# **CEGSA NEWS**



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

Volume 56 Number 4 Issue 224 NOVEMBER 2011



# CAVE EXPLORATION GROUP (SOUTH AUSTRALIA) Inc.

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Cover Photograph: Manoeuvring plastic stormwater pipe into entrance of SOS Cave.

Photo: Clare Buswell.

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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 56 Number 4 (Issue 224) must reach the Editor by Wednesday 8th FEBRUARY 2012. 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.

# TRIP REPORTS

#### Corra Lynn Cave, 5Y1, 7th Aug 2011. An introduction to caving.

Graham Pilkington, Gary Woodcock, Ray Gibbons, Mark Sefton, Steve Wasilewski, Alex Woodcock, and 3-month introductory members Angela Freeman + 32 others.

Another fun trip letting people know about caving. All the introductory members on the trip belonged to Mercedes College with Angela being a teacher.

We organized into three teams led by Gary, Ray, and myself. Steve had to bail out partway through the trip because he had hurt his neck a few days previously and did not want to exacerbate it. The rest of us did grand tours of the central and northeast sections of the old cave.

Graham Pilkington

#### SCIENTIFIC NULLARBOR EXPEDITION 2011 IN SA NATIONAL PARK.

CEGSA Trip members George & June MacLucas All photographs by George or June MacLucas

Permission for this trip for the search of new karst had restrictions. NO BUSH BASHING WITH VEHICLES, but we could use an old track near our camp area providing we stayed on this track. If we needed to venture off, we had to walk.

The group did have permission from the National Parks to use motor bikes for travelling long distance outside of walking range. Three motor bikes were taken out. Permission was given to use a vehicle for an emergency rescue, or for caving that needed heavy SRT equipment.

<u>Victorian cavers:</u> on this trip were: **Ken Boland**; (Ultra Light pilot). **Christine Dempsey**; (good bush walker). **Daryl Carr**; (his vehicle was the computer centre for the daily print outs). **Margaret James**; (the overall organiser for food and equipment) **Nicholas White**; main liaison officer communicating with the National Parks. **Sue White**; (camp safety officer). **Greg Leader**; (brought out 2 motor bikes). **Orange NSW: Denis Marsh**; (computer assistant). **Ian Curtis**; brought out a motor bike. **Canberra**; **Cathy Brown** (back-up person for computer data work). **Tasmania**; **Henry Shannon** (eager to survey). **South Australian**: **Brett Dalzell**; Senior Ranger for National Parks (came out and caved for 3 days). **George and June MacLucas**; (busy relation officers and George was Chief Choir Master).

#### History of how this type of trip started.

Over ten years ago whilst surveying Thampana Cave 6N206 (which was coming to a conclusion after a number of years of surveying) on average after a week of this surveying, the group of about six cavers would reward ourselves by touring to other features in the nearby area. At one of these stops Ken Boland mentioned he would like to do a triangular walk, sometimes sleeping out on his own at night. He did this for awhile, always coming back with the statement "I found a number of new features, there has to be a better way than this random finding". **Eureka,** Ken's glider club where he was a Glider Instructor, had purchased an Ultra Light plane, and so this new method of searching



Ken Boland in the Kitty Fox Ultra Light.

commenced. Usually he would fly in a pattern over 30 KM back and forwards over a three week period once a year while marking GPS readings of sites of interest. The rest of us as ground crew split into groups to check out features. This first Ultra Light was retired in the year 2009 and for 2010 and this year a new model Ultra Light is being used with a lot more safety features.

The new plane is a Kitty Fox (only one of its kind) single seater made by Owen Badcock of Tasmania. It has a rotary engine with 2 spark plugs. The main

safety feature is that the wings just fold back and the plane can be rolled into the trailer when bad weather is upon us. The previous Ultra Light had all wing struts requiring bolting together. Hence the plane was tethered out in bad weather needing extra lashings down. Also the engine had only one spark plug, which had given Ken considerable worry at times.

This year the groups output was 97 new 5N numbers from the sites we visited. Another 20 sites from Ken's markings which were non karst features – mostly rabbit or wombat burrows, also visited were 4 old 5N numbers.

I will only be mentioning trip highlights and karst features that June and I visited and took data information. All other features found by other groups will be collected by Daryl Carr and all the data will be passed onto CEGSA Records Officer, Graham Pilkington.

The duration of our trip was August 18<sup>th</sup> 2011, returning home to Adelaide September 15<sup>th</sup> 2011.

#### Karst features George and June were involved with:

5N4770, 5N4771, 5N4772, 5N4773, 5N4775, 5N4776, 5N4777, 5N4780, 5N4781, 5N4783, 5N4784, 5N4785 and 5N4786, 5N4793, 5N4794, 5N4795, 5N4796, 5N5200, 5N5201, 5N5222, 5N5223, 5N5224, 5N5225 and two old pre numbered sites 5N1019 and 5N1508.

Most blowholes if accessible had bell chambers and had some small tunnels off to one side. There were many fossils in karst structure. One cave 5N4786 had a run off from a clay pan putting water into the cave. June had to wear gum boots when surveying - "looked like a real English pot-holer".

Only one large cave 5N4793 was found. June and I were in the advanced exploration group while other members started the survey. A two hole entrance with 5m drop into a 20m chamber, then a stream way through rocks to a further 5m drop, leading to a 20m tunnel, then the drop chocked off.







George in streamway through rocks in 5N4793.

