CEGSA NEWS

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

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CAVE EXPLORATION GROUP (SOUTH AUSTRALIA) Inc.

PO Box 144, Rundle Mall, South Australia, 5000.

http://www.cegsa.org.au

Meetings held on the fourth Wednesday of each month, except December, at 7.30 PM usually in the Royal Society of South Australia meeting room, Natural Science Building, South Australian Museum.

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Cover Photograph: Caving party entering Punyelroo Cave Entrance May 23rd 2010.
Photo: Neville Skinner.

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QUARTERMASTERS NOTE.

High usage equipment will now be stored at the quartermaster's residence. Please make arrangements with the QM well in advance of required date for equipment. The QM can be contacted at the telephone numbers on the previous page.

NEWSLETTER MATERIAL

The deadline for copy for Volume 55 Number 4 (Issue 220) is Wednesday 10th November 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 post to 6 Hudson Ave Rostrevor 5073 on a CD, in Word or ASCII text format. Do not embed photos in text; send as separate files with notes where to put photos. Photos are preferred to be in colour (jpg format). Of course other forms of communication will still be gratefully accepted.

PRESIDENTS SPOT

In ancient times, the Gnostics believed in a revealed, mystical and esoteric knowledge that was available only to the chosen few. Modern scientists (and indeed most scholars), on the other hand, are driven to make newly found knowledge available to their peers and the community at large. Indeed, most researchers these days would not regard their research as complete until it had been published, and judge others in their field by their published work. This attitude is driven by the belief that failure to pass knowledge on renders it essentially useless to anyone but the holder and it ceases to be of any value once that person dies. Promotion in Universities and awarding of further research grants can depend on 'citation rates', a measure of how many times a research paper is made use of. Since I started caving more than 35 years ago, I have met some cavers, particularly in my earlier days, whose attitude was a bit like that of the Gnostics; new discoveries were kept secret and passed on only to their closest mates, and surveys were locked away for private use. When such people died, or lost interest in caving and drifted away, those maps and other forms of knowledge were lost. More recently, many cavers have sought to preserve their records by lodging them in club data bases, but even here, such data has been lost once clubs have folded. Some, however, have made sure that their work is circulated widely in print and endures long after their departure – either from caving or from the land of the living!

When we take charge of surveying programs and produce maps, we owe it to all of those who contributed hours and hours underground (not to mention to ourselves), to make sure that all that work does not end up being for nothing. The same could be said for other forms of data gathering. The best way for all of us to ensure this is to make sure that we all place our data in CEGSA Records, that our club records are protected and that we publish our data in CEGSA News or some similar format so that it is both widely disseminated and, most importantly, of use to others.

Mark Sefton.

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ON THE WEBSITE

Added to the website recently are:

ASF Minimum Impact Caving Code (MICC) 2010.

ASF Minimim Impact Science Code 2010.

Version 5 of the ASF safety Guidelines.

AAS Competency Standard.

CEGSA Constitution & Rules 23/06/2010.

Athol Jackson.

TRIP REPORTS

Gloop/Punyelroo: Sunday 23rd May 2010

Participants: Peter, Ellie and Alex Ashenden, Daniel Rodriguez, Neville Skinner and Mark Sefton

We began our trip to the Murray lands with a visit to Gloop Cave which the Ashendens had not seen before. Despite its name and reputation, the glutinous mud is currently confined to the far end of the cave where Alex was able to demonstrate its tenacity by getting well and truly 'bogged' and losing his footwear while trying to extract his feet from the bottom of the gloop. A short digging session resulted in the retrieval of two large balls of mud with his shoes somewhere in the middle. Neville took heaps of photos and somehow managed to keep his new Nikon D300 clean (brave lad!).

Gloop Cave River Cliff Entrance.
Photo: Neville Skinner.

Inside Gloop Cave.
Photo: Neville Skinner.

Next we moved to Punyelroo. The lagoon, which was almost completely dry this time last year, had rehydrated a little, despite the lack of rain over the previous week. Once in the cave, we ignored the major (left hand) branch off the second log which leads to Randell's Rock and instead went straight ahead, via the 'Fallen Sword of Damocles' to a dig marked on the map at the far end. Neville had knee problems and went off pottering with his camera instead. I hadn't been beyond the end of the survey before, and given that the way ahead from this point was extremely tight, (although Daniel and Ellie managed it) I began to remember why. Daniel returned via a low grovel on the right hand side and we were all able to progress here – but not for much further. The way on was again only Daniel/Ellie sized though it would be extremely easy to widen here and, indeed, I managed to slightly enlarge the small hole they had wormed through using just my hands. . There was a slight breeze at this point, and the dig lay a little further on. The way on is small, but who knows what might lie beyond. After having a good look, Daniel and Ellie returned and we left the cave.

