CEGSA NEWS

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

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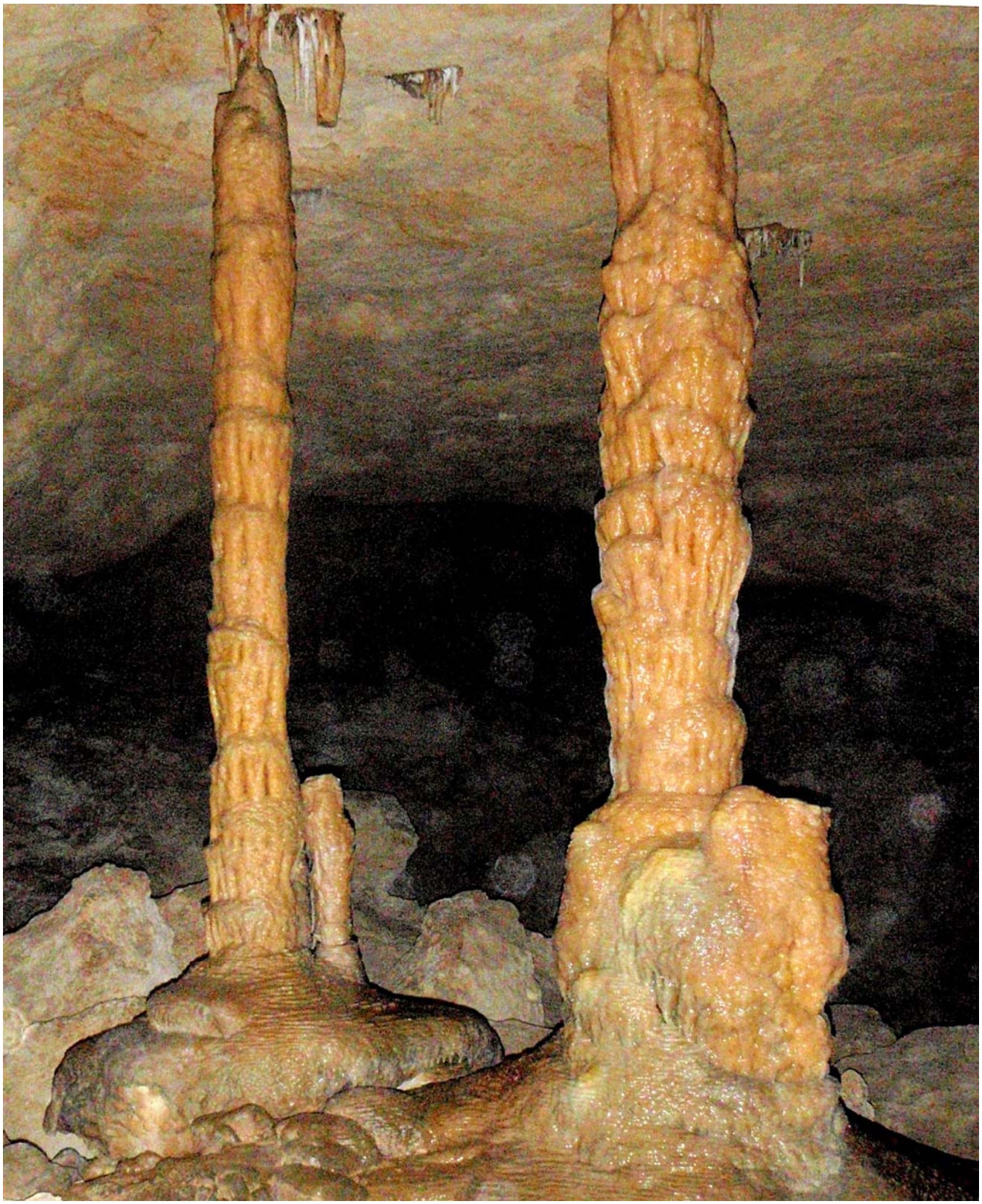

CAVE EXPLORATION GROUP (SOUTH AUSTRALIA) Inc.

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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Cover Photograph: Columns in Sand Cave**.**
Photo: Marie Choi.

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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 for Volume 56 Number 1 (Issue 221) is Wednesday 9th FEBRUARY 2011. 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 post to 6 Hudson Ave Rostrevor 5073 on a CD, in Word or ASCII text format. Do not embed photos in text; send as separate files with notes where to put photos. Photos are preferred to be in colour (jpg format). Of course other forms of communication will still be gratefully accepted.

PRESIDENTS SPOT

A few weeks ago (at the time of writing), I attended a most productive cave search and rescue weekend based at Port Vincent and Corra Lynn cave on the York Peninsula – the first search and rescue training activity run by CEGSA in many a long year. Apart from the pleasure of meeting a few younger cavers from another club (FUSSI), the whole weekend was a great success and both organisers and participants alike were pleasantly surprised when the cave rescue exercise on the Sunday went like clockwork. What was it that made this activity possible after such a long hiatus? Simply that there were people who were prepared to put their hand up and put in the effort. The weekend would not have happened had it not been for Richard Harris volunteering to take on the CEGSA Search and Rescue Coordinators role, Ross Anderson flying over from WA to conduct the program, and Graham Pilkington and Marie Choi contributing a considerable amount of their own time.

We remain a successful club, with a regular newsletter, a comprehensive set of records (now being converted to digital form), a program of activities and the ability to respond to outside threats to caves and caving because we have a core group of people who are prepared to put in time and effort on behalf of the club. The continuing success (or otherwise) of CEGSA will depend entirely on how many of its members continue to do so. By the time this Newsletter comes out, we will have had the last General Meeting for the year and it will not be long before CEGSA members will be appointing a new Committee for 2011. This year, we have not been able to fill all of the Committee positions, despite having one of the largest memberships of any ASF club. Serving on the Committee is not an onerous task and need not require anything more than attending meetings once a month and contributing to Committee discussions and decision making. So why not consider offering to join those who make CEGSA a successful caving club and make a contribution, big or small, to our group. The more who do so, the more we will be able to achieve.

Mark Sefton.

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ANNUAL GENERAL MEETING

The Annual General Meeting of the Cave Exploration Group (SA) incorporated will be held at the home of Mark and Karin Sefton, 22 Hogarth St, Panorama on Saturday 12th February 2010 at 7.00pm for the presentation of the 2010 Annual Report and the election of officers for 2011.

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

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 30th January 2011 (preferably earlier).

The Committee

TRIP REPORTS

Tracking Farie and Woolley Across the Nullarbor Plain

Trip dates: 1 – 22 Oct 2007

Party: Peter Ackroyd and Ray Gibbons.

The Tragic Farie and Woolley Story

In the latter part of the 19th century, after the frenzy of the gold rushes, there was a land boom in Australia. The various State and Colonial Governments were keen to have their empty interiors populated and virtually gave away land to enterprising pastoralists.

One such pastoralist was Mr J A Panton of Victoria. In 1862, whilst searching for new property in southern New South Wales, he came across an expedition led by the explorer Ernest Giles at Menindee and the two struck up a friendship.

In 1875–6 Giles led the "Elder Expedition" to the interior of Australia, during which he visited and named Boundary Dam, located near the border between Western and South Australia, and from there briefly examined the northern edge of the Nullarbor Plain. Giles later informed Panton that he had observed a valuable stock feed plant in the Nullarbor, that he called "Caundilla Clover" (probably *Calandrinia sp.* — the common name is Parakeelya), and that in his opinion, there must be water flowing inland, there being no watercourses flowing to the southern coast.

In 1877, acting on this advice, Panton joined with two friends to form the Holmes, White and Co Pastoral Company. The partners took out a lease on a block of land stretching 50km east from the WA/SA border and from 130km north of Eucla to almost the northern limit of the Nullarbor Plain.

Panton, who appears to have been the financier, appointed John Farie (whose name has been misspelt "Fairie" in the Victorian Geographical Journal), to lead a small reconnaissance party to examine this land with regard to its suitability for grazing. According to Panton, John Farie, whose father was Claud Farie, the then Sheriff of Melbourne, had had several years' bush experience on stations in southern New South Wales (Panton, 1913).

In Adelaide, Farie enlisted the aid of his friend, Henry Kirby Woolley, to accompany him. [Woolley was born in Melbourne in 1842 to Alfred Woolley — Victorian Births, Deaths and Marriages records.] Farie and Woolley proceeded to acquire a wagon, horses, stores and a nested set of four iron water tanks. On 16 September 1878 they left Adelaide on a 73 tonne schooner called Annie Taylor (Gillespie, 1994). This vessel has been incorrectly named as the Annie Wright in some articles (e.g. Clarke, 1878 and Stevens, 1938)..

Perhaps as an omen of things to come, on 28 September this vessel ran aground eight miles (13km) east of Fowlers Bay due to a navigation error by the Captain. However, the vessel was little damaged and Farie and Woolley and all their supplies were safe (Anon, 1878a and 1878b).

At Fowlers Bay, they engaged an Aboriginal guide and undertook the two-week overland journey to Eucla. At Eucla, they purchased an additional horse, known as "Gulliver" according to Tom Brown of the Nullarbor Station (Brown, 1919). They then proceeded to fill their water tanks (from Naliwoodin Rockhole), placing three of them at different stages along the proposed route — "a magnetic bearing of 4° east of North from the Douglas Post marking the boundary between Western and South Australia" (Panton, 1913).

On 4 November 1878, and approaching the hottest time of the year, Farie, Woolley and their guide set off from Eucla, arriving on the evening of 8 November on the approximate southern boundary of the new leasehold, 130km NNE of Eucla. Here they camped on a "hill", about 10m above the claypan level. The following day, leaving their fourth tank, containing 200 gallons (900 L) of water atop their wagon to act as a landmark, Farie, Woolley and their guide set off on an NNE course to reconnoitre the leasehold on horseback. They had two riding horses, and at least three pack horses.

On the night of 9 November they camped at what was later called Camp 1, about 30km NNE of their wagon and about 20km north of the local feature known by us as "The Dip". Farie's diary, recovered later and finally returned to Panton, stated that the horses were very tired and tended to ramble a

long way each night in search of water and feed. He also records that the daytime temperatures were 103°F (40°C).