From site 5N4771 June had the experience of being host to a tick. We often find ticks in these caves and usually we just brush them off our clothes, but we did find it the next day attached to her back. After removal of the tick, it was pleasing to note that there was no effect to June of any toxins from this beastie.

Another feature 5N4784 had some diverse opinion between geologists on this trip. The curvature layers marked in the wall of the entrance. Was it a travertine layer or a stromatolite as there were fossils above and below the curved wavy structure. **Travertine** – layers of limestone, calcareous rock.

**Stomatolites** – calcareous mount built up of layers of lime – secreting cyanobacteria and trapped sediment. Found in Precambrian rocks (approximately 4,000 million years ago) as the earliest known fossils are still being formed in lagoons in Australia. Personally, I would like to think it was a stromatolite.

#### The flora of the area.

June and I have been going out to the Nullarbor for the past 20 years, but we have not seen the lushness of vegetation as it was this year. Some sections of grass fields looked like wheat fields. One section of grass was up to my chest. The grasses and other plant coverage made it hard to see old rabbit burrows and even old wombat holes were hidden unless they were large structures (this did cause some concern for the bikers). Of course the usual blue bush and salt bush were prominent.

The plants in bloom were colourful and I used the local common names we know these plants by. Succulent plants with purple flowers, Pig Face flowers), Woolley-ball. with pink (plants Chenopods, White Paper Daisies (everlasting flowers), Yellow Daisies, Pea Bush and the different spear grasses. I personally only noticed three main different grasses, but it is listed that there is around 40 species of spear grasses in South Australia. They are generally perennial grasses flowering in spring and summer. At the end of the trip when driving south, one knows they are getting to the highway when we saw our first Myall Tree.



Myall Tree.

#### **Bird Life**

I was amazed how quickly the bird life had increased with all this vegetation, so many blow holes had resident Kestrels, others with kestrel eggs and some with kestrel Chicks. One cave we had a sighting of baby swallows in an easy viewing area. Then there were the Quails, we saw three different sizes of Quails, all of them at times trying to outrun our vehicle when we were driving down a track approved for use. There also would be a wave of Quails near the side of the track approx 2-3m out exploding into the air; checking us out; the Quails doing their helicopter rises as if jumping on a trampoline.



Kestrel nest with eggs.



Kestrel Chick.



Quail rescued from blowhole.

There was one cave where June and Cathy Brown were down surveying and there was a Kestrel nest to one side. After awhile a Quail came out of hiding, did his helicopter rise, but this cave only had a small blow hole entrance, it had a ceiling which the bird couldn't get around. June passed it up to me as I said "it didn't belong down there". It had fallen in. I sat it on my hand without any struggle, it probably thought the end was imminent, I carried him over to a nice grassy section, put him down, and when his feet hit the ground, Woosh!! He disappeared like a 100m sprinter.

In our walks to new sites we saw at times, small flocks of Budgies and also Zebra Finches.

#### Other Interesting wild life.

<u>Wild camels:</u> The main mammals we saw were wild camels often approaching near us to see what we were doing. No wonder they are called ships of the desert, as one moment they are close by checking you out, then without any noise they can drift away,



Feral Camels on the Nullarbor.



Our resident trapdoor spider.

from inside their hole. Another member of the family builds a side tunnel and puts a mud ball in it. If

the spider is threatened, he goes to the bottom of the hole and with threads attached to mud ball, pulls it down to cover his hiding space.

The <u>Centipedes:</u> are usually brightly coloured. The one photographed had found a comfortable spot under a tent and scuttled off when a tent was being dismantled. His bright red head, yellowish body with barbs of blue give a fair indication of how venomous he can be, which shows it would have to be a very reckless animal that would want to interfere with it.

silently, like a mirage. Here now, then gone. Australia is the only country with wild camels running loose and they find the Nullarbor a home from home.

Trapdoor spiders: A trapdoor spider came walking across our camp site. Maybe his home had been damaged. The sighting was very good as one could see his fangs quite clearly, but he scurried off into the foliage not to be seen again. Trapdoor spiders are interesting in that they have various ways of protecting themselves when in their home. Usually these lids are hard to see as they are flush against the ground. Also for a short time they can use their fangs to hold the lid down



Centipede.

<u>Southern Shovel Nosed Snake:</u> I had a wonderful sighting of this fellow and it had been my first viewing of this species. Regrettably by the time I went for my camera he had scurried off.

<u>Southern Right Whales:</u> At the start of the trip the arranged time to meet the other cavers was at the Nullarbor Road House. June and I arrived 2 days early. It was the Whale breeding season at the Head of The Great Australian Bight, only 30 km from the road house. Hence we took a tourist plane trip over the Whale nursery area, but flight restriction of no lower than 500m was not the best for our personal cameras, but we had a good look at the Head of the Bight itself and sighted around 60 Whales. The next day we went to the lookout area and viewed mothers and babies slowly drifting by.



Southern Right Whale and white calf.

These Whales are seasonal feeders and carnivores that filter feed plankton and tiny crustacean from the water. They swim slowly with their mouth open, constantly eating. On occasions, they are bottom feeders eating prey from the mud of the ocean floor. The gestation period is about 12 months and the calf is born tail first. The new born instinctively swims to the surface within 10 seconds for its first breath. The new born calf is around 4.8 to 6m long. The Right

Whales life expectancy is over 60 years. Southern Right Whales migrate from Antarctica to the southern coast of Australia each winter where the females give birth to their calves.