Inside Punyelroo Cave.
Photo: Neville Skinner

Punyelroo is one of the few decent sized caves that can be visited as an easy day trip from Adelaide. There are several prospects for extending the cave beyond its current two kilometre length, so maybe those keen diggers in the club looking for an occasional change to Corra Lynn could do worse than pay a few visits here.

Mark Sefton

Mole Creek: Friday 12th – Monday 15th February 2010

Participants: Steve Milner, Stuart Reedman, Mark Sefton (CEGSA); Deb Hunter, Catherine Stark (Mole Creek Caving Club).

Mark Sefton, Steve Milner, Deb Hunter, Catherine Stark and Stuart Reedman. Photo: Stuart Reedman.

An otherwise uneventful drive to Melbourne and overnight ferry crossing on the Thursday was punctuated by a torrential downpour that had one intrepid Melbournian swimming down Flinders Street in the heart of Melbourne and another snorkelling in a suburban street not far away. This change of weather carried south across the Bass Strait – a welcome break from several weeks of dry weather for Northern Tasmania but not exactly what I had anticipated when I started planning this trip several months earlier.

After arriving at Devonport early in the morning, I drove on to Deloraine to meet Deb Hunter of the Mole Creek Caving Club (MCCC) who was to be our host and guide for this long weekend of caving. We then drove on into Launceston where I left Deb at the University while I went to pick Steve up from the airport. We then met up again with Deb and returned to Deloraine for shopping before continuing on to Caveside and our home-away-from home for the next few days, Fern-Lea-Heights-With-Water-Views. On the way, we stopped for a brief look at Honeycomb cave. Soon after, Stuart, who had recently moved to Northern Tasmania (sensible lad!) joined the group. The rest of the evening was spent sorting gear.

The following day, we were away bright and early (well, early anyway) for what was the main objective of this visit – a trip to Kubla Khan Cave in the Mole Creek Karst National Park. We met Catherine at the entrance to the park and then continued on towards the cave. Kubla Khan has the reputation of being one of the finest, if not the finest cave in Australia. We were not to be disappointed.

Kubla Khan can be visited in one of several ways; a through trip from the top to bottom entrance, a so-called 'bounce trip (i.e. in and out of the top entrance but not proceeding past the Khan) or in and out of the bottom entrance as far as Cairn Hall. Other options are not permitted in order to minimise tracking mud through the cave. To keep open the option of a through trip, Deb, accompanied by Steve, rigged the bottom entrance, a split pitch of around 45 m. The five of us then continued on to the top entrance amid the continuing drizzle. Deb led the way, rigging the first three pitches. These lead into a broad, deep rift that comprises the whole upper part of the cave. For the next few hours, we made our way along past masses of pristine flowstone, columns and stals, stopping at various washing stations that have been placed throughout the cave to wash our boots in order to minimize the spread of cave sediments over the flowstone floor. Along the way, we passed a small plastic inflatable paddling pool that had been brought into the cave and filled with water as a reservoir to replenish the various washing stations. A strong smoky odour was evident throughout the cave, a result of the recent bushfires in the vicinity. We stopped to admire the aragonite formations at the Opium Den and the shawls at the Silkshop. But my favorite bit was the sparkling flowstone just beyond the shawls, where thousands of crystal faces reflected our lights straight back at us, making difficult to see where we were putting our feet.

Boot washing at one of the many washing stations. Photo: Stuart Reedman.

The Khan and Begum, Xanadu chamber.
Photo: Mark Sefton.

Eventually we arrived at Xanadu, at the end of the upper level rift. Here the obligatory photos were taken and the advantages of digital cameras were obvious. Photographing the chamber with the Khan, a 25 m high stalagmite, and the Begum, a column some 30 m tall would have been a struggle with film. From here, we decided to turn back and were all back out of the upper entrance just over nine hours after setting out underground. Then Steve, Stuart and I walked to the lower entrance and descended the pitch to look at the huge chamber at the bottom with its vast walls covered in flowstone. Even at the rebelay on the pitch, we could hear the roar of the streamway well beyond the gate at the far end of the chamber below.

The next day, the rain eased enough to allow a pleasant day sitting around the BBQ after a long lie in. Towards the end of the day, we took our beers and wine for a wander around the back paddock of Fern-Lea and watch the evening light over the Western Tiers. As dusk approached, we could see small puffs of cloud emanating from various points along the Tiers, where warm moist air from various cave entrances met the cooler air outside.

Early the following morning, Deb led me, Steve and Tom Porrit, a Queensland caver who had joined us the day before, through gleaming green rainforest to Westmorland Cave, a single steam passage which was in full flow after the recent rains. We proceeded as far as we could under the high water conditions and were able to enjoy the splendid glow worm display near the end. We then went to Honeycomb to admire the great variety of passage shapes there, all the more fun after the recent downpour. For me, doing these two caves felt like being back in England again Then Steve and I drove to Launceston for Steve to catch the lunchtime flight back to Adelaide. In the afternoon, Deb, Tom and I went for a walk up to the entrances of Devil's Pot and Devil's Ear high up in the Western Tiers. The next day, I took the ferry back to Adelaide.