The next morning (10 November 1878), they appear to have split up, with John Farie riding northwards for a further 15km to reach the approximate northern limit of the lease, while Woolley and the guide presumably remained at Camp 1. Once Farie had returned from his reconnaissance north, the whole party appears to have headed south-east to check that portion of the lease. They left behind a pack saddle at Camp 1, suggesting the loss of a horse.

They travelled about 30km to the southeast to establish Camp 2, where they stayed the night of 10 November. From Farie's notes, he appears to have ridden a further 15km to reconnoitre the eastern limit of the lease. That night, Farie recorded what was to be his last entry, ending with the sobering note, "Horses very tired and thirsty: [water] bags have leaked and evaporated two gallons" (Muir, 1879). The position of Camp 2 would have been about 15–20km east of their wagon "depot", with its precious cargo of water.

They may have commenced the next day (11 November) late, as the horses apparently wandered a considerable distance each night. It seems the Aboriginal guide's main job was to track down and catch these horses. The party headed due west, evidently believing they would intersect the wagon ruts left by them on their way up, or at the very least would spot the wagon on its "hill". Instead, they passed well to the north of the wagon, missing it by about 5km, and did not notice that they had crossed the faint horse tracks they'd left on their way north two days previously. They continued west for a further 7km before erecting a shade cloth in a stand of pittosporums in the middle of a claypan where they apparently rested during the heat of the day. This last camp (Camp 3) was about 8km WNW of their wagon.

At this stage they and their horses must have been desperately low on water. From the evidence of their tracks, followed about two weeks later, it was deduced that the horses had headed south from Camp 3 towards Eucla and, despite Farie and the Aboriginal guide tracking them for at least 20km, they were never caught. The two apparently returned towards Camp 3 and appear to have rejoined Woolley. After abandoning all their gear, except for a compass and revolver (Jones, 1880), they set off on foot. With daytime temperatures exceeding 40°C and with little or no water, their fate was sealed.

Farie and Woolley's story may be compared with that of Mason and Yonge, who, after their camels had been stolen while they were camped at Boundary Dam (located a little north of the Nullarbor Plain), carried as much water as they could and walked 250km across the Nullarbor. They reached Eucla in a very distressed state six days later. This was in the winter of 1896, when the daytime temperatures are typically 25°C rather than 40°C (Mason, 1921).

Farie and Woolley had indicated they would be back in Eucla around 20 November 1878. When on the 26 November the dehydrated horse "Gulliver" staggered into Eucla, a concerned William Kennedy, of Mundrabilla station, rode out along Farie and Woolley's wagon tracks in his buggy. Upon reaching the wagon depot and realising that no one had been there for some time, he followed horse tracks to the north to Camp 1, about 160km NNE of Eucla, finding only the abandoned pack saddle (Panton 1913). Not wishing to draw too heavily on the water tank on the wagon, Kennedy returned the Eucla and raised the alarm.

A team, consisting of Andrew Muir of Moopina station, John Clarke the South Australian telegraph station master at Eucla and possibly an Aboriginal tracker, set off on horseback on 3 December 1878. They were able to track the party back to Camp 3, finding also that the horses had wandered at least 45km south of that camp. At this point Muir decided to return to Eucla, as their own horses were suffering from thirst and heat stress.

Muir and Clarke returned to Eucla on 8 December 1878 precipitating a flurry of telegrams between Eucla, Adelaide and Fowlers Bay, requesting a team of camels be sent and asking about the possible involvement of the Fowlers Bay police trooper, Thomas Richards. (It is revealing that Richards, when he arrived at Eucla, and being a person experienced in the ways of the Nullarbor, sent telegrams back to his superiors to the effect that, with only horses at his disposal, he could be of no assistance whatsoever (Todd, 1878)).

Mr W R Swan, a pastoralist at Fowlers Bay, in consultation with his partner, Mr Barr Smith, made available a team of four camels, which they immediately sent from Fowlers Bay towards Eucla on the 16 December 1878 (Clarke 1878). The Camel team arrived at Eucla on 22 December 1878. Andrew Muir, this time accompanied by a Mr Dory (probably Dick Dorrie, Swan and Smith's dog poisoner (Brown, 1919)) and an Aboriginal tracker left Eucla on 24 December 1878, to try to determine exactly what had happened (Todd, 1878; Muir, 1879).

With the four camels, they were able to carry out a more thorough investigation, but unfortunately rain had fallen in the month and a half since Farie and Woolley had become stranded by their wandering horses. Muir's party was able to determine that one shod man, presumably Farie, had tracked the thirsty animals for at least 20km to the south, after which he appeared to have returned to Camp 3. No further trace of the men could be found, the rain having made the tracking of individual footprints virtually impossible. Muir's party returned to Eucla on 1 January 1879 (Muir, 1879).

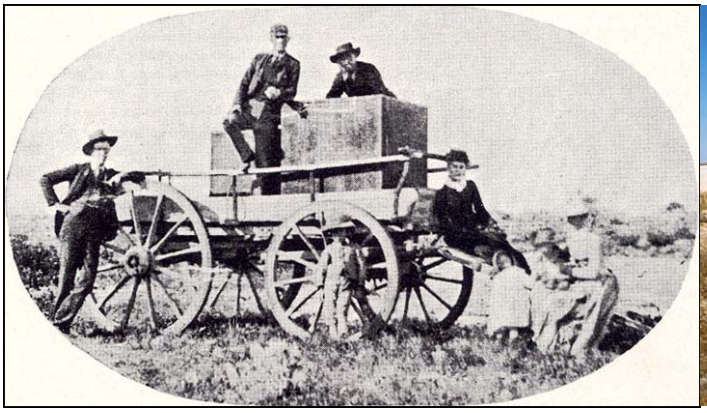
In April 1880, a Government Surveyor, James W Jones, was instructed to take a party mounted on camels to the far west of South Australia to choose a suitable site for a trial water bore.. [The site ultimately selected was near Albala Karoo Blowhole, N-171.] Added to this task was an instruction to look for any remains of Farie and Woolley (Jones, 1880).

Jones and an unnamed second man were well equipped, and were mounted on camels with an additional pack camel. He was able to secure the services of an Aboriginal tracker named "Billy". They followed Farie and Woolley's wagon ruts, still visible after the passage of 18 months, and Jones made a dead reckoning map of the route they had taken. He included the locations of the three staged water tanks and the positions of the two blowholes that the wagon tracks passed by. Unfortunately, the map is not particularly accurate, although probably the best that could be achieved by the horse distance and compass method apparently used. Once Jones reached the wagon depot on its "hill", with its now empty water tank, he recorded the latitude before heading off to the west and south in a fruitless search for any remains (Jones, 1880 — the latitude of the wagon is in his raw notes at the public records office, but was not included in his official report).

The final chapter of this sad event was written by two enterprising kangaroo shooters, Harris and Gordon. In 1891, they took extra horses up to the abandoned wagon and retrieved it, leaving it in the vicinity of 16 Mile Tank near the WA/SA border, "pending negotiations over ownership". In the same year, Mr George Phillip Stevens, who was working at the Eucla telegraph station, rode out to the wagon with family and friends and photographed it (Stevens, 1938).

J A Panton, the financial backer of Farie and Woolley's expedition, and presumably the wagon's owner, makes no mention of its fate in his article (Panton, 1913). Anecdotally it is believed that the wagon ended up in service on Nullarbor Station.

There is an old wagon in very poor condition standing outside Nullarbor Roadhouse today. It bears a passing resemblance to the one depicted in Stevens' 1891 photograph (Stevens, 1938).



Farie and Woolley's wagon recovered by kangaroo hunters, Harris and Gordon, and left at a point about 20km east of Eucla in 1891.
Photo: G P Stevens, 1891.. (Copy courtesy of the Royal Western Australian Historical Society Inc.)

Ray Gibbons outside Nullarbor Roadhouse at the remains of an old wagon that may have been Farie and Woolley's.
Photo: Peter Ackroyd, 2 Oct 2007.

The Follow-Up Trip

Ray Gibbons and I set off from Adelaide in Ray's Rodeo ute on 1 October 2007. That night, at Ceduna, Max Meth lent me his copy of J W Jones map, which showed the path taken by Farie and Woolley (Jones, 1880). From this map I was able to deduce the coordinates for the two blowholes shown on the path they'd followed, and those of their wagon depot.

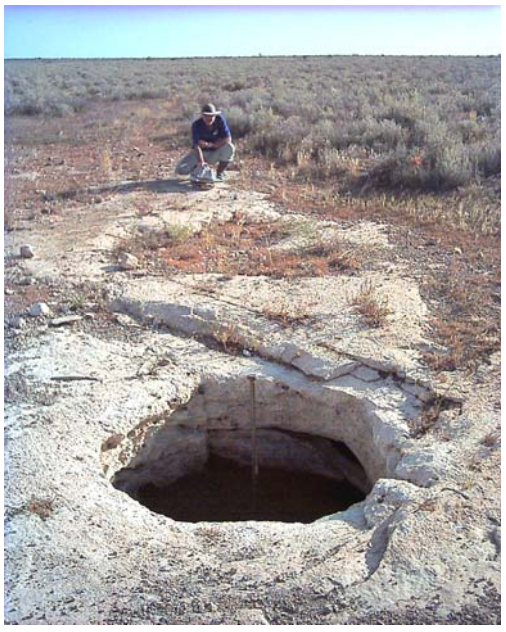
Driving west the next day, we turned off the highway a little before the WA border to try to locate some features logged by Harry Wheeler in the early 1970s (Wheeler, 1952–1980). While in the area we were able the tag some new features, and document some old features that had not been visited for some time.

One of the older features was N-180, that we later named "Half Circle". This feature was described as a 30m diameter doline with Myall trees (*Acacia papyrocarpa*). What we actually found was a 30m x 20m x 6.5m deep doline, containing some 3m high *Acacia oswaldii* trees, and a significant cave.

Ray Gibbons at entrance of Half Circle (N-180). Photo: Peter Ackroyd, 22 Apr 2009.

Ray carried out a quick check of the cave while I did the surface documentation work. Ray returned after exploring a cave of some significance, containing at least 100m of walking passage, "that needs a survey". Our next trip program was already taking shape, and we'd barely commenced the current one.

From this site, we moved along the Old Coach Road to track down some 1970s Wheeler features, including Bunburra Rockhole (N-991). After a lot of walking about, we finally found this rockhole, documenting and tagging it.



