

CEGSA NEWS

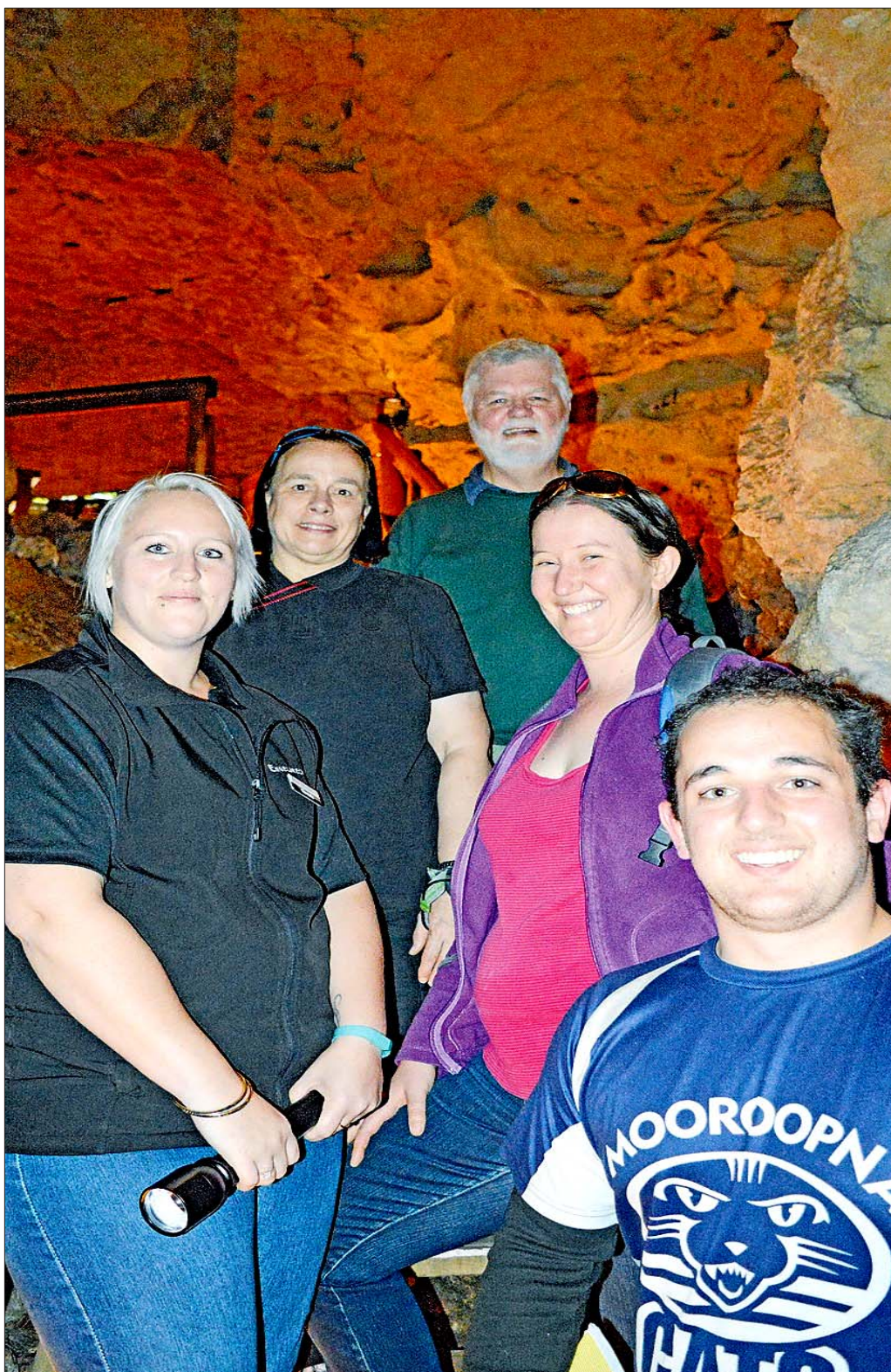


Newsletter of the Cave Exploration Group (South Australia) Inc.

Volume 61 Number 2

Issue 242

MAY 2016



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.

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Website Trip Log	All Trip Coordinators	See list p9

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SA Scout Liaison	Ian Lewis	As Above

Cover Photograph: Engelbrecht Cave tour guide Chantelle Fennell with La Trobe University senior lecturer Dr Ruth Lawrence, cave-diving geologist Ian Lewis and regional catchment studies students Frances Tancock and Lachlan Parker in the cave's eastern chamber. (see article Page 38)

Photo: Leon Rademeyer (*The Border Watch*)

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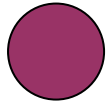
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QUARTERMASTERS NOTE.

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 61 Number 3 (Issue 243) must reach the Editor by Wednesday **10th AUGUST 2016**. 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 a memory stick or CD, in Word *.doc(x) or *.rtf files. Of course other forms of communication will still be gratefully accepted. Photographs are preferred to be in colour as separate files and note in the article where to be inserted. (*.jpg format under 500Kb unless for the cover). 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

At last you all say, a new face at the desk! I can particularly hear the sighs of relief from Graham Pilkington and Mark Sefton who between them have shared the CEGSA Presidency for years. I am delighted to give both of them a well-deserved retirement and note that already are disappearing off on extensive caving trips – and GOOD ON THEM. They did a fantastic job and are excellent support for me in a role which I'm learning about. As many of you know, I now generally confine my actual caving activity to standing-height chambers only with the excuse that I am contemplating the geology in great detail and cannot divert my attention to that horrible crawly little grot-hole that the rest of you are urging me to inspect. One of the advantages of building our geological knowledge base cave is that I have the luxury of looking at the easy stuff first! I successfully used this strategy as a cave diver with the CDAA for decades and can still use long geological words to try to impress everybody.

I had a long chat with Mark the other night after a Committee meeting. We reflected on the last five years or so and how pleased we are to see South Australia's three caving organisations working together or in various combinations across the State and beyond, both in caving trips and policy issues with owners and management groups. It is absolutely terrific to see a combination of scouts, Flinders Uni students, all our collective capable leaders with good caving knowledge and to accompany them as a grey hair to provide some of the history and background to South Australian speleology. And as President I never lose a chance to build the awareness of speleology and karst in this State through my contacts across government and at various Parks and Geology conferences, which also all helps with all our access and scientific permit negotiations etc.