Despite having been in Australia for more than 20 years, this was the first time I had ever been caving in Tasmania. What we had seen was just the tip of the iceberg. There are around 400 caves in the Mole Creek area, and many that are just as richly decorated as Kubla, though perhaps not on the same scale. Permits are needed for some of these, but certainly not all. So for those CEGSA cavers who want a change from the dry and dusty holes of SA, Northern Tasmania is a great place to come and recharge those jaded caving batteries.

Mark Sefton

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Waraweena Sanctuary and Sliding Rock Mine, Flinders Ranges SA. July 12-17th 2010

Richard Harris and Ken Smith; accompanied by 7 family and friends.

This trip report is unfortunately brief due to the lack of success in exploring the depths of the flooded mine shafts at Sliding Rock in the Flinders Ranges. However we report our activities for completeness.
On route to a previous bushwalking trip to the Mawson Plateau in 2009, Ken and I noted the water filled shafts at the old Sliding Rock copper mine situated amongst the ruins of the former town of Cadnia. Of great historical interest, the copper mine commenced operations in 1869 and ceased mining in approximately 1901. The body of copper ore was particularly rich however several issues made it uneconomical to continue with the mine, including the battle to pump out the constant influx of ground water and also the cost of transportation to and from this remote outpost. At the end of active mining, the abundant water was pumped to Leigh Creek for many years.

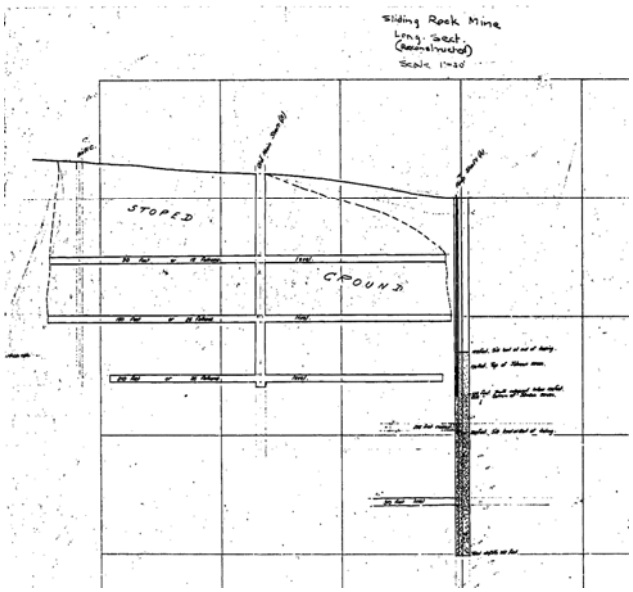

Fig 1

Day 2 dawned bright and clear and allowed us to tow the trailer out to the mine to begin our exploration. We systematically plumbed the 2 most promising mine shafts (Fig 2) and unfortunately discovered both were choked off with rocks and debris at a depth of approximately 4m. Our diving was over before it started! Such is the life of the explorer! Not to completely waste our efforts we made a rough survey of the shafts and gave this information to the owners who had so generously allowed us to access the area (see below).

Fig 3

in a rusty tin on the summit cairn. The ascent was made by following a gully south from the road. However, this involved some difficult climbing on scree and a rocky traverse. Descent was made via a gully to the west and the descent was relatively easy, with some attractive dry waterfalls along the way.

All in all, one of the most enjoyable unsuccessful trips I have been on!

Richard Harris

Maps of the mine show shafts descending to over 300' with a number of shorter horizontal drives (Fig 1). In addition to our interest in the mineshafts and whatever historical artefacts they might reveal, the ore body exists in a large deposit of limestone which potentially might bear cave features to explore.

After gaining permission from the caretakers Stony and Gina Steiner (and the Wetlands and Wildlife Trust who own the land) to explore the mines, we set off.

The drive to Waraweena via Parachilna with a trailer load of climbing and diving gear in tow took 6½ hours. We settled into the historic shearer's quarters for the first night. Heavy rains early next morning meant that we were confined to barracks the next day, as the clay tracks were impassable so we settled for a slow trudge out to the mines.

Fig 2

The next four days were not wasted as we discovered some of the excellent 4WD tracks and bushwalks on the property. Nearby Nantibury Spring is a permanent water source, which has been gated by the owners to prevent goat access (Fig 3). Some wonderful rock shelters also exist on the property (Fig 4).

Ken Smith and Cate Woods walked to the summit of Mt Stuart in calm sunny conditions. They added their names to a collection on notes

Fig 4

Past Trips From General Meetings

PAST TRIPS FROM MAY GM

1 **Daniel Rodriguez** gave an outline of the Mark Sefton led trip to Gloop and Punyelroo Caves on the 23rd May. He reached the dig extension that is not shown on the map in Punyelroo. No-one made the usual trip to Randell's Rock. Daniel drew a sketch map of the complex dig site.