Ray Gibbons at Bunburra Rockhole (N-991). Note the crowbar in the rockhole. Photo: Peter Ackroyd, 4 Oct 2007.

Having succeeded with Bunburra, we thought we would try to find the nearby Bundulla Rockhole (NX-280), shown on very early maps, but were not to be rewarded for our half day of searching.

We were by now very close to the path taken by Farie and Woolley in 1878, so we attempted to follow it as closely as available tracks would allow. We found the going tough however, getting a bad puncture in one tyre that required multiple plugs to stop the leak, and completely wiping out another tyre on a "razor rock".

Each night we set up our camp in a suitable area and, after putting up tents, shared a beer or two before cooking a meal. Each morning was taken up with me downloading and annotating the previous day's photos and GPS points while Ray went for a 5–10km karst walk, searching for new features.

On 6 October, we set off north, finding the country to be unrelentingly flat, presenting us with a sea of bluebush, occasional patches of saltbush and an almost complete absence of trees of any kind.

We looked for Farie and Woolley's staged water tanks, and for the first of the blowholes shown by Jones on his 1880s map. We came to the conclusion that the tanks had long ago been collected and reused elsewhere; very little is wasted in such a remote location. Of the two blowholes that Jones had mapped, we found none in the indicated locations. We did locate and tag N-3993, a blowhole

close to the first mapped blowhole, but it was much larger than that described by Jones, and was about 2km out of position.

Whilst searching, we came across a 1m long dugite sunning itself. These brown snakes can be quite aggressive, and we would normally stay well clear of them, however, this one appeared to be calm enough to allow itself to be photographed.

A 1m long dugite (*Pseudonaja affinis affinis*) sunning itself in the vicinity of N-3994.
Photo: Peter Ackroyd, 7 Oct 2007.

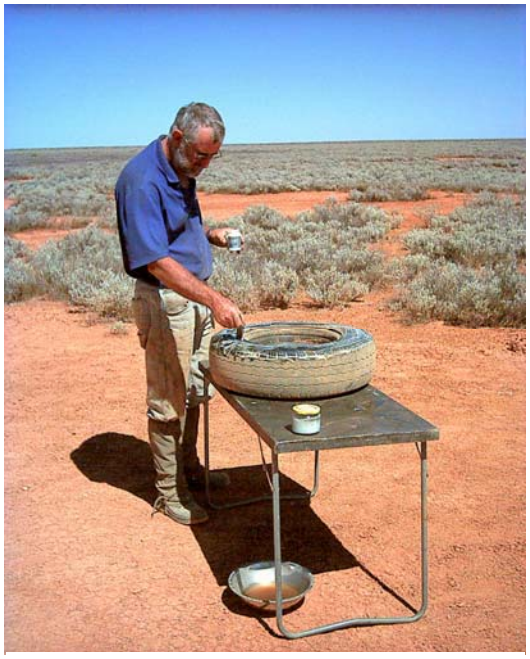
The unbelievably rough ground caused many, many punctures, and the dust and debris build up on the radiator required us to stop every hour or so to cool the motor. Despite our lack of success in finding the blowholes shown on Jones' map, we did find a few other blowholes and some dolines which we duly tagged.

On 8 October, we reached the Transcontinental Railway Line (the "Trans Line"), crossing it at the ramp next to the 1,027km post, a crossing point mentioned by Harry Wheeler. From here we were able to relocate and tag several of the features recorded by Wheeler in the early to mid 1950s, including Noisy Blowhole (N-938).

The following day, we searched for the second of the Farie and Woolley blowholes shown on Jones' map. The location, as indicated by Jones, would have put this about 6km north of the Trans Line, but despite a three hour search we found nothing.

Continuing on to the probable location of Farie and Woolley's 1878 wagon depot, we found two likely looking rises, both of which were about 10m above the claypan level. The second of these had two smallish rockholes and, nearby, a rough fireplace made of rocks. We named the rockhole "Farie and Woolley Rockhole" (N-3386). The vista to the north from this point was not encouraging, but it did display somewhat better country than that to the south.

We were also able to visit the likely location of Farie and Woolley's last camp (Camp 3), 8km WNW of the wagon depot, finding it to be a claypan with a large, and now dead, pittosporum in its centre. This was where they abandoned all their pack and riding saddles, their blankets and even a gun and a compass, in a last desperate chase after their lost horses. There were no relics left that we could discern; presumably they had all been collected in the 1800s. Looking south from this point was not a pretty sight. Bluebush seemingly stretched forever in a monotonous plain — the flattest and most featureless we have ever seen in all our trips to the Nullarbor.



Ray Gibbons carrying out what was to become our daily routine of repairing tyres.
Photo: Peter Ackroyd, Oct 2007.

On 10 October, we continued north towards "The Dip", a significant paleochannel located about 20km north of the Trans Line. The further we proceeded north, the more we saw the country improve, as had been noted by Farie in his journal (Panton, 1913). At The Dip we departed from Farie and Woolley's path to follow The Dip Track to the west, reaching the WA/SA border track. Shortly thereafter, we found a comfortable donga in which to camp after a rock slashed and ruined the last extra spare tyre. We were now reduced to four road tyres and wheels, four bush tyres and wheels and a leaky patched tyre on the spare wheel. We also had two thoroughly ruined tyre carcasses perched on the very top of the vehicle.

Ray Gibbons alongside a large specimen of *Acacia tetragonophylla*.
Photo: Peter Ackroyd, 10 Oct 2007.

We decided the following day should be a rest and recovery day. Ray had broken a tooth and its sharp edge was cutting his mouth. That was fixed by Ray, using a small warding file, nerves of steel and some careful filing. We also had many tyres in need of attention and we had a lovely big donga, full of 6m tall *Grevillea striata* (Beefwood) trees, in which to camp.

The edge of the donga had a great example of *Acacia tetragonophylla*, the common name of which is "Dead Finish". This large specimen looked more alive than most because it was in full flower, but it still wouldn't win any beauty contests.

During the late afternoon we became aware that we shared this donga with a pair of eagles when one of the adults glided in with a rabbit, dismembered it on the ground, then flew up to its nest to feed it to two healthy, three-quarter grown chicks perched in a large messy nest up a pittosporum tree.

A three-quarter grown wedge-tailed eagle chick nesting in a pittosporum tree (the second chick is hidden behind the first).
Photo: Peter Ackroyd, 11 Oct 2007.

On the morning of 12 October we fitted a heavily patched and repaired tyre to the rim of the spare wheel and hoped that it would hold, before heading south down the border track to Deakin Railway Siding. We jokingly pulled up at the rail crossing to look left and right, only to be surprised by the appearance of the Indian Pacific heading our way from the east. The train driver gave us a friendly toot and a wave. We saw many curious, pale passenger faces peering out at us.

A little to the east of Deakin is the border obelisk, constructed by a joint WA/SA survey party in 1926. It is only 50m out of position (too far to the east) — not bad for surveyors who had to rely on star shots for their location data.

Ray Gibbons at the WA/SA border obelisk east of Deakin.
Photo: Peter Ackroyd, 12 Oct 2007.

Near Deakin, we searched for more of Harry Wheeler's features, recorded by him during his 1955 visit. The location descriptions of these features referred to railway paraphernalia, such as signal boxes, that were no longer there. With some lateral thinking we tracked the various features down to tag and record them. They seem largely unaffected by the passage of the years, no doubt being rarely visited these days.

Continuing south down the border track, we turned WSW into Western Australia and headed for the Link Track, finding new karst features as we went. In this area, we saw a mediumsized herd of camels. We are finding that these animals are becoming an

Medium sized herd of camels seen in the central Nullarbor.
Photo: Peter Ackroyd, 13 Oct 2007.

increasingly common sight in the Nullarbor as their numbers steadily grow.

By 14 October we were able to start adding NXK features to our search list. These had been logged from the air in 2002, but never before visited on the ground. We were kept busy tagging and recording until a razor rock got into a yet another tyre (one we had only just repaired) and ruined it completely. We fitted a road tyre and hoped not to damage it.

Ray's stomach had been playing up on him, so we took it easy for the next day, locating a few more NXK features and recording them. Thankfully the road tyre survived unscathed. Ray was feeling a bit better the following morning so we continued with the same work along the eastern side of the Eucla-Forrest Road, near the Link Track.

On 16 October, we drove west along the Link Track to Old Homestead Cave to allow us to wash, and to collect more drinking water. While there I took the opportunity to check a broken speedo cable. It was completely gone, wiped off by the bluebush.

The following morning, we returned to do more tagging of NXK features on the northern side of the Link Track. In the afternoon we had repaired yet another puncture with a plug and had gone no more than 100m when a razor rock took the life of that tyre too. The tally was now four tyres written off, three major patching jobs and about 60 plugs used to repair lesser leaks.

We fitted yet another road tyre and carefully made our way south towards Eucla, arriving without further mishap at 9:20 pm. Fortunately we were able to secure the last room in the motel and crashed for the night.

Since we had terminated our trip a couple of days early due to tyre attrition problems, we thought we would indulge in a little tourism. We located an old underground water tank near the site of the old Moopina Station at Eucla, the mortar of which had been signed by its maker, "JD Batt 1883". Batt was the overseer of Moopina Station from about 1875 until 1885

When we attempted to return back up the old pass to Eucla village, the car refused to start. After poking about a bit I was able to diagnose that it was a fuel fault — the high pressure fuel pump had failed. The local RAA agent, Rod Fowler, very kindly made his workshop available to us, allowing us to remove the old fuel tank and pump ready to fit a second-hand one that Ray's son, Terry, picked up on our behalf in Adelaide very early on Saturday 20 October. Terry and his wife, Zofia, generously drove all day from Adelaide to Eucla, arriving on Saturday night at 11pm. First thing Sunday morning we fitted and tested the replacement tank.

We paid Rod Fowler, for the use of his hoist and workshop and were on the road by 11:30 am. After an overnight stay in Ceduna, we reached Adelaide on the night of Monday 22 October, ready to find a second-hand speedo to replace the one lost in the bluebush. The vehicle had travelled some rough roads on this trip, and it showed in the statistics. Four tyres were written off, 60 plugs were used on punctures and a new fuel tank, fuel pump and speedo had to be fitted.

