

CEGSA NEWS



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

Volume 60 Number 1

Issue 237

FEBRUARY 2015



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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Science Officer	Ian Lewis	As Above	
Training	Ian Lewis and Matt Smith	As Above As Above	
Website Trip Log	All Trip Coordinators	See list p9	

Area Coordinators

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ASF	Graham Pilkington	As Above
SA Speleological Council	Graham Pilkington	As Above
Kanawinka Geopark Liaison	Ian Lewis	As Above
CDAA liaison	Ian Lewis	As Above
SA Scout Liaison	Ian Lewis	As Above

Cover Photograph: Subsidence in M-51 doline beside Sedan / Swan Reach road. See p6.

Photo: Graham Pilkington.

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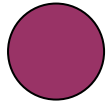
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QUARTERMASTERS NOTE.

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 60 Number 2 (Issue 238) must reach the Editor by Wednesday **13th MAY 2015**. 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

A complaint from Adelaide-based cavers is that we have so far to travel to most of our caves even though our longest is one of the few that we do have available for a day trip. The others tend to be isolated such as Punyelroo, Sellicks or Reynella unlike Naracoorte or the Nullarbor.

However, maybe the fault was in not looking. You would have heard about the Nullarbor cliffs project that is finding hundreds of caves never before visited or even documented, but it appears that we have a very similar situation right on our outskirts – the cliffs of Fleurieu Peninsula!

Just like the Nullarbor, a few sea caves have been known for decades even if almost never visited. In both cases it required a photographic trip along the cliffs, from the air or a boat, to establish the complexity and large numbers of sea and cliff caves that exist. So instead of needing to travel more than a day each way just to get to a “new” caving area, we can do day trips instead. It’s expected that over 100 caves will be documented in the coming couple of years to add to the 30 or so that we had for all the Adelaide Area.

Graham Pilkington

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Annual General Meeting Report

The Annual General Meeting was held at the home of Chris and Ray Gibbons on Saturday 14th Feb. The Annual awards for 2014 were announced and Neville Skinner was presented with a Leather Medal in the form of a spare clothing patch. The other two recipients were not present at the AGM. The Annual Report was presented and accepted, followed by the election of officers and committee. The results of the election were as follows:

President: Graham Pilkington.

Secretary: Matt Smith.

Committee Members: Chris Gibbons, Ian Lewis, Mark Sefton, Ken Smith and Tom Szabo.

The meeting was preceded by a social gathering and BBQ tea.

Athol Jackson.

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2014 AWARDS

Leather Medal (Leather Patch class)

Neville Skinner

For his shorts so they'll never rip again.

Leather Medal (Orientation class)

Aimee Leong

With an arrow to show which side is up.

Award of Merit

Richard Harris

For outstanding efforts in Cave Search and Rescue in Australia

Graham Pilkington

TRIP REPORTS

Lower South East Trip 29-30 November 2014

Caves visited

5L18 Tindales Cave
5L144 Sheathers Cave
5L101 Earl's Cave

Attendees

Matt Smith (SCG/CEGSA)
Matt Brinkley (SCG)
Mark Corbett (SCG/CEGSA)
Daniel Heritage (SCG)
Adam Hamilton (SCG)
Brianna Heritage
Stephen Holden

Report

A group of seven Scout Leaders and Rovers (a couple of whom are also CEGSA members) ventured down to Millicent to prepare for a expedition happening in January 2015 as part of the Australian Venture. The plan for the weekend was to visit a new cave, revisit one not seen for many years, and also to go for a quick swim in Ewens Ponds.

After a late arrival the night before, the team eventually got underway arriving at *Tindales Cave* at approximately 10am. The coordinates given for the cave entrance by Kevin Mott were spot on, and we were soon rigging the cave to enter via the 8m solution tube. While entering the cave we were able to give our rescue skills a little practice as one of the team members get her hair caught in her abseiling device.