2 **Harry Harris** and Grant Pearce went to Piccaninnie Ponds to take measurements and water samples at the sites of the permanent recorders so that the readings that are being transmitted to National Parks can be calibrated.

3 Ian Lewis attended the Ruth Lawrence trip for Latrobe Uni students.

4 **Grant Gartrell** attended the ACKMA AGM held at MULU. The event was run by Brian Clarke and included trips into some of the large caves in the area including Deer Cave.

5 **Grant Gartrell** also visited the Peake District in the UK.

PAST TRIPS FROM JUNE GM

6 **Marie Choi** went to Avenue Range from 11-13th June.

7 **Ian Lewis** and several other CEGSA members led bat-counting trips for DEH in the southeast on the 19th June. Counting was simultaneously conducted in nearby Victoria.

8 **Ian Lewis** attended the Ruth Lawrence trip for Latrobe Uni students to Naracoorte in May. Surveying was done in Cave Park Cave. A compilation of the surveys (incorporating some previous CEGSA surveying) in plan and long-section was presented to the meeting.

9 **Grant Gartrell** has given two talks to other groups, including the Strathalbyn Geological Society.

10 **Damian Grindley** visited a cave in a USA wilderness area called Lilburn Cave. There was a deep snow cover and very cold innards (cave and person).

11 **Ian Lewis** noted dolines on southern Eyre Peninsula.

PAST TRIPS FROM JULY GM

12 **Damian Grindley** went caving in Sand Cave at Naracoorte. A clean-up project is planned.

13 **Ken Smith** and Harry Harris visited an old mine that had a reported depth of tens of metres into mine workings. They found that the water had a maximum depth of 5m at the bottom of an 8m air-filled shaft.

14 **Mark Sefton** went caving at Jura National Park (Bullita). The trip to get there was very wet with Mark seeing some creeks flowing for the first time over his many visits to the area. He presented a line diagram of caves in a block of limestone to the south of Bullita Cave. The 1km long Spring Creek Cave had 5km added during the trip. A comparison was conducted of all the instruments to be used for surveying and discrepancies were within tolerance for all the tapes, Distos and clinos but compasses varied by up to 4 degrees. Compass discrepancies were mainly due to operator technique.

TECHNICAL and OTHER ARTICLES

MEMBERSHIP

Welcome to new members

A	Grant Sommer	1004	NFP	
A	David Pollitt	1005	(M) 0414-609-097	(E) daveju@adam.com.au

MEMBERSHIP FEES

CEGSA MEMBERSHIP FEES were due on January 1st. Continuity of membership has now expired. A Membership Application Form and a joining fee of $12.00 now applies.

CEGSA MEMBERSHIP FEES FOR 2010 YEAR

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

ASF LEVY FEE FOR 2010 YEAR

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

2010 YEAR FEES

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

Variation for Family Membership

1st Full Member + 2nd Full Member Less $16.00 for only 1 CEGSA News	$90.00	$121.50	$211.50
1st Full Member + 2nd Associate Member Less $16.00 for only 1 CEGSA News	$82.00	$121.50	$203.50
1st Associate Member + 2nd Assoc Member Less $16.00 for only 1 CEGSA News	$74.00	$121.50	$195.50

Discount for Country Membership applies for Family Memberships.

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

Chris Gibbons. Treasurer/Membership Officer.

Approved CEGSA Trip Leaders

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

All the above named are also CEGSA Trip Co-ordinators.
Members may query the classification of any Trip Leader at any time with the committee.
It is a requirement that each trip be organised by an approved Trip Coordinator to be classed as an official CEGSA trip. It is also a requirement that dependent party trips be led by an approved Trip Leader at the appropriate skill level for the cave being entered.

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The following 2 articles are additions to the Proceedings of the 26th ASF Conference, CAVES, CRATERS and CRITTERS.

Karst and Cave Conservation - A World Perspective

Elery Hamilton-Smith, AM, D.App.Sci.

Chair, IUCN / WCPA Task Force on Caves and Karst

Introduction

The concept of heritage has always been an aspect of the human condition – and probably even earlier in the process of evolving consciousness. Basically, the term covers those things that are handed on from each generation to those that follow. The concept is a broad and over-arching one – it may be natural or cultural, tangible or intangible. A valuable wide-ranging, visionary yet practical discussion is provided by Harmon & Putney (2003).

Some examples of tangible sites include sacred places, preserves of the rich and powerful and place of special beauty. They go back to the very beginnings of human awareness and consciousness. Formalised international recognition probably commenced when construction of the Aswan Dam threatened the great Nubian monuments of the Nile Valley. Renè Maheu, Director of UNESCO, was able to mobilise world support to save the monuments by moving them to a new site.

Both the International Union for Conservation of Nature (IUCN) and the International Council on Monuments and Sites (ICOMOS) had already opened discussions with UNESCO on the recognition

of sites of universal human value (now termed sites of Outstanding Universal Value). So, in 1972, The World Heritage Convention was established by international agreement and treaty.

