CEGSA NEWS

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

Volume 54 Number 4 **Issue 216** **NOVEMBER 2009**

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.

2009 Committee

President	Mark Sefton	(H) 8277 9086 (W) 8303 6600 (E) seftons@adam.com.au
Secretary / Public Officer / Library & Records	Graham Pilkington	(H) 8395 6713 (W) 8395 6713 (E) p-c-h@bigpond.net.au
Treasurer / Membership	Chris Gibbons	(H) 8258 9847 (E) ragchg@bigpond.com
Training / Safety Co-ord	Tim Payne	(M) 0448 147 927 (W) 8259 5724 (E) payne.tim@bigpond.com
Land Manager Liaison	Stan Flavel	(M) 0407 600 358 (E) tadarida@bigpond.com
New Member Liaison	Ian Lewis	(H) 8295 6582 (M) 0427 284 051 (E) kanawinka1@yahoo.com
Museum Representative	Neville Pledge	C/- SA Museum

Other Office Bearers

Publications / Trip Log Book / Website Coordinator	Athol Jackson	(H) 8337 8759 (E) atholjax@adam.com.au
Landowner Liaison (records)	Garry Woodcock	(H) 8380 5154 (E)woodcock.gary@saugov.sa.gov.au
Quartermaster / Key & GPS Holder	Paul Harper	(H) 8297 8878 (W) 8222 5615 (E) paul.harper@health.sa.gov.au
Search & Rescue Co-ord	Harry Harris	(H) 8431 5395 (W) 8273 5666 (E) harry@divedoc.net

Area Coordinators

Eyre Peninsula	Stan Flavel	As Above
Upper & Lower S E(dry), Glenelg River	Kevin Mott	(H) 8723 1461 (W) 8735 1131 (E) jkmott@internode.on.net
Lower South East(wet)	Peter Horne	(H) 8295 6031 (E) ppuddles@yahoo.com.au
Adelaide & Kangaroo Is.	Grant Gartrell	(H) 8556 9100 (E) blueberrypatch@bigpond.com
Nullarbor Plain, Yorke Peninsula & Murray Mallee	Graham Pilkington	AS Above
Flinders	Eddie Rubessa	(H) 8336 4775

Representatives

ASF	Ian Lewis	As Above
SA Speleological Council	Graham Pilkington	As Above
The Nullarbor Karst Project Steering Committee of Western Australia	Paul Hosie	(H) 08 9259 5815 (M) 0428 992 109 (E) paulhosie@trimixdivers.com
Kanawinka Geopark Liaison	Ian Lewis	As Above

Cover Photograph: Ray Gibbons at one of the Turner Rockholes — Bariedibi Rockhole (N-843).
Photo: Peter Ackroyd, 23 April 2007

CONTENTS

Volume 54 Number 4 **Issue 216** **NOVEMBER 2009**

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 55 Number 1 (Issue 217) is Wednesday **10th FEBRUARY 2010**. 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 CD or 3.5" IBM floppy disk, 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

While most of us think of CEGSA as an organisation that exists primarily to promote caving opportunities for its members, one of the achievements of our club that we can be justifiably proud of is our generation and keeping of records. These take many forms, from numerous trip reports from both members and non-members, our collection of old newspaper cuttings, old photographs and, perhaps most of all, records of caves we have discovered and explored. In the main, we have documented these new discoveries with trip reports, photographs and cave surveys, which we make available freely to each other and to the caving community at large through publication in media such as our Newsletter. In more recent times, CEGSA NEWS has continued to see a steady flow of trip reports and photographs, but surveys are as rare as hen's teeth – despite a not insignificant amount of surveying activities over the last decade or more. Partly, or even fully sketched maps tend to sit idly in personal collections until, more often than not, they are lost for good.

So why is this the case?

At this point, I need to make a not-so-small confession – your current President is one of the worst offenders when it comes to failing to convert completed field sketches into published maps. Although I have published several cave surveys over the years, I have just as big a collection waiting to see the light of day. But I know I am not alone in this. I can think of three major expeditions that I have been on, including one to the Nullarbor, from which barely a solitary map has been produced.

So again – why?

From a personal point of view, I find drawing a map a daunting task. In the old days, we would just produce hand-drawn and hand-annotated maps which would appear, as is, in published form. No-one bothered if they looked scrappy; they served their purpose and only a skilled draftsman could produce a decent version anyway. These days, most surveys are produced by computer – and maybe that's the problem. A few weeks ago, at a general meeting, we had a workshop on cave surveying given by Tim Payne and Graham Pilkington. This generated so much discussion that we ran out of time before Tim could finish his section. Most of the discussion centred around how we gather and record the data used to produce a map. The instrumentation available to take readings is pretty limited. Bearings are nearly always taken with Suunto or Silva compasses, dips with Suunto clinometers and distances are measured with either a tape measure or a laser measuring device. All are extremely easy to learn to use, although using them accurately can be another matter for some. Even here, it is not difficult to determine who can and can't read instruments accurately. When it comes to computer drawing programs, however, those brave souls who have attempted to produce maps digitally seem to be outnumbered by the variety of drawing programs available and it is hard to find two cavers who do their maps the same way. If you are as computer-illiterate as I am, drawing caves digitally ends up being one of those things pigeon-holed to another time.

As a caving community, we have tried to standardise the way we take measurements, the way we draw in the field and the symbols we use on our maps. Perhaps it is also time to standardise the way we draw maps digitally, settling on an agreed program or set of programs that we can all use and that will enable us to learn from each other. Then we can start to run workshops, like the one I described above, to help people like me to draw maps. Maybe then we will start to see a few more surveys begin to find their way into CEGSA NEWS once again.

Mark Sefton.

TRIP REPORTS

The Turner Rockholes, Nullarbor Plain

Part 1: Historical Perspective

Trip dates: 17 April 1885 – 3 October 1885.

Party: George Russell Turner, Edward Alfred Frederick Compton, John Jennings, Arthur Harston, John Donovan, Noel Edgar and three Aboriginal guides, one named “Peter”.

Introduction

In April 1994 I was exploring and surveying Thampanna Cave (N-206) on the Nullarbor Plain with Max Meth. He was looking for the correct position of Thampanna Rockhole, which was not to be found anywhere near the position marked on the map. Max had virtually given up when he happened to mention to me that he had a copy of the original survey data. I asked if I could have a go at sorting it out and spent a pleasant afternoon in the sun reducing the raw survey figures and came up with the coordinates of the three rockholes for which he had data — Thampanna, Yalganimirra and Yelangurra.

We navigated to each of my computed positions using my brand-new Garmin 75 GPS unit — an advanced unit for 1994, as it not only incorporated the Australian map datum, but also gave UTM coordinates, not just latitude and longitude. Using this GPS, we found each of the three rockholes, which were, on average, a kilometre from the indicated map location. We were then able to record their true position and tag and document them fully (Ackroyd, 1998). The surveyor whose field data I had used was listed as “G R Turner”. He had carried out the survey in 1885 using a theodolite and a steel band of two chains length.

In May 2004 I was able to secure prints from microfilm copies of Turner’s field books, numbers 8 and 9. These were the two books in which all of the 1885 Nullarbor data were recorded (State Records Office of Western Australia, 1885A and 1885B). The copies were poor, the writing faint and very cramped, and Turner’s survey methods not altogether clear.

Troughton and Simms theodolite Ca 1880, similar to the type of theodolite that Turner would have used. Photo: Courtesy University of Melbourne, Survey and Geomatics Collection.

My own surveying experience was in high-grade engineering surveys, where a second of arc of angle is important. The 1880s theodolite available to Turner, a “6 inch transit theodolite”, (State Records Office of Western Australia, 1885B, page 5) only allowed him to read to the nearest minute of arc (1 minute = 60 seconds of arc).

Turner measured his distances by having his assistant , Edward Compton, drag a ‘two chain’ steel band from end to end, keeping count of the number of chain lengths as he went (two chains is equivalent to 44 yards = 40.234m). Where Turner had to measure distances that could not be conveniently chained with a steel band (for example, from low on the Roe Plain up to the top of the stranded limestone sea cliff, locally known as the Roe Plain Escarpment), he used a surveyor’s technique called triangulation. By measuring two angles and the length of one side of a triangle, the lengths of the other two sides of the triangle may be computed. To maintain his correct bearing, he had to take nightly star shots at elongation. This technique allowed him to compute true north without the need of a chronometer.

In short, there were myriad ways an error could creep in and, I thought at the time, it was little wonder some map positions were badly in error. As it later transpired, I was doing Turner an injustice.

George Russell Turner

George Russell Turner was born in Taradale, Victoria (about 12 km SE of Castlemaine) on 12 April 1857. His father was Thomas Woodward Turner, who in 1852 had travelled from his family settlement at Augusta, in the southwest of Western Australia, to Victoria. Thomas' own father was a successful builder in the UK who had emigrated to Western Australia, arriving in March 1830 to take up land promised to new settlers who were willing to invest. He arrived with his family and entire household to find, strangely enough, that all the best land along the Swan River was already taken up by government officers and their cronies. He was shunted off to the wilds of Augusta, at that time completely untamed bush land. The story of his heroic struggles against the bush, and the red tape of bureaucracy, can be read, by those with an interest, in the book “Turners of Augusta” (Turner, 1960).

Young George Turner grew up in central Victoria, and learnt, as his father and brothers had learnt before him, to be a land surveyor. Turner moved to Western Australia for work, arriving on 20 May 1882 and was registered as a Western Australian surveyor on 6 June 1882 (for more details on Turner's life see appendix 1). Turner's boss was none other than Surveyor-General John Forrest, the famous explorer of the Nullarbor, who was later to become the Premier of Western Australia. Forrest's explorations of the Nullarbor in 1870 had led him to realise it had plenty of good pasture land, but that it lacked reliable water.