I got into caving through Scouts with Ken Heyne in the South East in 1966 which is 50 years ago for heaven's sake! So this is my half-century celebration year. Whew – I think I'll just sit down actually. I have never forgotten that gift which Scouts gave to me – those first couple of caving trips have shaped the direction of my life, work and research, above and below water ever since. Great to be a part of them again and to see them a part of CEGSA and speleology! This is also an excellent spot to also give great credit to our Life Member Fred Aslin who taught me the elements of cave surveying and many facets of speleo-science which I continue to promote to anyone in earshot whether that are a caver or not. And one other thankyou - as a teenager when our family moved from the South East to Adelaide, I walked into my first CEGSA meeting already as a member but knowing nobody up here in Adelaide. I will always remember a cheerful, welcoming face almost as soon as I entered the room and that was Grant Gartrell. That made a great impression, Grant - that warm welcome was so important and you see the results 50 years later. That is why I also am keen for us to encourage welcoming new faces and working with our other groups caving in South Australia. We can now offer them caving trips and training through Scouts and FUSSI as well as CEGSA which is a great threesome!

Best regards to all from

Ian Lewis.

TRIP REPORTS

WEE JASPER NSW - 19TH – 20TH DECEMBER 2015

PARTICIPANTS

George & June MacLucas (CEGSA)
 Bruce MacLucas (son of George & June)
 Cathy Brown (HCG – Highland Caving Group)

CAVES VISITED.

WJ 1 - Dip Cave
 WJ 7 - Signature Cave
 WJ 8 - Punch Bowl Cave
 WJ 100- Careys Cave

REPORT

On arrival to area we decided to go to the tourist cave **WJ100 Careys Cave** first before we picked our camp site. Normal trips in tourist cave was around 1 ¼ hours, but as we had some mutual friends with the guild we finished up underground for 5 hrs. The guide trip was by Geoff Kell. I have to say Geoff was a guide extraordinaire, he specialises in school trips and has many tricks up his sleeve on cave formation. As an adjunct to tours he has an "Underground Workshops" which allows visitors to handle and to discuss rock and crystal samples. I was impressed how today we have our own personal light or tourists caves have lights set up, but Geoff in one specific area started with one candle, dull as one thinks this light used by early cavers would have been. By the end of the demonstration we had nine candles and now we had a very good viewing of this specific area.

The latest booklet on Wee Jasper Caves has a reference to some of the problems early visitors had; namely coming out of the cave and find one of your horses had done a bolter. I can relate to this as my 4WD had problems with clutch on way to Canberra (where we were staying at our son's house) the problem cleared (spring adrift maybe). Then when the next day the clutch played up again, so with the hilly area and no phone access area, I drove back to Canberra in 2nd gear. A worry at times with vehicles rushing up behind us, even though I had Hazard Lights flashing.

SECOND DAY

Signature Cave WJ7 Signature Cave is so called because of the multiplicity of names and dates and hand prints of its walls which was known in the 19th Century. At our visit the cave, specially at the entrance, was very muddy and slippery which only two types of foot placements, one muddy or the other with polished rock edges. To get to the upper level our son Bruce climbed up a chimney, the rest of us mature people went back to the easy way up near the entrance.

Punch Bowl Cave WJ8. This cave and WJ7 are close together on the eastern side of Punchbowl Hill. We only stayed around the entrance.

Dip Cave WJ1. The name of this cave is assumed to be because the caves location is in "The Dip Paddock" after the location of a large sheep dip in the early days. Again we only stayed around the entrance.

George MacLucas.

Editors note: Photos were provided but proved to be unsuitable for reproduction.

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NARACOORTE 27 – 28 February 2016

Caves visited – U32, U83, U240

The last time I visited U83, Schultz's Cave was sometime in the late 1970's or early 1980's. I wanted to confirm the location for OzKarst and check on the cave's status as the property is now a vineyard as part of the Hollick estate.

The vineyard manager, Stuart, has been there since the vineyard was planted in 1998 and could not recall any cave on the property. It is assumed the previous owners filled the entrance prior to developing the vineyard. A location for the cave has been derived from previous location data. A copy of the location relative to the vineyard layout has been provided to the vineyard manager.

I also visited Henschke's Quarry to confirm the location of U240. When Ian Lewis started his thesis some decades ago he used a surveyor to record cave locations and levels using survey grade differential GPS. Several caves in the quarry were recorded. I was unclear if one of these was U240. David Henschke showed me the location of U240 and the cave was located with GPS and photographed. This confirmed the cave located by Ian was not U240.

CEGSA visited U32 on several trips during 1957 (Records p136, 174). The cave was well described but the location was not clear. There is no record of any one having visited the cave since. I contacted Alan Possingham the current owner and arranged to have a look at the cave. Alan (seven at the time) remembers the group visiting the cave when his father was described by CEGSA as the younger Mr Possingham.

We drove to the cave which is located in a runaway in the eastern side of the dune. The entrance is in a wall 4m long x 1.5m high and is a hole about 0.5m diam that is now partially blocked. From Alan's description the valley would fill with water to a depth of up to 6m. This would suddenly let go and the roar could be heard a couple of kilometres away. The entrance was located with GPS and photographed. The second feature recorded in 1957 was located. This cave has been filled as it is on a road reserve and was a potential hazard to vineyard traffic.

Mr Possingham showed me to recent collapses (2004) which were located and photographed. The first feature is a depression 12m diam x 0.7m deep with a hole 1.5m diam x 6m deep and appeared to continue to the east. There was limestone at the bottom. A calf was rescued from this hole. The second feature was 1.2m diam and 1.5m deep.

A very deep tube in the vineyard next door was also located. This tube has been filled in.

Kevin Mott.

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COONALPYN 3 Mar 2016

In July 2007 Fred Aslin investigated a series of cave reports from the Coonalpyn area (Trip Reports p.880). One of these was a series of holes on a property that had recently changed ownership. Unfortunately the features could not be visited as the area was under crop.

We were finally able to arrange a visit to the property during a trip to Adelaide when the area was not under crop. I arranged to meet the owner, Ray Kernick, and he took me out to the area. He started to show me an old clay pit that had been filled but I explained we were looking at documenting natural features such as caves and collapses. If the clay pits intersect cavities then, yes we were interested. There were four features that were documented on this trip.