Farie, Woolley and their unnamed Aboriginal guide had to deal with the same harsh country that we had been in, but in their case the temperatures were in the 40s rather than the 30s, and they had horses, that required water and feed, rather than a motor vehicle.

Acknowledgements

I would like to acknowledge the assistance of the staff at the South Australian State Records Office, Kelly Daniel in particular, for the provision of a copy of the original South Australian Police Report on the disappearance of Farie and Woolley.

Deb Wilson, Executive Officer of the Royal Western Australian Historical Society, very kindly scanned G P Stevens' image of Farie and Woolley's wagon from the Society's bound set of publications and sent it to me with permission to include it in this article.

Steve Howell of the State Library of Western Australia supplied a copy of the original text of the article written by G P Stevens about Farie and Woolley.

Paul Dee of the State Library of Victoria assisted with some of the biographical information on Farie and Woolly. Julia Marshal, also of the State Library of Victoria, kindly sent me a copy of John Panton's 1938 article on the ill-fated expedition.

Murray Collins of Ceduna generously supplied me with copies of shipping records of the coastal schooner *Annie Taylor*..

Appendix 1: Listing of features examined and karst numbers allocated

New 'N' numbers allocated, tagged and documented:
N-3382 — 3425 and N-3991 — 3999.
(Total = 53)

Existing 'N' numbers visited, data collected and feature tagged (when no tag found):
N-180 (Half Circle), N-936, N-937, N-938 (Noisy Blowhole), N-980, N-989, N-991 (Bunburra Rockhole), N-1164 (Torch Glass Blowhole), N-1165, N-1992, N-3152.
(Total = 11)

Temporary 'NX' numbers visited and 'N' numbers allocated (where applicable):
NX-71 (non-karst), NX-279 (non-karst), NX-599 (non-karst), NXK-206 (rabbits), NXK-233, NXK-234, NXK-235, NXK-1862, NXK-1863, NXK-1864, NXK-1865, NXK-1887, NXK-1888, NXK-1889, NXK-1898, NXK-1899, NXK-1914, NXK-1915.
(Total = 18)

All our cave information was entered into the CEGSA Karst Index (KIDSA, now OzKarst) in late 2007 and so is accessible to all cavers.

References

Anon, (1878a), The Annie Taylor. *The Adelaide Observer*, Saturday October 19th, 1878, page 14.

Anon, (1878b), The Annie Taylor. *The Adelaide Observer*, Saturday October 19th, 1878, page 13.

Brown, Tom, (1919), Nullarbor Plain, **In:** Supplement to the President's Annual Address, *Royal Geographical Society of Australasia, South Australian Branch* ***Vol XIX***: pp 150–151.

Clarke, [John], (1878), Two Young Men Lost In Western Australia, *The Adelaide Observer*, Saturday December 14th, 1878.

Gillespie, James, (1994), *Traders Under Sail — The Cutters, Ketches and Schooners of South Australia*: page 8.

Jones, James W, (1880), Examination of Country North-East of Eucla, *Parliamentary Paper No 191, South Australian Government.* (Includes map "Plan Shewing Country North-East of Eucla", dated 24 Sep 1880).

Mason, Arthur (1921), Explorations in the South-East Portion of Western Australia, **In:** Supplement to the President's Annual Address, *Royal Geographical Society of Australasia, South Australian Branch* ***Vol XXI***: pp 102–105.

Muir, [Andrew], (1879), The Expedition in Search of Messrs Farie and Woolley, *The Adelaide Observer*, Saturday January 4th, 1879.

Panton, J A, (1913), The Story of a Forgotten Expedition, *Victorian Geographical Journal*, ***Vol XXX***: pp 1–17.

Stevens, G P [George Phillip], (1938), Tragedy on the Nullarbor Plain, *Early Days Journal and Proceedings ,* ***Vol 1 (Oct 1938) , New Series,*** pp 59–60.

Todd, C (1878), Telegrams to South Australian Commissioner of Police, **State Records of South Australia, GRG5/2:** Correspondence Files – Police Commissioners Office.

Wheeler, Harry (1952–1980), Quartermaine-Wheeler List: Catalogue of blowholes caves & any other surface features of the Nullarbor limestone that have interesting underground connections. (Unpublished — copy held by CEGSA)..

Peter Ackroyd, 2 October 2010

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Jolly Jaunt, Sand Cave 5U016 24th July 2010

Over the years I suspect, like many in CEGSA, I am not alone in having had a passionate on and off relationship with Sand Cave (5U016). In Brief;- The cave was open for many years (Surveyed and dug), closed for decades, sold, briefly opened, then closed yet again. More recently the property has been for sale I even looked at the tender document. This on off relationship was all compounded by my somewhat off again and on again relationship with Australia. My last trip (Back in 1997) had resulted in some notable extensions that still remained unsurveyed. So when the opportunity to take a day trip in "Sand" came up. Then naturally it was game on again.

Participants;- Damian Grindley, Marie Choi, Amanda Grindley, Steve Bourne, Deborah Carden.

The main focus (no pun intended) of the trip was photographic. A potential sale was in the wind and who knows how access may develop in the future. Disappointingly my stereo camera was still in transit from the USA and ironically arrived in Adelaide the Monday following the trip!. Just as well really, we probably did not have enough slave bunnies. Being first down the entrance drop I was pleasantly surprised by the lack of foot prints, the soft sand had been churned up by multiple animal tracks. Almost immediately a rotten odour lead us to a recently deceased 1.5m snake. Just mouldy enough to make it difficult to distinguish between black and brown, we thinks brown. The smell lingered with us for a couple of chambers. Palaeontology still in action.

Deceased snake. Photo: Marie Choi.

Steve being a happy snappy chappy got on with the process of taking digital SLR images ably supported by Deborah, Amanda and Marie. Sand cones and columns being the obvious subjects. It is actually Marie's happy snaps that accompany this article. I was more interested in taking a detailed look at the undercuts in the first third or so of the cave. I had never really taken the time to look carefully at these rather I had shot off to the various ends without taking time to poke around. This interest, of course, has something to do with my previous interest in Robertsons cave 5U017. Nothing new was found. The undercuts had been well looked at previously but now I know. Sand cave has been well travelled yet there is some sign or recovery and certainly no sign of heavy wear

La La in Sand Cave. Photo: Marie Choi.

over the last decade. The exception being a new area of inscriptions in a sandy floor which of course can easily be removed if required. In all the trip lasted an enjoyable five hours. Steve towards the end of an Ethanol free month particularly enjoyed the PHisssst of fermented beverages opening and the exaggerated aaaaaaghs of post trip consumption.

What next. Don't expect the flood gates to open. Well for the meantime access is extremely limited. The extensions still need surveying and a future trip to clean up the sand cones of rubbish dumped in from above is planned. It has previously been professionally determined that there is little or no evidence of paleontological material in these cones. Consequently damage to older deposits is unlikely if the rubbish is removed. Occasionally interesting semi historical material can be found in the rubbish. Amanda spied old newspapers and bottles identifiable from the 30,s, 40,s and 50's still quite visible on this trip. Contact myself at cavin.pom@gmail.com if you have interest in helping out and seeing part of this stunning system.

Damian Grindley.

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Soon forgotten Hero's 5U016 Oct 2&3 2010

Sand Cave Cleanup

Participants:- Damian Grindley, Damon Reece, Marie Choi, (All CEGSA) and Ian Farhall (VSA).

Well a promise is a promise, I suppose, and I had promised to organize a group to help clean up the large Sand cone in Sand Cave 5U16. Unfortunately job prospects got in the way and I was to be whisked off to Sweden at short notice. So it all got brought forward to the long weekend. 2nd and 3rd Oct 2010. Now being a long weekend there are lots of competing activities and between that and illness the planned group of eight whittled away to half that size. Equally unfortunate was the absence of Steve Bourne who had been so active in the purchase of the property for the SA Dept of Environment and Natural Resources.

Being of course a well organised trip we were still running around Naracoorte Saturday morning grabbing gloves from Trev's , food from Woollies, trying to find plastic hauling buckets and generally faffing around. The original plan had been to have a haul team for the entrance drop and a cleanup team in the cave. At some point in time the roles would swap. But due to lack of bod's we all just piled in the cave. It had been previously determined by Liz Reed that no fossil bones were evident in the sand cone. Our plan was to clean up the obvious human detritus that had rolled in from the surface and hide our tracks with a handy dandy leaf rake. Then assess the situation for cleaning up the base of the shaft above the sand cone. Any historical material such as old wire ladders for entering the cave would be left in situ.

Rusty metal, bottles, cans, and newspapers made up the majority of rubbish with the odd toilet seat, gas boiler and battery cell thrown in for good measure. Gloves proved essential and snow shoes might have been handy!. All was hauled and dragged back to the entrance in tackle sacks or buckets. The bucket was used for the broken glass. We staged it all at the base of the drop for eventual hauling up to the surface. In all some thirty loads came up the shaft to the surface. The pile looked pathetically small in the paddock above, certainly no reflection of the effort involved to get it there. Newspaper articles although badly burnt where distinguishable as being from the 1930's and most of the bottles were dated from the 1950's. The choicest ones now decorate various mantle pieces in Adelaide.

Most was hauled up Sat afternoon however Ian and myself removed a final handful of buckets and a quick wiz round with the leaf rake on Sunday morning. We also gave Ian a quick tour of the main drag in return for all his hard efforts. On exiting, another Ian (Ian Lewis) was found lurking at the cars. Handily he had missed all the hard work.

Although the sand cones now look clean, you can only pick up the surface rubbish. The sand is slowly moving and I suspect bottles and cans will be found rearing their ugly heads out of the sand for many years to come. Regarding the rubbish at the base of the shaft above the sand cone this is about six to eight feet deep. Contains fencing wire, rubber tyres and all the junk we had previously removed. Our recommendation is to lower something the size of a ½ ton grape picking bin (~1000ltrs) down the shaft with a crane. Workers could hide in the cave while it is being hauled up and down.

Damian Grindley.