The solutions tube entrance is narrow, though not overly constrictive, and twists into the entry chamber below, which has plenty of room for the entire team to wait and remove gear ready to explore the cave. I noticed a bright yellow slug in the solution tube, which was quite interesting and almost appeared to “watch” me as I continued my way down. Interestingly the slug had increased in length by about double when I saw it again on the way out. I also counted well over a dozen cave crickets near the entrance.

We set off towards the SE section of the cave first, climbing over a couple of flowstone formations. We noticed right away that while the cave is pretty, it has been heavily tracked in the past, with much of the floor formations quite dirty and/or broken. The cave surely would have been stunning in it's original state! There is still plenty to see in the cave however, and we noted that there are still plenty of active formations in the cave, and the floor is quite wet in some parts.

After a quick lunch stop we drove out past the airport to find *Sheathers Cave*. An attempt to find this several years ago resulted in failure, so this time around I once more had coordinates from Kevin programmed into my GPS. Luckily I did, as the pine forest, having been replanted in recent years, is so thick that visibility was reduced to no more than a few metres. The GPS was able to do it's job though, and after 5 minutes of pushing our way through branches we reached the small clearing in which the cave was found.

The gate needed a little “persuasion” to be opened as it seemed to have jammed shut, presumably due to weather and/or infrequent usage. Once open we placed a cave ladder into the hole to assist getting out, and then donned our wetsuits. Upon entering the first chamber in the cave, I noted that the water levels were pretty similar to those of my last visit (sometime in the early 2000s). For the most part, we were between waist and shoulder deep in water.

We made our way through the cave, past the tree roots at the southern end and then back up the parallel tunnel heading North West. We reached the sumps in the cave, and they were passable with a couple of short duck unders. At this point a couple of the team members were starting to feel the cold, so they made their way out of the cave, while the hardier members of the group carried on. The lines from the “tie-off” rock to the further reaches of the cave were still in place and a handy guide as we progressed through the lake.

Past the sumps we continued up the north-west passage until we eventually reached “dry land” and the northern end of the cave. At this point we decided to head back rather than pushing through to “The Big Tunnel”. After a slippery climb out, we welcomed the warm sun upon exiting!

The next morning we’d planned to snorkel through *Ewens Ponds*, however it was shut until the following day, so our timing was a little off! Having been denied access to further caves due to a fire ban, we decided to walk to the top of *Mt Schank* instead, which welcomed us with a fantastic view of the surrounding land. We also had time to swing by the entrance to *Earl’s Cave*, a water filled sinkhole not far from *Ewens Ponds*.

Matt Smith.

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Corra Lynn Cave, 5Y-1, 27th December 2014

Participants: Graham, Charni and Ellie Pilkington, and Jamie Schmidt.

A fun exploration trip to take my granddaughter into her first “real” cave as Jamie describes Corra Lynn. I used the chance to explore parts of the cave that I rarely visit but suitable for Ellie. The 7 and 5 year-olds were very helpful in looking into places that my head wouldn’t fit into to see what was there.

I was surprised to find one Lower-Level tunnel blocked off near the Cauldron. Maybe I should make an effort to re-excavate the Cauldron tunnels that tend to get filled from surface wash-in to allow alternate loop paths to the Drumstone and Bushwalkers.

Graham Pilkington

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Punyelroo Cave, 5M-1, 9-12th Jan 2015

Participants: Graham Pilkington (9-12th), Mark Sefton (9th), Ray and Chris Gibbons (12th), Matt Smith (10th), Tom Szabo (11th), Dean Casement (9-12th), 5 other Scout caving leaders and 62 Venturers.