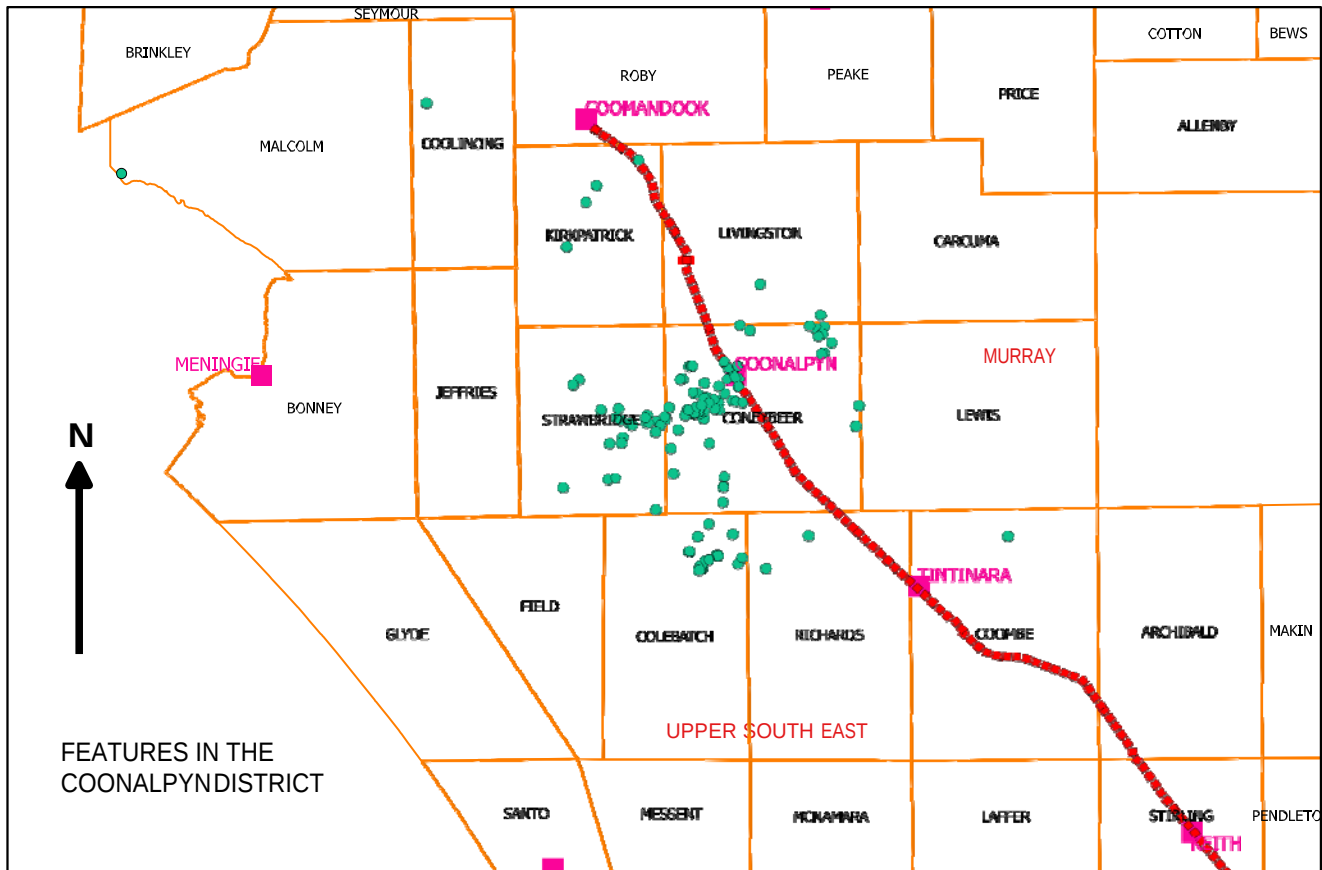
- Feature 1. A tube 0.6m diam x 3m deep that fell in between seeding and harvesting in 2013. It has since been filled in.
- Feature 2 A tube 0.3m diam x 3m deep. It fell in about the same time as feature 1 and has also been backfilled.
- Feature 3 Doline 20m x 15m x 1.5m deep. The western end contains wire from a former dividing fence that was removed by the previous owner. There is no rock but the feature is in an orange sandy clay. Some small holes are appearing on the west end and appear to be subsidence of fill into buried wire.
- Feature 4 Tube 1m diam x 5m deep that has now been backfilled.

These features appear to be in the Quaternary deposits of the Renmark basin. As they are located south of the Dukes Highway they fall within the Upper South East Region. There are approx. 145 features in this area, some in U, some in M. The boundary of the U/M areas is the Dukes Highway. The caves are similar to many of those in the Murray Plains area but given their discreet clustering

are probably worthy of their own area classification. The area is within the Murray Basin but the difficulty has been finding a geological boundary to define the area. The majority of features are clustered within the following hundreds: Kirkpatrick, Livingston, Strawbridge, Coneybeer, Lewis, Colebatch, Richards and Coombe. There are a couple of isolated features that could remain within the current M and U regions. The area has a raised plateau NE of Tintinara with the balance being Quaternary dunes and sands overlying Tertiary limestone. Surface landform is similar to the rest of the Murray mallee.

I suggest that a new area that encompasses the recorded features be defined and excised from the Upper South East and Murray Plains areas. The new area could be named Coonalpyn (C) as the township is central to that area. The area could be defined by the boundaries of the hundred listed above. Any feedback or suggestions would be welcomed.

Kevin Mott.



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Nullarbor trip from 7-26 April 2016

Participants: CEGSA: Graham Pilkington and Ray Gibbons
 SUSS: Alan Pryke
 VSA: Peter Freeman {13-25 April}

Alan flew over a couple of days early to help with preparation for the trip. Ray was initially a doubtful participant because of a medical condition but recovered enough during the delayed start.

After an overnight stop in a Parking Area near Nullarbor Roadhouse we stopped off at the Campbell's to obtain last-minute permission to travel across their lands to the caves that we had a WA DPAW permit to enter. I also obtained a final quote from Bree for accommodation at Mundrabilla Homestead for the Nullarbor field trip participants following the 17th UIS Congress next year.

Witches Cave, N193

Our prime aim for this trip was to complete the survey of Witches Cave that we started last December. This was expected to take us 4-5 days depending on the complexity of the northern part of the cave that we had not visited but knew went 100m beyond our last survey station. We also needed to complete the northern leg of the "loop traverse" by joining our surveys to the east and west

of it. These northern tasks were completed successfully but in the process we discovered two previously unentered parts of the cave, both of which vie for being the most northerly. The survey produced a central traverse as well as a northern option for the loop.