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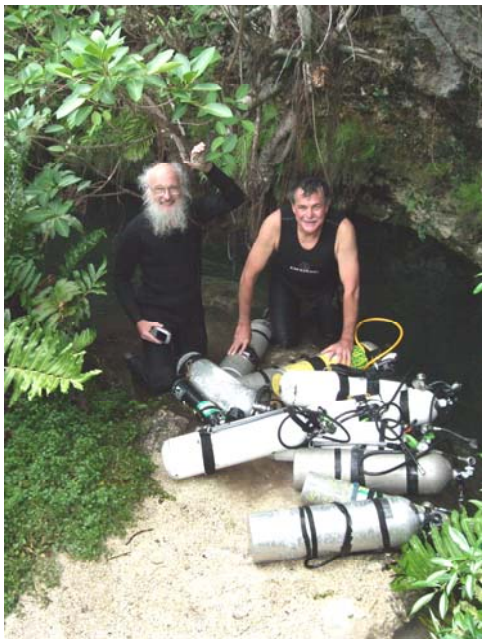
Cave Diving – ”Most Beautiful”

“They are the most beautiful caves in the world”, Agnes Milowka had told me after her 2009 trip to the island of Abaco in the Bahamas. “Sure” I thought “but she hasn’t been to Mexico yet”. I couldn’t imagine anything better than the Yucatan caves I saw in 2009. But I decided to have a look anyway and arranged a trip for May 2010.

Forrest looking for the blue hole outflow.

I had been to the Bahamas once before, to the island of Andros in 1998 (see Guidelines 68, March 1999). There are a number of Inland cave dives on Andros, including Stargate Blue Hole and many ocean blue holes. At Small Hope Bay lodge on Andros I looked at maps of several of these caves and saw a lot of surveyed passage at over 300 feet deep. This is when I first saw Brian Kakuk’s name, as most of this deep mapping was done by him. Brian is still in the Bahamas and he has spent more than 20 years in the exploration and study of the Bahamian underwater caves. He now lives on Abaco and runs “Bahamas Underground”, taking tourists like me to look at the caves.



Forrest and the author at entrance to Dan’s Cave.

When Forrest Wilson and I flew into Marsh Harbour on Abaco, Brian was there to meet us in his van. It was only a short drive to Brian’s house and dive shop, which shares a compound with the Bahamas Cave Research Foundation office. The “Friends of the Environment Cottage” is there too and this provided us with very convenient accommodation for the week. It was only a short walk to Brian’s van and dive shop. Brian guides a maximum of two cave divers. He regards any more than two divers as too risky for the fragile caves. Side mounted cylinders, whilst not mandatory, are a very good idea, since most of the beautiful areas are not accessible to back mounting divers.

Most of our diving was done in Dan’s Cave which is still growing as Brian continues to find new passage. It contains all types of cave, from huge Nullarbor style passage, to tight and delicate areas. No two dives were the same and all were wonderful. The water is fresh above about 10 metres and then you enter the salt water. There are many intensely decorated chambers at depths up to 20 m, but some sections of passage were 45 metres deep. We dived with nitrox, and

decompressed on oxygen after every dive. Between dives we sat in the woods near the cave entrance, ate our lunch, and swatted the large “Doctor” flies which came to feed on our blood. Brian has made friends with the local Bahamian curly tailed lizards. They emerge from the bushes to eat freshly swatted doctor fly from his fingers. These lizards look like a creation of Micheal Leunig and provided good entertainment. The weather was warm and humid so after lunch it was a pleasure to slip back into the 25C water.

The Bahamian curly tailed lizard.

We dived one ocean blue hole and it was interesting to swim along a winding cave passage as the marine environment slowly changed to the more familiar cave environment. This cave is tidal and Brian had timed our dive so that we swam in against the current, but had the pleasure and safety of the current helping us out. At one point we found a hole in the floor which was gushing cool clear cave water, contrasting with the warmer sea water.

Ralph’s cave has an area called the “Glass Factory” and a feature of this area is a dense collection of soda straws called the “Frozen Rain”. Brian describes entering this area as “swimming through a chandelier”. That was exactly how I felt as I crept along the floor of the cave trying to avoid the mass of delicate speleothems just above my head. Brian watched us very carefully through the delicate areas and was ready to grab a fin or push us down if we got too close. A feature of these caves is the purity and transparent nature of the calcite formation. We could see right through many of the shawls, and large stalagmites would light up if we placed a primary light on one side. In the glass factory the stalactites and straws had reached an ancient water surface at one point in their growth. Huge single crystals of calcite began to grow underwater, producing rose like formations and soda straws with large single crystals attached to the end. Most of these crystals look like perfect drawings from a crystallography text book. The frozen rain is probably the second most beautiful thing I have ever seen. No human artist could produce a sculpture of such complexity. It was created at least 10,000 years ago but it is so sparkling clean it could have been formed yesterday. This demonstrates the absolute purity of the ground water in the area.

The crocodile skull.

In Lost Reel cave Brian showed us a complete skeleton of a crocodile. It was in perfect condition and curled up as if it were sleeping. Then, like a magician, Brian would feel carefully in the silt and produce large sections of tortoise shell. Crocodiles and tortoises are both extinct in the Bahamas. However remains of both have been found in many of the caves. One tortoise shell shows crocodile bite marks, which indicates that they once cohabited on Abaco.

The final dive of our trip was a double stage dive to Fangorn Forest in Dan’s cave. Fangorn Forest is about 20m deep but we had to pass through a tunnel at 45m to get there. One of our two stages had a richer nitrox mix and we dropped this before we passed the deep section. All our remaining cylinders were all breathable at 45m. Fangorn Forest is the most beautiful place I have seen. The density, complexity and colour of the formation is amazing. It’s a big area too. I was able to look in all directions and the formation went as far as I could see. It was truly breathtaking! This can be a problem underwater, I kept checking my gauges to see how much gas I had left.

I didn’t take my camera underwater on any of these dives. I wanted to experience the cave in real time without the hassle of taking pictures. However, other people have taken some excellent photos.

Photos by Wes Skiles can be seen in the August 2010 issue of National Geographic. The web sites listed below also have some excellent shots. There is also a request for letters of support for cave conservation to be sent to the Bahamian Prime Minister. Brian is hopeful that the area of the caves will be made a national park to protect the caves and the pristine ground water which preserves them. Please consider adding your voice in support of this.

Agnes was right. They are the most beautiful underwater caves in the world!

http://www.bahamasunderground.com/

http://www.bahamascaves.com/blueholesconservation/sabhca.html

http://ngm.nationalgeographic.com/2010/08/bahamas-caves/skiles-photography

Ken Smith.

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Cave Rescue Orientation Program – CROP

On the weekend of September 18-19th this year, CEGSA held its first cave Rescue Orientation Program under the guidance of visiting WA caver and ACRC Convenor, Ross Anderson. The Australian Cave Rescue Commission is an ASF commission and acts as a central coordinator and facilitator for state based cave rescue groups. The CROP is an entry-level cave rescue "experience" that introduces participants to the terminology, techniques and issues involved in cave search and rescue scenarios. It is run over a single weekend and relies heavily on participation by club members to run it. A combination of interactive talks, show and tell sessions and rescue exercises are performed before a certificate of participation is given to those involved.

Most of the attendees of the CROP.

Examining some of the equipment.

I collected Ross from the airport on the Thursday night, and on Friday morning we headed over to Pt Vincent and our accommodation at Tuckerway Lodge. This is an excellent venue with dormitory style accommodation, good kitchen facilities and a good space for lectures. Joined by fellow organisers Graham Pilkington and Marie Choi, Ross and I set up the lecture area then visited the local playground (the venue for some stretcher carrying exercises then headed over to Corra-Lynn Cave to plan the Saturday self rescue scenarios, and Sundays larger SAREX (Search and Rescue Exercise). The other participants (making 16 in total) arrived Friday night and we completed registration over dinner and a beverage or two. We were very pleased to have some FUSSI members as well as another SES and a SAAS paramedic attend. They all contributed significantly to the discussions.

Harry conducting one of the lectures.

Stretcher handling exercise.

And more stretcher handling.

The hapless victim.

Saturday morning saw the arrival of Trevor Arnold and another training officer from the SES who very kindly donated their time and brought lots of equipment to demonstrate. We launched into the lectures soon after, and over the next few hours Ross Anderson, Graham, Marie, Trevor and myself spoke on a variety of subjects relating to cave rescue, the ACRC, emergency services and their structure, communication systems, medical and psychological considerations and the cave environment itself. It was an exhausting session but very informative and well received. The tea break saw us outside playing with a large variety of stretchers provided by FUSSI, Ross and the SES. After lunch we headed over to the playground and under the watchful eye of Ross, we parcelled up a “volunteer” in the wrap around stretcher and practiced a number of innovative stretcher carrying techniques. Under and over tables, through fences and over the play equipment we were amazed at how many cunning ways there are to move someone efficiently around in a stretcher. This practice would certainly stand us in good stead for the SAREX on Sunday!

No time to relax, we then whizzed out to Corra-Lynn for some self-rescue scenarios. We divided into three groups under the guidance of observers Harris, Anderson and Pilkington. At a suitable distance into the cave, a member of each party became suddenly overcome by either a broken ankle, blinding dust in the eyes or sadly for Ray gibbons; a compound femur fracture! The first 2 parties managed a self-rescue and Ray’s group recognised the severity of their situation, and sent for help. We used this opportunity to run through first aid underground and set up the Michie Phones while the stretcher was brought in. Fortunately the fracture knitted before the stretcher arrived and we could all exit the cave and enjoy a beautiful BBQ meal and a couple more talks before bed.

Preparing patient for stretcher.

Sunday morning and it’s all hands on deck! A caver is lost in Corra-Lynn and we must proceed to the scene! The luckless Damian Grindley found himself hidden in a nasty dark hole somewhere in the far reaches of the cave, struck down by that common affliction the fractured femur! The group split into 3 search teams (we learnt how difficult the planning of a search in a cave like this is) and located him after just 30mins. In came the Initial Response Team with paramedic, followed by stretcher team and comms. Packaging the patient into a stretcher underground was tricky but went smoothly.

And then the fun began! Just like Grindley to hurt himself on the wrong side of so many restrictions and crawlways. However, no one was more surprised than us how well the stretchering went! We used every trick in the book and in very short order, our injured friend was on the surface chatting to the nurse and sipping brandy. A very satisfying end, to a successful weekend.