#### Conclusion:

So all in all, another wonderful trip, in this barren, treeless, but so full of life plains, with so much caving on offer.

#### George MacLucas.

### Corra Lynn Cave, 5Y1, 20th Aug 2011. The Portal Dig.

Graham Pilkington, Ray Gibbons, Rory Pilkington, Isiah Pilkington, and FUSSI members Clare Buswell and Tom Varga.

It appears that CEGSA members are getting too decrepit to come along on digging trips so I had to recruit a couple of our most recent members who have not succumbed to old age. Isiah has just turned 10 while Rory is 12. Two enthusiastic FUSSI members made up the number required - six - to excavate the Portal.

With all the gear already on site it was a quick trip to get there especially as Rory led the way having been out there once before. His navigation skills show that not all youngsters require a screen in front of them to do anything. I was initially concerned that the required muscle power and stamina was missing from our two younger members but I need not have worried; both put in a worthy effort.

This was the first time that we used a platform (actually a 90mm wide plank) across the top of the lower dig. And even though it was at a cockeyed angle, it did the job. Next time I'll have to level the plank and raise it about a metre to make it more practicable. Ray spent most of the day there and close to the end of the day had to be relieved because his left arm had given up and we all know how strong Ray is. The left arm has to pass the bucket across to the person at the bottom of the ladder while lifting it high enough to prevent the bucket from wedging in the fissure. An extra metre will mean a simple pass without the excessive lift.

Over the day, we lowered the dig by only 0.5m. This was because I insisted on removing a 0.15m thick slab of rock wall that was hovering precariously alongside me. It was separated from the wall proper by a thin sheet of wet clay and consisted of shattered heavy massive rock. Not what I wanted to fall on me after excavating another metre or two. To fill a bucket, I only had to put the bucket next to the wall and nudge it. It produced heavy bucket loads even for half-full ones. I also enlarged the clay sides to give me more room to excavate the floor. Once started on the floor, I descended rapidly and easily. So far, we've been extremely lucky, only clay and small pebbles have been encountered.

We kept up a rapid excavation rate and overwhelmed the trolley team. By the end of the day 80 bucket-loads had been raised and a mound had accumulated in the Guardhouse that will need removing before continuing the dig. A good exercise for a team of two.

After another metre sloping at 70 degrees, the slope reduces to about 20 degrees. I could see what appears to be a roof step along the 0.25m wide side fissure at the low point. Balls of clay rolling down from the dig at the junction have almost blocked off the gap under the lip. It will take another three or more digging trips to reach the roof step and see what lies beyond. I hope that the fissure is wider than 25cm below the dirt or I'm not going to fit! Even though the air was nearly still all day higher up in the Portal, it remained fresh at the bottom of the 10m deep pit.

Graham Pilkington

Corra Lynn Cave, 5Y1, 28th Aug 2011. Surface topography.

Graham Pilkington, Ray Gibbons.

A disappointing turnout but an opportunity to conduct a topological survey of the doline and land above the cave. It would have been a shame to have spent such a glorious day underground. Using CEGSA's theodolite meant that I could generate an accurate height map and start an accurate cave depth survey. We managed to complete the survey of doline and the surface above the cave east of the entrance.

Setting the tops of the concrete posts of the cave enclosure's gate at plus 1.30m (making the doline lip zero across the carpark), gives the bottom of the lintel above the cave door a depth of 12.40m. A point at the bottom of the wooden entrance stairs, at the left-hand turn, was established as a base point to continue the levelling. The floor there is currently at 17.02m – this changes slightly every time heavy rains flow into the cave.

After the surface survey, Ray and I transported a new platform for the Portal dig to the entrance of the Alberta. The platform is in a kit form because it would be too big to fit down the Alberta if assembled. The current plank is 1.2m long but it needs to be 2.2m long to span the pit, a metre higher and above the tight bit at the bottom of the fissure containing the ladder.

To finish off the day, we removed all the debris that was in the passage before the Letterbox. On previous trips, every time I passed through there, I found pebbles had rolled into the smaller section, making it awkward for us larger people to traverse.

### Graham Pilkington

#### SOS Cave Entrance Stabilisation Friday 9th - Sunday 11th September 2011

Participants: Graham Pilkington, Kevin Mott, Fred Aslin, Clare Buswell (FUSSI), Heiko Maurer (FUSSI), David Pollitt, Neville Skinner, Paul Harper, and Mark Sefton.
All photos are by the author unless otherwise noted.

More than 20 years ago, a group of cavers visiting S102 cave in Naracoorte found that an entrance to a new cave had opened up in the same paddock. The resulting cave, first named Shaftesbury Shaft, and then SOS Cave (for Son-Of-S102), was entered, explored and eventually surveyed to over half a kilometre in length. The two cave entrances are 80 m apart, and the caves come within a few tens of metres of each other underground. While the entrance to S102 is stable, the entrance to SOS has been a different proposition altogether. SOS is entered via a narrow 8 m deep solution pipe which drops through the roof of the biggest chamber in the cave. But the top of the bedrock in which this solution pipe is formed is still below some two and a half metres of sand which lies between it and the surface. The farmer had placed a bottomless metal water tank into the sandy funnel and



The two tanks. Note undermining of the outer tank on the left and right.



The cave entrance prior to the 9<sup>th</sup> of September. Note the two fences and tanks and the collapsed wooden railing. The yellow plank is one metre long.