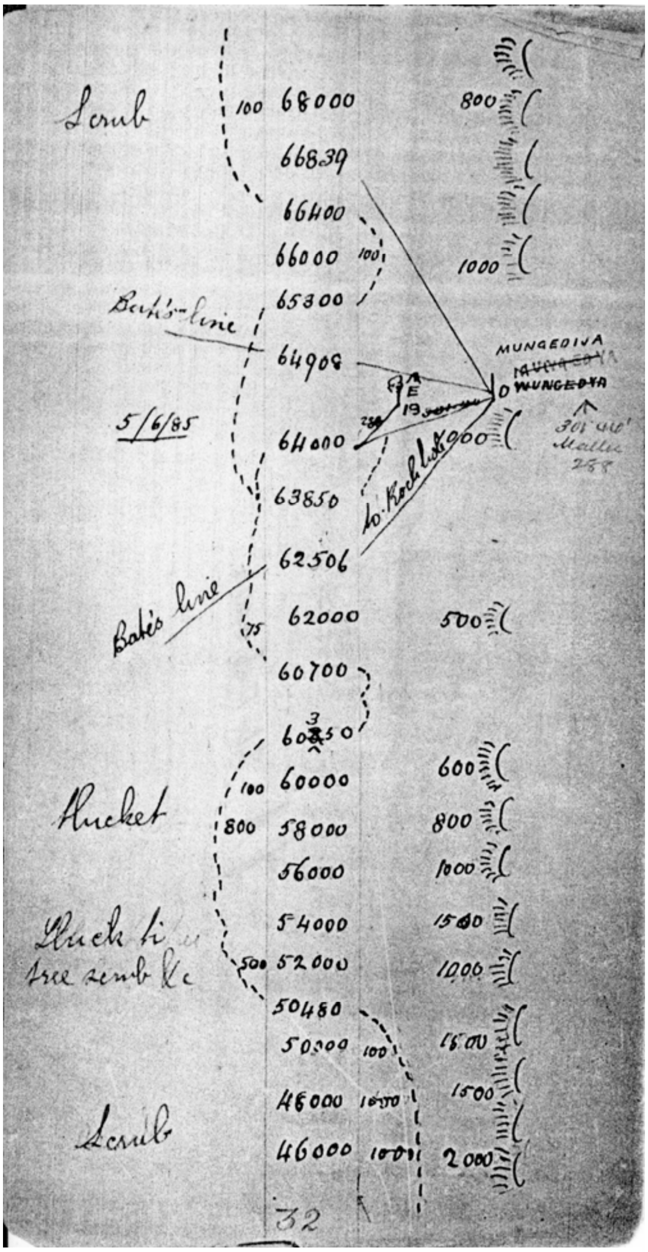
In early 1885 Forrest directed Turner to survey as many water sources as possible in the settled areas of the Nullarbor. He was to start from Eucla, the extreme south-eastern limit of Western Australia, and work his way to the west, as far as Eyre. He was provided with enough funds and equipment to last six months (State Records Office of Western Australia, 1885C).

The Survey

While still in Perth, Turner put together a team of six men, to be led by himself as “officer in charge” and a young assistant surveyor, Edward Alfred Frederick Compton as second in command. He engaged John Jennings, an Irishman and ex-schoolmaster, who was about 51 years old, Arthur Harston, John Donovan and Noel Edgar as the teamster. Apart from Turner and Compton, Jennings was the only other literate member of the group it appears, as he was the only person to sign his name in his own hand on the employment contract (State Records Office of Western Australia, 1885C, item1157/85 and Erickson, 1987–1988).

John Donovan was probably an “expiree” — a convict who had been transported to Western Australia and had since served his time. It is possible he was included in the party, despite his dubious past, because he had already worked in the Eucla area. Jack Batt, the manager of the Moopina Lease north of Eucla, wrote in a June 1883 letter to the lease owner, Andrew Muir, telling him he had let go from employment a “J. Donovan” (Saunders, 2005).

Turner's assistant, Edward Alfred Frederick Compton, was learning his surveyor's trade and, at the age of 18, was to be sent out to the far east of the State, a notoriously dry and rugged area, for six months. It was he that measured the chainages and recorded them in “Field Book Number 8” (State Records Office of Western Australia, 1885A). However, the only hint that he did so I found when I visited the Western Australian State Records Office in June 2006 and was able to examine the relevant field books in person. In the very back of book Number 8, on the flyleaf, is written in pencil “E. A. F. Compton”. This page was not reproduced in the microfilming process so I had not seen it before. Compton's field book contains mainly his handwriting, sometimes Turner's, and occasionally that of another. Some rockhole names in particular appear to have been re-spelled — presumably by the only other literate person in the group, John Jennings. The spelling of various names is relevant, insofar as the information could only have come from one of the two guides that Turner had employed at Eucla and, later, a third guide that he employed at Eyre. The names would have been transliterations from the little understood Mirning language into English.



Typical page from Compton’s Field Book (No 8, page 32) showing chainages, descriptions of the country and alterations in spelling of rockhole names.

Compton continued on as an assistant surveyor until 1888 when he changed careers to become a mining registrar. He later laid out the gold mining town of Southern Cross (west of Kalgoorlie), naming streets after constellations and stars, names he presumably learnt during his time with Turner (see appendix 2 for more details).

The terms of payment for the four, non-professional members of the team, is worth a mention. The rate of pay was five shillings per month, plus food. Only half of the wages were to be paid when due, the balance to be paid once back in Perth (State Records Office of Western Australia, 1885C, item 1157/85).

Turner and his party arrived at Eucla, on Saturday 11 April 1885, the day before Turner’s 28th birthday. His telegram from Eucla back to John Forrest states baldly, “Landed here yesterday. One horse drowned. Two inches rain. G. R. Turner.” Because of the shallow water at Eucla, the horses and the dray would have been swum ashore, apparently resulting in the drowning of one horse.

Apart from the surveying instruments and the stores, Turner’s equipment consisted of two draught horses, three (originally four), riding horses, a spring dray (a cart), harnesses for same, saddles for the riding horses, a full horse-shoeing kit, rifles and cartridges, digging tools and five pairs of hobbles. The total cost of this equipment was £167 (State Records Office of Western Australia, 1885C, item 1215/85).

Once on shore Turner immediately set to work. In his field book Turner mentions “natives”, so presumably he engaged at least two Aboriginal guides at Eucla. There is no record of any payment having been made to these Aboriginal guides. In his field book Turner mentions one by name: “Note — Could not complete this part of traverse for want of water The native, Peter, that I had as guide said that he did not know any more R. Hs. in the direction I wished to travel [west of Boering Rockhole]. G. R. T.” (State Records Office of Western Australia, 1885B, page 51). The presence of these two Aboriginal guides explains how Turner was able to find the rockholes in the first place, and also explains how he was able to record the names of nearly all of them. Later, Turner engaged an additional guide when he reached Eyre in June 1885, prior to heading inland (State Records Office of Western Australia, 1885C, item 1889/85).

Water in Australia

As second nature as it is for us in the modern age to look right and left before crossing a road, the nomadic Aboriginal people of the more arid parts of Australia knew exactly where their next water source was. It amounts to the same thing — life or death.

Bayly (1999) in his very useful compilation of known papers on the subject, explains how, from an extremely young age, Aboriginal people learned the exact names and exact positions of every source of water. An important aside here is Bayly’s description of the emphasis on getting the pronunciation absolutely correct for every water source or rockhole. This was presumably in order to ensure the

Ray Gibbons at Naliwoodin Rockhole (6N-1223).
Photo: Peter Ackroyd, 18 April 2006.

community 'memory map' remained accurate. This may also explain why the spelling of the rockholes, as recorded separately by Turner and Compton, differs. Such differences actually tell us more about the true pronunciation of the name than if they had agreed on just one name in advance.

For example, at the place, we now know as Kuthala Pass, a rockhole was recorded. In Turner's field book the name is written "Cudella" and "Kudella", whereas in Compton's book, it is first written as "Kudella", which has then been crossed out and the word "Kuthela" inserted.

This series of changes suggest that the hard "d" sound that the ears of both Turner and Compton heard from their respective native guides was later corrected to the slightly softer, Germanic "th" sound, that is, an aspirated "t" sound.

In fact, the names of several of the features recorded by Turner and Compton have a decided Germanic style of pronunciation. The most obvious of these is in the naming of "Boering Rockhole". Turner had originally recorded this as "Borin" before crossing this version out and replacing it with the name that now stands (State Records Office of Western Australia, 1885B). It is possible that some of these spelling changes may have been the work of ex-schoolmaster, John Jennings.

The Aboriginal Australian's deeply etched knowledge of water sources in desert country is illustrated by two, rather contrasting stories. In 1860 Major Egerton Warburton wrote how, before heading inland from the Fowlers Bay area on the extreme eastern side of the Nullarbor, he set out to "catch a black" to take as a guide for water. In an abridged version of his journal, Warburton notes that the kidnapped man, after showing Warburton's party to one rockhole, became less than cooperative and "a little coercion" had to be resorted to. This technique proved to be ineffective and Warburton and his party felt they had no choice other than to return to base, as without a guide they were helpless (Warburton, 1860).

The other example comes from Turner's own survey figures. As he surveyed to each of the inland rockholes on the Nullarbor Plain proper, it is evident from the data that Turner would push along a dead straight bearing, for up to 23 km in one instance, but more usually 13 or 14 km, before a short shot was taken to a rockhole. This short shot was typically less than 400m. Such a pattern implies that his guides were able to walk the vast and essentially featureless Nullarbor Plain for great distances and arrive within a few hundred metres of their target rockhole at the end.

The Survey

Turner commenced survey work on 17 April 1885, six days after landing at Eucla. His first task was to provide John Forrest with a map of the Eucla township, the original boundaries of which had been laid out by C D Price in 1877 during his survey of the overland telegraph route. Turner surveyed the locations of streets and the major buildings, for example, the telegraph office. He also noted the position of original Eucla settler (1872), John Muir's grave (died 1878) and of the Muir Homestead, Moopina, amongst other things.

After completing this task he set out on 8 May 1885 with his party to survey his way west, along the original track following the base of the cliffs. This cart track is even now, with its deeply cut ruts, still recognisable and negotiable in most parts. As Turner surveyed, he triangulated up the cliffs to the various rockholes pointed out by his guides.

A typical day was an 8 am start, chain and traverse till about 4 pm, building cairns or blazing trees, as required along the way as permanent marks. Camp was set up a little way off the traverse line, near a rockhole or, occasionally, a well.

At the camp, a temporary survey marker would be erected to allow Turner and Compton to carry out an azimuth check to ensure their survey still maintained the correct bearing. This involved night-time star sightings to a star at “elongation” — the point when a star appears to be moving in the vertical plane in its apparent motion around the South Celestial Pole. By knowing which star it is, and by reference to the star charts to determine the angle subtended by that star at elongation, a check on the true bearing can be made. Turner carried out this check nearly every night, so the traverse was always well controlled for bearing. Sometimes a latitude reading was also taken using the sun or a star, but no longitude could be taken as the chronometer was found to be inaccurate (State Records Office of Western Australia, 1885B, page 2 and State Records Office of Western Australia, 1885C, item 2260/85).

A typical day’s work resulted in 14 km of traverse length on the plain itself, or 10 km along the face of the Hampton Range — the shorter distance due to the greater complexity of the triangulation work up to rockholes in the cliff face.

By mid June 1885, Turner had reached Eyre, having located and recorded a total of 43 features, mainly rockholes, but including a few rockshelters and a couple of wells. While at the telegraph station, he sought permission from John Forrest, now the Commissioner of Crown lands, to carry out some exploration work inland. Permission was reluctantly granted but with a reminder to Turner that his first priority was to locate rockholes (State Records Office of Western Australia, 1885C, item 1890/85).