Also needing completion was the new extension coming off the south-eastern corner found on the December trip. This we did, tripling the extension size in the process and almost joining back into the second chamber (the first chamber past the entrance scree chamber). It appears that some small animals have been getting through this potential join because we found their trail on both sides of the "link" but of course too small for us to follow. I was pleasantly surprised to be able to contribute to the survey of this area after being told in December that both access constrictions were NFG (Not For Graham). It turned out that one was passable by me after removal of a small floor bump. In this part of the cave, a chamber has been named the **Quickdust Chamber** in recognition of a patch of floor measuring approximately 3x1.5m that had the unusual property of looking like any other patch of flat floor but if you step on it, it's like there's nothing's there until your foot lands on rock 0.4m down. At least it was 0.4m where it was stepped on; a measuring rod is needed to better test the depths. A sample of the dust has been submitted to Mike Snow for analysis.

A passage that needed completion was in the ceiling of the second chamber. I'd started this survey with Megan last December but in following the larger tube we discovered several negotiable dropdowns into the chamber below and it ended as a shelf in the roof of the chamber. We wanted to tie the end station of the tube into main chamber below hence we dropped into it and did so but never went back up to see where the side tunnels went because we had to survey the main chamber to create the tie! This also distracted us into not examining the wall next to the initial climb-up point into the tubes. Alan did this as we went to complete the tube survey and found a NFG drop into another chamber that we were not aware of but had previously been entered by someone. While Alan and Peter commenced the survey of this surprise, I converted the NFG into a FG with final help by Alan who removed a lip from the bottom rock ledge. In completing the survey of this chamber – which gave us the most westerly part of the cave – we located a scree slope giving an alternate access back out into the main chamber. However, it would have been very difficult to have established this path from above.

I saw a cave-adapted cockroach well inside the cave. It was light-brown, about 4cm body-length, had feelers ~6cm long, and all skinny legs ~4cm long.

We spent 10 days this trip surveying Witches. Peter joining in with the fun on the 13th when I took him on a tour on a day off I was having while Alan and Ray were off surveying the NFG southern extension. We tried to make sure that we'd left no loose ends but on checking the survey back home a few bits of wall were found that need to be checked out. The cave now covers an area of about 290m EW and 330m NS.

Webbs Cave, N132

To enable us to spend more than a couple of days at Old Homestead Cave, we had to shorten our stay at Webbs Cave to 3 days and skip the planned survey of Snake Pit. Other than a couple of minor spots of wall detail, all that we had to do at Webbs was to check out 3 possible leads that we had left because in each case a "thicket" was in the way. A "thicket" was the label what we had coined for patches of cave typically 0.4 to 1.5m high where the passage or chamber was so densely filled with thin columns (usually 1 to 10 cm across) that you could not see any walls nor what was happening to the passage. These parts of the cave require VERY careful negotiation to prevent damage as well as tortuous paths to get through, which is often not possible. In some cases we'd been able to find an alternate route but in 3 instances the previous surveying had left them as possible leads.

We only got to tackle one of the 3 thickets because it went in two places that joined together further south. This was the **Thicket** itself at which the term was first applied at the south end of the **Arboretum**. In two days we managed to map about 300m of tunnels and left going leads. One thicketed passage went about 100m to the west nearly parallelling the other two to the north, however most of the newly discovered tunnels were south of the **Thicket** making this area the most southerly part of the cave..

We also mapped a chamber and tunnels in the main part of the cave in a slab-pile that exists beneath a couple of higher chambers. Normally I would say in a rockpile but in Webbs many areas consist of large fallen roof slabs instead of the usual jumble of rocks, and in places several layers, not levels, of cave exist between the slabs each with their own set of speleothems.

The cave now covers an area of about 580m EW and 380m NS.

Old Homestead Cave, N83

We arrived with enough time to set up tents, clean out the shed, and unpack the trailer in the light. This was a surprise because of the late start after surveying in Webbs all morning and expecting Peter to drive at a very sedate speed, which he didn't. Ray had been unwell for a few days and spent his time at camp recuperating instead of going underground.

The main task of the trip was to continue resurveying the Spring Series south of **Central Station**. During our stay, we managed to survey down into the first part of the **Mouse Holes**. This expanded the map supplied by Narrabundah College, fixed up much crude wall detail and replaced a few bad loop errors. They'd sketched at 1:500 which was not adequate for the small passage size and complexity; we mapped at 1:200. They'd also explored but not mapped many of the small side tunnels. And it should also be remembered that most of the school kids were probably on their first caving trip as well as their first time handling survey equipment.

One day instead of helping out with the Spring Series survey I did a survey traverse from the bottom of the South Cave entrance rockpile through **Lizard Link** to the start of the Spring Series to solve an elevation loop error (via the **Improbability Drive**). This error had created a 7m uncertainty in elevation for all the Spring Series and beyond. The error was located and fixed but also showed that the **Lizard Link** has an error in mapping probably caused by an unrecorded leg along the low tunnel.

I also took us on a "tour" of the North cave out past RDFND so that Peter could see some major tunnels as well as mouse holes. I took the opportunity to do a DistoX traverse starting from RDFNC so that I could solve survey discrepancies by tying in many old survey stations from a mishmash of small surveys made by many different teams. On the tour I discovered what might be a shark's tooth - this has been handed over to the SA Museum.

A couple called in to use the Public Toilet at the Hut. They had travelled up to Forrest only a few minutes ahead of us a couple of days earlier but had used the southern track instead of the one going past the hut. However, on their return from visiting their relatives who had recently taken over managing Forrest, they came by the hut to visit the cave. Visit is probably the wrong term to use; they took a quick look down from the lip. We saw no one else but Ray thought that he had heard a vehicle on the south track one day.

Planning for our return home, Alan and Peter requested a visit to a typical "large Nullarbor cave", Abrakurrie being the most desired. I considered the options and timing and decided to leave a day early so that we could comfortably visit Abrakurrie. This also reduced the possibility of getting trapped on the Nullarbor by a rain storm and Alan missing his flight at 9am on the 27th from Adelaide. But which way to go? Peter only had one spare wheel and a "limp-along" at that. This ruled out the Link Track. I then had to decide if we travelled down to the Highway and back to Abrakurrie from Eucla to minimise travel on rough tracks but estimated that this would only save at the most 10km from the option of travelling directly along the Old Coach Road; so the OCR it would be, saving an hour in travel time and 10lr of fuel per vehicle.