We finished up with a debrief back at Tuckerway Lodge, then after being presented with our certificates, made our way back to Adelaide. All those present have indicated they are happy to be on the SA volunteer call out list in the event a genuine rescue arises. FUSSI are discussing holding another CROP within their club to further increase cave rescue awareness within South Australia.
My thanks to Graham, Marie and Ross for assisting so much with the weekend, and everyone else for their enthusiastic participation.

Richard Harris.
CEGSA SAR Officer and ACRC SA Rep.

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Roe Plain and Warbla Cave, Oct 1-12th 2010

October this year saw me participate in a wonderful trip out to the Roe Plain to dive Olwolgin and Burnabbie Caves, followed by a rare opportunity to explore and photograph Warble Cave on the SA Nullarbor. The trip coincided with a visit to Australia by the famous US cave diver Forrest Wilson (a good friend of CEGSA members Ken Smith and Ian Lewis). So it offered a great chance to see some new caves and meet one of cave diving's legends.

Fri 1st October
Got away at 0530, driving by myself to Eucla to meet up with Paul Hosie (WASG) and Liz Rogers (CDAA) with whom I will be visiting the Roe Plain Caves. The Roe Plain is pretty much Paul's baby. He has led most of the exploration and discovery since it really got going in 2002. I made a good start with light traffic at that time of day and I hit Port Augusta by 0830. Exactly 14hrs after departing Adelaide I roll into Eucla then go out to Weebubbie Cave to camp with Grant Pearce (CEGSA) and family who are also out here for some diving.

Sat 2nd
Up with the dawn at 0500 (can never sleep in on these trips!) and since I won't be meeting Liz or Paul until midday, a quick trip to Abrakurrie Cave is in order. The desert looks amazing! Green grass and wildflowers everywhere after the big rains this year. We follow the east west track over to Chowilla Doline and then head south to Abrakurrie. It is my first visit here and inspired by Ian Lewis's diprotodon images I want to try and capture some shots of my own using modern digital cameras and light painting with our dive lights.

Abrakurrie Cave - A composite of 3 images stitched together.

An enormous and beautiful cave and it is a terrible shame we can only spend a couple of hours here. Back to Eucla roadhouse to wait for my companions. Liz Rogers arrives on time (well, on one of the 3 time zones anyway!) with her parents Peter Rogers and Cheryl Bass…also well-known cave divers. But Hosie is nowhere to be seen. Hmmm… A couple of hours later he finally calls – from Cocklebiddy Roadhouse! It seems his heavily laden trailer has broken a spring and he ain't goin' anywhere!

No worries, we'll go to him. Liz (and her 50 bags of gear) join me and we drive on to Cocklebiddy. Paul has salvaged some spares from another trailer that met a similar fate earlier in the year (Note to self, don't lend Paul Hosie my trailer) so we spend the evening in the dirt making repairs to the springs. Bush mechanics at their best. Out into the nearby bush to camp for the night.

Sunday 3rd

Liz Rogers in the doline at Olwolgin.

Yawn…up at 5 again. A few hours on minor tracks out into the Roe Plain, and we arrive at the Olwolgin Campsite. From camp, the cave is 1.3km walk and Paul has intentionally not tried to push a vehicle track through in order to help conserve the cave. The downside is however, all the gear must be carried in. Harden up Harris! It only takes 3 trips then we have all the cylinders, dive gear and underwater photography equipment into the site. Once you are there, entry through the doline to the water's edge is a relatively straight forward affair, with only a small amount of crawlway to negotiate. Since we are here, we may as well have a dive and so in we go. With a maximum depth of 11m and a water temp of 19-21 degrees, we spend a comfortable 65 minutes checking out the beautifully sculptured tunnels. Olwolgin (N1951) is a truly beautiful cave. It is full of the most bizarre and interesting biology one can imagine and I would love to spend time just studying this one site. A huge diversity of bacteria, hanging roots, green tannic water and multiple haloclines make it very photogenic. Paul has used dry cave track marking techniques to guide divers around the more fragile areas in the cave…with great effect. Babylon Lake deep into the cave, has the most toxic air I have ever (accidently) tasted. Floating dead white centipedes and spiders litter the surface. Huge root bundles cascade into the water below. Simply awesome.

Monday 4th

Getting the hang of this bushwalk today…might even be good for me! My 5 o'clock start saw me manage a load before breakfast so I felt very superior by the time the others awoke. Two dives today and Liz and I both took heaps of UW photos. Also lugged my oversized video camera and housing in for a dive. Fair to say I slept very well that night.

Tuesday 5th

Paul Hosie next to what we believe to be Blackadder Cave.

Today for something different we are going to check a hole that Ray Gibbons told me about – Blackadder Cave (N3959). He spotted it late in the day on a recent trip but didn't have time to look at it properly. It isn't far from camp, but we have to backtrack a fair way to cross the scrub to access it. Unfortunately it proved to be a small solution tube, which was pretty choked with dirt and rocks. With no sign of it breathing we decided that it wasn't worth a dig at this stage. We didn't see the tag so can't be completely sure we are at the correct spot although there didn't seem to be anything else around. Took a GPS mark to check with Ray.

One more photo dive in Olwolgin in the afternoon and Liz and I even get to lay a little line in some new passage. Plenty more to find here still it seems! Nice campfire that evening and Liz makes a particularly good herb damper in the camp oven.

Wednesday 6th

Not wishing to confuse my body clock, I got up at 0500 again and retrieved the last of my gear from the cave. Today we are off to Burnabbie to dive although we will continue to use this camp as our base. More dirt tracks to negotiate but the plain is even prettier down here. Pretty, but sharp it seems because I soon had a double puncture and Paul had one also. Plenty of spares and repairs however

so it doesn't hold us up for long. Shortly after, the radio aerial is ripped off. Hmm…getting expensive this trip.

Burnabbie is good… and bad. Good because you can drive right up to the cave. Bad, because you must grovel through a 20m mud filled flattener with your gear to get to the water's edge. Once there, gearing up occurs almost lying on your side. Most inconsiderate! But once into the water and away, another wonderful and weird Roe Plain's cave awaits. Amazing calcite rafting, rocks covered in black bacteria, kilometres of pretty sculptured passage and more delicate tree roots. Definitely worth every ounce of effort. A nice long dive almost to the end of the main passage, and planty of photos taken.

On the way back to camp we stopped to look at a large dry doline which has been tagged N2782. Just under the tag, the dirt floor doesn't quite reach the limestone ceiling and suddenly with the idea of finding my own little Burnabbie, I thought I could feel a breeze gently emanating from the area. Hosie agreed and we had a bit of dig through the soft soil, gradually enlarging the entrance. It was encouraging enough to decide we would return tomorrow with tools and give it a good go.

Thursday 7th

0530, a sleep in! Whoohoo I must be starting to relax. After brekky we are straight back to N2782. Better prepared, Paul and I put in a good 4-5 hours digging while Liz dragged soil away from the entrance. I seem to be somewhat… ahem, larger than Hosie so he spent most of the time up the pointy end of the dig while I lay half way back retrieving his dirt. We probably got in a good 7-8m before running out of steam. A breeze is definitely present and it certainly has potential for another go some time in the future.

Resembling more mole than man, I decided there was little point trying to de-dirt myself when we were about to go diving anyway. So over to Burnabbie for a final dive (with video camera), which I had to turn early when one of my regulators completely failed not far in. So I waited in the entrance pool while Liz and Paul completed their dive. Exited in the evening and back to camp for a small party as we would be leaving Paul tomorrow, while Liz and I headed east back to our next adventure at Warble Cave in SA.

Friday 8th

Got away mid morning and took the Telegraph track to Madura for a shower and a burger. Are the burgers better at Madura, Eucla or Cocklebiddy?? Further research required.

Mid afternoon saw us at Warbla Cave (N1) where we met Ken Smith and Forrest Wilson, Cheryl Bass and Peter Rogers and Grant Pearce. Peter has obtained a scientific permit to dive this reference cave, with the primary goal of photographing and videoing the bacterial colonies here. Everyone except Forrest is down the cave so Liz and I decide to load our gear in and see if we can manage a dive before night-time.

The team at Warbla Cave L-R Liz Rogers, Ken Smith, Cheryl Bass, Peter Rogers, Grant Pearce, Forrest Wilson and Harry Harris.

Warbla Cave.

We could, and we did and what a pretty place it is too. The limestone here is the purest white, or so it seems after the green tinged walls of the Roe Plain caves. Access is moderately hard work carting gear down to the water, but much easier than Cocklebiddy so I am happy with that! No cameras this time, just relaxing and after a great dive we return to the surface late at night to eat a steak that Liz's mum has kindly prepared for us. Life is good!

Saturday 9th/Sunday 10th

Back on SA time and suddenly it seems I can sleep in again. One big dive each day and we have seen most corners of this lovely site, taken a zillion photos and videoed the place to death. Grant Pearce has provided a fabulous lightweight HP hose that goes all the way to the water, so we fill tanks underground without the worry of dragging them out each day. But eventually all good things come to an end and everything has to be hauled out…I hate that bit! Nothing makes you sleep like carrying dive gear out of a cave.

Monday 11th

With everything out of the cave, Grant Pearce who will be joining me for the drive home, get away at midday and with the bit between our teeth, make it all the way back to Adelaide. Home a day early I am in the good books at home and have a chance to wash out some gear before heading back to work on Wednesday. A top trip.

Richard Harris.

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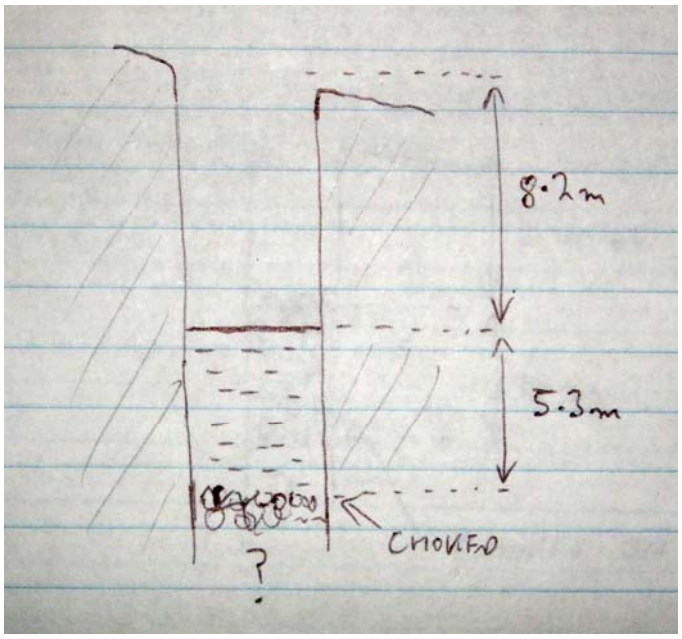
Waraweena Sanctuary and Sliding Rock Mine, July 12-17th 2010. Part 2.

