bryce and his camera man Daniel.

We were later joined by Matt Cupper, a Postgraduate from Melbourne University who arrived with equipment for dating the Thylacoleo, by taking small samples of sediments from under the species while still in the cave. Matt also took two digit bones and Leo's front incisors to test the enamel back to Melbourne for analysis. Finally two of 'The West Australian' newspaper media arrived, Carmelo Amalfi and John Mokrzycki, who turned up just in time to help save the camp from total destruction during what felt like a hurricane type wind force.

At all times the caves were respected. As soon as possible Ray Gibbons taped off areas to make single pathways down one side of the wall of each cave to protect various areas of sediment. While Lindsay, Nick, Paul, Eve, June and George spent hours and for some of the group days, sitting in the caves painting each and every bone and tiny fragment three coats of Mowital, a solution for hardening the bones enabling packaging of the fossils for their long and safe journey back to Perth.

The finds were amazing, it was thought that the caves had acted as death traps for animals over many thousands of years. Most of the bones were found exactly where the animals had laid down to die. The bones of several other types of extinct animals, including giant wallabies and kangaroos were also found, as well as what was thought to be two new species of kangaroo that have never been seen before.



Skull of Thylacoleo carnifex. Photo by June MacLucas

Dr. Long commented on the cavers who found the bones, who had the foresight to leave the specimens uncontaminated, taking only photos and leaving them in the exact position they had died tens or even hundreds of thousands of years ago, this allowed scientists to take samples of ancient DNA and other samples for dating and forensic tests while onsite. Such as, optically stimulated luminescence (OSL) a measurement of electrons emitted upon exposure to a sample of light. And electron spin resonance (ESR) a way of measuring trapped electrons by exposure to high frequency electromagnetic radiation used for dating tooth enamel taken from species thought to be 5,000 to 1,000,000 years old.

Dr. Long claims that these Nullarbor caves represent one of the most important mega- fauna deposits in Australia. While the scientists carried out their work and others painted and packaged the bones to extract from the caves Ken, Peter, Ray and Paul went about surveying all three caves finding many more bones as they went.

The expedition offered so much potential for further study of the megafauna period perhaps solving several mysteries still laying open for speculation. The West Australian Museum were overjoyed at their find and each and every caver that joined the expedition came home with satisfaction and renewed knowledge of what caves can offer.

Enough for now, a detailed report of this expedition will be printed at a later date.

June MacLucas.

Eyre Peninsular & Nullarbor Trip Report, 16 April to 28 April 2002

CEGSA: Graham Pilkington
Visitor: Rob Garrett.

Karst features visited:
5E8, E9, E10, E15, E17, E18, E19, E50, E67.
5N16, N215, N525.
6N2, N3, N17, N24, N34, N44-45, N83, N139, N169-170, N175, N222, N1620.

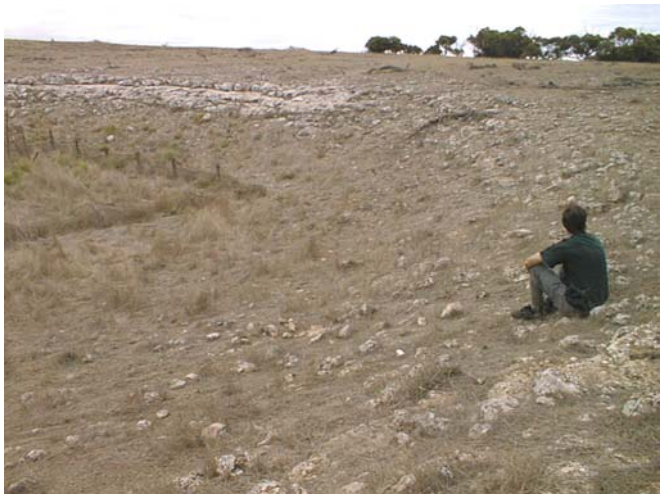
Tuesday 16: We travelled out to Tumby Bay on Eyre Peninsular and camped for the night.

Wednesday 17: Following George MacLucas's excellent suggestion on his last Nullarbor trip, I decided to locate some more 'E' features. We found the lost E8 close to a small grike field with nearby pits and small dolines. After a fruitless search for E6 and E7, which appear to have been ploughed in, we located E10 and E9 near the road. E15 at Elliston was a sea cave about 25x12x3m high with a thin roof. Also along the cliffs we saw more sea caves, some easily accessible even with the sea inside but others down 20m high cliffs.

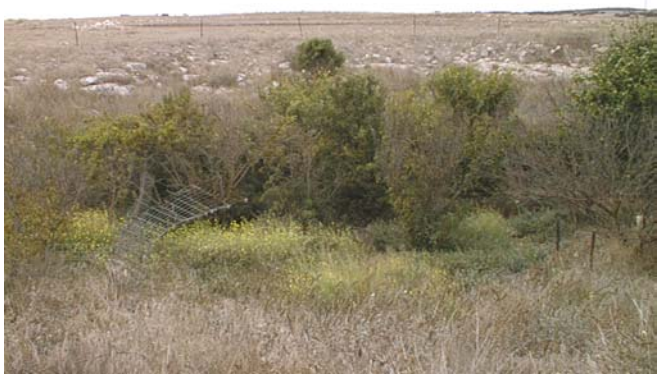
5E15 Entrance. Photo: Graham Pilkington

Thursday 18:A great day for visiting Tallia cliffs, it was low tide and the caves could be entered without difficulty. At the Woolshed E17, it was 17.6m from cliff-top (cave roof starts here) to the pebble floor (tide out). The Tub, E18, with sea cliff entrance E19 together with the adjacent sea caves to the north were photographed. These caves are usually inaccessible but low tide and a calm sea greeted us. Next we found a doline 36x12x2.5m @090 half buried by the road on the way to E50 and E67. CEGSA's maps of E50 and E67 had their doline names swapped when drawn 25 years ago. Since then we have had incorrect records. The maps obviously described what we found E67 "The Orchard" and E50 "The Amphitheatre". We should have noticed the name exchange error without re-visiting the features!

5E18 'The Tub' Photos: Graham Pilkington



5E50 'The Amphitheatre"



5E67 'The Orchard' Photo: Graham Pilkington

The "E" data and digital photos were dumped into Max's PC. Max & Hennie invited us to stay at their Ceduna home for the night.

Friday 19: A day of entrance sightseeing to accurately locate some known caves. It also gave me a chance to show Rob what Nullarbor caves look like after the small Eyre Peninsular features. First we visited Clay Dam, N16. The clay lip has sloughed back a few metres since I first visited it nearly 30 years ago and some run-off capture tunnels have formed in the dirt 1-2m below ground. Wave Cave N215, was easily located but a small blowhole N525, a Quartermaine-Wheeler feature, was hiding behind a bush. We could not find N524. After calling in on Eucla for fuel, we headed out to N24 and the adjacent N169 and N170. Weebubbie cave was the home of divers. We camped with the divers and shared their campfire.

Saturday 20: Moving from Weebubbie to Old Homestead Caves we travelled along the Old Coach Road to visit Chowilla Landslip N17, Abrakurrie Cave N3, dolines N175, N222 and N44, followed by Winbirra Cave N45.