Each day a bus arrived from the Scout camp at Woodside with from 11 to 20 Scout Venturers having an age range of 15-17. These were split into two groups – the reds and the blues as designated by their helmet colour – and escorted through Punyelroo Cave. The Scout organization supplied all the helmets. In the morning, one team took the Randal’s Rock branch and the other the right-branch from the log, returning to the entrance for lunch then swapping over the parts of the cave visited in the afternoon. Each team was led by a Cave Trip Leader and had at least one other adult, usually another caver. The 75 year old bus driver joined in the caving each day, twice acting as the second adult after a booked-in caver could not make the trip. Like me, he was flagging a bit by the fourth day but had the advantage of being able to wait for us before reaching the end of the branches. Not that I

ever went to the end of the RH branches. I moved to the end of the line a bit before the end of the tunnel so that I would not be in the way (passing becoming impossible). At least that's my excuse!

Dean was the Scout organiser for the event and never entered out of daylight. In fact he never traversed along the path at the bottom of the cliff – he went by boat from the other side of the river because he had to carry in and set up lunch each day. Prior to the trip, Dean had placed a portable toilet at the cliff top car park and a less salubrious toilet just south of the cave entrance. Both well attended. He had also driven-in star-droppers along the edge of the car park and down the top part of the cliff track with flagging tape strung between them. The fence “stopped” people from approaching the cliff edge at the top and was very effective as a psychological barrier down the cliff path.

The participants appeared to enjoy themselves with enthusiasm ranging from “I’ve now been in a cave” to “we needed more time to explore”. What was surprising was that even though they had all been informed that they needed to bring a torch, some didn’t. But Dean had catered for this by bringing plenty of LED headlights to clip onto the helmets.

I stayed each night in a hut at the Roonka Scout Camp north of Blanchetown rather than travelling home, saving me about 3 hours driving each day. The camp is usually a busy place but I had it all to myself just missing out by a few days on the company of a 100 or so Scouts enjoying water activities. Not that I missed out on water sports because there was a very heavy rain on the first night that changed the track into camp into a series of ponds to skate my car across.

On the way over Monday morning, Ray had noticed some holes alongside the road from Sedan to Swan Reach and we visited them on the way back to Adelaide. They were in a doline about 60m diameter and 3m deep. The road had not been deviated to avoid the doline and been kept level by constructing a railway embankment look-alike across the doline. Ray had seen holes on the north of the road. There were about ten of them scattered over the nearly level 15m wide floor of the doline,



M-51 @270©GPilkington



M51s2 @270d-10©GPilkington

typically 0.5 to 1.0m deep and obviously collapsing into something. The floor was a soil and pebble mixture whereas the surrounding land had a calcrete cap overlaying calcrete rubble. None of them appeared to have exposed rock. Some ?wombat scats were present but none of the holes had been made nor disturbed by wombats. On looking on the south side of the road, it appears that runoff from the road from both east and west are channelled to a central depression only 4m wide and 10m long in which a collapse has occurred down adjacent pipes in rock 2m below creating a single vertical-sided soil sink about 5m long, 1m wide and varying in depth from 1 to over 2m. Further examination of this doline, M51, and the surrounding area is warranted but at the time it was getting late, rain was imminent and I was tired after 4 days caving!

Graham Pilkington

Past Trips from General Meetings

November 2014

Nil Reports.