Today we recognise a group of similar international protocols:

- Man and the Biosphere Program with its Biosphere Reserves (1968-71)
- Ramsar Convention on Wetlands (1971)
- World Heritage Convention (1972)
- Charter for Nature (1982), and now
- The evolving World Geoparks Network

The World Heritage System

I will start with discussion of World Heritage as the most prestigious and best known of these. The Register now includes some 830 sites in a variety of categories:

- Cultural Heritage
- Natural Heritage
- Mixed Sites, i.e., having both cultural and natural values
- Cultural Landscapes, i.e., sites within which cultural and natural values are integrated and inseparable

The process of recognition and registration of sites has progressively become increasingly rigorous. Today, every effort is made to both ensure that each site is genuinely of outstanding universal value and does not duplicate the characteristics of existing sites. This gives rise to a certain ambiguity, as the process attempts to ensure that any new site is in fact the best example of its kind. There is now a comprehensive set of operational guidelines and regulations which shape and govern the processes of nomination and registration (UNESCO 2005)

The first step in the process of recognition is the submission by the member state of a tentative list of proposed sites. Once approved, then preparation of a detailed account of the site must be prepared for consideration at a meeting of the World Heritage Committee. The nomination will be subjected to a thorough process of assessment and a summary of that assessment is prepared by either IUCN and/or ICOMOS which is also passed on to the committee.

Any site must meet one or more of ten criteria in order to establish outstanding universal value (OUV). It must also meet various conditions of integrity, which include such matters as authenticity, appropriate boundaries to ensure the wholeness and intact character of the site and evidence of appropriate and adequate management capacity to ensure sustainability.

Currently, some 50 sites are located within karst areas, or include major caves. They each meet one or more of the relevant criteria, and those most commonly invoked are:

- Bear a unique or at least exceptional to a cultural tradition or to a civilisation, which is living or which has disappeared. (examples include the great cave art sites or archaeological sites)
- Contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance (such sites as Plitvice Lakes, Carlsbad Caverns and a horde of others)
- Be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features (including the Australian fossil mammal sites. We often say that 'Caves are the books in the library of the history of the earth)
- Be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals
- Contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from he point of view of science or conservation. (These latter two criteria are no surprise in karst as it often provides an immense range of microclimates and hence environmental niches, both underground and on the surface

To be deemed of outstanding universal value, a property must also meet the conditions of integrity and/or authenticity and must have an adequate protection and management system to ensure its safeguarding.

Biosphere Reserves

Essentially these represent a commitment on the part of the stakeholders and the relevant governments to work towards an appropriate balance between development and conservation and so to achieve sustainability. Today, they are generally based around a core protected area, but contain a diversity of other lands being managed for sustainability. The pattern of negotiated management by stakeholders means that a Biosphere Reserve can provide an excellent mechanism for buffer zone management of major protected areas.

Ramsar

The Ramsar convention on wetlands was established to foster protection and quality management of wetlands. It became well known for its development of co-operative programs for protection of migratory water birds, such as the species that annually migrate along a great figure-of-eight route between Siberia and Southern Australia.

Its particular relevance to karst management lies in the fact that it now has a program devoted to subterranean wetlands, most of which are in karst.

Geoparks

Geoparks are aimed at protection of, respect for and understanding of geological phenomena and have a strong emphasis on public education. Networks developing in Europe, Asia and Australia and there are now regular world meetings to set standards and exchange expertise.

The Good News in Karst Protection

We now have a continuing growth in recognised and hence more adequately protected karst sites. There is also a significant improvement in management quality, although this varies from place to place and time to time.

Special support is being given to the small countries of the Pacific region, including the Micronesian states, Vanuatu and Papua New Guinea. Key sites in PNG are the Sublime Karst (Nakanai, Muller and Telefomin), the Huon Peninsula and the polygonal karst of the Southern mountains. The tentative listings are in place and work on preparing nomination documents is proceding. .

China already has four karst World Heritage Areas. But a serial nomination of some 12 locations is in progress on the South China Karst. Given that China has some 25% of world karst, this is probably not an excessive number. One of these locations is the exceptional Maolan forest. Generally considered the world's finest sub-tropical rain forest, this has been managed by the Shui People on a basis of sustainability for over 1,000 years. There is even a book, again originally published about 1,000 years ago from woodblock.

Vietnam is making considerable progress and developing high quality of management. Ten years ago, I did the on-site assessment of the World Heritage nomination for the Phong Nha karst. I found it to be a place of remarkable biodiversity. The nomination was premature so I recommended deferment to provide for the necessary development of information, inventory and management. The Phong Nha Ke Bang WHA is now well established. I also suggested (a) that the proposed area be quadrupled and (b) a trans-boundary agreement be struck so to include the Hin Namno Karst of the Lao PDR. The first took less than six months; and I have only just returned from a joint meeting to establish the trans-boundary agreement.