Sunday 21: As an introduction to Old Homestead Cave, I took Rob into the South Cave's Spring Series and down the Micky Mouse Holes. While there we added 30m to the survey, most of that was a link passage "short-cutting" a loop of the main path. The main passage was extended only 6m because it needs dirt removed from the floor to continue. With a draft present, no-doubt someone will do that someday. On arriving back at the hut, we found a message from Ray Gibbons and Peter Ackroyd inviting us to join up with Ken's VSA "plane" trip.

Monday 22: A day off to visit the VSA camp approx 35km south of OHC. Everyone but Ken Boland was away; Ken was in camp to keep an eye on his plane. We declined the offer to move camp because Rob and I were more interested in mapping OHC. The wind was up and a cool change was on the way. The rain started after we got back to OHC.

Tuesday 23: After getting up at the crack of dawn we watched the light show from the shelter of the hut. A good day to escape underground! Rob and I went to the new area located last year off the Officers Mess. About 200m was surveyed from the dig point. It joined to an open roof hole easily climbed into from main path close to the original dig! Most of the area is in the upper calcified level.

Wednesday 24: This was a very rainy day. We stayed out of it in the hut not willing to travel the 350m to the doline. By the afternoon the rain had eased off and we trogged up for a tourist run out to RDF NF – about 1.5km into the North cave. Rob at last got to see what the cave was really like. It took less time to get there than it did to get to the survey area in the Officers Mess only 500m from the entrance.

Thursday 25:The survey of our Officers Mess section was completed. Several good dig points exist but why dig while open leads still exist? More of the main path roof holes were explored but did not go very far. The best was a continuation of the main passage of the new section that crosses over the top of the main run but it needed a hammer to continue.

Friday 26: A quiet day. I photographed the N83 entrance then we packed for our return to Adelaide.

Saturday 27: The track looked dry enough to risk trying to get back to Eucla. Photos of N1620 and N139 were taken. The Link Track was in excellent condition with no standing water nor boggy areas but the main Forrest-Eucla track was drowned in places and we had to detour around those patches. The new track was probably very good because the ground was not compressed and still soaks up the water. Camped near Penong.

Sunday 28: Back to Adelaide.

386m was added to Old Homestead Cave to bring the surveyed length up to 29.4km. GPS'ed 23 known features including 8 on Eyre Peninsula.

Graham Pilkington.

Mt Gambier, May Long Weekend 18th – 20th May 2002

Saturday

Linda in a Mt. Salt cave.
Photo: Marie Choi.

The first part of our day was spent surveying numerous features on a property at Mt Salt. Despite the rain and the mix up with rain jackets, (ask Paul exactly how a 6'2" male fits into a small Gore-Tex!), the morning was rather successful with several features documented and explored. We re-visited the fossil find from the June 2001 long weekend. I was blown away by the nature of the deposit. It is even better in real life than on the front cover of the newsletter. Much time was spent ogling at the fossils before we finally moved on.

We had a brief look through a previously known feature that Fred had not visited for many years.

The rain didn't ease through the day. We moved to another area on the property where Fred and Kevin investigated another feature. The rest of the team remained in the car sheltered from the rain eating lunch when we noticed increased activity from the cows in the paddock. It appeared that Fred seemed quite appealing to one of the cows. We all found it rather amusing!

Carcass Crevasse 5L453

The cave entrance was less than appealing. It was full of farm animal carcasses! Kevin and I made our way to the bottom of the smelly bone pile where we found a small grovely passage which lead to a large passage parallel to the main one. A spectacular lake was our only reward. The lake was around 20m long, 1m wide. I traversed across the top hoping to find a dry lead on the other side. No such luck. The lake disappears under the rock wall at an angle. It appears to have potential for diving exploration.

We headed back to the Mount for a well appreciated shower and dinner.

Sunday

Yay! Happy Birthday Dave! What a way to celebrate your birthday.

Rubbish Pile Cave. 5L447

The cave entrances got better as the weekend went on! We arrived at the cave site to be greeted with one of the most impressive household rubbish piles I have seen! The rubbish reached to the top of a 12m deep doline. The majority of the group lacked enthusiasm for such an entrance and stood back whilst Kevin and Dave trogged up (much to the curiosity of the cows might I add!). At the base of the rubbish pile, there was a small passage through the rubbish leading to a medium sized chamber. Once given the go ahead by Kevin and Dave, I joined them in the chamber to assist with the survey. The chamber terminated in a rock pile, which sounded relatively mobile on the other side. The cave indicated potential for further investigation later once the rock pile stabilised and hopefully clears. We looked at several other features on the same property, some with minor potential.

That night, Fred and Jeanette, the Springer Clan, Ian Lewis and others joined us at the Venturer Hall where we watched a DVD of Amazing Caves and the Making of Amazing Caves projected onto the wall along with other caving videos. Kevin (Yes I said Kevin) baked a scrumptious birthday cake for Dave.

Kevin Mott in Rubbish Pile Cave.
Photo: Marie Choi.

Monday

5L460

We drove out to another property where we had been told of a feature that had claimed a lamb. During the course of the day, we cleared a tonne of sand from within a solution pipe (very soft to dig). We managed to dig down to what seems to be a cave roof which bells out in all directions. Time restraints meant that we could stay all day but the feature remains a digging project for the future.

Linda Deer.

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Corra Lynn Trip Report, 25 May 2002

CEGSA: Graham Pilkington, Linda Deer, Paul Deer, Bekki Fletcher and Daniel Fletcher.

Mercedes College: Steve Warlewski (teacher) and 11 students

CEGSA led a four hour tour to introduce the students to caving. The group was organised into three teams to visit different areas. In this way they could pool their experiences to gain more from the adventure then was possible in the short time allowed.

Graham Pilkington.

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Corra Lynn Trip Report, 26-27 June 2002

CEGSA: Graham Pilkington, Marie Choi, Kai Fallows and Daniel Gill.

Faith Lutheran Secondary School: Steve Dutschke, one other teacher and 20 students.

An adventure tour over two days to introduce the students to caving. The group was organised into three teams. For the night we stayed in a farmhouse kindly loaned to the school by a local farmer. The school supplied meals for evening and breakfast.

FLSS Party. Photo: Marie Choi.

Graham Pilkington.

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Sellicks Hill Cave (A5) Trip Report for 17 March, 9 June, 30 June, 28 July and 11 August 2002.

17 March: Grant Gartrell, Graham Pilkington, Eddie Rubessa and Bill Binks.

9 June: Grant Gartrell, Graham Pilkington and Bill Binks.

30 June: Grant Gartrell, Graham Pilkington, Frank Hankinson, Bekki Fletcher and Daniel Fletcher.

28 July: Grant Gartrell, Graham Pilkington, Frank Hankinson, Ray Gibbons, Eddie Rubessa, Bill Binks and Tim Moulds.

11 August: Grant Gartrell, Graham Pilkington, Frank Hankinson and Ray Gibbons.
At least two other trips have been led by Grant on Friday nights during this period.

Sellicks Hill Cave is essentially a 65m deep rock-filled vertical fissure with a typical width of 1-2m. Very little open space exists for the first 15m then it opens out to about 30m long towards the bottom.

Caving is simply negotiating between and down the boulders wedged in the fissure. Ladders are used in a few spots.