January 2015

1. **Grant Gartrell, Eddie Rubessa** and **Ray Gibbons** travelled to the Fleurieu Peninsula to visit A25. Discovered that the gate was damaged. Also attempted to visit A30 but were restricted due to new gating and fencing. Grant reflected on the need to establish relations with the land owners. Also travelled to Myponga and Carrickalinga to visit karst features in the area. Eventually ended up at Second Valley, spoke to a local landowner (who didn't own the property on which the cave was located). Grant will continue to work contacting land owners in order to improve access to the caves in the region. Also visited Delamere, as he suspects caves in the area. The owner currently wants privacy, but Grant suspects given time will be amenable to getting future access.
2. **Steve Milner** visited the Fleurieu Peninsula twice, kayaking along the coast looking at sea caves. Two weekends ago Steve returned with Ian, Aimee, Neville and FUSSI members to investigate some of these caves in more detail. 12 new karst features were identified.
3. **Matt Smith**, members of the Scout Caving Group and some Rovers travelled to Millicent on 29-30 November. Tindales Cave and Sheathers Cave were visited on Saturday with a fire ban preventing access to Forestry SA caves on Sunday. A trip was planned to Ewens Ponds however it was closed to let the ponds regenerate. The group hiked up Mt Shank instead.
4. **Matt Smith** lead a team of 33 to Mt Gambier and Naracoorte as part of AV2015. Caves visited included Monbulla Cave, Ewens Ponds, Sheathers Cave, Snake Hill Cave, Morgans Cave, Beekeepers Cave, Wet Cave and S102.
5. **Neville Skinner** and **Aimee Leong** visited Mole Creek in Tasmania with FUSSI members. Kubla Kahn and a number of other caves. Beautiful and photogenic, was an excellent trip. Very full on with a packed program!
6. **Neville Skinner** visited Eyre Peninsula with **Dan Dingwell** from Cleve. Visited various features in the area include caves and mines. The caves were quite colourful due to the different minerals mined in each of the areas – greens, blues, reds and yellows. Visited sea caves in Whalers Way. Some quite large caves were found. Several of the caves had lakes of water in them. Also drove over to Elleston to visit Homestead Cave. Visited E1, E6 and E7, though didn't enter the caves. Also visited the Talia? Caves.
7. **Lance Hoey & Barb Wiesner** visited Coobowie Cave on the Yorke Peninsula. Y18 directions were inaccurate and need to be revised. The cave has been blocked since the mid-80s. Speaking to the land owner, and discovered that the daughter had produced a field report for Year 12 which includes maps and photos as well as history on the cave. The cave hasn't been visited lately, and the group should consider spending some time in the cave. According to another local there is a cave near the foreshore which heads in the same direction as Coobowie.

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TECHNICAL and OTHER ARTICLES

MEMBERSHIP FEES

If you have not renewed by 31st March this will be your last communication.

CEGSA MEMBERSHIP FEES became due on January 1st. To ensure continuity of membership and privileges (particularly insurance) please pay before March 31st.

Joining fee applies after March 31st.

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
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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Teacher Arrested At Sydney International

(This may also apply to a cave Surveyor)

A high school teacher was arrested today at Sydney's Kingsford-Smith International airport as he attempted to board a flight while in possession of a ruler, a protractor, a compass, a slide-rule and a calculator.

At the press conference, the Attorney General said he believes the man is a member of the notorious extremist Al-Gebra movement.

He did not identify the man, who has been charged by the AFP with carrying weapons of maths instruction.

'Al-Gebra is a problem for us', the Attorney General said.

'They derive solutions by means and extremes, and sometimes go off on tangents in search of absolute values.'

They use secret code names like "X" and "Y" and refer to themselves as "unknowns;" but we have determined that they belong to a common denominator of the axis of medieval with coordinates in every country.

As the Greek philosopher Isosceles used to say, "There are three sides to every triangle."

When asked to comment on the arrest, Australian Federal Treasurer Joe Hockey said, "If God had wanted us to have better weapons of maths instruction, He would have given us more fingers and toes."

Fellow coalition colleagues told reporters they could not recall a more intelligent or profound statement by the Treasurer.

Notice of Motion to be put at the March 2015 General Meeting

"That CEGSA donate a further \$700 to the *Save Cliefden Caves Appeal* facilitated by the Australian Speleological Federation's Karst Conservation Fund."

\$300 was donated to this cause at the January General Meeting and this \$700 would be in addition to that. These beautiful extensive caves are in danger of being inundated due to the proposed construction of a dam. They're in near-pristine condition because of the rigorous protection that has been afforded by the landowners and by the Orange Speleological Society. Much more information, photographs, movies and a TV report can be found on the internet.