The little-known but splendid karst of Bosnia and Herzegovina is now getting considerable attention. The Popovo Polje – one of the largest in the world and a place of great interest - is being given special attention and may well be nominated for World Heritage. The wondrous Vjetrenica Cave which drains into it from the plateau on the Northern side is currently being restored.

France, Italy and Slovenia have joined in a three country program of identifying and managing Karst Cultural Landscapes

And some bad news . . .

War is destroying or seriously threatening a number of karst and other very valuable natural heritage sites. However, probably the biggest problem is that poor management of either the site or of associated tourism is destroying others almost as effectively. The National Geographic Society's annual monitoring and rating of World Heritage sites has recently highlighted this.
At the same time, much informal discussion at this conference has highlighted the decline in management quality at some Australian cave parks. Again, this is often associated with tourism.

In conclusion, it is a source of immense satisfaction to me that I have been able to play some role in all of this. This builds firstly upon the shoulders of all my friends in Australasian caving and secondly on my experience as a policy consultant to governments.

References

Harmon, David & Putney, Allen D. (eds.) 2003. *The Full Value of Parks: From Economics to the Intangible.* New York: Rowman & Littlefield Publishers Inc.

UNESCO 2005. *Basic texts of the 1972 World Heritage Convention.* Paris: UNESCO.

See also text only version of .ppt presentation in 2007 *Caves, Craters and Critters: Proceedings ASF 26th Conference, Mt Gambier, Paper 1.*

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Looking Back: Some Reflections on Gains and Losses.

Elery Hamilton-Smith

Introduction

This paper is a mix of personal (and hence self-indulgent) reflections upon over 50 years of caving together with a discussion of the things we have lost over the years and also the things we have gained. Inevitably, the early part of it is firmly based in the distinctive culture of South Australia and does not do justice to the very different situations in other states. Then in the later section, my comments are also inevitably shaped by my extensive national and international experience. So, it is not an attempt to write a serious and well-balanced history or assessment.

South Australia has a remarkably rich and diverse speleological story. The Aboriginal people used many of the caves as residential sites, art galleries, mines, workshops for making tools and graves. The first European arrivals included Flinders who explored, mapped and noted the character of the Nullarbor Coast and the Baudin expedition, some members of which wrote their names on the cave walls of the Ravine De Casoars. They were soon followed by Governor Grey's expeditions with Burr and Angas during the late 1830s and 1840s. In the 1850s, railway engineer Edward Snell visited Corra Lynn at Curramulka and included some delightful pencil illustrations in his diary.

The most outstanding early speleologist was the Rev Julian Tenison Woods who wrote at considerable length, describing and discussing features of karst in the Limestone Coast Region. The major and most familiar example of this writing is his 1862 book, *Geological Observations in South Australia: principally in the district South-East of Adelaide.* However, there are some other papers, and his capacity for observation provide us with excellent assistance in locating features, although the scientific value and implications of his work were only probably recognised some hundred years later. Then in the 1890s, William Reddan arrived as manager of the Naracoorte Caves. He used Woods' book as his key reference, discovered many further caves, initiated further palaentological work by Stirling and Zeitz of the South Australian Museum and continued extensive exploration, often with James Mason, and in turn was succeeded by Bob Leitch.

Samuel Bedford of the Kyancutta Museum also visited Curramulka during the 1930s, but does not appear to have left any record of his activities there. Herbert Hale and Norman Tindale of the South Australian Museum were the leading cave scientists of the 1930s, with their methodologically innovative excavation at Devon Downs cave, a systematic review of sites along the Murray River, identification of many Aboriginal sites and examination of caves on the Limestone Coast.

Next, former seaman Captain Maitland Thomson heard of the caves on the Nullarbor, some of which had been discovered many years before by surveyor A.E.Delisser, and staff of the Overland Telegraph had and commenced exploration. Thomson joined with them and in the following year commenced regular expeditions and in 1938, learned to pilot a light aircraft and commenced aerial spotting of caves with the support of his instructor, the equally remarkable Ian MacRitchie. It was Thomson who first aroused my interest in caves.

The "Modern" Era

Following World War II, Thomson continued his expeditions into the 1970s. Meanwhile, in 1946, Prof. W.S. Carey formed the first Australian speleological organisation –the Tasmanian Caverneering Club. He had spent some time during the war at Mt Etna Caves, training Australian commandos to fight Japanese troops in the caves of the Pacific.

Sydney bush walking clubs commonly included caving, often at Colong, in their regular programs. In due course, some of those involved joined with others and formed the Sydney University Speleological Society. Others followed, including our own Cave Exploration Group of South Australia.

In the 1950s, with the ascent of Everest and other outstanding British exploration or adventure, there was an immense upsurge of interest in outdoor adventure, which was often called by journalists and others the "New Elizabethan" movement. This doubtless influenced many of us and was also expressed in the Rover Scout Movement.