On 24 June 1885, having previously reconnoitred as far as Yayoudle Rockhole 50 km NNW of Eyre, and having engaged an additional guide, Turner set off inland. After several attempts to extend the knowledge of the Nullarbor beyond the known areas, frequently backtracking due to lack of water and navigational information, he located an additional 47 features. He completed the inland loop back to Eucla, closing the traverse on 14 September 1885. Again, most of the features that Turner located were rockholes, but he did include Chowilla Landslip (6N-17), a blowhole or two, a couple of dolines and a couple of wells.

Once back in Eucla, Turner reduced and plotted his rockhole traverse, found there was a gross error, located it (near Woodella Rockhole) and re-measured it. He also discussed, via telegraph, with John Forrest the timing of his team’s return to Perth. This could not be arranged until the ‘Franklin’ docked at Eucla in early October 1885, so Turner did some more survey work between Eucla and the Western Australian/South Australian border until 3 October. He and his party boarded the ‘Franklin’ and headed back to Perth on Tuesday, 6 October 1885, six months after having arrived. The dray, horses, saddles and harnesses, ammunition, a grindstone, a horse-shoeing kit and sundry items were sold to the Eucla telegraph master for £100 prior to departure (State Records Office of Western Australia, 1885C).

During the rockhole traverse part of the survey, Turner set 360 stations, for a total traverse length of 988 km. The precision, as determined by my reductions of his two approximately 200 km loop closures, was 1:4,800, or about 1 metre for every 5 km of traverse length. Turner’s survey was quite precise for its day, especially given the conditions. This meant, in practical terms, that each of his features should have been able to be relocated on the ground within about 25m of where Turner said they were.

Reducing the Data

I consulted a land surveyor of my acquaintance to learn just what was involved with maintaining survey control using star and sun shots alone. I also dug out my old survey notes and texts and revised how to reduce geodetic surveys, that is, apply sea level corrections, scale factor corrections, grid convergence corrections and least squares adjustments in order to convert all of Turner’s land survey data to UTM coordinates.

Throughout 2005 I began the tedious task of extracting the extraordinarily difficult-to-decipher data contained in Turner and Compton's survey books. Then, in the first three months of 2006, I spent all my time on this task in order to complete it in time for a planned trip in April 2006.

I had identified 90 features and 42 'permanent' stations left at strategic points along the traverse. I allocated the reference numbers T1 – T90 to each of the karst features. Turner himself had allocated the reference numbers E1 – E42 to his permanent survey marks. The next logical step was to follow in Turner's footsteps and relocate these features.

Unfortunately, most of Turner's 'permanent' survey marks consisted of blazed trees or posts planted in the soil — unlikely to have survived the intervening 121 years. However, a few were of a cairn-with-post type, built on top of the Roe Plain Escarpment cliffs. I had some prospect of relocating these, if they survived, given the accuracy of Turner's work. Relocating even one or two of Turner's control points would mean I could then be sure of having found the correct rockholes, as surveyed by Turner.

Ray Gibbons at Turner's cairn E7, on the cliff-top.
Photo: Peter Ackroyd, 29 April 2006.

If you examine any Nullarbor map you will see a string of rockholes plotted along the cliff line between Eucla and Eyre. Similarly, about 10 to 20 km inland from this line, a second band of rockholes is marked all the way back again to Eucla. These are Turner's rockholes. The problem is that these map locations do not match Turner's survey. I discovered that the more work I did on Turner's data, the more I found that nearly every one of these positions is wrong, sometimes by a kilometre or so, sometimes more. I later found that the worst examples were Carujie Rockhole, which was in error by 2.0 km, Karulbie Rockhole, 2.4 km in error and Karlabie Rockhole 2.7 km in error. It is no wonder that Turner's rockholes have eluded us for so long. It is true that Turner's handwriting, in particular, is difficult to interpret, but once his survey system is worked out, it simply takes time and patience to follow the data.

One rockhole that Turner had missed was "10 Mile Rockhole", located about 16km west of Eucla. A South Australian telegraphist, William Russell Evans, had published in 1919 and 1921 a series of photos of Eucla scenes he had taken between 1901 and 1907. One of these, "View 13" had a caption which mentioned "an important little rockhole at the back of 10 Mile Point" (Evans, 1919 and 1921). Evans spent seven years at Eucla carefully recording life in and around the township. He used a large format camera (his glass plates were 20cm x 15.5cm) taking it into some very difficult-to-reach places, including Weebubbie Cave (see appendix 3 for a brief biography).

On 16 April 2006, Ray Gibbons and I set out to attempt to follow in Turner and party's footsteps as closely as we could, relocating and recording all of the features that had been surveyed by them. The story of that trip will appear soon.

Appendix 1: Brief Biography of George Russell TURNER

Born: 12 April 1857 at Taradale, Victoria.
Married: Christine Brown of Benalla, Victoria, on 20 April 1886.
Died: 1 October 1907 in East Melbourne, Victoria.

George Russell Turner was born at Taradale, Victoria, about 12km SE of Castlemaine. He was the third son of Thomas Woodward Turner and Elizabeth Heppingstone. In 1830, Thomas Turner emigrated from the UK with his parents and siblings to Augusta, in the south-west of Western Australia. In the same year, when Thomas was about 17 years of age he painted the first European painting of Augusta, now held in the WA Museum.

George Russell Turner grew up and trained as a surveyor in central Victoria. He sailed to Western Australia on the 'Macedon' arriving on 20 May 1882 and registered in WA as a surveyor on 6 June 1882 (Turner, David, 2001). G R Turner's first survey work was in the Kimberley area, in the far north of WA, from May to July 1883.

In 1885, John Forrest, then the WA Surveyor-General, directed Turner to locate "all rockholes likely to be useful to lessees between Eyre and Eucla", which at that time were the settled areas of the Nullarbor Plain (State Records Office of Western Australia, 1885C, item 1890/85). Between 17 April and 3 October 1885, Turner and his small party were wholly taken up with this Nullarbor Rockhole Survey.

George Turner married Christine Brown of Benalla, Victoria, on 20 April 1886. Christine and George had four children before Christine died on 22 July 1896, only 10 years after they had married.

Turner visited Victoria with his young family in 1897, probably to leave them with relatives, and returned to work for the Survey Department in WA until at least June 1901 (State Records Office of Western Australia, 1901)..

About 1901 Turner returned to Victoria and lived in East Melbourne, where he died of neck cancer on 1 October 1907, at 49 years of age (Turner, David, 2001 and Erickson, 1987–1988).

Appendix 2: Brief Biography of Edward Alfred Frederick COMPTON

Born: 19 November 1867 in Melbourne, Victoria.
Married: 1890 to Agnes Maria Mitchell.
Died: 1 May 1930.

Edward Alfred Frederick Compton was born on 19 November 1867 in Melbourne, Victoria, son of George Spencer Compton. When Edward Compton was two years old his family moved from Victoria to Western Australia where he grew up. He joined Turner's Nullarbor Rockhole Survey party as an assistant surveyor when he was only 18 years of age. After that project was completed in October 1885, he continued as an assistant surveyor until about 1888 when he became a Mining Registrar near the present day township of Southern Cross, about 200km west of Kalgoorlie.

Edward Compton married Agnes Maria Mitchell in 1890, with whom he ultimately had six children.

In 1892 he became Town Clerk in addition to his mine registrar's duties and was responsible for laying out and naming the streets of Southern Cross. In 1894 he was appointed Mining Warden at Coolgardie.

Compton resigned from the WA Mines Department in 1910 and became a captain in a volunteer regiment. He served in World War I in Egypt, England and France (Compton, 1992 and Erickson, 1987–1988).

Appendix 3: Brief Biography of William Russell EVANS

Born: 27 Feb 1878 at Semaphore Road, Port Adelaide.
Married: ca 1901, wife's name unknown.
Died: 5 December 1953 at Woodville, Hindmarsh District, aged 75.

William Russell Evans was born on 27 Feb 1878 at Semaphore Road, Port Adelaide. He was the son of Thomas William Sheridan Evans and Mary Ann Elizabeth Salter. He commenced work with the South Australian Colonial Government in 1892, at 14 years of age.

On 1 July 1900, at 22 years of age, Evans was appointed to the position of telegraphist with the South Australian Telegraph Division. His annual salary was £90, plus £39 sustenance allowance.

Evans spent seven years based at Eucla, unbroken except for apparently short spells at Yalata and Yardea telegraph stations. He had with him his young wife — she appears in several of his Eucla photos. During that time he took many photographs of the Nullarbor area, most of which are now held by the State Library of South Australia in two albums (B 54057 and B 54060). These photos had previously been held by Adelaide's Sturt College of Advanced Education until it became part of Flinders University in 1991. The photos originally arrived at Sturt CAE library via a Mr J M Robertson of the Post Master General's Office, on behalf of W R Evans (Bingley, 2006 and Evans, 1919). Evans' photos constitute a valuable record of life at Eucla Telegraph Station from about 1901 till 1907, when the South Australian staff left, the station then being run exclusively by Western Australian staff.

Acknowledgements

I would like to gratefully acknowledge the friendly and valuable assistance of the staff at the State Library of South Australia, in particular Brian Bingley for his help with the history of W R Evans. Likewise, David Whiteford and the staff at the Battye Library of West Australian History provided additional details on E A F Compton.

The staff, Gerard Foley in particular, at the State Records Office of Western Australia was helpful in retrieving many records for me during a whirlwind day of research in Perth in June 2006.

I also wish to thank Sandra Middleton of Ballarat, widow of Alan Middleton, who kindly made available her late husband's copy of the book, "Turners of Augusta" and Ian Ballinger, amateur historian of Horsham, who put me in touch with Sandra in the first place.

References

Ackroyd, Peter, (1998), Origin of the Name of Thampanna Cave, Western Australia. *Australian Caver **144*** (June 1998): 8

Bayly, I A E (1999), Review of how indigenous people managed for water in desert regions of Australia. *Journal of the Royal Society of Western Australia **82***: 17–25.

Bingley, Brian (2006), Research Department, State Library of South Australia, Pers. Comm. 17 & 19 Oct 2006.

Compton, George (1992), Grandpa was starry-eyed about Southern Cross. *Goldfields Mining Journal, Aug 3 1992*: 18.

Erickson, Rica (Ed.) (1987–1988), The Bicentennial Dictionary of Western Australians, pre 1829–1888 (4 Vols). University of Western Australia Press, Nedlands, WA.

Evans, W R, (1919), *Royal Geographical Society of Australasia, South Australian Branch **Vol XIX***: opposite page 152.

Evans, W R (wrongly shown as W C), (1921), Eucla, W. A. *Royal Geographical Society of Australasia, South Australian Branch **Vol XXI***: 99.

Saunders, B A (2005) Letter from J D Batt. **In:** Spirit of the Desert — The Story of Eucla, WA, after the East-West Telegraph Era (ISBN 0 64644583 9): 8.