This part was inadvertently omitted from the report in Vol 55 N0 3.

Depth Measurement in Shafts

Three shafts which contained water were plumbed with a lead weight on a nylon cord. A second rope was stretched across the top of the shaft to allow the plumbing weight to be dropped in the centre and at other places in the shaft. We attempted to find to the deepest area and any possible holes in the choking of the shaft. GPS coordinates were taken alongside each shaft and these are given as map coordinates (UTM UPS) using the Australia Geodetic Datum 1966 to match the topographic map of the area. Coordinates in a different format can be provided on request.



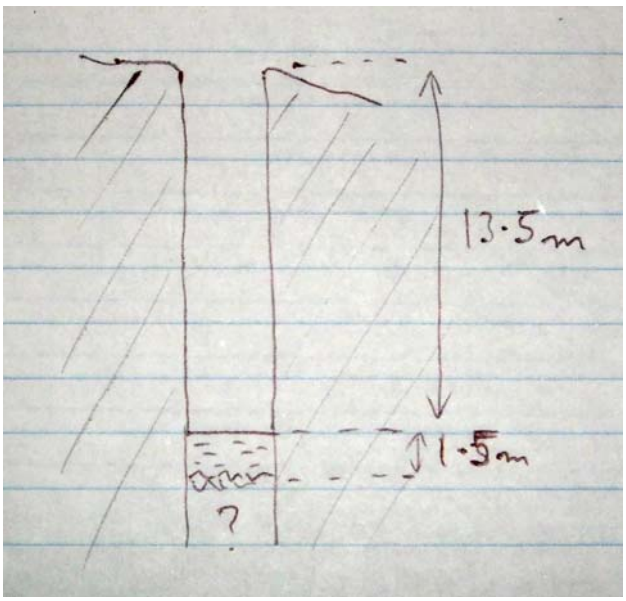
"Shaft 1"

This is a large and obvious water filled shaft near the cornish chimney for the old pumphouse.

Coordinates 54J 0270236 6593208 (easting and northing)

Depth from ground surface to water level 8.2 metres

Depth of water, surface to rock choke 5.3 metres



"Shaft 2"

This is a deep shaft 55 metres uphill from shaft 1. The fencing on one side of the shaft had been undercut by material falling in the shaft. To improve safety two droppers and four runs of fencing wire were installed further back from the hole

Coordinates 54J 0270207 6593162 (easting and northing)

Depth from ground surface to water level 13.5 metres

Depth of water, surface to rock choke 1.5 metres

"Shaft 3"

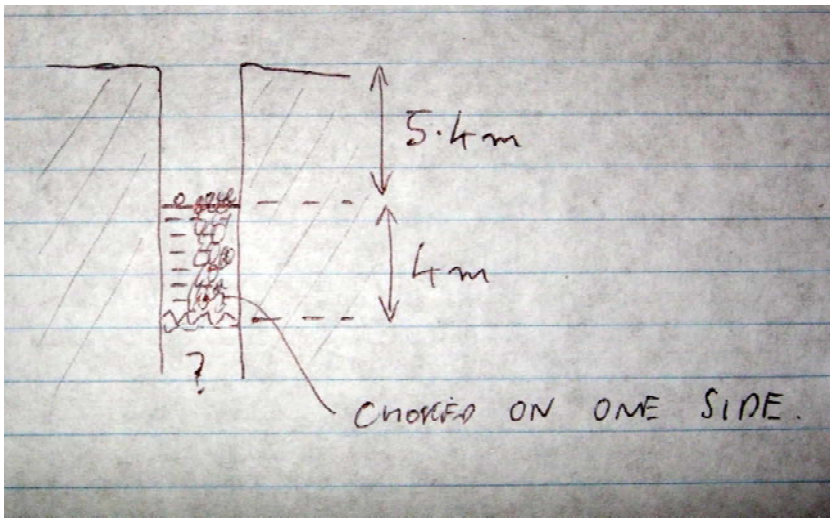
This shaft is about 400 metres approximately east of the Cornish chimney near the creek. The large water tank is across the creek from this shaft.

Coordinates 54J 0270603 6593002 (easting and northing)

Depth from ground surface to water level 5.4 metres

Depth of water, surface to rock choke 4 metres

The depth of 4m was found on the west side of the shaft. The other side of the shaft was choked with debris almost to the water surface.



Richard Harris.

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Past Trips From General Meetings

PAST TRIPS FROM AUGUST GM

1 **Ken Smith** talked about the Corra Lynn Cave trip held on the 22nd August. On the trip were 42 people, including 33 who teach/attend Mercedes Collage. After most people left, a group of 5 went out to the Portal Dig and lowered the dig site by 0.2m – about 10 buckets – just to have a look.

2 **Harry Harris** visited Mount Gambier over 21-22 Aug diving in Iddlebiddy and Tank Caves. The Highways Dept was going to re-align a main road to the north of its current position and the divers used a pinger to determine that a major chamber of Tank Cave was just south of the road and in no danger from or to the new road.

PAST TRIPS FROM SEPTEMBER GM

1 **Harry Harris** with 17 others attended the CROP event on 18-19th Sep.

PAST TRIPS FROM OCTOBER GM

1 **Ian Lewis** was a speaker at "Water Week" in the south east. His talk on caves and cenotes followed a talk by Steven Walker on frogs

2 **Ian Lewis** reported on the **Damian Grindley** trip of October 2-3rd into Sand Cave near Naracoorte. They cleaned some of the smaller rubbish from the large entrance. The wire and other rubbish may need power machinery. **Athol Jackson** said that the large entrance was enlarged in the 1930's in order to extract bat guano.

3 **Ian Lewis** reported on the recent Nullarbor diving trip by **Harry Harris** including caves in the Roe Plain, more lower-level tunnels found in Warbla Cave and spectacular panoramic photos from inside Abrakurrie Cave.

TECHNICAL and OTHER ARTICLES

MEMBERSHIP

CHANGE IN MEMBERSHIP DETAILS

Change of Address

9104 Sue McCormick 49/220 Greenhill Road EASTWOOD SA 5063

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 2010 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 2010 YEAR

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

2010 YEAR FEES

	CEGSA	+ASF	TOTAL
Full Membership	$53.00	$ 68.00	$121.00
Full Country Membership	47.00	68.00	115.00
Associate Membership	45.00	68.00	113.00
3 Month Introductory	5.00	20.00	25.00

Variation for Family Membership

1st Full Member + 2nd Full Member Less $16.00 for only 1 CEGSA News	$90.00	$121.50	$211.50
1st Full Member + 2nd Associate Member Less $16.00 for only 1 CEGSA News	$82.00	$121.50	$203.50
1st Associate Member + 2nd 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.

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	Trip Co-ordinator only
Chris Gibbons	Trip Co-ordinator 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
Michael Woodward	Horizontal, Laddering and Vertical

All the above named are also CEGSA Trip Co-ordinators.
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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OUR BATS ENDANGERED.

My first caving trip was in December 1966 to Gran Gran, Mt Burr and Five Corners Caves with Ken Heyne looking for lonely bats. These caves are wintering caves so in December should not have held any bats except for strays and older ones because the whole population of *Miniopterus schreibersii* (Little Bent Wing Bat) migrate over summer to the big breeding cave at Naracoorte – Bat Cave – with its huge insect supply at nearby Bool Lagoon.

My second cave trip was with Ken and Fred Aslin to Naracoorte in July 1967 to join a large national group of bat scientists led by Elery Hamilton-Smith who had gathered to undertake banding, assessing and recording of the huge summer breeding population in Bat Cave. In those days, cavers and scientists could access Bat Cave easily for visits, virtually unrestricted.

The scientific group operated out of the old CEGSA hut near where the current bone lab is located. Thousands of bats were banded for assessing migration patterns and age distributions. An estimate of approximately 250,000 bats all together in Bat Cave was made on that weekend using the “100 bats per square foot” estimation method.

40 years later this bat population has crashed to 30,000 during the summer breeding season in Bat Cave. It has also been actually recognised as a distinct sub-species - *Miniopterus schreibersii bassanii* (the Southern Bent Wing Bat). This crash and its sub-species identification have enabled it to be declared an “Endangered Species” and this status has attracted Federal Wildlife funding in order to save it from any further rapid decline. There is real fear for them if they are close to some critical limit of population size below which they cannot continue to survive.

The crash has also led to serious examination of the Bat Cave figures. One consideration is whether the 1967 estimation of 250,000 was itself wrong. The “100 bats per square foot” estimation technique is still acceptable today. However, applied in Bat Cave where the roof height is high, with bats flying everywhere in those 1967 counting visits due to people wandering through the breeding

chambers, it is possible that the estimation was significantly wrong, distorted or even haphazard. This could mean the actual count may have been anything down to half the estimate – e.g. 120,000. This would mean that the population crash since would still be appalling but not quite as cataclysmic as it appears. This is no comfort, and any population which has crashed to 10 or even 20% is a disaster.