The Committee

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Capping Training – Naracoorte Area, November 2014 – Steve Milner.

Prelude

In 2013, out in a Nullarbor Cliff Cave (N6701, Lejeg Cave) we were thwarted by a boulder collapse just too narrow to pass and with a howling draught issuing from it. We took turns hammering with a chisel for a good two hours in an awkward position but just couldn't make progress; we had to leave it for a later day.

I had heard of 'capping' being used successfully all over the world as an aid for cave exploration and after researching the internet decided to trial it in my back yard. Big mistake, the trial resulted in two pieces of shrapnel in my hand, surgery and 7 stitches. Luckily no real damage, but a huge lesson learned and a resolve to learn how to do it more safely.

A call out via the Ozcavers email list resulted in a successful connection to Alan Jackson of Tasmania who had developed a third generation capping bar and he agreed to come to South Australia to demonstrate how to 'cap' safely.

Following an indoor training briefing, capping practice was undertaken in a quarry, and underground.

Disclaimer: this article is intended to describe the contemporary practice of capping and should not be relied upon. Capping is objectively dangerous and any persons undertaking 'capping' do so at their own risk.

What is Capping?

Capping, which is also known as 'popping' or 'shaving', is a technique successfully used all over the world. Briefly, a small hole is drilled into the rock using a battery powered drill, a small charge (designed for use with a nail gun) is inserted, and fired using a long steel rod in order to cleave off pieces of rock.

Capping is used for cave exploration and for use in widening passages in the event of a rescue; the big advantage is that because only a few grams of charge is used, fumes are minimal.

Popular 'caps' are the Hilti brand used for nail guns for nailing steel to concrete (e.g. DX Cartridge #50354 .27 Cal. Short, Cal. 6.8/11 M). Generally 'black' caps are used as these have the highest power.



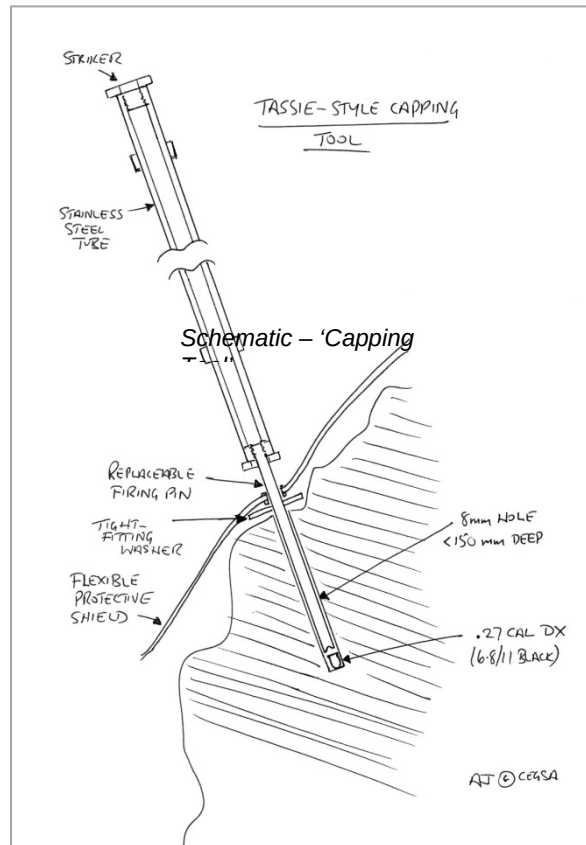
Hollow design firing pin and Hilti cap.

The Firing Pin and Capping Bar

After safety gear, the firing pin and capping bar is the most important piece of equipment. There are commercially available capping bars which appear small and weak and a wide variety of homemade ones appear to be quite unsafe. A search for capping on YouTube will yield all manner of unsafe tools and practices. The capping bar presented in this report is an adjustable length system that allows work down narrow holes and keeps the caver a reasonable distance from flying rock.