The first trip was to assess the potential of the deepest part of the main fissure. It was known to have a breeze issuing from the rock and soil floor, but we had to determine if it was feasible to excavate. At the lowest point the nearly vertical fissure varied from 0.4 to 1m wide with an effective length of about 6m. The floor was "loose" dirt and rocks. Access down the last 4m was obstructed by rocks preventing access for larger cavers and would have made hauling very difficult – this was rectified first. A dump spot 2m further up from the haul point and 7m along the fissure was safe to use.

By the end of the last trip, about 4.5m depth has been added to the cave along about 1.5m of fissure. The width is 0.3-0.5m and appears to widen out below. Most of the lowest 20m of fissure has had repeated "coats" of flowstone layered over the walls. These layers are often on a clay backing indicating a repetition of clay fills being washed in followed by calcite deposition. What this does is to give the fissure a much narrower appearance then the "true" width because some of the solid looking walls are not. The main obstacle to descent is a large slab of rock nearly filling the fissure for maybe the next 2m depth, nothing a few good nudges won't shift.

Another breathing dig spot is about 15m higher up the fissure but at the other end of the open zone. This one is more in rockpile than fill and requires rock-smashing our way down. Only about 1.5m has been removed during this year but when the cave does some heavy breathing this appears to be the prime spot.

Graham Pilkington.

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Trip to DREAMLAND (1) – Corra Lynn Cave (5Y1) 13th July 2002

Present: Paul Harper, Daniel Fletcher, Rebecca Fletcher and Marie Choi

After an early rise on a cold and miserable morning, thinking about how much better it was going to be underground, we were on our way toward the York Peninsula. Two and a half hours later we arrived at the local meeting place and waited for ¾ of an hour before we managed to contact the others to only find out that they were still nice and warm inside their home and weren't going to be joining us. So we headed towards Andrew's to say hello and let him know we were going to be under for the after day.

Paul went into pass on everyone hello's and thanks. About 40 mins later, Marie ventured in to find Paul, while Dan and Bek try to catch up on their missed sleep. Nearly 75 mins later the door opens into Andrew's garage and they venture out to actually head toward the cave.

What started out as an early morning, out of bed by 6:15am to be underground by 9am, well, morning tea in the car and under by 11am was the realistic way!!! The more the day went on, the more we were looking at getting underground away from the cold wet weather.

None of us were looking forward to standing the rain and wind to get changed. Many thoughts ran through our heads about how we could all get our gear in the car past the cargo barrier to get changed, we've done rat squeeze, but can we do the cargo barrier squeeze!

We were lucky enough to have a break from the rain as we quickly got changed and headed under!

The purpose of the trip was to go and check out some little visited areas of the cave, check out some potentially interesting 'leads' and introduce Bek and Daniel to this interesting part of the cave. We ventured through the letterbox and started crawling and crawling and crawling. After about 45 minutes, just as we approached 'the portal' up to the middle level of the cave, we discovered why Marie shouldn't eat egg and lettuce sandwiches for breakfast!!

The trip through the portal took about 40 mins to set up a belay and for the party to climb the 5 or so meters (including a couple of minutes for Marie to leave a permanent scar on Paul's shoulder that looks remarkably similar to a boot print)!!

From here the cave gets really interesting, more decoration (some very old and degraded stalactites) and large piles of red dirt scattered around. Marie took some photos of decoration as we headed out to the northeastern end of the cave with the intent of looking down some 'dotted lines on the map'. As the cave was maintaining a toasty 18 or so degrees, the going got a little slower as we rested a few times to let the party cool down. We went to one particular area and started poking around in some very small passages. Bek checked out a difficult to get into but interesting 10 meters or so of passage while Daniel was almost directly above her checking out a different 10 or 15 meters of passage that has good exploration potential. Must remember the compass and tape next trip to add to the map.

After we had been in the cave for 5 or 6 hours, the time came to start the long trip out. After descending The Portal, we crawled and crawled and crawled until most of us were quite sick of crawling. As we exited the doline we were greeted by a spectacular display of stars in the dark night sky. The trip back to Adelaide was uneventful.

Daniel Fletcher.

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Trip to DREAMLAND (2) – Corra Lynn Cave (5Y1) 20th July 2002

Trip Leader: Paul Harper
Team: Bart Jansen, Michael Caruana, Tim Moulds and Linda Deer

We had planned to meet at the Curramulka Bowling green at 9:30am ready for a fun filled day of adventure. I think if Paul had told us what we were in for, none of us would have shown up! We ventured underground around 10:15am. We headed straight for Alberta and the Letterbox, this is where Paul apparently got a little familiar with the rock the week prior! We continued on to the Portal where we could all finally stand up. It was a nice change after about an hour on our bellies. After a bit of manoeuvring, we all made it through and up into the middle level called Dreamland. It was here all of our tummy grovelling seemed worth it. We were presented with a myriad of passages containing endless crystals in all shapes and forms. Gypsum, selenite, calcite, manganese dendrites, not to mention the flowstone!! One could quite happily thrash through dreamland and not see anything bar a few sparkles on the walls. However, if you take the time to actually look, you will be pleasantly rewarded. We had lunch on the way out to the far NE section of Dreamland where we planned to investigate the possibilities of some new leads. Unfortunately for Paul, when we got to our desired chamber, we couldn't all fit through the squeeze! The portion of the team that could fit through, investigated the area whilst a certain trip leader widened the squeeze relentlessly with his jimmy bar. Just as we had completed our explorations of the area and decided that there were no new leads, Paul joined us through the squeeze. He then wished to look for himself briefly before we all turned around and embarked on our long journey back to the Portal. After 7 hours in Dreamland and Corra-Lynn cave, we were all glad to surface just in time to see the sun disappearing over the plains. A great day was had by all who attended regardless of how sore we all felt the next day. Thanks for a great trip Paul!

Linda Deer.

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Lower South East

Trip report – 10th /11th August 2002.

Saturday 10th August Snake Hill

It would have been the nicest day in Mount Gambier since about March. The sun was warmly shining providing us with its radiant warmth, the fluffy clouds were gently floating by, and the air was full of

the sweet aroma of the pines in the local area. The birds were singing merry tunes in this most lovely of days. In fact, in comparison to our usual weather, this day was perfect. What did I do to amuse myself on this magnificent day? Did I spend some time working in the garden…? No. Did I take my motorbike for a ride through the forests…? No. Did I pleasantly take a stroll around the rim of the Blue Lake…? No…I went underground.

We all arrived at Snake Hill around mid morning, eager to show our new local Ranger, Karren, some of the caves that she is now responsible for. Snake Hill is always an ideal cave to take beginners into as it contains many and varied caving experiences without the need to push any limits. I had a copy of a map that Motty had given me and was eager to find some new pockets of the cave that I hadn't been in before.

We started off in the usual manner, and went into the cave via the entrance. This tiny crawl appears to get smaller every-time I go through it. It must be another one of those shrinking entrances that I have mentioned before in past ramblings. We went into the first main stand up section and had a small chat about the huge numbers of bats that we were about to encounter, and how it is vital that all members of the party remain silent and careful as we move through this section.