The two tanks and top of the solution pipe. The inner tank is undermined at the left and bottom right of the picture.

over the next few years, cavers entering SOS negotiated a gap under the tank and a thicket of blackberry that helped stabilize the sand before descending the solution pipe. A wooden fence around the tank helped keep cattle from coming to grief. In recent times, the blackberry had been poisoned, the sand continued to fall in and a second, wider tank had been installed around the first. A larger perimeter fence was placed around the previous one as one of the original fence posts had started to disappear down the ever

widening slope. The cave entrance had become dangerous to the point that it had not been descended for several years and was at risk of filling in altogether.

Some weeks earlier, Graham Pilkington and I had visited this entrance, talked to the farmer and hatched a plan of action to secure the entrance for the long term, while removing a current headache

for the farmer. We were able to secure a generous donation of a three metre long, 90 cm diameter second-hand reinforced plastic stormwater pipe from the local council which was left at the cave entrance for us. A few weeks later, nine of us were back again armed with a plethora of tools several bags of concrete and a sort-of-a-plan.

Graham and I drove down to Naracoorte on the Friday and were soon joined by Clare and Heiko. We began preparations for the main task, first removing the fence. Graham climbed down to the top of the solution pipe and hammered a series of stakes sideways into the sand at the base of the inner tank where this had been undercut by the eroding sand. Various bits of old tarpaulin etc were then jammed onto these stakes and a mixture of rubble, sand and other bits and pieces carefully poured on top from the outside. The stakes proved strong enough to hold back the sand etc long enough for the second stage to be completed the following day. The farmer then showed us some old ruins where we were able to obtain as many limestone blocks as we wanted. Several trailer loads were carted from here to the cave entrance.



Outer tank removed and gaps around the inner tank partially back-filled.



The surrounds of the inner tank are now completely back-filled. The stormwater pipe is in the background.

The next day, the rest of the group arrived. We removed the outer tank and continued to fill in the gaps around the inner tank with limestone blocks and sand until these had been built up to level with the top of the inner tank.



The rock around the top of the solution pipe has been cleaned.

Photo: Clare Buswell.



Measuring the wooden frame to fit the stormwater pipe.
Photo: Clare Buswell.

Meanwhile, Graham spent several hours down below, perched on one leg on a caving ladder, clearing away the dirt around the top of the solution pipe and washing the exposed rock clean. At the same time, Kevin and Fred built a 'circular' wooden frame to place over the top of the solution pipe on which the stormwater pipe could be placed and concreted into position. Plans to provide our own gravel by breaking up large limestone boulders into tiny pieces with hammers, as though we were a bunch of convicts doing hard labour, were sensibly abandoned and instead, we put Fred's local knowledge and friendships to good use, managing to scrounge a trailer load of gravel as a generous donation from Henschke's quarry. By 4:00 p.m. we were ready to fit the frame and seal the irregular surrounds with concrete before placing the stormwater pipe on top. Graham's leg had given out by this stage, so Neville took his place. A mini rubbish tip at the bottom of the paddock proved a





The team admire their handywork. Photo: Clare Buswell.

Fitting the wooden frame. Photo: Clare Buswell.

godsend; old star-droppers were cut into convenient lengths by the farmer and bits of old canvas, timber etc were used to plug gaps so that Neville could concrete all the nooks and crannies around the timber frame. Then it was all hands on deck to lug the several hundred kilogram pipe on top of the frame. (See front cover photo.) This was achieved and the gaps between the bottom of the pipe and its surrounds were sealed with more concrete just before darkness descended. Clare, Heiko, Kevin and Fred then headed for home. David left for home first thing in the morning.



The stormwater pipe has been placed on top of the solution pipe, the surrounds at the base have been sealed with concrete and the inner tank then back-filled.

The area around the pipe has been built up with sand to the level of the surrounds. A temporary fence has been put back in place until the entrance to the pipe can be properly secured.

The next day the remaining five of us completed the task, filling in around the pipe until

most of it and the inner tank were buried. In all, we must have used more than 20 trailer loads of limestone boulders and fifty barrow loads of sand for the whole task. A temporary fence was placed around the pipe and we are now in the process of securing a rig that will make it possible to descend the cave easily and safely while making it impossible for animals to fall in.

Despite having only a general idea of how we were going to go about this task, the whole weekend went like clockwork. Our number was just right for the job and we always seemed to be able to improvise our way around problems as they occurred. We should have the entrance rig completed by summer and then it will be time to go caving again here after a hiatus of many years.

#### Mark Sefton

#### Corra Lynn Cave, 5Y1, 24th Sep 2011. Odd jobs.

Graham Pilkington, Isiah Pilkington.

Only us two enthusiasts could attend this trip, making it impractical to dig at the Portal as planned. However, we got a few odd jobs done.

The surface survey done by Ray and myself a month ago required a couple of stadia distances to be measured by tape to confirm the readings. For the steep decline into the cave, a mm change in stadia values on each of the 2 legs is equivalent to 11cm in depth at the first junction in the cave. An error of 2cm in tape distance gives only a 1cm depth error. For dips of less than 5 degrees, as was the case for most of the surface survey around the doline, stadia errors are negligible in determining elevations.

The next job was to enlarge the Letterbox at the start of the Alberta. The idea being that some willing but oversized helpers could then get to the Portal dig. But I didn't make much headway before running out of arm strength. However, a slice of wall a few cm thick now has a crack behind it and is sounding hollow when hit.