State Records Office of Western Australia (1885A), Record Series 32, consignment 3401, item TURG/08: Turner field book No 8, (written by E A F Compton, 1885).

State Records Office of Western Australia (1885B), Record Series 32, consignment 3401, item TURG/09: Turner field book No 9, (written by G R Turner, 1885).

State Records Office of Western Australia (1885C), Record Series 211, consignment 541: General files — communications between Western Australian Surveyor General and G R Turner, 1885.

State Records Office of Western Australia (1901), Record Series 32, consignment 3401, item TURG/96: Turner field book No 96, (written by G R Turner, 1901).

Turner, David (2001) Pers. Comm.

Turner, Tom (1960, but wrongly shown as 1956), Turners of Augusta, 2nd Edition. Paterson Brokensha P/L, Perth, WA.

Warburton, Egarton (1860), Explorations by Major Egarton Warburton between Fowler's Bay and West of the Head of the Great Australian Bight (since called "Nullarbor Plain" and "Bunda Plateau") made in October and November, 1860. [An abridged version of Warburton's original trip journal]. *Royal Geographical Society of Australasia, South Australian Branch* ***Vol XIX*** (published 1919): 111.

Peter Ackroyd, 14 November 2009

. **%%%%%%%%%%%%%%%**

Recent visits to some Lower South East caves and sinkholes

Features visited: Kilsby's Hole (5L46), Piccaninnie Ponds (5L72), Sheather's Cave (5L144), Hunter's Cave (5L220) and Glendene Park Cave (5L238).

In February and May this year I was very happy to have been afforded the opportunity to revisit several of my favourite Lower South East caves in the company of various cave diving/caving/non-caving friends, for the first time in many years in some cases. While none of these were formal CEGSA trips, CEGSA's previous involvement with most of these sites led me to feel that they warranted at least a basic write-up like this!

On 20 February 2009 my long-term cave diving buddy Mark Nielsen and I had a fun splash in Piccaninnie Ponds, checking the general orientation of the beginning of the Dog Leg at 35 metres or so as well as the "Hot Spot" in the Cathedral, which was indeed still mysteriously pumping out water that was warmer than elsewhere in the system. Later in the day at 6.45pm, we met up with the other members of the "Hunters Cave team", namely Nathan Christinger (aka "Nathan #1"), Kym and Nathan Crettenden (aka "Nathan #2"), Ryan Kaczkowski, Audrey "Auds" Pang and Joel Vermey at Grant and Lynne Pearce's "Pine Tank Dive Lodge" in Glencoe, and we then headed off to Fred and Val Hunter's house before following Fred across his paddocks out to the cave. This was the first visit to the feature since my October 2003 trip with Richard "Harry" Harris and John Currie, during which they discovered the Anaesthetic Room extension.


Hunters Cave 5L220 July 1983 and May 2009. Photos: P Horne and K Mott.

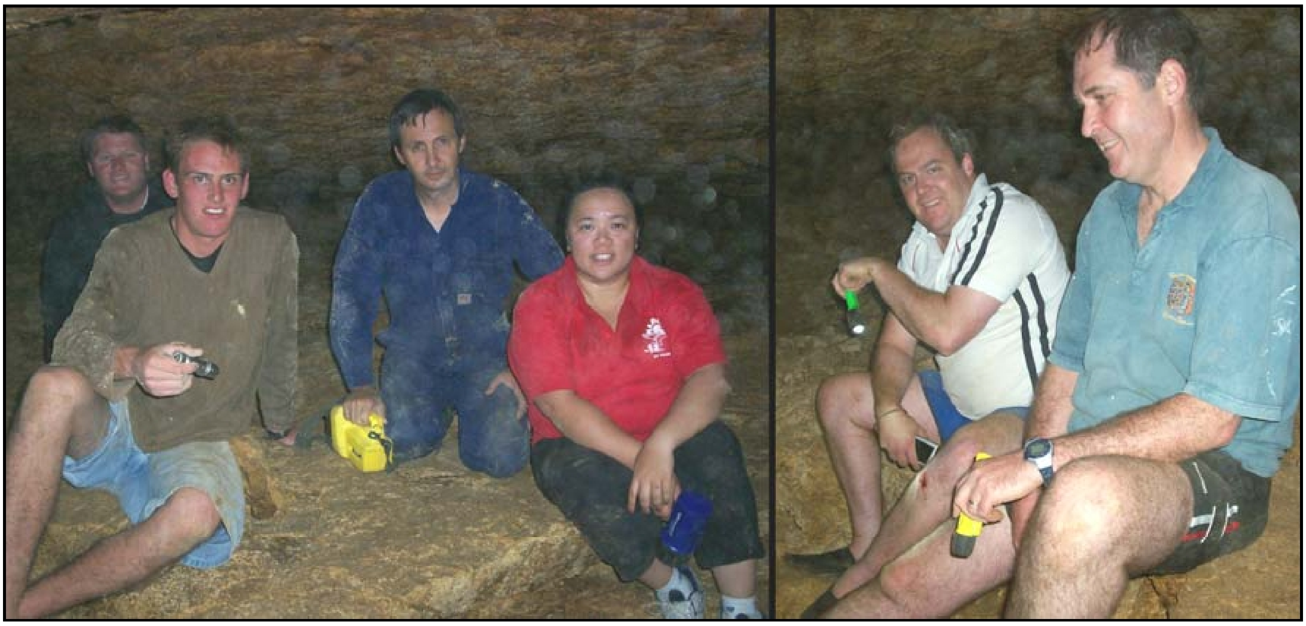
We parked beside the cave's fence, and while I chatted with Fred the others wandered down and began their explorations of the NW extension. When I climbed down a short while later I was amazed to see that the "lake" at the bottom of the talus mound had completely disappeared, as had the

former small puddles on the northern wall! This meant that there had been a drop in the water-table of more than 2 metres (perhaps even 3m or more). I then heard the others coming back after their wanderings and said g'day, but was a bit upset to find that "Nathan #2" was sporting a rather nasty cut/bruise on his left leg from an unpleasant encounter with a large slab that had broken when he was stepping onto it. However being a true battler, he was still keen to keep exploring.
Realising the opportunity for discovering new passage because of the lack of water in the cave, I grovelled down the closest former puddle on the northern wall ("Pool #1") and discovered an easily-accessible but quite muddy passage ambling down and further in; the floor was also covered in fine sediment and calcite raft sheets indicating that there had been a considerable amount of airspace in this area when the puddle had formerly filled the entrance. As this was supposed to be a relaxed, casual caving trip, none of us were fully equipped to undertake any major explorations, but fortunately this passage was basically a simple horizontal fissure which got progressively lower the further in I went.

The passage was still continuing when I finally stopped about 30 metres in, where the roof was about 35cm above the muddy floor, and I crawled back to the others, making some mental notes along the way (most of which I promptly forgot!! The damned ol' Puddles memory sure ain't what it used to be – guess it's because of the escaped hair follicles!). We then wandered down to check out the passage in the main "lake" which I had dived in 1983, but upon reaching the area Ryan and Nathan #1 discovered an extremely emaciated sheep lying in the dampness there! The poor critter was basically just wool and bones, and the boys carefully grabbed it by its legs and carried it back to the surface while Nathan #2 and I took photos. Sadly it was unable to support its own weight, and it wouldn't eat or drink. (I later learnt that it had died during the night, under a sky full of stars; its pitiful end is now remembered by the naming of the cavity as "The Sheep Dip").

After the sheep "rescue" I grovelled under the wall of the former lake and gritting my teeth against the terrible smells in the cavity, I was quickly able to slither over the top of a large boulder which I had previously negotiated underwater to find myself looking along another muddy, narrow and very small horizontal tube-like passage with phreatic meanderings here and there. We then went up to the main SE passage entrance, and after some grunting and puffing we reached the main drag where Joel, Ryan, Mark and Nathan #1 went off to explore. The pools here were also long gone and the first one on the SE wall near where we stopped (now "Pool #3") was checked out in the hope that it would continue for some distance; sadly it didn't.

By this time, several team members including myself were becoming rather fatigued and Nathan #2's injured leg was also causing trouble as it stiffened up, so I decided to call it a day. Before heading back out, we rested for awhile and contemplated the experience all of these new cavers had just had here, and I decided to commemorate the trip and Nathan #2's perseverance in dragging his injured leg all this way by naming this area of the cave "Toe'd Haul" (as he had hauled his toes there!), which is of course a pretty lousy pun on the famous Cocklebiddy Cave's "Toad Hall" (or "Towed Hall", if



Toe'd Haul cave divers Nathan 1 & Joel & Mark & Auds & Nathan 2 & Kim. Photo: P Horne.

you're one of those pathetic newbie cave divers who thinks it is actually a major achievement to get there by being pulled through the water by a scooter). The following day (21 Feb) Mark and I enjoyed a great 40 metre pleasure dive in Kilsby's Hole with Nathan #2 et al, and we concluded that it had been one of our best caving and diving trips in several decades! And the motto for this trip? "Few wonder, only we know"!

On 23 May 2009 I returned to Hunters Cave, after many weeks of encouraging people to come along and possibly explore more virgin passage there (something not so easily done in the Mount Gambier area these days). This time I had a different party of keen cavers, and even though about half of my invitees were unable to attend, we still ended up with a sizeable team comprising 1983 and 1985 "Hunter's Cave pioneering explorers" Tony Hambling, Mark Wasley and myself, along with Tony's wife Sheryl, Neville and Matt Skinner, Rob and Michelle Norman and our very own beloved Kevin Mott (who unbelievably, like Mark Nielsen on the previous trip, had never been in the cave even though he helped to put up the fence in July 1992!!).

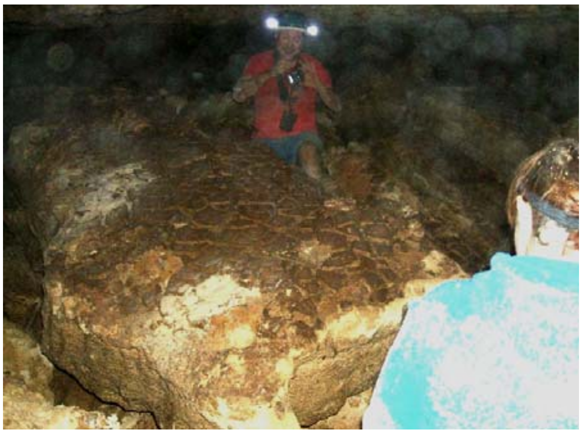
Motty & Puddles speleo-chatting. Photo: R Norman.