With bated breath we stealthily entered the bat area only to find that there were none. This was most unusual for Snake Hill during this time of the year. Disappointed we continued through the cave. We shortly entered the main long chamber that has a heap of roof holes that illuminate the whole area. It was in here that I had seen bats before and so we had a quick look around. We soon found them. There was a mass of little black bodies, scrunched up into the holes that pockmark the roof. We were all gobsmacked by the sheer number of the little critters. After we all had a quick look, we moved on, careful not to disturb any.

We then came to the entrance 32, through which several years ago, we had hauled out enough car components to build a car yard. The map indicated that there were some sections of cave in behind the wall near this entrance. So we decided to have a bit of a look. Fairly shortly we were moving through some cold water and mud to find where this little crawly bit went. After some getting wet, grunting and groaning, we came out in the chamber next to the one that had just come from. It was a good fun little crawl, certainly something I'll remember next time I'm leading people through the cave.

Following this we headed into the middle section of the cave that contains the old and dry rim pools. We must have had some rain down here this year because the pools were full of water. In fact, the whole cave was somewhat active from the rains we had sustained earlier on in the year. After some photos, and some closer investigation of the pools, we moved on, heading towards the entrances near the back of the cave. At this point in time we exited, as Linda needed to go into town to meet some others for a dive at Ewens Ponds. Yep…It was still a near perfect day.

Throughout the entire cave, Ranger Karren was in awe of her surroundings. She was excited about some of the more routine and mundane things that we had seen underground many times before. Karren was eager to learn about the cave, it's formations and history.

Adam Branford.

Lofty's and 5L307

After emerging from Snake Hill Cave (5L119) we enjoyed lunch whilst Linda headed off for her first dive in Ewens Ponds with one of her dive instructors from Adelaide. During this time we got a chance to drill Karren about her background and interests. We then visited a small cave nearby that has some of the best moonmilk I have seen. Again Karren was suitably impressed and could not get over the fact that it was so fluffy and white and reminded her of fresh snow.

From here we moved onto Lofty's Cave. I first saw this cave several years ago. It is only a small cave but is heavily decorated. The first time I saw it the formation was dry but sparkled as though someone had thrown a bucket of glitter over it. Within a relatively short period it became dull and lifeless and in no way resembled the cave I once saw. A few years ago they logged the pines in this area and I have not been in the cave since. I was amazed what a difference a couple of years has made. The cave has come alive again with all the formation dripping wet and glistening, and it is also

obvious that the cave hasn't had the frequent large numbers of visitors it received in the past. Karren too was impressed with the beauty of this little hole and could not get over the difference of the three sites in such close proximity. We spent about an hour in the cave before heading off.

Marie Choi.

Sunday 11th August Sheathers Cave

We woke the next morning to the sound of heavy rainfall pouring onto the tin roof of my house. Good to see that the usual weather was back. After getting ready, we headed out behind the Mount Gambier airport to have a swim in Sheathers Cave. We arrived, got ready, removed the new cover and went in. Sheathers is one of my favourite caves in the South East because… A) It's only about 5 minutes from home …and B) You get wet. We descended the small rock pile and got to the waters edge. The level of the water table appeared to be higher than it was last time, meaning that we probably wouldn't be able to investigate the whole cave.

Adam Entering Sheathers Cave.
Photo: Marie Choi.

I sat on the rock at the waters edge, psyching myself up for what would inevitably be a most painful and unpleasant experience; entering the water. As I slowly emersed myself in the cool, clear fluid, I was very quickly reminded about the large hole in my wetsuit, located in the worst place possible…the crutch. Icy fingers of torture massed around my manliness, raising my voice a few octaves in the process. Marie, Linda and Brigid just sat on the edge, laughing as if this was amusing. They soon realised that the water was every bit as cold as I had suggested. Pretty soon though, my wetsuit had warmed up and I was fine. My extra layer of natural insulation, combined with my thermals and wetsuit ensured that my visit to this cave would be an enjoyable one… and that it was.

In Sheathers Cave. Photo: Marie Choi.

We headed down the main passage, silting up the beautiful clear water as we moved. We then turned the 180-degree corner and went back towards the back of the rock-pile that forms the entrance. Unfortunately it was clear that we were not going to get very far through the cave as the water level was just too high. We did manage to go through some little duck-unders and find other interesting bits of the cave, but at least two thirds would remain unseen on this visit.

After about 45 minutes Linda noticed that she was really starting to feel the cold. We then decided to move back out of the cave and head home. Not quite as easy as that due to the silt that had covered over any trace of rock that was in your way. Ever so slowly we moved out, surfaced and got changed. Once again sheathers cave proved itself to be a whole lot of cold, wet fun! Can't wait to get in there again.

Adam Branford.

Naracoorte Cave Park

On the Drive home Linda and I decided to stop at Naracoorte and catch up with Liz Reed and Steve Bourne. After receiving our usual greeting of "Quick bolt the doors, maybe they'll go away" Steve relented and let us stay. The first thing we noticed was a new book called "Kadimakara" Extinct Vertebrates of Australia going at the princely sum of $25 (it's a hard cover book of almost 300 pages). Linda and I of course both bought copies. Steve and Liz then treated us to a trip into Cathedral cave to see how the cave was coming along since it was tracked marked. I must say the changes over a short time are quite impressive.
After fixing a flat tyre we adjourned back to the house for coffee and photos of the paleo conference that they had been to recently. We also discussed CEGSA members being able to become involved in some fossil work in Blanche Cave or other sites.
We headed off after viewing a variety of smelly carcasses that they are stripping for the skeletons and arrived back in Adelaide around 9pm

Marie Choi.

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Ewens Ponds, Mount Gambier

10/08/2002

If you are ever short of caves to visit in the Mount Gambier area (I don't know how this could be!) or if you have members of your trip not so fond of caving, then I can highly recommend a snorkel or SCUBA Dive through Ewens Ponds. Located just off the Gambier to Port Mac road, it is easily accessible. A small jetty on the side of the first pond allows you to enter this fresh water fish bowl. I was fortunate to SCUBA dive this site with Ian Taylor (Dive Master, Glenelg Scuba Diving Club, GSDC, CDAA) on a recent visit to the area. I had previously snorkelled the ponds but my memory failed me of the splendour held within this site. We saw fresh water eels, crayfish, yabbies, along with schools of fish that had passed up the stream from the ocean. The visibility of this site was incredible (as long as you didn't kick the silt up off the bottom!). The third pond contains a small cave at 9 meters depth, which has unfortunately been demolished. We spent almost an hour exploring the three ponds before exiting via another small jetty in the third pond. I have read that you can follow the system all the way to the ocean but it is advisable to have a car waiting at the other end.

Linda Deer.

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GETTING THE SYSTEM OUT OF YOUR SYSTEM

British Beer, cavin and curries. July 02.

A return to some of the formative caves, beers, curry houses and Karst regions of my twenties namely the hills of Southern England and Wales.

Adrian Willmont, The Landing, Swildons Hole.
Photo: Damian Grindley.