So, on the 4th-6th June, 1954, Rovers Cec Giles, Noel Mollet, John David Taylor and myself, together with geologists Graham Chinner and David Pegum went to Corra Lynn Cave, then on the property of the Correll family.

Pegum was the only one with any previous caving experience I cannot resist telling one of his stories about his experiences. He was at a party in Sydney and very drunk when one of his friends came up to him and asked how he was. David responded, "I'm great! I could even get through the S-bend in Mammoth Cave right now." This was a feat that he had never been able to achieve previously. But his friends loaded him into a car with several bottles of whisky and headed to Jenolan. The carried him into the Mammoth and fed him into the tunnel where the then notorious S-bend was located. They went to the other end and collected him when he came through and drove him home. When he awoke, he couldn't remember what had happened, but was immensely puzzled as to why or how he had mud all over his dinner suit!

Over the next 12 months, this informal group grew rapidly, recruiting other rover scouts, friends and colleagues. We made a number of significant discoveries, including a number of articulated skeletons of an extinct species of *Bettongia.* This laid the foundation for a close relationship with the South Australian Museum and won the respect of some university academics.

We gained a great deal from all of this activity. Probably each of us would make up a different list, depending on individual preferences and interests. I know things that come virtually immediately into my own mind can be listed as in the box below

The things we gained:

- Friendship with Captain Thomson
- Other new friends, particularly landowners
- Fun, fellowship and a wonderful new interest
- Visiting remarkable new places across the state
- Learning expertise from each other and various friends, hence . . .
- Within our own group, a great sense of self-confidence and of safety in our new pursuit
- The freedom and spontaneity of caving
    - "You don't have to be mad to go caving, but it helps"
    - "Nothing can go wrong, because nothing has been organized"
- Respect and support from the museum and academics
- The opportunity for inquiry and research
- Developing greater environmental understanding
- A focus on the importance of recording and documentation
- Some very important contributions which originated from the late Alan Hill
    - The cave numbering system
    - Understanding cave processes in soft rock
    - A greatly enriched vocabulary
    - A diverse range of specialised equipment or supplies (" XXX has just made a gift of this to the group. No letter of thanks is to be sent!")

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So, on 19th April, 1955, we established the Cave Exploration Group of South Australia (CEGSA).

This led to a multitude of things, including the 1956 Nullarbor Expedition and hosting the Inaugural Conference of the Australian Speleological Federation.

The Continuing Saga

A minor side-issue which nevertheless attracted immense interest was the problem of taking photographs in the immense caverns of the Nullarbor. This resulted in a series of devices known as blow-through lamps which burned magnesium powder, and which amongst cavers were renamed as "Diprotodons".

They were actually invented in Europe and widely used across Europe and North America in various applications, even including studio portraiture. Charles Kerry had begun his own experiments with magnesium lamps in the 1880s and even had a monster lamp with six heads, all of which could be fired simultaneously. The firm of Baker and Rouse, using the trade name *Austral* produced a lightweight hand-held model. Its introduction to the Nullarbor occurred when George Watson bought and used one, which he later shared with Maitland Thomson.

A whole gaggle of elaborations followed. Henry Fairlie-Cunninghame built several lamps for the 1956 expedition, each of which used a meteorological balloon to provide the ":blow"; Alan Hill used High Density magnesium powder which flowed much more smoothly and eliminated some of the unpredictability of the blow-though lamps; Norm Poulter used a can of bottled gas which provide both the 'blow' and easy ignition. I found a Baker and Rouse version in a second-hand shop and Noel Mollet fitted it with a fire extinguisher cylinder and tire pump as a gift to the Captain.

But, that interesting digression aside, there have been numerous important discoveries or advances made by speleologists, such as:

- Koonalda (and later many other) archaeological sites
- Victoria Cave fossils (and later many other) palaentological sites
- New methods in bat research and management of the initial bat-banding scheme, followed by the establishment of the Australasian Bat Society

- Use of infra-red imagery at the Naracoorte World Heritage Area
- ASF Handbook and Karst Data Base
- Development of cave diving and in particular the CDAA training program.
- Development of a holistic approach to cave studies, management and conservation (still in progress)
- Systematic strategies for improving the management of cave and karst management, and the establishment of the Australasian Cave and Karst Management Association (ACKMA)

The culture of discovery has both shaped and resulted from the close relationship and continuing exchange of knowledge between scientists and cavers. This was initially encouraged and fostered largely by both Norman Tindale and Joe Jennings but it has been maintained by many others and must be preserved as a feature of speleology at all costs.

Above perhaps all else, there is a broad and world-wide committment to international programs in karst studies and heightening environmental awareness, protection and conservation. There is no question that various Australian cavers and the Federation have played a key role in this.

But, What have we lost?