Last Tree Cave, N2121

After deciding not to return to Eucla via the Link Track, Ray mentioned that we would pass close by Last Tree Cave and could check it out. We walked out the kilometre to it from the Mundrabilla Track and discovered that it was blowing one of the strongest air blasts that I've noted. The entrance is off a rock filled doline of about 6m diameter that slopes in from the east under the rock lip a couple of metres down and just doesn't stop going down until it reaches a depth of maybe 30m in a single large chamber typically 3m high and at a guess, 50m diameter. At the bottom are the WA Museum's excavation sites carefully marked by red disks. We stayed away from those and off all the sediment beds. The only place that we located any internal air movement was along the lowest walls near to the fossil sites. The fossils were probably located there not because trapped animals were following the breeze "out" as can be the explanation in many pit-trap caves, but because that is where the surface runoff ends up.

Chowilla Landslip, N17

We arrived at Chowilla at dusk and stopped so that our Nullarbor newbies could see what a real hole looks like. Alan and Peter were most impressed but we could only stay for a few minutes because we wanted to set up our tents while we could see the ground clearly – there are lots of low spiky plants around that are deadly to tent floors.

Abrakurrie Cave, N3

I'd decided that an evening tour of Abrakurrie was our best option. This meant that we would have just enough travelling time next day to get to Kimba before dark followed by an easy last day back into Adelaide so that Alan could do some preparation for his flight back to Sydney very early the next morning. It also gave us time to copy and examine the survey data.

I was surprised at the lush vegetation and bush at the drop-off at the south end of the "valley" and in the doline itself. Alan as usual rushed down into the cave while Peter and I took our time to look around and descend with a bit more caution. Ray had stayed back at camp. We caught up with Alan in the final dome as he set up his camera. Peter acted as light-man and model while I toured the walls and noted what I could see as my lights failed. It was handy having three independent light sources because I hadn't brought any spare batteries and was using my lights from the Last Tree exploration. With only one light left – my weakest, I'd been using the others at full power in the huge cavern – I decided to return to camp and left the others to film on. Besides, I needed my sleep after driving the bush tracks with a heavy trailer and the prospect of two more days of driving.

At least 30 bats are using a shelf at the apex of the final dome. The shelf looks more like a roof blemish from the floor but the speed with which the bats were flying in and out showed that it must be substantial. Several mounds of fresh and recent guano piles in various places on the tunnel floor indicate that a sizable bat population uses the cave and they must be one of the gregarious species.

Graham Pilkington

Analysis of Witches' and Webbs' cave samples, April 2016.

Supplied by Graham Pilkington and analysed by Michael Snow. Bat identification by Terry Reardon.

Witches Cave

1. Floor sample taken on 14/4/16 from chamber just past rock crawl way. Brown powder with white flecks:
Weddellite, Quartz, Phosphamite, Gypsum+Brushite, Hydroxylapatite.
2. Floor sample taken on 14/4/16 from north arm of loop. Brown powder:
Weddellite, Hydroxylapatite, Calcite (Mg), Mirabilite.
3. "Quick dust" sampled on 10/4/16. Lighter brown powder. Walked on, ones leg goes deep into this material as in "Quick sand":
Gypsum, Calcite (Mg), Halite, Hydroxylapatite.

No obvious reason for the "quick" property. I will look at it in the scanning electron microscope to see what is giving rise to the "quick" property.

Webbs Cave

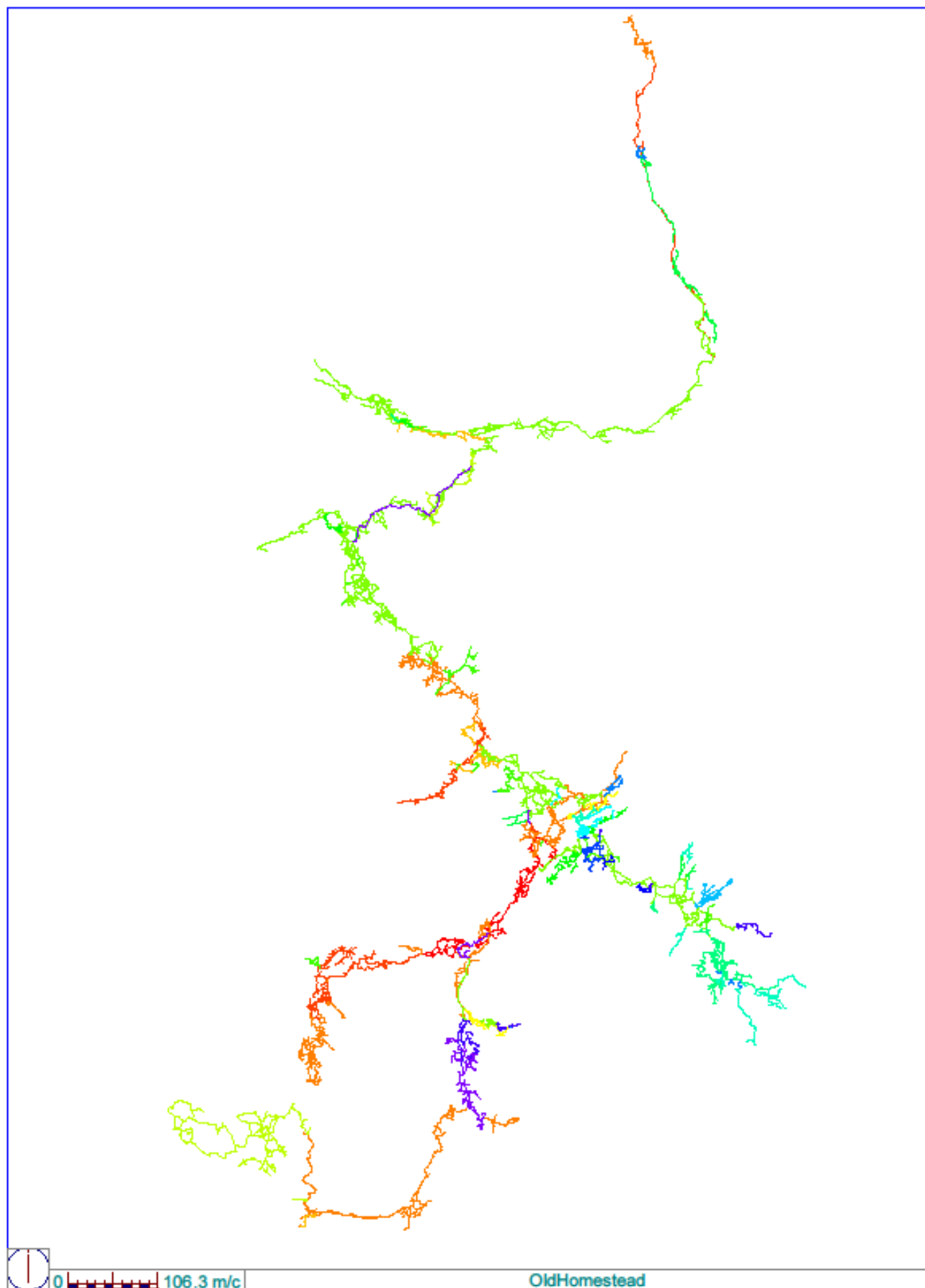
4. Sample taken on 18/4/16 of a rock coating at the entrance to "The Thicket". Brown lumps:
Mostly Syngenite with some Weddellite.
Syngenite forms by reaction of potassium sulphate with calcium sulphate.
5. Dead bat on floor near entrance. Terry Reardon (SAM) says: Juvenile chocolate wattled bat, *Chalinolobus morio*.