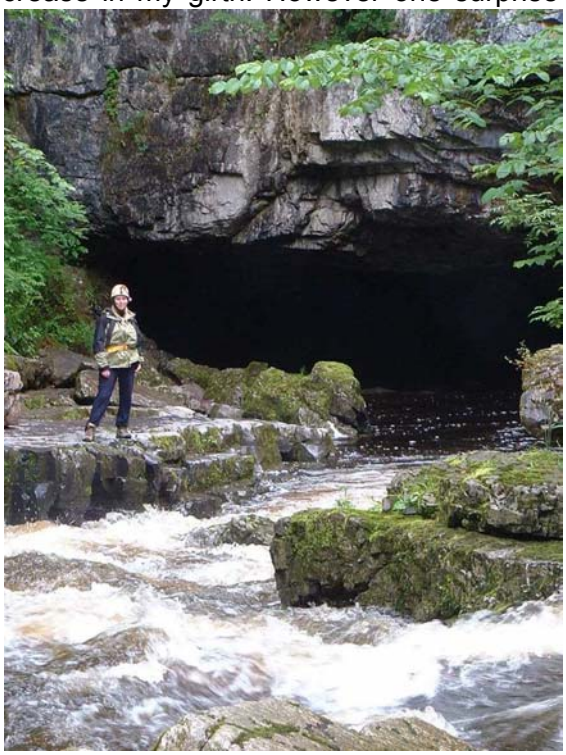
First stop was to Bat Products on the edge of the Mendip Hills to do the touchy feelie thing with all the new gear such as Indian Carbide lamps, cans of Horseshoe Bat soup and select some 2nd hand caving books for in-flight reading. With the associated cave BS the trip here lasted almost as long as the later cave. Such shops are surely lacking in Australia and California!

Chris Seal and myself where soon joined by Adrian Willimont this combined with a chance "in cafe" meeting with John Cooper meant our trip was slowly mushrooming. Leaving Amanda to go tent shopping, its a

pregnancy thing. We headed up the hill to Priddy Green. In all my trips to Swildons Hole I have never seen the local Annual Fair in progress. Our normal parking spot was occupied by hordes of Morris Dancers prancing about with bells on their feet and hitting themselves with sticks. I worry about those guys sometimes. Hummmm, glad we had a barn to change in.

Swildons is a fun cave. It would be hard to do any damage. You can splash around, bounce from wall to wall, dump water on each other and generally be very silly. Such caves are surely lacking in Australia and California. The camera survived freediving sump one (18") but Chris had duff batteries in his slave unit so we were doomed to take happy snappies.

The cave, its pitches and sumps were a tad smaller than remembered. Probably an effect of being involved in larger systems since, rather than an increase in my girth. However one surprise was the amount of passage between sumps one and two. In all a 3 hr trip including photo taking. A trip that would have taken at least ten hours pre 1920's according to my plane time reading. Such are the advances in equipment.



Amanda at Entrance of Porth-yr-Ogof Cave.
Photo: Damian Grindley.

Naturally this was topped off by a couple of warm pints in the pub full of worrisome Morris Men still beating their drums. The Hunters Inn now sports its own cave in their car park. Dug in the Foot and Mouth outbreak last year when access to the surrounding fields and caves was banned. Finally a very decent curry with the tent shoppers in the Royal city of Bath to round off a perfect day.

Midweek was spent mooching around entrances on Llangattock mountain but we did manage to drop into Dragon Caving gear for a fine cup of tea, lots of caving BS and make some major modifications to my lighting setup. This I planned to test in Porth-yr-Ogof (Translates as Gateway to the cave or often known as White Horse cave). Unfortunately the usually dry river Mellte was in spate and we resorted to paddling around the entrances before squelching to the pub. Chris, the nutter, actually spent midweek in South Korea but returned to the Chelsea Hut in Wales by late Friday night to accompany myself and Amanda on our jaunt down Ogof Draenen (Cave of the Hawthorns).

Amanda Grindley exiting Ogof Draenen.
Photo: Damian Grindley.

Draenen was discovered a decade or so ago and we had been intimately involved in extending the system up to and beyond 65km. We would sit in the Lamb and Fox Public house at the end of the day and compare survey notes. " I got 1.1km, We got 500m, They got 800m" would be the electrifying conversation. Unfortunately postgrad studies in Australia pulled me away. But I often dreamt of what was round that bend or behind that choke. Sad git! The pub is incidentally directly above known passage.

A short trip was planned to give Amanda an impression of the cave. No point in looking into those going leads as we could not possibly follow them up correctly. In fact it was very pleasing. The cave is track marked but I had started to notice damage occurring before leaving. It had got no worse. Probably due to the slowdown in exploration, closure due to foot and mouth and caving politics. A five hour trip took us down Gilwern passage covering only 2-3% of the cave but the large booming crystal covered passage did not fail to reimpress. Oh and of course out for opening time.

Damian Grindley.

TECHNICAL and OTHER ARTICLES

MEMBERSHIP

Change in Memberhip details:-

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Welcome to New member:-

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Welcome to New Members:-

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MEMBERSHIP FEES

The ASF have now advised their fees for 2002 as one component as follows:-

Single	$ 56.50
Family	$106.50
Student	$ 50.25
Introductory (Special Rate 3 months)	$ 18.25

These fees are Insurance inclusive.

From this point in time CEGSA will now charge the ASF Fees as above. therefore the fees will be:-

YEAR 2002 CEGSA MEMBERSHIP FEES	CEGSA	+ ASF	TOTAL
FULL MEMBERSHIP	$40.00	$56.50	$96.50
FULL COUNTRY MEMBERSHIP	$34.00	$56.50	$90.50
ASSOCIATE MEMBER	$33.00	$56.50	$89.50
LONG TERM ASSOCIATE	$40.00	$56.50	$96.50
ASF fee for full time students		$50.25	
INTRODUCTORY (3 months)	$6.75	$18.25	$25.00

VARIATION FOR FAMILY MEMBERSHIP	CEGSA	+ ASF	TOTAL
1) First Full member $40 + second Full member $40	$80.00	$106.50	$186.50
Less $16 for only 1 CEGSA NEWS	$64.00	$106.50	$170.50
2) First Full member $40 + Second Assoc. member $33	$73.00	$106.50	$179.50
Less $16 for only 1 CEGSA NEWS	$57.00	$106.50	$163.50
3) First Assoc. member $33 + second Assoc. member $33	$66.00	$106.50	$172.50
Less $16 for only one CEGSA NEWS	$50.00	$106.50	$156.50

Please make sure the payment of fees includes both CEGSA and ASF if applicable. If there are any queries regarding the fees please give me a ring on 8258-9847.

Chris Gibbons.
Membership Officer.

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LIBRARY AND RECORDS

After a six month break, it is pleasing to see the working bees have started again with the first attendees being Chris and Ray Gibbons, Graham Pilkington and June and George MacLucas.

The last few weeks has seen a heavier than usual demand for maps of well visited caves, such as, M1, F3 & 4 and Y1.

Bill Binks handed in an update of Flinders records before he ventured recently overseas. Eddie Rubessa will be the representative officer for Flinders during Bill's absence.

Peter Ackroyd handed in update data of Nullarbor April 2002 trip including entrance photographs of all karst features visited.

David Trehearne passed on free web site information of '*Life on a line'* by Dr. D.F. Merchant, www.draftlight.net/lifeonline. George downloaded this info for CEGSA consisting of 117 pages covering chapters 1-9. Chapters 10-17 not yet offered on web.

Geoff Aslin of Mt. Gambier sent CEGSA a chapter titled 'The wonders of the Nullarbor' from *Australian Caves, Cliffs and Waterfalls* – 10 pages.