We did go to the Portal. Not to dig, but to take in the second longer platform for the dig. After the slow transport of the bits and pieces through the Alberta, (more people would have been helpful!), the 2.2m long board was bolted together and positioned over the pit. I found an excellent secure spot for the board where it could be made level and didn't require the leg that I hade brought in. This second platform is 1.3m above the first one and higher than the tight bit of the ladder fissure. Passing buckets from the pit to the ladder drop should now be much easier. The only drawback is that the second platform makes it very difficult to get out of the pit. However, the second platform can be moved into an upright position, out of the way, standing on top of the lower one.

After a short rest back outside the cave, I showed Isiah how to get to the Skeleton Crevasse and Skeleton Maze via the Bandicoot Bypass. He was an ideal size for Bandicoot and it gave him plenty of time to ponder the Universe while watching my very slow progress, both ways. But his small stature was a disadvantage getting down and up the drop into the Crevasse. What a caver needs is the ability to increase or decrease height as needed, maybe bones that act like hydraulic pistons? Of course, something still needs to be done about caver width as well as height!

Between tasks, we always exited the cave, and I let Isiah lead the way from wherever we were, which he did without difficulty. This was to ensure that his skills as a navigator would enable him to exit without me if the need arose.

# Graham Pilkington

#### 

# Corra Lynn Cave, 5Y1, 1<sup>st</sup> Oct 2011. Beginners trip.

Graham Pilkington, Damien Pilkington, Rory Pilkington, Isiah Pilkington, Charlie Pilkington, Phil Serle, Kathleen Serle, Bec Serle, Jac Serle, Andrew Serle, Josh Serle, and 3-month Associates Shan Jukinen, David Jukinen, Trans Stevens, James Riley, Justin Edwards.

A fun day to introduce new members to the art of exploration. Teams of 3 or 4 set off in various directions for 5-15 minutes (the time expanding with each foray) to find which passages "went". At the time limit, they had to return and report their findings. Not only did this get them to look around the cave but it helped in memorising the passage network. The return base was moved once from near the entrance to Grand Central to expand the coverage. The inadequacy of verbal descriptions quickly became apparent. I was barely able to follow what was being described even though I knew what the teams were trying to tell us. In complicated networks such as Corra Lynn Cave, every exploration team needs to draw sketches (or a line diagram to indicate passages and intersections) so that a map can be assembled for use in further exploration.

After a few hours, I took them on a loop down the Rope Crevasse and back via Ramshorns to exit the cave for lunch. Phil and Kathleen arrived at lunchtime with their children's lunch. Phil took a walking tour into the cave; in other words, around a couple of bends until he would have had to stoop

– just to see what the kids were doing. Surprisingly, most people left for open-air places after lunch, leaving just Damien, Rory, Isiah, Jac, Josh, and myself.

With a smaller group in tow, Rory led us to Bushwalkers Chamber (he'd been there on a previous trip). From there I got them to explore and try to find the Twin Pits and the Octopus Chamber. It took a while, but they happened upon the obscure tunnel that leads off from tunnels on the mid-east wall to the Octopus without having first searched all the more obvious leads. Rory was left behind in Bushwalkers; maybe he had had enough of small tunnels or was just plain exhausted.

Damien found a few spots along the way to Octopus were just his size, and not a mm more. Getting out from Octopus must have been much easier because at lot of internal water became external to lubricate the tight bits. We made it all the way to the Gravity Cavity lookdown but decided not to traverse onto and over it, reserving our energy for the return trip. I insisted on being an observer on the way out, letting the others navigate their way back to the entrance. A little guidance in navigation techniques was required to find the correct path out of the Bushwalkers Chamber into the Bushwalkers Run. This is a common problem spot for first-timers into the area but signposting the way out would not help people improve their navigation skills to find their way around the rest of the cave. Damien, in true caving spirit, persisted in his efforts to find the correct way out without resorting to asking me. As I had explained to him earlier, if I was incapacitated, it would be up to him to get out.

Graham Pilkington

#### Corra Lynn Cave, 5Y1, 8th Oct 2011. The Portal Dig.

Graham Pilkington, Gary Woodcock, Neville Skinner, Mark Sefton, David Pollitt.

This was the first time we had used the upper platform above the lower Portal dig and it proved its effectiveness immediately by reducing the required number of diggers from 6 to 5. We no longer need anyone at the bottom of the ladder because the bucket can swing freely across the main fissure guided by a second rope held by the person on the platform.

For the first half of the day the spoil was moved into the Alberta. At the same time, the Guardhouse accumulation was reduced to an acceptable level by adding extra dirt to the trolley containers that were only partially filled from each bucket haul to make up a full load. Lifting full buckets from the dig is impractical because the lifters tire too quickly – better to get in a full days work than wear everyone out in an hour or two. The spoil is also very heavy because it's saturated with water and is a VERY sticky clay.

Swapping tasks after lunch gave everyone a change of scenery as well as a change in muscle groups being exercised. Even so, we had to rotate jobs later to ease the stress on little used muscles, that's the result of most of us having desk jobs. The spoil from the afternoon was deposited in the tunnels southwest of the Portal. At least this way no-one was isolated. When using the trolley from the Guardhouse, the only contact that the puller has to everyone else is a faint "OK" when the trolley is full. There's also the problem of the rapid reduction in available space along the Alberta "streamway" tunnel. It would be a pity to finally make room to travel through the Portal floor by blocking off access to the Portal! The southwest tunnels can still absorb more spoil but it requires the full complement of 5 diggers to make use of it. When only 3 are present, the Guardhouse is the only option – not that this should be a problem with everyone so keen to be involved.