Old Homestead Cave.

6. Shark's tooth from floor on Ducks Passage. Not worked on.

These caves are very interesting in having so much of the rare cave mineral weddellite, Calcium oxalate dihydrate. It has been recorded from Webbs' cave before and also in caves in Namibia. Oxalates form in the breakdown of animal waste, but enzymes exist to break oxalate into carbon dioxide and water. If the oxalate stage can come into solution with even low calcium concentrations then it will be precipitated as either the mono or the dihydrate. The phase that forms depends on whether the Ca^{+2} ion or the oxalate-2 ion is in excess. Diffusion of Ca^{+2} into an oxalate environment forms the monohydrate (whewellite) while oxalate diffusing into a calcium-rich environment gives the dihydrate (weddellite). So it looks like the bat droppings were accompanied with dripping or available lime water. Its wide distribution suggests a past wet cave.

Michael Snow.



Line traverse map of Old Homestead Cave as at April 2016.
Superseded data has been removed.
Colour indicates the year of the survey.

Lower South East Trip March 2016

Trip dates: March 11-13 2016

Party: Daniel Heritage (Trip Leader, Scout Caving Group), Matt Smith (SCG/CEGSA), Mark Corbett (SCG/CEGSA), Rebecca Elleray (Beefacres Venturer Unit), Alice Bourne (BVU), Evan Grey (BVU), Brandon Papadimitrou (BVU), Troy Phan (BVU)

Over the Adelaide Cup Day weekend in March 2016, five Beefacres Venturers and three Scout Caving Group leaders headed down to Millicent for a weekend of caving and snorkelling in the Lower South East.

On Saturday morning we drove out to 5L-69 Mt Burr Cave for a quick visit. Recent trips to the cave had presented us with problems in regards to blackberries and other plant growth at the entrance, however this year it seemed to be much easier to access the cave with a well trodden path leading to it. Upon entering the cave, we discovered that a significant number of bats were roosting in the entrance chamber. Over the years numbers have fluctuated in this cave, and it was pleasing to see that on this occasion there seemed to be lots of them hanging around. Careful not to disturb the bats, we quickly moved deeper into the cave to explore it further.

That afternoon we headed out toward Penola to visit 5L-5 Monbulla and 2L-21 Wrecked Car caves. First up was a quick look through Monbulla Cave. It's always an interesting cave to test the navigation skills of new caving leaders, and as expected it took some time for us to find our way into the the bat chamber of the cave. There were very few bats in residence this time around though! The focus of the afternoon was on Wrecked Car Cave, which is one of the more beautiful caves in the region. It is a hard slog however, taking us close to three hours to get through followed by numerous complaints from select members of the team! It's a cave not often visited, and one that I feel is well worth the effort!

The following day we drove through Mount Gambier to 5L-119 Snake Hill Cave. On entering the cave we found that some furniture had been left in the first chamber of the cave, presumably so that some of the locals could unwind after a hard day's work. After making a note that another cleanup of the cave should be on the cards, we moved on to the main section of the cave through a quite narrow tunnel. Knowing that there are usually bats in this cave, I informed the leaders in front to be mindful of disturbing them, however for the first time in a number of years we didn't encounter any in the usual bat chamber. There was a significant and fresh looking guano pile, however no bats to be seen. After further exploration we did notice some flying around the cave, but certainly not the significant numbers encountered in the past.

The cave itself is not dissimilar to Monbulla Cave, with navigation being tricky for new people to the cave, as well as plenty of entrances in the ceiling making for some quite pretty light throughout the cave. The plan was to take the usual path through the cave, through the decoration chamber and out through the Dragons Teeth/Organ Pipes, however the group chose to explore the north-western section of the cave that we infrequently visit. From all reports there was some tough crawling around!

Having finished in Snake Hill Cave, the plan for the afternoon was to scale Mt Schank and then have a quick swim through Ewens Ponds. As expected the view from the top of Mt Schank was breathtaking, as was the cold water in the ponds! For many of our team it was the first time they'd had a chance to snorkel in the ponds, and it was the highlight of the weekend for most of them.

The final morning of the trip was a visit to 5L-35 Graveyard Cave not far from Mt Burr. The group abseiled into one entrance and then laddered out of the second. We were surprised to find that the water level inside the cave was significantly lower than our last visit to the cave 12 months before. Usually the water is at least deep enough to “swim” through, however this time it was a shallow muddy pool. Perhaps a reflection of a very dry summer?

Overall it was an excellent weekend. We were able to see some of the best caves in the region, and look forward to heading back there in the coming years!

Matt Smith.



A selection of photographs from Wrecked Car Cave.
Photos taken by Mark Corbett.