We all firstly had a wander through the western passage and Neville and Matt grovelled off along every low, grotty flattener and skin-shredding fissure they encountered before we moved back towards the entrance. Nev and Matt then decided to have a "quick look" at my recent discovery from what used to be called "Pool #1", so they went in through the now-dry "Pool #2" close by and disappeared. A good 20 minutes or so later they returned with grins from ear to ear, reporting that they had found another 60 metres or so of passage beyond where I had stopped last time, including one rather oddly-shaped area (about 25 metres across) which inspired Matt to name it after a pirate ship (the "Galleon Room", at my suggestion). A really good discovery by these two cave divers on their first trip into this great little dry cave, and something that now requires some serious surveying!

I did a quick slide down to the "Sheep Dip" cavity and checked to see whether I could see or hear Nev and Matt in the new area, but it was blocked off way too much and so we then moved around the talus mound to the SE passage entrance. Rob didn't like the look of the collapse pile there, so he opted to take some general surface photos while I took Michelle and the others through Toe'd Haul and to the far end of the main drag. Mark checked out the former "Pool #4" (which I in fact initially thought was "Pool #5" because of the non-existent water there, and then we all followed Neville into the MarsBar Squeeze which was also completely "dry" (well, sticky, but not submerged, at least). MarsBar Squeeze is a claustrophobia-inducing flattener for "larger" caving folk and it is also rather daunting for most newer cavers to take on something like this in their first "wild cave"; I was really

Michelle and Grotty – er Motty – in Mars Bar Squeeze Photo: P Horne.

impressed with the cool and calm way that everyone eagerly tackled it ... some of us even stopped to take some photos too!



Puddles behind The Crocodile.
Photo:K Mott.

We all had a ball in MarsBar Extension; Neville naturally went off grovelling along previous "queries", finding a few tens of metres of more virgin passage, and Matt and I had a shot at pushing the final very small and extremely muddy phreatic tube at the end of Crocodile Passage (in which I nearly became a permanent feature myself!). Nev also pointed out an apparent extension near that area but it would need some fairly major work by some very strong but slim cavers... and he found a small lead near the "Pencil Pinch Passage" and also confirmed that the PPPassage ended as shown on the old map. I was also pleased to be able to confirm the location of the Anaesthetic Room extension on my original map (and of course, Nev found a way to bypass the infamous "Prostate Probe", too, thank God)!

The following day (24 May), Tony, Sheryl, Rob, Michelle, Matt, Neville and Mark and I rendezvoused with Rob Mengler from ForestrySA and headed out to Sheather's Cave near Mount Gambier's airport, where Rob M and others removed the (fairly new) sliding-lid gate to reveal a rather nasty, sharp-edged rectangular metal support structure that made entering and exiting the tube quite a chore for some of us (especially those who were less than 2 metres tall)! Neville had a quick look inside and chirpily reported that the "main lake area" appeared to be dry, but I thought this was highly unlikely and suspected that he had fallen for the same illusion that I had way back in 1982, because the water was so clear. Sure enough, the cold, crystal-clear water was still there, and it was also still at roughly the same level as it was in 1983, despite the 3-4 metre drop in the regional water table to the south of the Mount! Rob M said his farewells and left us to it, and Nev and Matt got into their woosie drysuits while the rest of us (except Rob N) put on our old wetsuits before we all clambered down the tube into the cave.

Seeing everyone in the murky, freezing, waist-deep water, Rob had second thoughts about climbing through the final restriction, considering the fact that he was the only member of the team without even a basic wetsuit for protection! He therefore headed back up and out of the cave and had a lot of fun taking photos around the forest (some fungi were especially beautiful) while the rest of us headed off. We moved along the First Tunnel to the Hole In The Wall and then went back across to the "sumps" area, where I was delighted to find my original survey tag at the "Tie Off Rock" as well as my old fixed line, which I had laid in late January 1982 to serve very roughly as a guide through the "duck-unders". Even the old fishing-line spool was still hanging there!

I was also carrying my non-waterproof el-cheapo digital camera (stowed in a lovely zip-lock sandwich bag) so every time I wanted to take a photo I had to stand very carefully in the mud/water, wash my fingers, take care not to drip anything on the bag and extract the camera for a very quick shot before re-sealing it again. (This technique only worked for the first 8-10 openings ... my hands were then too muddy to do anything more after that. But I did get some great shots). Unfortunately though, everyone had shot off ahead, and it wasn't til I slopped and glooped my way right to the end of the Glock Passage that I finally caught up with everyone! The only "dampener" of this trip was that none of us could get through the "digs" at the end of the cave which led back into The Big Tunnel; I really think that the soil mound has slumped in this case (not my belly!), and it'll require a bit of trowel-work again before folk can get through. What a shame – I was so looking forward to taking a photo of the fabulous tree root "decoration" in the middle of this passage!

Oh yes, another bit of excitement involved my little (2m) fall (almost onto Sheryl and Neville) as I was trying to climb out of the entrance; not easy when you are covered in very slippery mud and have cramp in all of your arms and legs! Fortunately Rob N was there to rescue me with a "hup-ho!" reverse bear-hug lift, and he even gave me an electrical-type back massage in the forest to sooth my aching body! *(Thinks ... future trips to L144 will include a wire caving ladder*!!!).

The following Saturday, 30 May 2009, I took the opportunity to carry out the request of my dear friends Malcolm and Karen Kilsby who had arranged for me to take some of their friends into Glendene Park Cave while I was visiting the Mount to provide support and information from my 1993 "Black Hole Mapping Project" to CDAA Standards Director Steve Trewavas and his "2009 Black Hole Deep Mapping" team. I travelled down to the Mount with our fossil Hon Life Member Ian "Lewy de Fly" Lewis; it was naturally a great chit-chatty trip and Ian also took me around the Kanawinka fault (no fault of his own HAHAHA!) and to meet some of his great friends in Portland etc. Ian also decided to join our party in the cave, so at around 7pm we arrived at the Kilsby property where Malcolm, Karen and little Nathan greeted us with Penne and Mackenzie Paltridge, and we had some snags and chops while we waited for Tony, Jane and Tia Calleja to arrive (as well as my very special friends of more than 25 years, Malcolm's Mum and Dad, Dene Kilsby and "Mrs K"). Karen stayed back to cook up some lovely scones for our party while Malcolm then led everyone out to the cave entrance where he had already prepared the ladder!

After the obligatory introductory chat about the cave's discovery etc, I showed the group the fabulous fossils in the "Fossil Wall" before we wandered through the Zig-Zag passage to the "lake" which was also some 3-4 metres down now and comprised just a tiny patch of water at the bottom of an inaccessible fissure. We then headed down the main SE passage; young Nathan was really excited and keen to rush ahead all the time, but fortunately he was also able to constrain himself while he waited for us "oldies" to carefully negotiate the fissure passages etc that he had literally run through! We went in about two-thirds of the way, stopping underneath the road where we heard a heavy truck "swoosh" overhead before turning back. Everyone had a really great time exploring this very pretty little cave, and even Lewy thought it was a very special and interesting feature. Penne also took some really fabulous photos of some of the moonmilk features, too.

Back on the surface we all had a lot of fun chatting about caving and geoparks and all kinds of other stuff while we hopped into Karen's yummy scones – it was a very pleasant ending to a very enjoyable bit of "not-quite-armchair" caving!

Peter Horne.

%%%%%%%%%%%%%%%

TASMANIA TRIP 30TH JULY – 5TH AUGUST 2009

Caves visited: MC32 – BALDOCKS CAVE & GP1- GUNNS PLAINS CAVE.

This trip came about by a set of different circumstances. Originally the visit to Tasmania was initiated by the Burnie Regional Art Gallery as they had arranged to exhibit for 6 weeks, drawings of the Ross Bridge that June MacLucas carried out in 1989. These drawings were first seen at the gallery 20 years ago in 1989, then at the request of the gallery they were donated to them in 2001.

These massive scale charcoal drawings of the Ross Bridge that was built in the midlands of Tasmania in 1836 by convicts, was based upon actual specifications taken from restoration plans of the 1970s. These drawings comprised six arches both north and south, each measuring 36 feet long by 12 feet high totalling some 216 feet in length; it was a replica of the 186 icons carved on the bridge. These icons consisted of a number of portraits of locals of that time living in Ross; all are interwoven with historical mystical Celtic meaning that runs throughout all the icons.

D Hunter, J MacLucas & D Wools-Cobb.

Of the 70 or so guest attending the opening night on Friday 31st July, as well as local dignitaries some Tasmanian cavers attended the event. Both June and George MacLucas from CEGSA, David Wools-Cobb, Debbie Hunter, Debbie Lynch and Norm Poulter who is now a resident of Tasmania demonstrated their interest.

The following day Saturday 1st August some 50 plus people attended to hear June talk about the ‘Why and How’ the bridge drawings came about. On this occasion the cavers reappeared along with well known caver Henry Shannon of Launceston.

During the opening Debbie Hunter approached June requesting that she was interested in posing for a portrait of herself in a cave.

This request eventuated and Debbie organised a visit on the 2nd August to Baldocks Cave MC32, in the Mole Creek area for a photographic portrait shoot of Debbie. Normally this cave is gated but Debbie has access to this cave which is extremely muddy in places and has many large Tasmanian spiders near the entrance. This cave also has a reflective pool with active straws. Baldocks Cave is an ex show cave and still has some pipe work of the old feeder lines for acetylene gas lighting. Fortunately Debbie supplied all the caving gear not only for herself but for June, Debbie Lynch another caver who also wished to sit for a portrait and myself that included overalls, helmets, boots and a great lunch.

This was not the first time we have been to this cave; back in 1998 we undertook a trip with Chris Hales and Paul Harper. It had been dryer then as it was the middle of summer, this trip was the middle of winter.

This visit set the mood for caving, so on Tuesday 4th August we visited Gunns Plains GP1 Cave. This cave is leased by Triss Deer and her husband Geoff as a tourist cave. The cave is formed in Gordon Ordovician limestone that was deposited about 450 million years ago. At the time of our visit, the creek that flowed through the cave was turbulent and extremely noisy, but the bonus of this cave was seeing a small pocket of glow worms. My main reason for this visit was to see the new lighting system I had read about. The upgrade to 24 volt LED light in 2008 to my observation was very successful. On our last visit to this cave back in 1998 the lighting then was a 240 volt system. So for economy it was limited and everyone needed their own light in order to appreciate the decorations of the cave. With this lighting system we all had a great view as we proceeded throughout the cave.

After leaving Gunns Plains, we called in on David Wools-Cobb a good friend and a well known Tasmanian caver who lives out of Ulverstone, and then it was back to our lodgings at Wynyard just past Burnie.

Looking back over the five days we were in Tasmania we realised we had a great trip that also included a ring route inland to Savage River, then Couta Rocks, Nelson Bay, and Green Point then back to Wynyard. This part of our trip was freezing and very windy and on the Highlands, it was snowing.