I was lucky enough to get last go at the dig face. By the end of 5 hours of excavation, we had lowered the dig by 0.8m, only 0.4m above the roof of what looks like a horizontal passage following the cross-fissure that we are digging down. An opening became exposed in the dirt a few cm wide and 0.3m long down one wall of the fissure that drops into the passage, but it's most likely just a wash-through. It's so tantalising being able to see along the horizontal passage to a roof step that blocks the view while not being able to get there via the 0.2m wide fissure. The dig is now primarily in the cross fissure in the 0.3m wide section adjacent to the junction. Total depth of the lower dig excavation has reached 4.5m giving a drop of 11m from the Alberta.

#### Graham Pilkington

#### Corra Lynn Cave, 5Y1, 16th Oct 2011. Alberta elevation survey.

Graham Pilkington, Ray Gibbons.

Using CEGSA's theodolite on a 28<sup>th</sup> August we had established that the floor at the bottom of the wooden entrance steps is 17.02m deep. On this trip, we continued the theodolite survey from there to the access tunnel to the Alberta, establishing a station on the roof lip at 29.76m. Alberta actually starts from the base of the Letterbox, the access tunnel being in the "Old" cave. Corra Lynn Cave's Lower Level is at 30m depth hence the access tunnel is part of the Lower Level.

From there we conducted an inclinometer and laser-tape survey to the Guardhouse. Two clinos were used and were calibrated on the surface and both turned out to have a zero offset. Every leg was read by both Ray and me, I took forward dips and Ray took back dips. All distances were measured at least twice. After reading, we compared dips and re-read if the difference was more then one degree until we were sure that any gross error had been eliminated. A later analysis of the readings gave a mean error between the two surveys a standard deviation of 0.1 degrees, well within the 0.5 degree precision. On a couple of occasions on short legs, only one reading was accepted because one dip was too difficult to read accurately. We used up 8 hours to complete the levelling. With the cold wind outside, we were glad to be inside, but the cold wind followed us all day. A pleasant change from the stuffy conditions of the last few months. The wind usually blows when exploration is not on the agenda!

The traverse along the Alberta from the base of the 2m deep Letterbox to the Guardhouse window floor is 173.4m with a drop of 8.4m giving an average slope of 2.8 degrees. The slope is very uniform and hardly noticeable. However, the washing through of the silt in the 1944 deluge had typically left dirt banks on the sides of a central channel. This implied that the water was confined to the channel and must have had a good gradient to establish such a neat washout. The survey confirmed that the required gradient exists even if hard to see. What confuses the senses is that the tunnels run along the bedding plane so that wall patterns look horizontal to anyone crawling.

A station placed on the roof of the Guardhouse is at 39.80m (using the average elevation from the two surveys which differed by 0.27m), while the Dig has reached 51m. This is about 10m lower than anywhere else in Corra Lynn and almost exactly twice as deep as Grand Central.

# Graham Pilkington

## Corra Lynn Cave, 5Y1, 22<sup>nd</sup> Oct 2011. The Portal Dig

Graham Pilkington, Gary Woodcock, Sue McCormick, Peter Ashenden.

Another Portal Dig trip, this time lasting 6½ hours. Excavation was a bit slow for several reasons, but we still managed to excavate down another 0.3m, only a few cm above the top of what I believe (hope?) will be a horizontal passage following along the line of the side fissure that we're using. Difficulties arose from fouled rope; broken bucket handle; bucket getting caught on the ladder (we ended up removing the ladder, temporarily stranding two of us down below); fears of falling out of the Guardhouse window when lifting buckets; and my bad shoulder.

The spoil was packed into the Guardhouse. It might be possible to store all future spoil here and in the southwest tunnels without having to fill more of the Streamway. Besides, it means that only four cavers are required.

The next trip could be very enlightening. We might be able to look beyond the roof step even if we don't actually get to made it navigable. But it will take a full team of fit cavers and a long day.

#### Graham Pilkington

# Past Trips from General Meetings

#### August 2011

- 1 Stan Flavel saw but did not enter erosion caves behind waterfalls near the border of Canada and the USA.
- **2 Graham Pilkington** continued the Portal dig in Corra Lynn Cave on the 20<sup>th</sup> August with the help of 3 other CEGSA members and 2 FUSSI members. A further ½m was removed.
- **Ray Gibbons** reported on the Mercedes College trip to Corra Lynn Cave on 7<sup>th</sup> Aug. 32 students attended.
- 4 Neville Skinner did some cave diving in Mexico.

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#### September 2011

- 1 **Neville Skinner** reported on the 3 day SOS cave entrance repair. There were 4/9/4 attendees over the 3 days. Most of the work was done on the Saturday when the numbers enabled the pipe to be manually lowered into the hole onto the prepared platform.
- **George MacLucas** gave us a description of the vegetated Nullarbor with grass up to 1.5m high hiding rabbit traps. It was the annual VSA ultralight plane trip, this time over an area north of Koonalda. They found 97 features. Park access restrictions included no driving off-track except by motorbike. After all that walking, sometimes ten or more kilometres off-track, they must have been very fit by the end of the trip.
- **Neville Skinner** gave us an idea of the difficulties that he had in just getting to Mexico to enjoy the cave diving. A pictorial extravaganza of the trip will be given at the January GM.
- **Matt Smith** was on the Scout Venturer trip of September 24-25<sup>th</sup> to the south east, including Mt Burr and Graveyard caves.