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Past Trips from General Meetings

February 2016

1. **Ken Smith** visited the Pearce Resurgence in January with Richard Harris– the cave was extended another 30m and depth 229m. Check Vimeo for videos by Richard Harris.
2. **Ken Smith** visited Yarrangobilly Caves with FUSSI – reported it was an excellent trip. Caves hard to get to, but very beautiful. Manager George Bradford is very supportive of caving groups using the area.
3. **Mark Corbett** visited Punyelroo at the end of January.
4. **Mark Corbett** and **Michael Woodward** visited Corra-Lynn cave on Valentines Day
5. **Grant Gartrell** visited A25 at Sellicks finding the gate completely removed. Grant plans to

rebuild the gate in the near future.

6. **Neville Skinner** and **Dan Dingwall** visited Rapid Bay and visited some of the sea caves in the area. Found what appeared to be some significant caves in the area. They had decorations and such indicating they were actual limestone caves rather than just the usual sea caves.
7. **Graham Pilkington** visited Corra-Lynn on the 24th of January with family members.
8. **Graham** visited the Nullarbor in December and will present later.

March 2016

1. **Matt Smith** and **Mark Corbett** visited the Lower South East with the Beefacres Venturer Unit, visiting Monbulla, Wrecked Car, Mt Burr, Graveyard and Snake Hill Caves. It was noted that there were lots of bats in Mt Burr Cave, some bats in Snake Hill (though not as many as the last visit) and that the water level was down significantly in Graveyard Cave.
2. **Joel Dillon** & **Graham Pilkington** visited Curramulka with a 3D laser scanner. Took 4 surveying and science students into the cave as well. Surveyed the cave down to Grand Central and back out to the doline for a geo-referenced model. Looking forward to seeing the data, and combining it with that collected by **Tim Featonby**.
3. **Ken Smith** visited the Murray with FUSSI on the lookout for caves. Found a few holes in the cliffs but nothing of any note. Also visited Punyelroo cave.
4. Mercedes Trip to Corra Lynn on the 25th of February. Doesn't look like there will be another trip this year.
5. **Mark Sefton** visited Tasmania in February/March with Mole Creek Cavers. Was there while the fires were near by. Caves visited My Cave, Kubla Kahn Cave (9.5 hour trip), Baldocks Cave (an abandoned tourist cave), Diamond Cave, Machinery Creek (canyoning), Sassafrass Cave. Caves were much drier than usual, and several sumps were accessible.

April 2016

1. **Eddie Rubessa** visited the Flinders Ranges with **Paul Harper**, **Ray Gibbons**, **Frank Hankinson** and **Grant Gartrell**. They managed to get underground! Met FUSSI members at Narrina Lake Cave. A new cave was found, 10m deep not far from an existing feature. Ray survived an encounter with a yellow footed rock wallaby on a cliff ledge!
2. **Neville Skinner** & FUSSI also visited Narrina Lake Cave at the same time as Eddie & co. Found the back way into the "Clayballs" chamber. Also visited Mairs, Mt Sims and Clara St Dora. Lots of wine was consumed!
3. **Ian Lewis** with the Field Geology Club of SA visited Corra-Lynn Cave
4. **Graham Pilkington** and **Ray Gibbons** visited the Nullarbor – Witches, Webbs, Old Homestead, Last Tree, Chowilla landslip, Abrakurrie. Carried on with the survey from December of Witches cave. They think the survey may now be complete. Three new "areas" were added to **Witches Cave**. There could be another extension for the cave, via an impassable tunnel off the doline – plenty of breeze coming out, but rock pile couldn't be bypassed. Dimensions of the cave are approximately 360m N to S 280 E to W. One patch of floor referred to as "quickdust", deep powder that feet sank into 40cm. Alan Pryke and Peter Freeman (VSA) also joined on the trip. Continued the survey in **Webbs Cave** for 2 days. Added 300m of passage, still unexplored leads. Mineral samples were collected for *Mike Snow*. Visited **Old Homestead Cave**, remapping a section of the cave the "Spring Series". Spent 3 days surveying, and found significant differences between the old map and the remapped one. Found a Sharks Tooth in the North Cave section. Visited **Last Tree Cave**, and the airflow coming from the cave suggests it may be significantly larger than is currently thought. Great potential for further exploration.
5. **Mark Corbett** visited Wee Jasper Caves with NSW West Sydney Caving Group. 15 hours of caving over 2 days including the **Dip series**, **Gong Cave**, **Dog Leg** and **Punchbowl**. Lots of vertical caving, big caves, lots of water!
6. **Joel Dillon** did a coastal traverse from Carrickalinga to Mypalanga. Found a few cave features, one was about 10m long through a headland.

TECHNICAL and OTHER ARTICLES

MEMBERSHIP FEES

CEGSA MEMBERSHIP FEES became due on January 1st. To ensure continuity of membership and privileges (particularly insurance) please pay immediately.

A Joining fee now applies to all renewals.

CEGSA MEMBERSHIP FEES FOR 2015 YEAR

Full Membership	\$ 45.00
Full Country Membership	39.00
Associate Membership	37.00
Long Term Associate	45.00
3 Month Introductory	5.00
Joining Fee (N/A to 3mth Intro)	12.00
Discount for Country Membership	6.00
Print Form CEGSA News	25.00

ASF LEVY FEE FOR 2015 YEAR

Single	\$ 68.00
Family	117.00
3 Month Introductory	20.00
Journal Subscription	25.00

2015 YEAR FEES

	CEGSA	+ASF	TOTAL
Full Membership	\$45.00	\$ 68.00	\$113.00
Full Country Membership	39.00	68.00	107.00
Associate Membership	37.00	68.00	105.00
3 Month Introductory	5.00	20.00	25.00

Variation for Family Membership

1 st Full Member + 2 nd Full Member	\$90.00	\$117.00	\$207.00
1 st Full Member + 2 nd Associate Member	\$82.00	\$117.00	\$199.00
1 st Assoc Member + 2 nd Assoc Member	\$74.00	\$117.00	\$191.00

Discount for Country Membership applies for Family Memberships.

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

Membership Fees can be paid direct into CEGSA Account BSB 105-900 Account No 950661040 and reference with your Name, CEGSA Fees or Membership Number.

Chris Gibbons. Treasurer/Membership Officer.