One highlight for Burnie itself was down near the wharf area there is an old quarry face that has basalt columns fed from lava flow through a fault line distorted by a small hill. The quarry face is an excellent example of geometric columnar jointing in Tertiary basalt.

Bassalt Columns, Burnie.

George MacLucas.

%%%%%%%%%%%%%%%%

Margaret River Caving Weekend 20-21 August 2009

The group consisted of Paul and Kym Hosie, Peter Rattigan, Roger Howlett and Kylee Grubb.
It was a social caving weekend to enjoy the surrounds and catch up with some local cavers.

On Saturday we met at the Golgotha Cave carpark and then headed to Mordang Dar Cave which has a large sinkhole entrance that leads steeply down to a massive rocky cave chamber with a short extension leading off the bottom. A small section of flowstones and some decoration was admired before heading back up to the surface. This was Kylee's first caving experience and she held up pretty well. The next cave would test her mettle a little more!

After lunch we drove to Connolleys Cave which requires a 12m abseil down a 2m diameter solution tube. The cave is very extensive with over 2.5km of highly decorated, mainly dry stream passages. 2km of the passages are downstream from the entrance and is a locked cave with no access

currently allowed. Upstream has over 500m of sporting cave passage. Once the pitch was rigged, everyone headed down into the cave and moved upstream. After about 30m of horizontal passage travel, the cave descends a further 10m down to the stream level which currently consists of dry mud bricks.
Many helictite bushes grow off the straws and stalactites in this area and were quite impressive in their number and size.

Peter Rattigan exits Connolleys Cave.

Connolleys Cave – Helictite blown straw.

Connolleys Cave – Rimpool.

Peter, Roger and Paul continued for several hundred metres before returning to the entrance.
Dinner that night at the Margaret River Hotel was a lovely way to end the day.

Sunday morning saw a late start for Roger, Kym and Paul before we set off to Quinninup Lake Cave which has stunning views of the wild ocean from its entrance high on a cliff face. The cave is heavily visited by local surfers and their friends. It has a couple of large chambers with some beautiful and active formations in it.
A great, easy going weekend away caving in the beautiful south west where we expect to spend more time caving over summer.

Paul Hosie

%%%%%%%%%%%%%%%

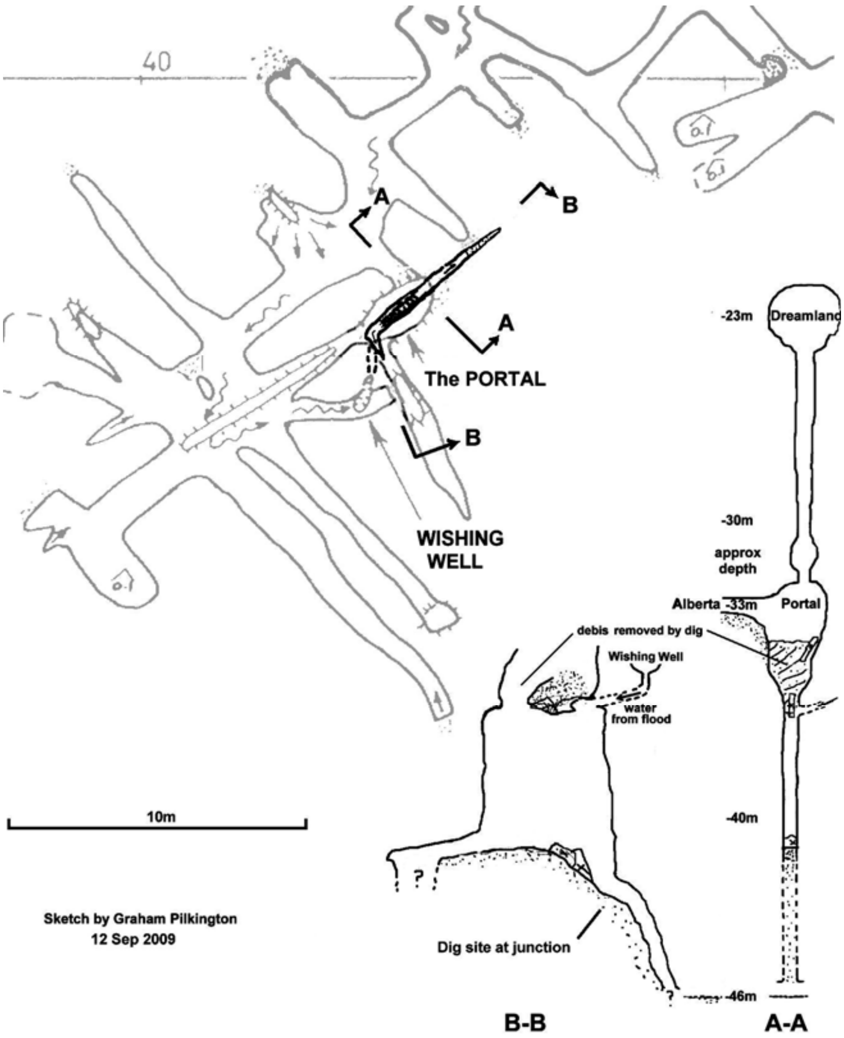
Corra Lynn Cave, 12 September 2009

Party: Graham Pilkington (L), Ray Gibbons and Paul Harper

I had expected more people along to tackle the lower Portal Dig but attrition for one reason or another reduced us to 3. At least this enabled me to examine the site that only Ian Lewis had seen and to work out what was required to proceed further.

A close look at the lower rift showed that my interpretation of what Ian had reported was slightly in error. First, the “left-hand” fissure was only about 1.5m long in plan. The 5m was down-slope. And second, the Wishing Well DID join the Portal and undermine the fill (but you had to know what you were looking at up in the “roof” of muck, and the undermining had not caused a collapse). See the amended sketch for details.

Water from the (presumed) 1944 flood had cascaded down the rift and coated the walls with what is still slippy sticky wet mud. This makes travel along the narrow inclined fissure very easy from the descent point to the junction where excavation is possible because it is 0.6m diameter here instead of the 0.2 to 0.4m width along the fissure. However, it took me about 10 minutes to return back up along that 4m and without the (by then) mud coated handline it would have taken considerably longer!



A trial excavation was started by using a bucket on a haul rope to lift mud from the junction to below the ladder-in point. This demonstrated that we either need a smaller bucket to fit along the fissure without having to lift it a few metres up to a wider section or a haul system that lifts the bucket before dragging it the 4m along the fissure. During the dig, the occasional small pebble careered downslope and did NOT stop at the visible "bottom" of the left-hand fissure but rattled on down further – a good sign. Another good sign was the breeze!

Getting out of the lower Portal was as interesting this time as the last, even with a wire ladder. In the end, Ray had to set up a pulley system to a foot-loop (using pulleys that I'd brought in with the expectation of having to use them). The ladder was attached to the only good anchor – the Portal rope – but this is off-set by about a metre and drags the ladder and climber into the constriction of the jumble of rocks wedged into the Portal "floor". Hence the need has arisen to place an anchor bolt in Corra Lynn. Luckily for us, there's solid rock to drill a hole into, unluckily for us this is Corra Lynn rock.

The next trip will have to include a bolting team. A second anchor will be needed at the lower Portal junction because the digger might want to leave the cave at some stage. Much of the lower rift will have to be cleared out to stop the sloppy muck from oozing out and burying the digger once the dig has progressed down a few metres. A junction dig depth of at least 5m is anticipated before enough can be seen to work out how best to enter Basement. In preparation, the Alberta tunnels next to the Portal along the entry passages have been cleared out for trolley use to a dirt-disposal area about 20m away.

Graham Pilkington

. %%%%%%%%%%%%%%

CAC Trip Report - E24 Weelawadgi Cave 12-13 September 2009

Trip Leader – Paul Hosie, CEGSA
Participants – Kym Hosie, CEGSA
- Peter Rattigan, SRGWA
- Dr Roger Howlett, PhD, WASG

(Dr Howlett took the place of Suzanne Hall who was unable to attend)

The cave was entered on Saturday morning with cleaning and track marking equipment for the intended tasks. No bats were noticed on entry.

The padlock had recently been replaced by DEC but it was noted that the replacement padlock was not as sturdy as the one it had replaced and the shank was very long. It is quite easy to rotate the lock and point it back through the bars of the gate on the entrance side so that the keyway is directly accessible. This is undesirable and may leave the cave susceptible to further unauthorised access or damage to the lock. This problem could be rectified by modifying the gate with extra protective steel plate near the lock assembly or installation of a padlock closer in form to the one which was replaced.

Making our way to the Barricade and Pool Room area it was noted that the majority of the yellow track markers in the cave were no longer reflective. It is recommended that they are progressively upgraded with yellow reflective stickers of the type provided by CAC for this trip.

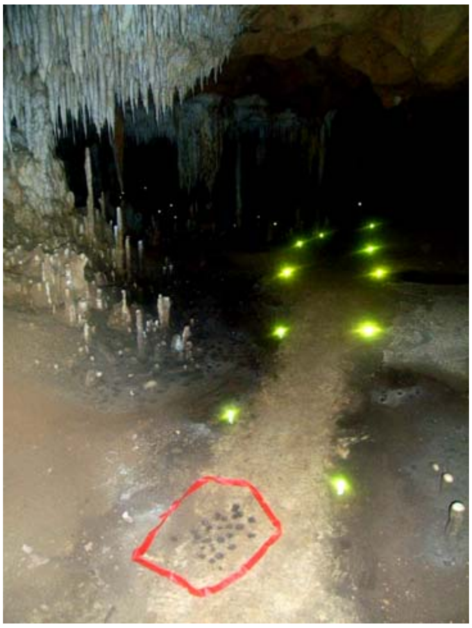
The group split into two work parties, Peter Rattigan and Dr Howlett attended to the track marking through the Barrier whilst Paul & Kym commenced work on removing soil from the flowstones and rim-pools.

Track Marking

The track marking was implemented by way of PVC poles at the entrance and exit sides of the Barrier with two lengths of 100 pound nylon line connecting them together. The line is separated by no more than 50-70cm all the way through the Barrier at waist height with tabs and red reflectors spaced at 1m intervals between the supporting columns and PVC poles.

Barricade Entry Side. Photo: Paul Hosie.

Barricade Exit Side. Photo: Paul Hosie.



Drip Hole And Track Marking.
Photo: Paul Hosie.

White and yellow reflectors have been placed at the entry and exit sides of the Barrier only as the heavy nylon line physically prevents wandering off track whilst in the Barrier formations. The remaining track marking reflectors were used in the Pool Room and back through to the Battye Library where we ran out so the remaining yellow reflectors were placed on the Western side of the track through the Battye Library.

Several red metal tabs that had been placed on the floor in the area of the Barrier and Pool Room were found to be blistering and corroding. They were removed and replaced where practicable. More can be done in future to remove the rest of these tabs and replace them with non-corroding plastic tabs and reflectors. Red flagging tape was laid on the ground to encircle newly forming drip hole formations – one between the Battye Library and the Barrier, the other on the entrance side of the Battye Library.