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#### October 2011

- **1.** Damien Pilkington and several children (Rory, Josh, Isiah,....) plus other members had visited Corra Lynn for a search and navigation exercise. 14 people took part in the morning trip. They exited the cave for lunch and 6 people did a second trip in the afternoon to Bushwalkers Chamber.
- **2.** Ray Gibbons has conducted an elevation survey in Corra Lynn from the surface to the portal dig. Forward and back readings were taken. This indicated a 3% slope to the portal. Approximate drops are; 12m to the door lintel, another 6m to the bottom of the stairs, 12m along the Alberta to the Portal.
- **3.** Two other Corra Lynn trips have taken place. Sue McCormick took part in a portal dig trip last weekend. It was hard work hauling material and placing it in the guard room. The hole is quite big now. Two more digging trips may be required.
- **4.** Ray Gibbons had a disappointing trip to the Nullarbor. A car problem resulted in a slow trip, covering 90km in three days. Dense grass covered the track and a Pajero set fire to the grass at one point. However he did manage to abseil 30m into a chamber which was blowing and had some formation.
- **5.** Ken Smith, Richard Harris, Grant Pearce, Brian Kakuk (from the Bahamas), Millie Harris, Emma Richards and Aaron Pearce took part in a joint CDAA/CEGSA Nullarbor trip. Weebubbie cave was visited. Then camp was moved to the Roe plain where Olwolgin and Burnabbie caves were dived. Paul Hosie and Al Polini joined us on the Roe Plain. A new underwater cave system on the Roe Plain was discovered by Paul Hosie. The entrance has a challenging zero visibility side mount restriction, but beyond this the passages are quite large. 1.5 km of line was laid in two days.

# **TECHNICAL and OTHER ARTICLES**

#### **MEMBERSHIP**

#### **Welcome to New Member**

1103 Afa Philip Serle **NFP** 

#### Change in membership details

0401 Ffa Richard Harris - Change to Family Membership

#### **MEMBERSHIP FEES**

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

#### **CEGSA MEMBERSHIP FEES FOR 2012 YEAR**

Full Membership	\$ 53.00
Full Country Membership	47.00
Associate Membership	45.00
Long Term Associate	53.00
3 Month Introductory	5.00
Joining Fee (N/A to 3mth Intro)	12.00
Discount for e-mail CEGSA News	15.00
Discount for Country Membership	6.00

#### **ASF LEVY FEE FOR 2012 YEAR**

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

#### **2012 YEAR FEES**

CEGSA	+ASF	IOTAL
\$53.00	\$ 68.00	\$121.00
47.00	68.00	115.00
45.00	68.00	113.00
5.00	20.00	25.00
	\$53.00 47.00 45.00	47.00 68.00 45.00 68.00

Variation for Family Membership			
1 <sup>st</sup> Full Member + 2 <sup>nd</sup> Full Member Less \$16.00 for only 1 CEGSA News	\$90.00	\$121.50	\$211.50
1 <sup>st</sup> Full Member + 2 <sup>nd</sup> Associate Member Less \$16.00 for only 1 CEGSA News	\$82.00	\$121.50	\$203.50
1 <sup>st</sup> Associate Member + 2 <sup>nd</sup> Assoc Member Less \$16.00 for only 1 CEGSA News	\$74.00	\$121.50	\$195.50

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 and CEGSA Fees.

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

#### Chris Gibbons.

Treasurer/Membership Officer.

# **Approved CEGSA Trip Leaders**

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

All the above named are also CEGSA Trip Coordinators.

Members may query the classification of any Trip Leader at any time with the committee.

It is a requirement that each trip be organised by an approved Trip Coordinator to be classed as an official CEGSA trip. It is also a requirement that dependent party trips be led by an approved Trip Leader at the appropriate skill level for the cave being entered.

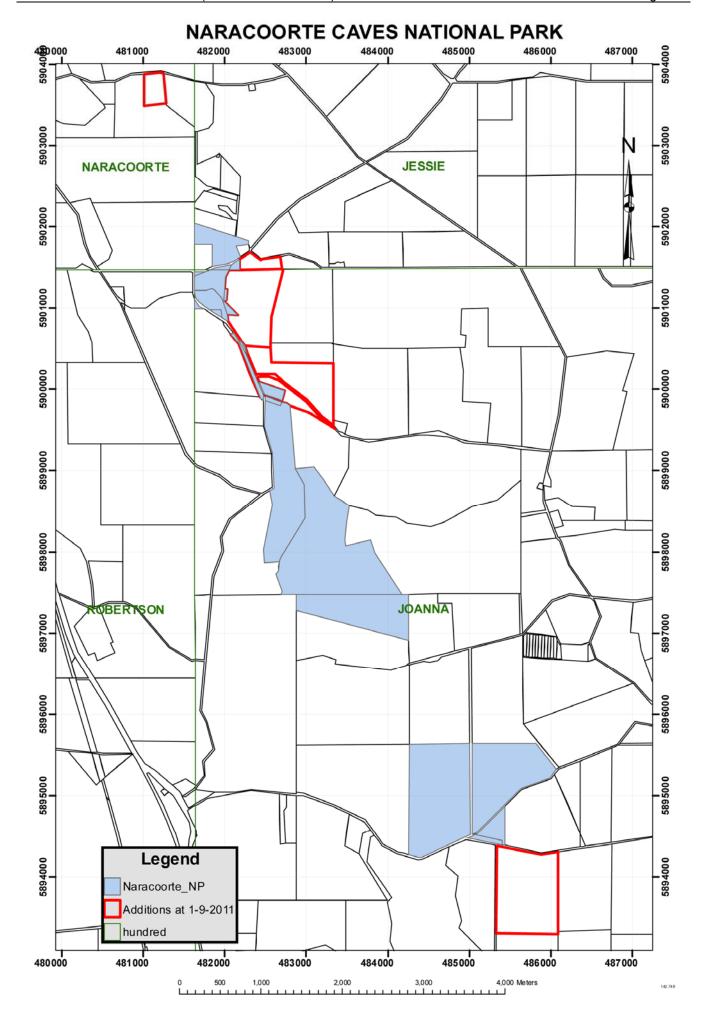
# **Addition to Naracoorte Caves National Park**