Dr. D.M. Kos, author of recordings of sedimentary deposits in McEachern's Death Trap Cave G49/50 kindly sent three original copies for our files.

Apology must go to Simon Kendrick that we did not acknowledge ownership of his kind gesture of submitting a copy of *Glorious Kangaroo Island* as recorded in the last CEGSA Newsletter.

George MacLucas.
Library & Records Officer.

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The Protection of Quarry Cave 5L23

The cave known as Quarry Cave, given the identification number 5L23 by the Cave Exploration Group of South Australia (CEGSA) is located on the Cave Range in the Monbulla area of the lower south east of South Australia. It has formed in dune limestone, with several roof collapse features, tree roots penetrating into one chamber and a chamber showing significant speleothem development.
This cave was discovered around 1908, as evidenced by this being the earliest date found inscribed on the walls. Visitation has been unsupervised, and as has occurred on many occasions, without the landowner's consent or knowledge. Graffiti, mainly in the form of candle smoke was prevalent throughout much of the cave. Most of this appears to be ancient, dating to the 1920's and 1930's. This has been removed over a period of time with the assistance of many volunteers. Some more recent defacing had occurred in the form of engraving.

Tree roots penetrating caves provide important habitat for invertebrates and although no studies have been conducted in this cave, their presence has been noted. On several visits it was discovered cave visitors had pulled roots from the roof, potentially removing invertebrate habitat.

Speleothems in L23. Photos: Athol Jackson.

Tree Roots in L23.

At the known extremity of the cave is a chamber of spectacular speleothem decoration. This includes stalactites, stalagmites and a large area of straws, up to 70 cm in length. Some damage has been caused in this chamber by careless visitors, but fortunately this is fairly minimal to date. No bones or sub fossil material has been discovered in the cave, but the skull of the extinct Toolache Wallaby, *Macropus greyi*, was found in a small cave nearby. (This cave was found in 1998 and gated within a week of its discovery) It is possible that in the future bone material may be found here.

Although the endangered southern bent wing bat, *Miniopterus bassanni* has been recorded from this cave, no records exist during the time of the current owners tenure.

The gate was designed to allow natural airflow and not disrupt the cave's natural environment and allow movement of any animals that use the cave as habitat. This could not be done to allow access for bats as they are very sensitive to cave gating and unlikely to fly through a gate that is restrictive to human access. As a significant wintering site for bats exists within 500 metres and they have not been recorded in the cave for many years, it was not regarded as an important consideration.

L23 Entrance. Photo: Steve Bourne.

Now that the gate is in place, a strict control over the number of visitors can be maintained and damage to the cave is minimised. Quarry Cave is a significant karst feature that is now afforded considerable protection that will only be accessed under the supervision of experienced speleologists.

Steve Bourne.

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Fossil Trips to Naracoorte

If you are interested in learning more about our fossils and wish to participate in activities such as digging for fossils, sorting, sifting silt, fossil preservation then contact Liz Reed at Naracoorte caves on 8762 2340

Or email her at liz.reed@flinders.edu.au.

Identification of some mineral samples taken from Nullarbor and Naracoorte Caves

By J.E.J. Martini

The following lists more than 60 mineral samples taken from several Nullarbor and Naracoorte caves by the author during a visit to Australia in 1996. The samples were identified in the laboratory of the Council for Geoscience, Pretoria, South Africa, using X-ray diffraction and, in two cases, by chemical analysis. Dominant components, which gave a complete X-ray pattern, are underlined; those in brackets are minor or trace components only. Where a single phase in a sample is not underlined, this indicates that that the mineral did not produce strong lines in the X-ray pattern, possibly because it was diluted with unidentified amorphous phases.

Nullarbor Caves

Old Homestead Cave (6N 83)

First Chamber in the South Cave:

1) Monocrystalline crusts on a block and on the soil in the middle of the first chamber – **calcite**.
2) Fine powdery crystalline material trapped in spider webs – **calcite**, **gypsum**.
3) In the constriction just beyond the first chamber, a saline efflorescence on the wall – **thenardite** (Na_2SO_4), **(calcite)**, **(quartz).**

Side passage near entrance to the Spring Series:

1) Saline efflorescence at the ceiling – **thenardite**, **(gypsum)**, (**calcite).**
2) Saline crust on the floor - **thenardite**, **calcite, (quartz)**. Calcite and quartz are probably detrital.
3) Crust on the ceiling – **calcite**.
4) Saline 'cotton' at the foot of the wall (fallen from efflorescences on the wall) – **thenardite**, **gypsum**.

North Cave, between RDF N and the Vengeance Series.

1) Efflorescence on the wall – **thenardite**, **(calcite).** Calcite is detrital.
2) Efflorescence on the wall – **mirabilite** ($Na_2SO_4.10H_2O$), **thenardite**.

Upper section, near 'The Drain'.

1) 'Potsherds' (beige coloured) – **calcite**.
2) Curled red-brown cracked mud, forming a layer above the 'potsherds' – **kaolinite** [$Al_2Si_2O_5(OH)_4$] (poorly crystalline), **(quartz)**.

Vengeance Series.

1) White crystalline plates – **gypsum** (could either have been rafts, or flakes fallen from the wall).
2) White crystalline plates – **calcite** (this had a typical 'raft' cross section, flat on one side and with small crystalline protrusions on the other).
3) White powder on the floor – **thenardite**, **calcite**, **gypsum**.
4) Soft beige crust on the floor – **calcite**.
5) Cone of beige powder – **calcite**, **gypsum**.
6) One centimetre banded white/brown crust on cracked mud – **calcite**, **gypsum**.
7) Crystals at the ceiling – **calcite**, **(gypsum)**.

Comment

No halite (NaCl), which is abundant in many other Nullarbor caves, was observed in any of the saline efflorescences, possibly because of the considerable distance of the cave from the sea.

Thenardite ($NaSO_4$) was the dominant form of sodium sulphate found and is not likely to be due to post-sampling dehydration of mirabilite ($NaSO_4.10H_2O$) since the samples were well sealed and did not show evidence of decay from mirabilite. The predominance of thenardite over mirabilite

indicates a dry atmosphere and relatively warm temperature (no surprise to anyone who has been in Old Homestead Cave!).

The finely crystallised calcitic nature of the 'potsherds', as well as their morphology, suggests an origin from a purely calcitic mud (no clay minerals were observed) deposited in the past, then curled after desiccation, and hardened by partial recrystallisation of calcite. The mud most likely originated from erosion of the soft chalky limestone when the system was active.

Kaolinite has been washed in from the surface, perhaps indirectly by erosion of the phreatic anastomoses filled with red earth. They are exposed at the entrance and in the upper levels. Kaolinite normally forms in well-drained soil in a humid climate, not in the semi-arid conditions prevailing today. So it is probably a relict of the past.

No phosphate minerals (commonly derived from guano) were observed, even in the large chamber at the beginning of the South Cave.

Thampanna Cave (6N 206)

Enigma Chamber

1) Chalky crust at the ceiling – **gypsum**.
2) Chalky crust – **gypsum**, **(calcite)**, **(quartz)**. Calcite and quartz are detrital.