Formation Cleaning

The use of a dustbuster portable vacuum with a narrow nozzle or brush attachment was found to be highly effective – while the batteries lasted. The non-replaceable batteries ran down after 15mins and only half of the way through the task.

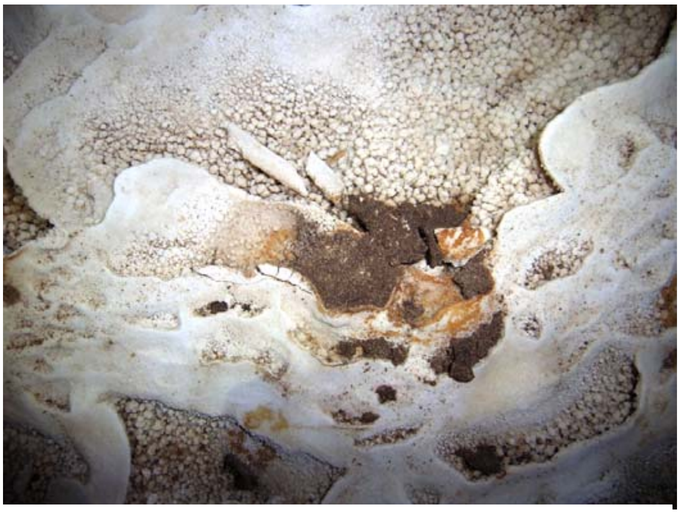
Another problem encountered was that much of the soil material was damp and physically stuck to the formation and rim-pool edges which made it very difficult to lift cleanly. The dampness also meant that the white calcite formation had been stained brown where the soil had temporarily resided.

Before Washing. Photo: Paul Hosie.

After Washing. Photo: Kym Hosie.

Washing and scrubbing with a soft brush was effective in removing soil particles and black marks, but stain removal may require different tools and techniques.

The damage to the thin calcite rims of the gour pools is noted as being the most reprehensible action of the individuals who did this. Most of the rims have been crushed and are probably irreparable. Great care was taken to put weight only on solid flowstone areas from which the gours could be reached.



Rim Mud and Damage. Photo: Kym Hosie.

Mud Clod from Boot on Gour. Photo: Kym Hosie

The cave was exited mid-afternoon with the aim of replenishing supplies and modifying the vacuum for a return trip on Sunday morning to finish the cleaning work. On the way out of the cave, a small cluster of 10-20 bats were noted on the roof of the chamber 20m SE of the gate.

The vacuum was disassembled and rewired so it could be powered by a high capacity 12V sealed lead acid battery. The cave was re-entered on Sunday morning with the modified vacuum and battery pack, as well as extra water for washing the formation. The vacuum cleaner ran for an hour in this arrangement and removed over two cupfuls of black dirt which were emptied into a garbage bag and removed from the cave. The soft brush vacuum attachment both dislodged and removed the offending soil and is considered to be an excellent tool for this type of work.

The formation was brush-washed where soil had left stains and brushed clean upon withdrawal. The overall result is not perfect but is proffered as a considerable improvement to the state in which we found it. Photos of all work conducted are attached to this report for review.

There is more work to be done to remove the stains from the pure white calcite and some attempt at repairing the snapped rim-pool edges could be attempted. I leave this for CAC consideration and advice and can only offer to assist with future repair and cleaning work in the cave as required.

Paul Hosie 15 September 2009

Nambung Adventures 2009

This year saw the CEGSA Sandgropers foray into the Nambung National Park 200km North of Perth where the Nambung River disappears straight into the coastal limestone at a number of inflow points before reappearing at coastal springs. When the river flooded in 1974, it overwhelmed the inflow caves and formed lakes where valleys are today. Water tracing conducted at the time showed connections to springs over 13km away. In the intervening limestone hills, there are many dozens of caves, most of them beautifully decorated.

After a couple of reconnaissance trips into the area to locate caves identified in the KID, we applied for permits to enter the locked caves over two consecutive weekends in late September / early October. The group consisted of Paul and Kym Hosie, Roger Howlett, Peter Rattigan, Mike Newton, Kim Halliday and Andrew Beattie. A number of caves were visited in addition to the locked caves. 6SH-12 Quandong Cave and 6-SH7 Thousand Man Caves were visited. The gates were installed in the 1950/60s and are now heavily corroded. The caves are stunningly decorated, the main feature being the beautiful variation of colours in the deposits. Interestingly, some graffiti on a dark flowstone in Quandong Cave that was not visible whilst in the cave came out quite clearly on the digital photos when later scrutinised.

Upper Chamber of Quondong Cave (6SH12).

Two other caves of note were visited on that first weekend – SH11 Army Cave and SH51 Echidna Cave. Army Cave is a highly decorated through trip with the entrances 70m apart. Echidna Cave was a pleasant surprise as it is unsurveyed and we didn't know what to expect but this 80m long cave terminates in a large, beautifully decorated chamber containing a section of flat roof of black limestone completely covered in pure white straws and stalactites.

The first weekend in October saw Peter Rattigan, Kym and Paul visiting SH09 Pretty Cave. This is clearly the real 'gem' of all the Nambung National Park caves due to its extensive passageways as well as the quantity and diversity of its mostly active and undamaged formations. We were very impressed, took lots of photos and identified some unusual speleothems – 'orange calcite roof flowers' which we later found had been discovered many years before by Bob Shoosmith in the same cave, but in a different section.

SH18 Cadda Cave is the most straight forward of the locked caves in the area with a single chamber with a large decorated area and many beautiful straws and fresh calcite deposits.

Although there is some track marking in the locked caves, it can be improved using modern materials so it is visible which will help prevent visitation damage to the fragile calcite crusts common to the WA aeolian limestone caves. A proposal has been generated to install clear track marking and replace the gates on all four locked caves we visited. An ASF Gift Fund grant has been applied for to pay for materials and the land manager has provided his formal support for the work to be done. It is now up to the WA Caves Access Committee to review the proposal and amend or endorse it so the project can go ahead.

New Discoveries

Active Column-Flowstone in Kaiser Cave.

Calcified Tree Roots in Kaiser Cave.

Author in Entrance to King Browns Cave

Coral Suckerpod – King Browns Cave

During some of our bushwalks to locate karst features in the Nambung area, we have located three caves which have not been entered before. The most impressive of these was reported in the last CEGSA News, the cave that Peter Rattigan fell into. Since that report, Roger Howlett and the author have returned and explored several hundred metres of spectacularly decorated passages (see included photo). Peter has named it Kaiser Cave after his favourite dog that had recently passed away. This cave is yet to be fully explored and surveyed but we expect it will connect to other nearby caves as the passages trend towards them.

The second significant cave was discovered in a shallow doline under a clump of wattle trees and is called King Browns Cave after the large Mulga snake that considered it necessary to go straight down the small entrance hole shortly after we found it and just before we were about to head into it! We left it that day and returned the next day to explore the cave, prepared for an unwelcome encounter that thankfully did not occur. The cave is beautifully decorated and has cave coral on the ceiling throughout. We are yet to completely explore and survey this cave but are planning a return trip in the near future. Most work will be done in winter when it is cooler and the ticks and snakes are less friendly!

Much exploration and surveying remains to be done in this excellent area for years to come. You can be assured your Sandgroper colleagues will be out there doing it.

Paul Hosie 11 November 2009

Past Trips From General Meetings

PAST TRIPS FROM AUGUST GM.

1 **Neville Skinner** made a dive in Fossil Cave (L81) to extract a quantity of jaws of Sthenurine kangaroos from a new fossil site.

2 **Grant Gartrell** with Steve Maxwell went to Sellicks Hill Cave and investigated nearby possible entrances.

3 **Grant Gartrell** and others attended the Science Week at Naracoorte and gave a talk on his involvement in the area and how science can be used in the exploration and understanding of caves.

4 **Ian Lewis** expanded Grant's account of the Science Week at Naracoorte. He also suggested the Grant repeat his entertaining talk at a CEGSA meeting.

5 **Ian Lewis** mentioned that Kevin Mott has a chart on the June bat count, noting that a total of 13772 bats were counted. But it was acknowledged that the count figure is nowhere near that accurate because bat numbers seen in caves were usually just estimates.

6 **George MacLucas** gave a rundown on his trip with June to Mole Creek in Tasmania, visiting Baldocks Cave, and Gunns Plain amongst others. The trip Leader was Debbie Hunter who has keys for some of the caves.

7 **Tim Payne** outlined the events of the ladder rigging training exercise of the 5th July. About 10 people attended. 2 ladders were set up at Morialta to investigate how to belay such that the rigging can be switched over to a hauling or lowering system to assist or recover a person who has become incapacitated on the ladder.

8 **Graham Pilkington** took a group of 11 Mercedes College students to Corra Lynn Cave on the 23rd August with help from Ray Gibbons, Michael Woodward and Steve Wasilewski (a long-time CEGSA member who is a Mercedes school teacher).

9 **Stuart Reedman** went with FUSSI members on a Corra Lynn Cave trip on 22nd August. They played with a drag mat and extracting someone from the cave.

10 **Grant Gartrell** read from the NEWS trip report of 7th May 1978 run by Kevin Mott to Curramulka Town Well Cave when they discovered that the gate had been damaged but not breached. A dried pool of blood was present.

PAST TRIPS FROM SEPTEMBER GM

1 **Tim Payne** to Reynella Cave on 5th September for survey training. 2 trainees plus several others attended. About 130m in a 30x10m area next to the cliff face was surveyed. Future site access to continue the survey was discussed.

2 **Graham Pilkington** to the Corra Lynn Cave Portal Dig on 12th September. An assessment was made of the new lower dig site and a trial dig commenced. Bolting will be required to tackle a slow dig in sloppy mud.

3 **Mark Sefton** mentioned the recent Bullita Cave trip result has the cave now the 13th longest in the world at 120km. About 190km of passage has been mapped in the Gregory National Park.

PAST TRIPS FROM OCTOBER GM

1 **Ray Gibbons** went to the Nullarbor with Peter Ackroyd, logging 60 features including 49 new ones. 2 holes were revisited from last trip because they had not been entered – one being a 17m shaft to a silt floor and the other 11m into a large cave. This cave, N4800 named "Own Rookery", had several chambers including the entrance 30x20x6m and another 120x50x(2 to 11m high). It contained sand hills of spall, coffee & cream, stals, halite, gypsum, kestrel eggs and chicks and of course owl remains.

2 **Eddie Rubessa** visited the Flinders Ranges and found 6 new features.

3 **Grant Gartrell** went to Kangaroo Island to find bone sites for paleontology. Visited caves at Kelly Hill, Mt Taylor, and Bob Seton's place.