Approved CEGSA Trip Leaders

Name	Caving Leader level
Marie Choi	Horizontal, Laddering and Vertical
Mark Corbett	Horizontal and Laddering
Stan Flavel	Horizontal and Laddering
Grant Gartrell	Nil
Chris Gibbons	Nil
Paul Harper	Horizontal, Laddering and Vertical
Richard Harris	Horizontal
Lance Hoey	Horizontal and Laddering
Peter Horne	Horizontal and Laddering
Peter Kraehenbuehl	Horizontal, Laddering and Vertical
Ian Lewis	Horizontal and Laddering
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
Eddie Rubessa	Horizontal and Laddering
Mark Sefton	Horizontal and Laddering
Matt Smith	Horizontal and Laddering
Tom Szabo	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.

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Underground Wonder Explored

University students given first-hand look at hidden water system



READY TO ENTER: La Trobe University guest lecturer Ian Lewis (back) with 29 regional catchment studies students at the entrance to Mount Gambier's Engelbrecht Cave. Students from the university's Bendigo campus recently visited the cave as part of a regional catchment studies field trip.

A GROUP of 29 La Trobe University students from Bendigo discovered the hidden wonders of Mount Gambier's Engelbrecht Cave on a recent field trip to investigate the flow of groundwater through ancient limestone formations. "Engelbrecht Cave is unique in the sense that students can go underground and actually see the groundwater in the form of a lake, making it a very special experience," La Trobe University senior lecturer Dr Ruth Lawrence told *The Border Watch*.

"The focus of our trip was limestone unconfined aquifer systems, which can be challenging to teach without a visual element like Engelbrecht Cave"

The students' five day trip started in Naracoorte, from where they followed the flow of groundwater through the Mount Gambier and Mount Schank regions to Ewens Ponds where the water is discharged into the sea.

"They snorkelled at Ewens Ponds, which was a fitting end to the trip, for which I have received overwhelmingly positive feedback," she said.

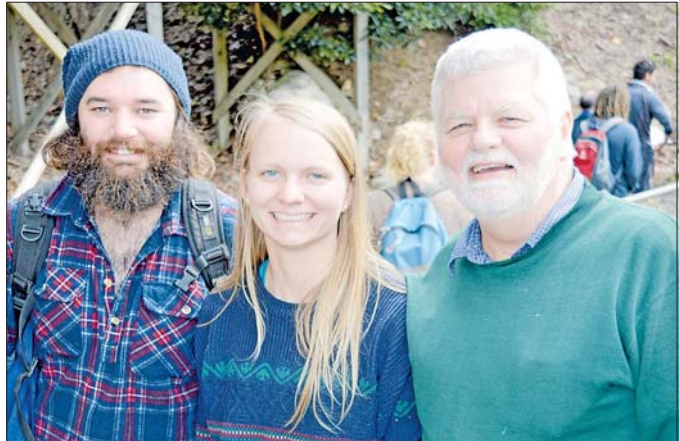
The group included specialist lecturer and cave-diving geologist Ian Lewis, who explained the significance of Engelbrecht Cave in relation to the movement of groundwater. Mr Lewis, a life member of the Cave Divers Association of Australia, said the Engelbrecht formation could be around 300,000 years old.

"Caves tell a gigantic story of this region's history and investigating them is like reading a time chart," he said. "Because of climate change, groundwater rises and falls and around 18,000 years ago it was about 100 metres lower than today. "This can clearly be seen on the dry walls in the eastern chamber of Engelbrecht's in the form of ledges that indicate past water levels. "In addition, scallop shapes are visible, which are clues to the flow of groundwater thousands of years ago."

Mr. Lewis said in the cave's western chamber rock collapse has occurred "which is the next step in cave development". "Both chambers looked the same previously," he said.

The students heard how groundwater slowly moves from Naracoorte through swamps, caves and sinkholes - even The Blue Lake - before reaching Ewens Ponds and the sea.

According to Mr. Lewis, they also discussed the human element of what happens to groundwater when people use the resource. "The effects of forestation and environmental pollution are important when it comes to groundwater," he said. "Engelbrecht looked like a sinkhole 40 years ago where people could dump their rubbish. "Now we know it may look like a sinkhole from afar, but it actually leads to a very special cave."



FIELD TRIP: La Trobe University regional catchment studies students Kyle Hodgkinson and Beth Powell with cave-diving geologist Ian Lewis at Engelbrecht Cave. Mr Lewis explained the cave's unique characteristics to students as they studied the flow of groundwater through limestone formations.

Leon Rademeyer (*The Border Watch*)



UNDERGROUND SPLENDOUR: La Trobe University regional catchment studies students studying Mount Gambier's Engelbrecht Cave as part of a five day field trip to the region. Around 300,000 years old, the unique cave revealed clues about the levels and movement of groundwater in the distant past.

CALENDAR OF EVENTS

Date	Type of Event	Description	Contact
25/05/16	General Meeting	Royal Society Room, SA Museum, Adel. TBA	Ian Lewis
??/06/16	Committee Meeting	TBA	Ian Lewis
11-13/ 06/16	Queens Birthday W/E		
22/06/16	General Meeting	Royal Society Room, SA Museum, Adel. TBA	Ian Lewis
25/06/16	Working Bee	Library and Records	Graham Pilkington
??/07/16	Committee Meeting	TBA	Ian Lewis
27/07/16	General Meeting	Royal Society Room, SA Museum, Adel. TBA	Ian Lewis
30/07/16	Working Bee	Library and Records	Graham Pilkington
??/08/16	Committee Meeting	TBA	Ian Lewis
10/08/16	CEGSA NEWS	Articles due	Athol Jackson
24/08/16	General Meeting	Royal Society Room, SA Museum, Adel. TBA	Ian Lewis
27/08/16	Working Bee	Library and Records	Graham Pilkington
??/09/16	Committee Meeting	TBA	Ian Lewis
28/09/16	General Meeting	Royal Society Room, SA Museum, Adel. TBA	Ian Lewis
01/10/16	Working Bee	Library and Records	Graham Pilkington
	Caving	Ongoing Vic Fossil survey	Gary Woodcock
	Caving	Continuing Fleurieu Peninsula Exploration	Grant Gartrell

****Extra trips will be notified in the Calendar on the Website or at General Meetings****

To be covered by insurance it is mandatory that caving trips involving club members must be registered as CEGSA Trips. To do this, the nature and timing of the trip must be entered in the Calendar of events in CEGSA NEWS, minuted at a General Meeting of Members or entered in the Website Calendar. 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 to the Records Officer in a timely manner.

NOTES