Alan Jackson's third generation capping bar has been successfully developed for use in tight, wet, and muddy caves of Tasmania. Alan describes the firing pin and capping bar:

The firing pin is made from a high tensile ~200mm long M8 bolt with a short bit of thread on one end fitted with a 13mm outside diameter locking nut. The bolt head is cut off and machined to a shape to fire the charge. Most use a raised ridge on the rim which is 'ideal' for easiest firing, but a more conservative approach is a hollow centre design (see photograph), which spreads the load on the rim of the cap and makes it harder to fire. This may reduce the risk of accidental / premature firing while tamping the cap down the hole with the firing pin. Mild steel firing pins have been used but they do not last long, as they become compressed after a few firings and do not fit into the holes. High tensile ones are more expensive but last for ages.



Essentially, the capping bar is a reasonably heavy object behind the firing pin (about the same weight as a nail gun). The third-generation bar is made from two 1-inch stainless steel tubes with machined stainless plugs with internal threads that are welded into the ends of the bars, and nuts welded on the outside to assist assembly and tightening of the equipment. A short piece of threaded bar is used for joining two sections of different lengths and a short high tensile bolt that screws into an end is used as a striking end. The firing pin bolts into another high tensile bolt drilled and threaded to 8mm and is screwed into the opposite end.

The overall design is flexible and allows for different lengths of the bar, the use of standard caving tools such as a 13mm spanner used for bolting, and other multi-grips or spanners.

Safety

A blast mat is needed to shield the user from flying rock. Conveyor belt style, or heavy rubber matting may be used but it is very difficult and too heavy to cart about underground. An old carpet may be used but generally does not last long. The current optimal design is a doubled-over square of heavy PVC coated material (like cave pack material) sown up and had a tarp eyelet punched into the centre to accommodate the firing pin. The PVC version is lighter than carpet, but heavy enough to stop flying rock, won't tear at the firing pin hole so quickly, doesn't get wet, is easy to clean, and cheap. It is also reasonably flexible so it contours to the shape of the rock being treated.

As capping is a dangerous activity, users should cover all exposed skin, wear sturdy gloves, use hearing protection, safety glasses / eye protection, use a helmet with face shield, and wear boots, canvas overalls, etc.

Key Learnings

It should be clearly understood that capping is objectively dangerous. Every firing should be taken seriously, and undertaken methodically following established procedures and the use of safety equipment. The following were key learnings from the training sessions:

- Safety should be considered first and foremost.
- Drill a 8mm hole at least 120mm deep in the rock with the objective of shaving off pieces of rock rather than attempting to remove 'big chunks'; aim to work with the 'grain' of the rock, cracks and



Alan Jackson at Wirreanda

fractures in order to maximise the result. Remember also that the capping bar is long and the firing pin needs to fit in without restriction, therefore the angle of the hole needs to be considered safely. Clear the hole of dust (more difficult in wet conditions as it becomes muddy).

- Use a high quality SDS-type 8mm drill bit and a reliable battery powered hammer drill.

- Insert the cap; be conservative until the strength of the caps vs. the rock is established. Soft rock and hard rock behaves differently. Commence with one cap and test, if this does not break the rock, increase to two then step up to three if necessary. In general, no more than three should be used. If three does not break the rock then make a different hole in order to shave the rock off. In general, use the minimum number of caps as this will lessen the noise, the fumes, and the flying fragments.