TECHNICAL and OTHER ARTICLES

MEMBERSHIP

Welcome back to former members

9104 Sue McCormick 65 Chapel Street NORWOOD SA 5067
(H) 8363-6163 (M) 0411-264-766
(W) 8204-9081 (E) sue.mccormick@sa.gov.au

9412 Bill Binks 11/53 Ellimatta Street BRADDON ACT 2612
(M) 0401-736-914 (E) bill.binks@daff.gov.au

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	Nil
Chris Gibbons	Nil
Amanda Grindley	Horizontal
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
Steve Milner	Horizontal, Laddering and Vertical
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.

%%%%%%%%%%%%%%%

Notes From General Meetings

August 2009 Nil **September 2009** Nil
October 2009

1 **The ASF Timor Karst Appeal**. Moved by Grant Gartrell and seconded by Athol Jackson "That the club donate $1000 to the ASF Timor Karst Appeal". After a general debate over the merits of donating to this appeal and the aid that the ASF provided CEGSA in the Sellicks Hill Cave saga, the motion was carried unanimously.

2 The latest NSW Cave Rescue calendar is available for sale via Stan Flavel.

%%%%%%%%%%%%%%%

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*

Cave SAR Management Forum

Lower Moutere, NZ. August 7-9th, 2009

New Zealand contains the deepest and perhaps the most challenging dry caves in the southern hemisphere. Its small but committed caving community has a well-organised and well-practiced Cave Search and Rescue (Cave SAR) capability. This 2-day Cave SAR Management forum provided an excellent opportunity for myself, and Joe Sydney (Australian Cave Rescue Commission, and Union of Speleology - Cave Rescue Commission Oceania Co-ordinator for Cave Rescue), to exchange ideas with the cavers in NZ.

The focus of the weekend was not so much the nuts and bolts (pardon the pun) of cave rescue, but the management infrastructure and behind the scenes workings of cave SAR in NZ. As a newcomer to cave SAR myself, and with cave SAR organisations in some areas of Australia in their infancy, I found the forum to be very relevant and useful. In particular it was of great interest to see how the New Zealanders manage the relationship between official rescue authorities (e.g. the Police) and volunteers (the cavers).

Interesting talks were heard from the local police SAR coordinator, LandSAR representatives (LandSAR could be likened to some aspects of the SES in Australia), Alpine Cliff Rescue, SARINZ (a teaching body who provides *free* SAR training to any NZ resident including technical rope and rigging courses), NZ Speleological Society and a media trainer. Different regions (including the Aussies) gave short presentations on their manpower, training levels, equipment stores and other capabilities giving a clear picture of the state of Cave SAR preparedness in NZ.

During the course of the weekend we completed 2 paper Cave SAR exercises during which we ran through all the requirements for the rescues: including first response teams, Incident Control Posts, forward staging areas, communications, manpower and other logistics. We learnt how to prioritise our goals and best use our sometimes-limited resources. As most of those in the audience have been involved in 2 or 3 actual deep cave rescues and multiple less challenging rescues, there was a huge amount to be learned from their experiences. Deep cave rescue is a major undertaking!

For me the most important observation was the well-established relationship between the volunteer cave rescuers, the police (who like in Australia maintain control of all incidents) and other SAR services. The police in NZ now accept and support the use of experienced cavers for the underground component of Cave SAR incidents. In the very early days of cave rescue in NZ, it was quickly established that other services like mine rescue or the fire department did not have the necessary skill set to perform cave rescue. Over many years an excellent relationship has developed between the police and cavers, and they now cooperate on all Cave SAR callouts. The police indemnify the cavers, and LandSAR offers (limited) life insurance to all volunteers who work under the Police department's jurisdiction for the period of the rescue. Furthermore volunteer rescuers are compensated for travel and other minor expenses. I wonder if the no-fault ACC insurance system in NZ makes some of this a lot easier, as this seems to be a potential sticking point in Australia.

Another worthwhile concept is that of cave specific "preplans". If a cave is felt to be "high risk" (e.g. technically difficult, flood prone, frequently visited especially by inexperienced or non-cavers) then a specific SAR management plan can be drawn up in anticipation of an incident in that site. Details include important local contacts, phone numbers, helicopter landing sites, communications issues, rigging info for pitches etc etc. This can significantly streamline rescue operations in the event of an SAR callout.

An Incident Management System (IMS) is central to the organisation of any search or rescue. A version of this system is used in many countries including Australia. In NZ, it is called CIMS…the "Coordinated Incident Management System". When the police receive a callout, they appoint an Incident Controller. This person will notify the region's Cave Advisor (a local caver who knows the caves and is a SAR enthusiast!). Together, the police and Cave Advisor will facilitate the rescue appointing other personnel as required. These might include an Operations Manager, Logistics Manager, Intelligence and Planning Manager. The more prolonged and complex the rescue becomes, the bigger the management structure will become. Various teams will be tasked to enter the cave such as a First Response/Medical team, Communications Team (laying wire for the Michie

Phones), Supply Teams and Rigging Teams. Whilst a small rescue may require only the First Response Team, and be completed in 6 hours, a major deep cave rescue with a stretcher-ridden patient may use 100 personnel and take several days. The Cave Advisor may decide to mobilise cavers from all over the country for such rescues, and so up to date call out lists of cavers (and their skill sets) are kept by the regional Cave Advisors. In a major disaster it is possible that Australian cavers would also be called in, and there is ongoing interest by the New Zealanders in streamlining the process by which this could happen.

One deficiency in NZ Cave SAR is in the area of sump and cave diving rescue. There are literally less than half a dozen cave divers in the NZ caving ranks and most of these only dive intermittently. I had some early discussions with the Kiwis about the possibility of Australian cave divers being called upon in an emergency. This dialogue will continue.

My thoughts after the conference:

- With the exception of the NSW CRS, I suspect Australia is generally in a poor state of preparedness for cave rescue compared with NZ.

- Cave accidents requiring rescue are a rare event in Australia, hence it is difficult to motivate cavers and authorities to prepare for such events. However when an event occurs, this decreases the chances of a good outcome.

- Excellent caving experience exists within the current Australian club structure. What is lacking is the relationships with Police and SES that our NZ counterparts enjoy. A Cave SAR Management forum such as this would be an excellent way to further develop these relationships. Local and national Cave SAREXs would highlight our strengths and weaknesses. Such exercises would encourage police to call out cavers earlier during Cave SAR incidents.

- Because of the small numbers of incidents and few “cave SAR” cavers in Australia, perhaps each region need only maintain a small, motivated Cave SAR unit; but be quick to call in other regional units for more major incidents. We need to maintain our list of “SAR Cavers” and communicate with each other more often/effectively. Areas like Tasmania with deeper caves will need to maintain higher levels of operational readiness, but other regions should also encourage a few cavers to be “deep” cave trained and practised.

- Skills relevant to Cave SAR seem easy to come by in NZ. SARINZ will train individuals in all aspects of general SAR, and will also offer technical rope training with certification *at no charge*. Do we have anything comparable for volunteers?

- Preplanning could be done for some Australian caves considered high risk. Paper exercises could be done (even via internet or teleconference?) for different caves. It would be interesting to plan a hypothetical rescue for a remote Nullarbor or Kimberley cave! How do we get cavers to these areas in a hurry?

- I wish to continue to organise a system for a national cave sump rescue team and consider the possibility that they could be called out by places like NZ. A sump rescue SAREX would be interesting.

- Joe Sydney would like to see Michie phones being held in all clubs around the country…a very reasonable and achievable goal.

- Consider a regional SAREX with Australian and NZ cavers, as the Kiwis have a great deal of experience and knowledge to offer. In Tasmania??

I would like to thank the CDAA for assisting with funding to help me attend this forum, and to thank the very generous NZ hosts for their hospitality.

Richard Harris (Harry)
CDAA, CEGSA

A PLEA from your Librarian –Keep those clippings rolling in.

Over the last decades, Fred Aslin with help from Kevin Mott, numerous wives and anyone failing to take a wide enough detour, has been accumulating a collection of articles from newspapers, magazines and other publications. Added to this are articles from CEGSA's Speleo Oddities. These articles pertain to caves, caving, and the people involved (mostly landowners, speleologists and CEGSA members) and mainly relate to the areas of Australia in which CEGSA has some involvement but do cover all articles that have been found in local publications.

Fred lives in Mount Gambier hence has naturally focused on the newspapers of the south east of SA. What CEGSA needs from ALL its' members is to submit any article that they come across. Many local newspapers that only cover a few suburbs in metropolitan Adelaide have an occasional feature of interest but are most unlikely to be seen by anyone living outside the local area. These are of special interest because YOU are most likely to spot them, and Fred isn't. Fred has also been searching the major interstate newspapers for primarily South Australian cave-related articles. But he can't do it all himself.

Don't assume that someone else will have submitted a copy. It's better for us to have multiple copies than none. Besides, yours will be crease-free!

The database has well over 6000 entries from newspapers and magazines. In the near future I want to expand the scope to include periodicals, starting with our own NEWS. Kevin Mott has been methodically supplying annual indexes of our NEWS that are printed in the NEWS enabling some searching to be done via the new text-readable set of issues. Now we want to be able to electronically access this information in a more structured manner.

Graham Pilkington

%%%%%%%%%%%%%%

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

%%%%%%%%%%%%%%

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 6th February 2010 at 7.00pm for the presentation of the 2009 Annual Report and the election of officers for 2010.

The AGM will be preceded by a social get together from 3.00pm and a BBQ tea at 6.00pm.
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 31st January 2010 (preferably earlier).

The Committee

CALENDAR OF EVENTS

Date	Type of Event	Description	Contact
25/11/09	General Meeting	Royal Society Room, SA Museum, Adel. End of Year BBQ	Graham Pilkington Chris Gibbons
28/11/09	Working Bee	Library and records	Graham Pilkington
09/12/09	Committee Meeting	TBA	Mark Sefton
23/12/09	**NO General Meeting in December**		
1-2-3 /01/10	New Year weekend		
13/01/10	Committee Meeting	TBA	Mark Sefton
26/01/10	Australia Day Holiday		
27/01/10	General Meeting	Royal Society Room, SA Museum, Adel. Surveying Workshop Part 2	Tim Payne
30/01/10	Working Bee	Library and Records	Graham Pilkington
06/02/10	**Annual General Meeting**	6 Cuthbert Ave Gulfview Heights. See notice in Newsletter.	Mark Sefton Chris Gibbons
10/02/10	Committee Meeting	TBA	Mark Sefton
10/02/10	CEGSA NEWS	Articles due	Athol Jackson
??/02/10	Caving	Tasmania – Kubla Khan	Mark Sefton
24/02/10	General Meeting	Royal Society Room, SA Museum, Adel. “OzKast” – a GIS version of KIDSA demo	Graham Pilkington
27/02/10	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

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.