The additions to Naracoorte Caves National Park were finally gazetted on 1 September 2011. The latest additions to the park include:

- the land containing Sand Cave
- the land around Wombat Cave and east of Blackberry Cave
- the closed road north of Victoria Fossil Cave entrance
- the strip of land on the western side of the road to Victoria Fossil Cave containing Cable Cave
- the land between the camp area and Victoria Fossil Cave
- the land containing Brown Snake Cave

The extent of the reserve which now encompasses some 592ha is shown in the attached map.

#### Kevin Mott



# **Notice of Motion to Alter the Constitution**

Motion to be voted on at the January 2012 General Meeting:

Constitution 6(f)

Add Clause (iv)

"If a quorum is not present at any meeting then the following meeting of that type requires a quorum of three who are entitled to vote. Any such reduced quorum must be proclaimed at least 3 weeks prior to the meeting."

# **Annual General Meeting**

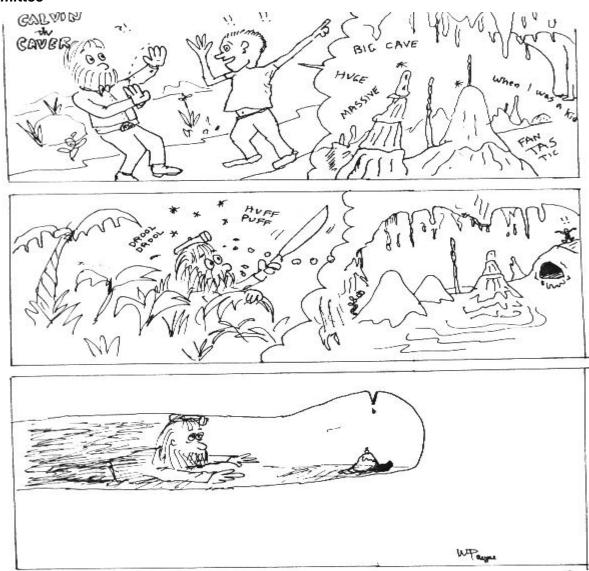
The Annual General Meeting of the Cave Exploration Group (SA) incorporated will be held at the home of Ray and Chris Gibbons, 9 Cuthbert Ave, Gulfview Heights on Saturday 11<sup>th</sup> February 2012 at 6.30pm for the presentation of the 2011 Annual Report and the election of officers for 2012.

The AGM will be preceded by a social get together and a BBQ tea from 3.00pm. Please BYO everything except BBQ. The swimming pool will be available to cool off if required.

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

Would all present officers please have their contributions for the Annual Report to the editor by no later than 31<sup>st</sup> January 2012 (preferably earlier).

#### The Committee



# **CALENDAR OF EVENTS**

Date	Type of Event	Description	Contact
23/11/11	General Meeting	Royal Society Room, SA Museum, Adel. End of Year BBQ	Graham Pilkington
29/11/11	Working Bee	Library and Records	Graham Pilkington
14/12/11	Committee Meeting	ТВА	Mark Sefton
28/12/11		NO General Meeting in December	Mark Sefton
	Working Bee	Library and Records	Graham Pilkington
11/01/12	Committee Meeting	TBA	Mark Sefton
25/01/12	General Meeting	Royal Society Room, SA Museum, Adel.	Neville Skinner
	Working Bee	Cave Diving in Mexico.  Library and records	Graham Pilkington
	Committee Meeting	TBA	Mark Sefton
	CEGSA NEWS	Newsletter Articles due	Athol Jackson
11/02/12	AGM	9 Cuthbert Ave Gulfview Heights from 3.00pm AGM at 6.30pm	Mark Sefton
22/02/12	General Meeting	Royal Society Room, SA Museum, Adel. SOS Cave entrance stabilisation.	Mark Sefton
25/02/12	Working Bee	Library and records	Graham Pilkington
28/03/12	General Meeting	Royal Society Room, SA Museum, Adel. Flinders Ranges.	Eddie Rubessa & Ian Lewis
25/04/12	General Meeting	Royal Society Room, SA Museum, Adel. "Up not Down" The view from 6000 metres.	Sue McCormick
	Training	Ad Hoc training	Tim Payne
	Caving	Ongoing Vic Fossil survey	Gary Woodcock
	Caving	Continuing Fleurieu Peninsula Exploration	Grant Gartrell

<sup>\*\*\*\*</sup>Extra trips will be notified through CEGSA e-News via email\*\*\*\*

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

Also, please ensure that a report of the trip is submitted in a timely manner.