- Freedom and spontaneity
- Including the freedom to explore new discoveries without impediment
- The right to ignore the uselessness and excessive costs of so-called “risk management”
- The one-time simplicity of conservation – now a long hard swim through the very muddy waters of politics and bureaucracy

But, finally, we have lost many highly valued friends – Norman Tindale, Alan Hill, and most recently Brian Franz, husband of Ailsa. So I pay tribute to those who have walked the speleological road with us, and whose memory helps to sustain us.

Finally, let me revert to the personal. Two of the most significant and highly valued decisions of my life have been to make that first visit to Corra Lynn Cave and then to join in developing the Federation and all that has arisen from it. They have given me many great friendships, a joyful and satisfying life and a wonderful collection of memories.

Thank you all.

See also text only version of .ppt presentation in 2007 *Caves, Craters and Critters: Proceedings ASF 26th Conference, Mt Gambier, Paper 1*

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CEGSA NEWS for SALE

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

Orders to: *Graham Pilkington*

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REMINDER

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

The Committee

Burleeyung Cave – 5A16

This cave was first reported in the South Australian Register on 8 November 1861. It remained undisturbed by cavers till I came across a copy of the article. My interest was piqued as my mother's family came from the area and no caves had been reported in that area.

A cave was eventually tracked down and visited in 1980 when the cave was originally surveyed. Some time later, date not known, the cave was again visited and resurveyed. To the credit of all, the two surveys are very similar.

There is only one minor problem that puzzles me. Both surveys differ in orientation by 90^0. Perhaps some one may like to check the records and let me know which one is drawn correctly. The prize is a free trip to the only known cave (as far as I know) in marble in SA.

My interest was further raised when Lewy raised the question of a cave locality recently. The cave is in the same area but the location is, I suspect, different to Burleeyung Cave.

Perhaps the prize could be extended to include a visit to a previously unkown cave. With a slight detour the cave at Jacobs Creek could also be visited.

Kevin Mott

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Answers to Puzzles in Edition 218

Golo Problem

First Solution

Fill the 7 litre bottle. Then put 5 litres of it into the 5 litre bottle which leaves 2 litres in the big bottle. Empty the 5 litre bottle and put the 2 litres into it. Fill the 7 litre bottle again and put 3 litres of it into the 5 litre bottle which leaves 4 litres in the big bottle. Empty the 5 litre bottle and put the 4 litres into it. Fill the 7 litre bottle again and fill the 5 litre bottle from it. It will only take 1 litre which leaves 6 litres in the big bottle.
Put the bottle with the 6 litres in it on the handle and the gate will open.

Second Solution

Fill the 5 litre bottle and then put it into the 7 litre bottle. Fill the 5 litre bottle again and fill the 7 litre bottle from it. Empty the 7 litre bottle and put the remaining 3 litres from the 5 litre bottle in it. Fill the 5 litre bottle again and fill the 7 litre bottle from it. Empty the 7 litre bottle and put the 1 litre from the 5 litre bottle into it. Fill the 5 litre bottle and put it into the 7 litre bottle.
There will now be 6 litres in the 7 litre bottle and if it is put on the handle the gate will open.

Hidden Tiger Problem

If you look carefully at the stripes on the tiger you will see that they spell out:

THE HIDDEN TIGER

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26th ASF CONFERENCE PROCEEDINGS

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

Athol Jackson.

CALENDAR OF EVENTS

Date	Type of Event	Description	Contact
25/08/10	General Meeting	Royal Society Room, SA Museum, Adel.	
28/08/10	Working Bee	Library and records	Graham Pilkington
28-29/ 08/10	Caving	Sand Cave Naracoorte	Damian Grindley
14/09/10	Committee Meeting	22 Hogarth St. Panorama	Mark Sefton
18-19/ 09/10	CROP Exercise	Corra Lynn Cave, Curramulka and Tuckerway Hostel, Port Vincent.	Richard Harris
22/09/10	General Meeting	Royal Society Room, SA Museum, Adel. CROP exercise results and discussions.	Richard Harris
25/09/10	Working Bee	Library and Records	Graham Pilkington
??/10/10	Caving	Nullarbor	Ian Lewis
12/10/10	Committee Meeting	22 Hogarth St. Panorama	Mark Sefton
27/10/10	General Meeting	Royal Society Room, SA Museum, Adel. Video of Caves or Karst.	
30/10/10	Working Bee	Library and Records	Graham Pilkington
09/11/10	Committee Meeting	TBA	Mark Sefton
09/11/10	CEGSA NEWS	Articles due	Athol Jackson
24/11/10	General Meeting	Royal Society Room, SA Museum, Adel. End of Year Social BBQ	Graham Pilkington
27/11/10	Working Bee	Library and Records	Graham Pilkington
2-6/01/ 2011	Caving Leaders	Rover Scouts, Naracoorte	Michael Woodward
	Training	Ad Hoc training	Tim Payne
	Caving	Ongoing Vic Fossil survey	Gary Woodcock
	Caving	Continuing Fleurieu Peninsula Exploration	Grant Gartrell

****Extra trips will be notified through CEGSA e-News via email****

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