A successful firing – Steve Milner

- A good hole is one where the firing pin fits snugly into the rock, so the cap is quite snug, and the energy from the firing goes into the rock. 'Recoil' is the main issue to avoid, especially if you get too greedy and fail to crack the rock (all the energy has to go somewhere and that usually means firing the pin back out the hole).
- Ensure any helpers move well back, and the drill and bits are set well to one side, ensure gloves, hearing protection, goggles and face mask are all in place and distance yourself from the 'live' hole.
- Assume that an accidental firing is possible during the next stage, so be cautious. Place the firing pin through the blast mat, then fit the large washer before carefully place the firing pin and the blast mat over the hole. When ready, gently tamp down the cap(s) to the bottom of the hole. Treat gently so as to avoid premature firing.
- After warning your colleagues, strike the firing pin firmly and sharply with the hammer, and firing should occur.
- A cap may fail to detonate, which is possible in soft rock. Such a situation is potentially dangerous, as if it is left and care is not taken, it could be fired accidentally whilst drilling a second hole. In the first instance, another cap should be inserted as above, and a further attempt made to detonate the cap. If this fails, a second hole should be drilled such that it cannot intercept the previous hole, and the rock split. Care should then be taken with the debris until the unexploded cap has been located.



Rod Short – Note safety gear in use

- With use the capping bar and firing pin may loosen up, always pay attention and keep the threads tight.
- Naracoorte limestone proved to be surprisingly resilient to capping presumably because it is soft, porous and readily absorbs energy. More caps than expected were used.

Participants



Left to right: Graham Pilkington, Allan Campbell, Rod Short, Mark Sefton, Dee Campbell, Alan Jackson, and Steve Milner outside Beekeepers Cave

Acknowledgement

Our sincere thanks go to Alan Jackson for his time and generous sharing of knowledge and expertise.

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Ningaloo Underground 30th ASF Conference

Place: Exmouth, Western Australia

Date: 21-26 June 2015

Organisations: SCoWA / ASF

More information:

Escape the southern winter (or the northern hemisphere!) to enjoy a packed conference program and explore **Range, Reef** and **Gorges** with the benefit of local knowledge (always a plus).



- Learn why Ningaloo Reef and Cape Range were declared a World Heritage Area
- Snorkel straight off the beach and see coral on the land
- See blind gudgeon fish less than 50m from a road or encounter a *Draculoides brooksii*
- Swim and dive with a whale shark
- Camp on the top of the range for pre- and post-conference caving and have a real chance of finding a new cave
- Improve your SRT skills in the multi-pitch caves

Get **Underground** and **Underwater** with us in 2015.

Correction to Annual Report 2014

The financial graphs published in the printed version of the 2014 Annual Report were incorrect. The version on the website is correct except for the first three downloads.

If you were an early downloader it would pay to check your copy. A corrected page is attached to this issue of CEGSA NEWS for you to insert in your printed copy.

Also the reference to “/ Public Officer / Library & Records” after “Secretary” in line 2 under 2014 Committee on page 4 should be after “President” in line 1.

Apologies for the errors.

Athol Jackson.

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FUSSI PROGRAMME February to July 2015

22 nd Feb & or 1 st March.	Sunday. Sellicks Hill caves by Boat. 9.30 – 6pm. Thomas Coordinating
23-27 Feb O–Week	
25 th Feb:	Fairday on Campus. Club Stall, all help needed.
2 nd March Term Starts	
7-9 March:	SRT competent ONLY to Wooltana. Contact: Clare
14-15 March:	Wet and Wild trip. Contact: Heiko/Thomas/Clare
19 th March:	General Meeting. Talk on the Caves of NZ. Ian Lewis guest speaker. 6pm - 8pm. On Campus
3-6 April: Easter	Caves on the Eyre Peninsula. Clare, Dan, Neville coordinating.
MID SEMESTER BREAK April 13- 27	
9 th April	General Meeting. The Caves of France. Ken Smith, guest speaker. TBC 6pm - 8pm. On Campus
25-26 April:	Naracoorte. Sand Cave. Etc
3 rd May	Corra Lynn. Thomas coordinating.
7 th May	AGM. On campus.
10-15 May	ACKMA Conference Naracoorte, Cavers needed to run trips.
21-26 th June	Ningaloo Reef WA. ASF Conference. GO TO IT.
GLOOM, Depression etc, EXAMS 22 June – July 4	
Mid Year Break 6 July – 28 July	
July 11-19 th	Nullarbor (TENTATIVE DATE ONLY).