Comment

Calcite, which is brown or reddish-brown in colour, and sometime so dark as to appear black, forms speleothems filling older karst channels intersected by the actual cave. The pigmentation is almost certainly due to organic matter leached down into the endokarst domain in the distant past under a more humid climate. On the surface one may visualise that a well developed residual soil may have covered the karst. In this soil the conditions would have been acidic and therefore organic matter could have been dissolved and re-precipitated at depth due to pH increase following contact with the limestone.

Goat Cave (6N 745)

Bat Aven

1) Guano containing a crystalline material – **aphthitalite** $[(K,Na)_3Na(SO_4)_2]$, **stercorite** $[H(NH_4)NaPO_4.4H_2O]$
2) Brown crust on a rock (two samples) – **gypsum**, **apatite**.
3) Beige powder on guano – **stercorite**, **aphthitalite**.
4) Crust on guano – **stercorite**.
5) Eroded crystalline crust – **gypsum**, **calcite**.
6) Crust on guano – **aphthitalite, stercorite**.
7) Crust on rock – **gypsum**, **apatite**.
8) Black crust on guano, **gypsum**, **apatite**.
9) Shiny efflorescences on the wall – **halite**, **(calcite).** The calcite is almost certainly detrital.

Final Chamber

1) Shiny crystals in red earth – **quartz**, **halite**, **gypsum, (calcite)**. Quartz is detrital
2) Crust in alveole at ceiling – **calcite**, **gypsum**
3) Crust below guano – **calcite**, **apatite**, **gypsum**.
4) Crust on guano – **aphthitalite**, **halite**, **quartz**, **calcite.** Quartz and calcite are detrital).
5) Crust on block – **calcite**, **gypsum**, **(apatite)**.
6) Saline crust on block **– halite, quartz, calcite (gypsum)** Quartz and calcite are detrital.
7) Loose beige powder on soil – **quartz** (detrital), **gypsum**.
8) Finely crystallised crust at the ceiling – **gypsum**.
9) Crust on block – **gypsum, apatite.**

Comment

Aphthitalite and stercorite are formed by evaporation of water containing sodium in contact with guano. In Goat Cave, apatite (which is formed when phosphoric acid, leached from guano, comes into contact with calcite) was always associated with gypsum. The sodium in aphthitalite and stercorite may have originated from rainwater, which is salt-rich when close to the sea, but a contribution from seawater conveyed inland as spray is also possible. The presence of halite crusts supports the proposed origin of sodium from sea water. Sulphate in the gypsum associated with apatite may also originate from sea spray, but a partial source from guano cannot be excluded.

Abrakurrie (6N 3)

1) Thin (1-2 mm), brown finely crystallised crust on a block near the entrance. – **gypsum**, **kaolinite**, **apatite** Kaolinite is detrital. Apatite suggests phosphatisation by bat guano.

Weebubbie (6N 2)

1) Brown crust near entrance – **gypsum**, **apatite**.
2) Crust on chalky block – **gypsum**, **calcite**.

Comment

The gypsum associated with apatite in sample 1 may have derived sulphate from bat guano, whereas that in sample 2 presumably derived sulphate from other sources.

Naracoorte Caves

Blanche Cave (5U 4)

1) White chalky efflorescences on the floor, 5 m from the stairway entrance – **gypsum**, **(quartz)**, **(calcite).** Quartz and calcite are detrital.
2) Hard white moonmilk from the ceiling, 15 m south of the 'phosphate pit' (see comments below) – **calcite**.
3) White chalky efflorescences on the floor, near the second entrance – **calcite**, **quartz.** Quartz is detrital.
4) White powder, part of a 'pseudo-stromatolite', beyond the furthermost entrance – **calcite**.
5) Orange, slag-like coating on the wall of the 'phosphate pit' - **apatite**, **gypsum**.
6) White chalky nodules on brown earth at the bottom of the 'phosphate pit' – **taranakite** [$(K,NH_4)Al_3(PO_4)_3(OH).9H_2O$)].
7) Thin crust relict on the roof above the phosphate pit – **gypsum, (calcite).**
8) Hard brown resinous crust on limestone wall in the 'phosphate pit' – **apatite**.
9) White nodules on brown soil on the bottom of the 'phosphate pit' – **gypsum**, **montgomeryite** [$Ca_4MgAl_4(PO_4)_6(OH)_4.12H_2O$].
10) Brown crust relict on corroded speleothem near the 'phosphate pit' – **gypsum, apatite**.
11) Grey-blue crust on the wall of the phosphate pit – **apatite**, **quartz.** Quartz is detrital.
12) White chalky efflorescence on the wall of the 'phosphate pit' – **apatite**.

Comment

Phosphate minerals are concentrated at or near the so-called 'phosphate pit', a 2 m deep pit near the end of the cave. The presence of these phosphates indicates that there was once a guano deposit at this location (see comments under 'Goat Cave'). Corrosion of the speleothem from which sample 10 was taken can also be attributed, at least in part, to guano. Apatite has formed against the limestone walls of the pit, while taranakite and montgomeryite are in the soil at the bottom where aluminium is available from clay minerals.

Samples 8 and 12 were analysed for H_2O, CO_2 and F. The percentage composition was:

	H_2O	CO_2	F
8)	1.89	2.67	0.03
12)	2.72	1.13	0.04

These samples are therefore forms of carbonate-hydroxylapatite, the most common mineral of the apatite group found in caves.

Wombat Cave (5U 58)

1) Soft very fine moonmilk at the ceiling of the main chamber – **calcite**.

Beekeeper's Cave (5U 15)

1) Crust on boulder – **calcite** (**quartz**). Quartz is detrital.
2) Brown crust on boulder – **calcite**, **dolomite**.

Comment

The dolomite may have been formed by evaporation.

Blackberry Cave (5U 8/9)

1) Blocks of moonmilk forming a debris cone originating from a flat hole in the ceiling (= 'hopper') – **calcite**.
2) White cotton-like growth on the ceiling, near the steel gate – **calcite**.

SOS Cave (5U 132)

1) Moonmilk coating at the ceiling – **calcite**.
2) White discoloured limestone or moonmilk – **calcite**.
3) Black popcorn in Aussie's Crawl – **calcite**.
4) White, mould-like efflorescence at the ceiling – **calcite**.
5) White soft coating at the ceiling – **calcite**.

Samples 1,2,4 and 5 were taken from the upper rockpile chamber at the north-eastern part of the cave.

Microscopic texture of moonmilk

Sample 1 from Blackberry is typical calcite moonmilk. Sample 2 of the same cave looks like mould but is not. It might have once been mould or some other filamentous organism that has precipitated calcite. Microorganisms have previously been described in moonmilk, and some authors are of the opinion that they play a role in precipitating calcite in this finely divided form.

Acknowledgment.

These notes were edited by Mark Sefton. We thank Brian Clark for permission to take samples from Blanche Cave, Wombat Cave and Blackberry Cave for analysis.

Biographical

Jacques Martini is a caving friend of mine from my South African days, recently retired to the South of France where he is still happily caving. He was a Deputy Director of the Council for Geoscience in Pretoria, South Africa (formerly the Geological Survey of South Africa), has explored and surveyed over 100 km of cave in that country, is an author or co-author of more than 40 articles on cave minerals and speleothems, and was a major contributor to the second edition of 'Cave Minerals of the World'.

Mark Sefton.