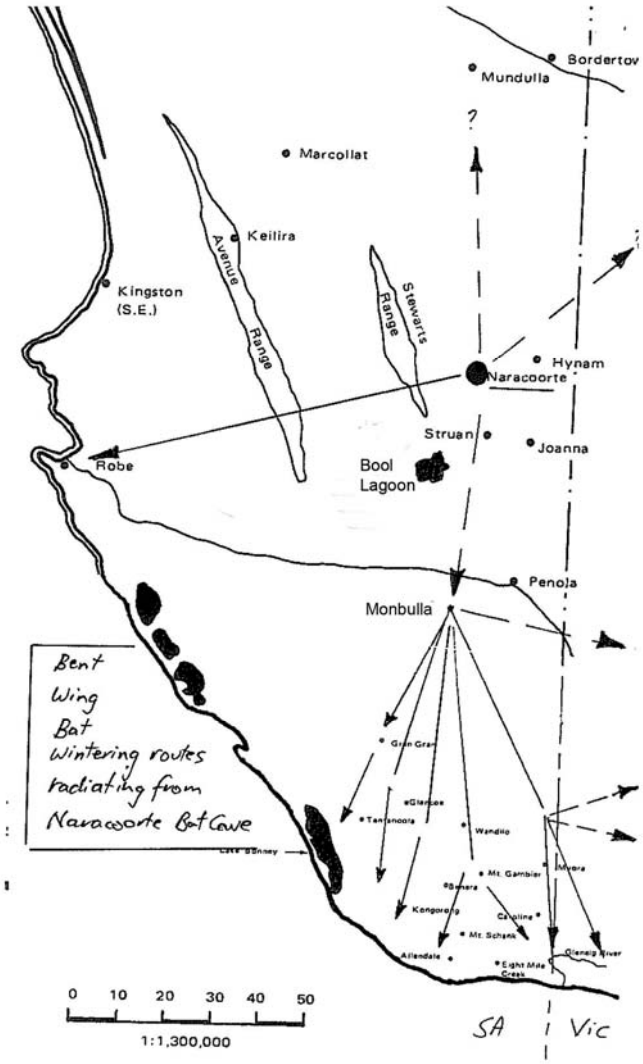
But the re-think led to the idea of a systematic current bat count to establish baseline quantities of the surviving population. Sufficient systematic records have never been undertaken throughout that 40-year period, so it has been decided that the most stable time to count the population without disturbing them in breeding season in Bat Cave is to count them in winter at the start of the hibernation period.

We picked the Saturday of the Queens Birthday long weekend as being the best to allow volunteers (e.g. CEGSA, Uni students and the friends of the Naracoorte Caves) to be available to join with environmental staff and count bats in all the well-known wintering caves. This has now been done in 2009 and 2010. So far about half the known summer population has been located in the wintering caves, with counts in the South East now being matched by Western Victorian counts along the Glenelg River, in important caves at Bats Ridges near Portland and Warrnambool and small lava caves scattered across the western volcanic plains as far away as Colac and Skipton. It is unknown where the rest of the winter population are, but they all returned to Bat Cave (and the smaller breeding site Starlight Cave at Warrnambool) in the summer, so they are wintering out there somewhere. This may be a hopeful initial sign if the current population is stable but this will not become apparent for probably the first decade of winter censuses. If the species is critically balanced on a knife edge, other action must be taking place now, not in a decade's time. Cavers and volunteers are encouraged to book next June long weekend to help us with the 2011 count. This systematic winter data is unfortunately decades overdue, but finally it is now happening.

Ian Lewis.

FACING EXTINCTION: Cave expert and bat enthusiast Ian Lewis inspects the health of one of the critically endangered Southern Bent-wing Bats during an annual survey held last Saturday. The survey plays an important role in plans to save the furry creature from extinction. Pictures: ANELIA BLACKIE

SIZE DOES MATTER: The insectivorous Southern Bent-wing Bat may be small in size, but it plays a major role in controlling insect numbers.



Map showing bat wintering routes.

These photos and the following article are reprinted with permission from 'The Border Watch', Friday, June 25, 2010, pages 6 and 7. The article and photos are by Border Watch reporter Anelia Blackie.

As volunteers went underground at the weekend in search of one of the region's endangered species, The Border Watch *reporter ANELIA BLACKIE crawled along for some insight into the project.*

Bats on brink of extinction

BY ANELIA BLACKIE
Email: anelia@tbw.com.au

DELICATE: The Southern Bent-wing Bat is easily distinguished from other bat species by its long third finger, which folds back, creating a distinctive "bent wing" appearance. Their delicate wings are easily torn when they become entangled in branches or rubble people dump into the openings of their caves.

CLIMBING down dangling ladders and crawling through small openings in dark caves has helped me realise how important it has become to protect the critically endangered Southern Bent-wing Bat.

Joining cave and bat experts, along with community volunteers, last Saturday in their second annual survey of the furry little creature, I learned about the fate of this intriguing mammal.

For many people, bats are associated with blood sucking vampires and they may not be on everyone's list of favourite animals.

But they do play a major role in controlling insect numbers - a role only someone who enjoys the buzzing noise of a mosquito can dismiss as unimportant.

The survey was organised by Department of Environment and Heritage threatened fauna ecologist Ronald Bonifacio, who gathered seven teams to count and photograph bats in caves, and report on habitat observations that may help to prevent this species from disappearing forever.

There are about 30,000 Southern Bent-wing Bats in the wild, which may sound like a lot, but becomes alarming when considering that about 250,000 were inhabiting our caves in 1967.

While crawling through the caves, bat enthusiast Ian Lewis explained how white settlement in the region had contributed to the dramatic decline.

The draining of swamp areas for farming, which led to a decline in insect numbers, coupled with the use of pesticides, found by researchers in bat guano, were two contributors.

However, the continuing destruction of their habitat could still be the most alarming cause of their decline.

"Last year, when I went to caves near Mount Shank, I could not find one of the six entrances to the caves and when I investigated I found that the entire cave system was filled in and ploughed over by farmers," Mr Lewis said.

"The caves, in which about 1000 bats were living, were no longer there."

A lot of work is being done to educate and encourage farmers to protect caves on their properties, but those who are not taking it seriously are not the only culprits to blame.

When our team reached a cave system on Forestry SA land at Snake Hill, we found a warning sign at the opening of the caves urging people not to enter as the caves were used by the critically endangered bat to hibernate during winter.

These signs were clearly ignored by some members of the public.

Inside the caves we found the walls were spray-painted with graffiti.

One of the other teams, led by Mr Bonifacio, found a family of four exploring one of the caves.

"It was a difficult situation to be in because how do you tell parents in front of their children that they are trespassing," Mr Bonifacio said.

In a briefing before our expedition, Mr Bonifacio explained how important it was for us to keep disturbance of the bats to an absolute minimum.

During winter, bats enter torpor or hibernation - a state where they allow their body temperature to drop, thereby reducing metabolism and energy use.

If disturbed, they may fall to the floor or try to fly.

However, before they can fly, bats need to raise their core body temperature, which they can only achieve by burning fat reserves.

This is obvious as the bats shake visibly, giving the appearance of being nervous, but they are in fact burning important fat reserves, which can be fatal.

In late August, the bats leave their winter sites to gather in two breeding sites - the Naracoorte Caves and Starlight Cave in western Victoria.

Here the adult females will give birth to a single pup between October and January.

While Mr Bonifacio is still awaiting final count results from western Victorian, this year's Southern Bent-wing Bat population in the South East was estimated at less than 15,000.

Although numbers are an important part of the survey, other observations, such as human interference in the caves, will play an important role in plans to attempt to save the Southern Bent-wing Bat from extinction.

CEGSA NEWS for SALE

Digital Copies of the CEGSA NEWS (issues 1 to 215, in text-readable form) and Annual Reports (1956 to 2008, most in text-readable form) are now available on a CD for $25 plus postage and handling ($3 in Australia).
CEGSA members get a discount and can purchase their copy for $10 plus postage.
Monies raised will be used to create a digital index to the articles and to complete the text-readable digital copies of our Occasional Papers.

Orders to: *Graham Pilkington*

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REMINDER

Members are reminded that CEGSA will reimburse all reasonable expenses incurred by members in catering to the operation of the Group, execution of Office bearer activities; and running Group functions. If the expense will be beyond the pre-approved budget, then it's suggested that the member get prior approval from the Committee or a General Meeting before expending the money.

The Committee

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26th ASF CONFERENCE PROCEEDINGS

The proceedings of the 26th ASF Conference have been distributed to those who have ordered them. There will be a few extras for sale. Printed copies are $20.00 + $10.00 P&P and the DVD version is $10.00 + $5.00 P&P. Get your orders in early to avoid missing out.

Athol Jackson.

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CEGSA AWARDS

Members are invited to submit nominations or suggestions to the Committee for any CEGSA award for which you consider a nominee would be a worthy recipient.

The Committee.

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Blind as a bat!!!

A vampire bat came flapping in from the night covered in fresh blood and parked himself on the cave's roof to get some sleep. Soon all the other bats smelled the blood and began hassling him about where he got it. He told them to shut up and let him get some sleep, but they persisted until he finally gave in.
"OK, follow me."
He flew out of the cave with hundreds of bats behind him. Down through a valley they went, across a river and into a forest of trees. Finally he slowed down and all the other bats excitedly milled around him.
"Do you see that tree over there?" "YES, YES, YES!!" the bats all screamed in a frenzy.
"Well I didn't!"

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Vale – Eric Choi

It is with deepest regret that we have to announce the passing of Marie Choi's husband, Eric.
Our sincerest condolences to Marie and the family.

CALENDAR OF EVENTS

Date	Type of Event	Description	Contact
24/11/10	General Meeting	Royal Society Room, SA Museum, Adel. End of year barbecue.	Graham Pilkington
27/11/10	Working Bee	Library and records	Graham Pilkington
14/12/10	Committee Meeting	22 Hogarth St. Panorama	Mark Sefton
22/12/10	General Meeting	*******No General meeting in December.*******	
2-6 /01/11	Caving Leaders	Rover Scouts, Naracoorte	Michael Woodward and Ian Lewis
11/01/11	Committee Meeting	22 Hogarth St. Panorama	Mark Sefton
26/01/11	General Meeting	Royal Society Room, SA Museum, Adel.	Mark Sefton
29/01/11	Working Bee	Library and Records	Graham Pilkington
30/01/11	Annual Report	Reports due to editor	Athol Jackson
08/02/11	Committee Meeting	22 Hogarth St Panorama	Mark Sefton
09/02/11	CEGSA NEWS	Articles due	Athol Jackson
12/02/11	A G M	22 Hogarth St Panorama (see advert)	Mark Sefton
23/02/11	General Meeting	Royal Society Room, SA Museum, Adel.	
26/02/11	Working Bee	Library and Records	Graham Pilkington
	Training	Ad Hoc training	Tim Payne
	Caving	Ongoing Vic Fossil survey	Gary Woodcock
	Caving	Continuing Fleurieu Peninsula Exploration	Grant Gartrell

****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.