ALL SUBJECT TO CHANGE

CALENDAR OF EVENTS

Date	Type of Event	Description	Contact
25/02/15	General Meeting	Royal Society Room, SA Museum, Adel. Caving in South Africa	Mark Sefton
28/02/15	Working Bee	Library and records	Graham Pilkington
??/03/14	Committee Meeting	TBA	Graham Pilkington
07-09/ 03/15	Adelaide Cup W/E		
25/03/15	General Meeting	Royal Society Room, SA Museum, Adel. Mysteries of the Nullarbor	Ian Lewis
28/03/14	Working Bee?	Library and Records	Graham Pilkington
03-06/ 04/15	Easter W/E	Eyre Peninsula CEGSA / FUSSI trip	Graham Pilkington
03-06/ 04/15	Easter W/E	Flinders Ranges Narrina / Wirrealpa area	Eddie Rubessa
??/04/15	Committee Meeting	TBA	Graham Pilkington
22/04/15	General Meeting	Royal Society Room, SA Museum, Adel. European Caves	Ken Smith
25-26/ 04/15	Anzac Day W/E	No Public Holiday	
25/04/15	Working Bee	Library and Records	Graham Pilkington
??/05/15	Committee Meeting	TBA	Graham Pilkington
13/05/15	CEGSA NEWS	Articles due	Athol Jackson
27/05/15	General Meeting	Royal Society Room, SA Museum, Adel. TBA	Graham Pilkington
30/05/15	Working Bee	Library and Records	Graham Pilkington
??/06/15	Committee Meeting	TBA	Graham Pilkington
06-08/ 06/15	Queens Birthday W/E		
24/06/15	General Meeting	Royal Society Room, SA Museum, Adel. TBA	Graham Pilkington
27/06/15	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

TREASURERS' STATEMENT

The Income & Expenditure and Balance Sheet have been prepared from a reconciled Cash Book with the Bank Statements that reflect the operations of the Club for the year ended 31st December 2014.

The Income & Expenditure Statement shows a slightly lower Operating Surplus compared to the 2013 year. This can be accounted for in Extraordinary spending this year for the OzKarst Trademark Application from the General Bank Account instead of the Investment Accounts. Other Operating Income and Expenses have remained reasonably stable.

****note1** The CEGSA subscriptions collected in 2014 include \$741.00 for the 2015 year.

****note 2** The ASF fees collected in 2014 include \$1159.00 for the 2015 year. The ASF Levy and Insurance has not changed. CEGSA receives the members ASF fee approximately 9 months behind the ASF setting the current year Levy.

The financial standing of the Club has continued to remain sound for the year.

Chris Gibbons.

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INDEPENDENT AUDIT REPORT

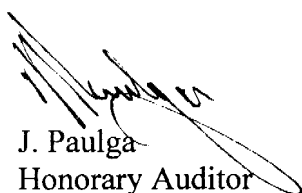
To the President and Members of the Cave Exploration Group (South Australia) Incorporated

Income and Expenditure Statement and Balance Sheet for the period 1 January 2014 to 31 December 2014

I have audited the Income and Expenditure Statement and the Balance Sheet for 2014. In my opinion the Statement fairly presents the financial transactions of the Group for the period 1st January 2014 to 31st December 2014 and the Balance Sheet fairly presents the financial position of the Group at 31st December 2014.

Scope and Procedures

In order to reach these opinions, my audit has included an examination of invoices received, receipts for payments, supporting records, Bank Current Account Statements, Bank Investment Account Statements, Deposit Book, Cheque Book, Receipt Book for 2014 and the financial reports for 2013.



J. Paulga
Honorary Auditor

28 January 2015

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