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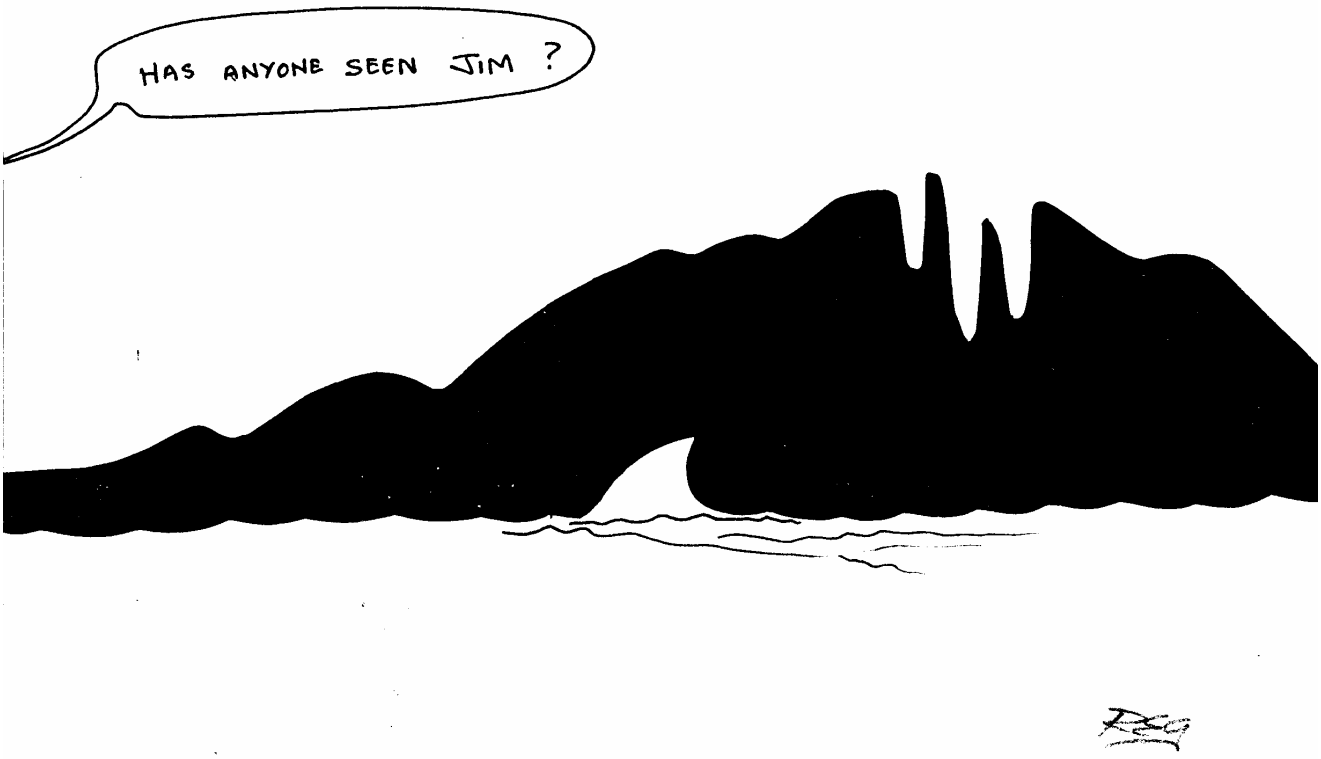

Cartoon by Robin Gray. Anyone for Sheathers Cave?

Karren Laudenbach. (Ranger Karren)

Earlier this year, us country bumpkins in the South East were saddened by Trevor Wynniat's decision to move to Adelaide to take on a role at Mt Crawford forest reserve. Trevor had been a real friend to the cavers down here and naturally we were worried about who would be replacing him. Well…we need worry no more. May I introduce our new ranger; Karren Laudenbach.

Karren Laudenbach in Loftys Cave.
Photo: Marie Choi.

Karren was born in country N.S.W. several years ago, and moved to S.A. when she was nineteen. (Again…several years ago) She started off her career as a Youth Worker, dealing with young offenders, but soon realised that she wanted to work somewhere in Natural Resources Management. It was here that Karren decided to take on university, studying Natural Resources Management.

Once qualified she went to work at Belair National Park, moving to Cleland after 18 months. Following this, Karren won a temporary position for 12 months in the South East. She is immensely enjoying her work in Mount Gambier and is eager to make a difference while based in the South East.

Karren enjoys a variety of pastimes not usually associated with females. On a weekend you'll not find her staying at home with the kids or making herself a dress. You will however, find her riding her Honda XR250, shooting, watching the Rugby, patrolling around the forests or enjoying a quiet bottle or two of rum.

First impressions indicate that Karen will be a real asset to the caves and cavers of our region. On this trip she seemed really interested in caving and in protecting the caves of the Lower South East region. I suspect that when available, we will see her on more trips in the future.

Adam Branford.

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Stocktake

The Quartermaster wants to update the register of all CEGSA assets.
Would any member who has CEGSA property in their possession, or who knows where property is please contact the QM so that its location can be recorded.
This includes caving equipment, survey equipment, digging gear, keys, radios, Cave tags, stretchers/dragmats and anything else that belongs to the club.

If you have books, maps or records contact the Librarian / Records Officer.

Paul Harper.
Quartermaster / Key Holder

CALENDAR OF EVENTS

Date	Type of Event	Description	Contact
28/08/02	General Meeting	Old Queens Arms Hotel, 88 Wright St. Adel.	Marie Choi
31/08/02	Working Bee	Library and Records	George MacLucas
31-01/08	Survey & Exploration	Mt. Gambier	Marie Choi
10/09/02	Committee Meeting	Old Queens Arms Hotel, 88 Wright St. Adel.	Marie Choi
25/09/02	General Meeting	Old Queens Arms Hotel, 88 Wright St. Adel.	Marie Choi
28/09/02	Working Bee	Library and Records	George MacLucas
28/09/02	Social Caving Day	Corra Lynn	Marie Choi
5-7/10 02 LWE	Survey, Exploration & Recreation	Mt. Gambier	Marie Choi
9/10/02	Committee Meeting	Old Queens Arms Hotel, 88 Wright St. Adel.	Marie Choi
23/10/02	General Meeting	Old Queens Arms Hotel, 88 Wright St. Adel.	Marie Choi
26/10/02	Working Bee	Library and Records	George MacLucas
26/10/02	Social Caving Day	Corra Lynn	Marie Choi
13/11/02	Committee Meeting	Old Queens Arms Hotel, 88 Wright St. Adel.	Marie Choi
13/11/02	CEGSA NEWS	Articles due	Athol Jackson
27/11/02	General Meeting	Old Queens Arms Hotel, 88 Wright St. Adel.	Marie Choi
30/11/02	Working Bee	Library and Records	George MacLucas
	Caving	Ongoing Vic Fossil Survey contact	Garry Woodcock
	Caving	Regular trips to 5A25 contact	Grant Gartrell
25-27/01 03 LWE	Survey, Exploration & Recreation	Mt. Gambier	Marie Choi

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. You must also be an accredited trip leader with the appropriate skill endorsement to take a party underground. Also, please make sure that a report of the trip is submitted.

Please submit your list of future trips early so they can be included in the calendar.