CAVES AUSTRALIA

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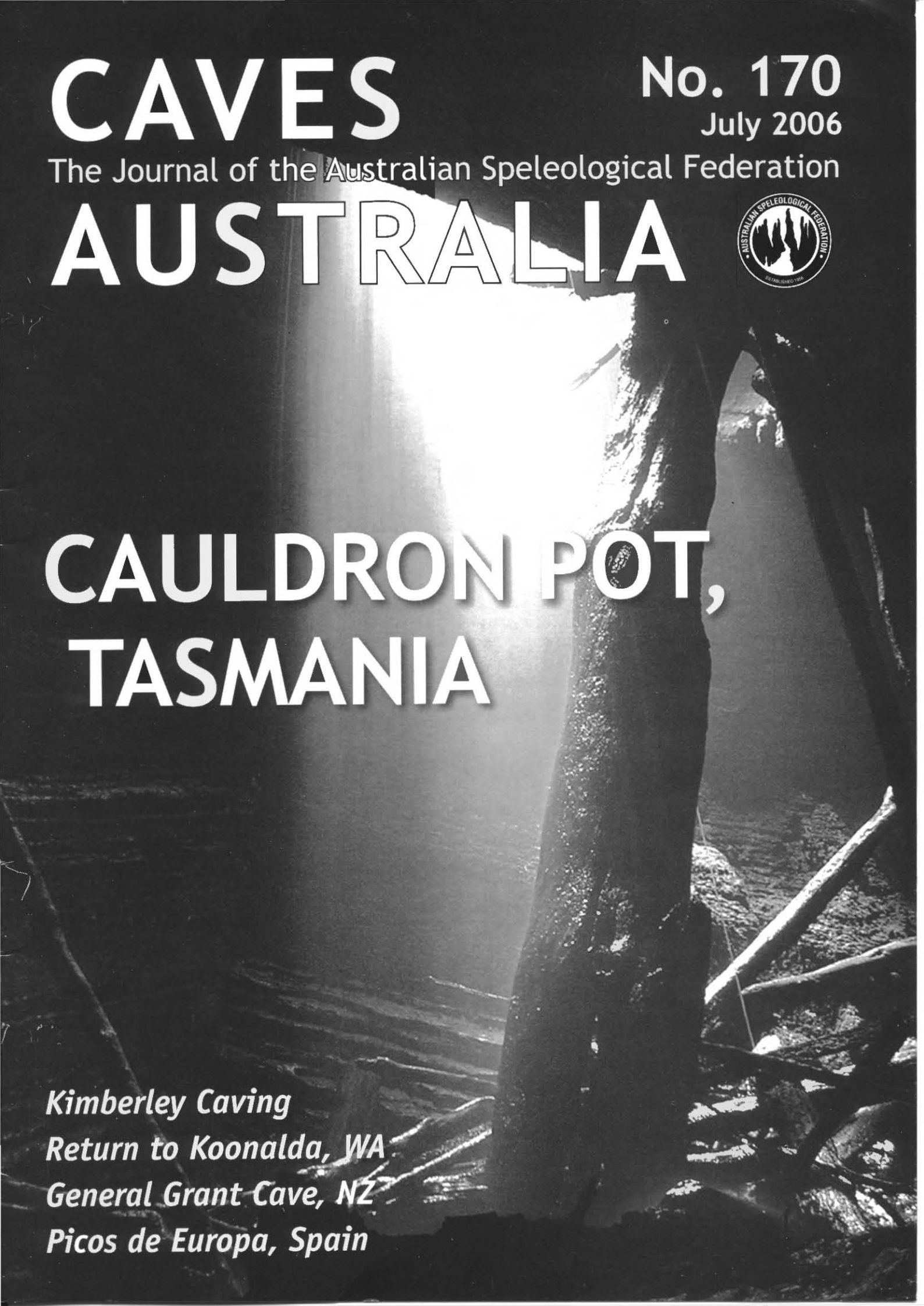
The Journal of the Australian Speleological Federation



CAULDRON POT, TASMANIA

Kimberley Caving
Return to Koonalda, WA
General Grant Cave, NZ
Picos de Europa, Spain

Coming Events

In particular, this list will cover events of special interest to cavers and others seriously interested in caves and karst. This list is just that. If you are interested in any listed events, contact Elery Hamilton-Smith for further details on [redacted]. The chair of the ASF International Commission is Nicholas White who will also have international information.

If you plan to visit North America or Europe, we can probably also provide details for some of the local-regional meetings that take place there.

2006

June 27-July 2nd	International Karstological School on *Sustainable Management of Natural and Environmental Resources on Karst*, Karst Research Institute, Postojna, Slovenia.
July 3-7	Regional Conference, International Geographical Union on *Geomorphology, Hydrology and Management of Karst Terrains* at Queensland University of Technology, Brisbane, Qld.
July 3-8	International Symposium on Vulcanospeleology, Tepotzlan, Mexico.
July 10-15	International Symposium on Biospeleology, Cluj-Napoca, Romania.
August 14-19	International Union for Quaternary Research: Sub-aerially exposed continental shelves since the Middle Pleistocene climatic transition Exmouth, Cape Range and Ningaloo Reef, W. Aust.
August 6-10	National and Regional Conference on Geomorphology, Goiania, Brazil.
Sept 21-23	8th Conference on Limestone Hydrology, Neuchatel, Switzerland.
Sept 22-24	Hidden Earth — UK National Caving Conference, Staffordshire, U.K.
Sept 8-10	National Cave & Karst Conservancies Forum, Lewisburg, W. Virginia.
Sept 24-27	International Symposium on Environmental Geochemistry, Beijing, China.
October	International Show Caves Association, Bermuda.
October 9-11	All About Karst and Water, Vienna, Austria.
Oct 20-25	Protected Area Program Workshop, Jeju Island, South Korea.
mid October	Dwight Deal will be running a tour of the China Karst.
December 3-6	Sustaining Social and Natural Capital, Australia New Zealand Systems Society Conference, Katoomba, N.S.W.

And Looking Further Ahead

2007 January	26th ASF Conference celebrating 50 years of the Australian Speleological Federation. Mt Gambier, S.Aust.
2007 April 9-12	CAVEPS — Conference on Vertebrate Evolution, Palaeontology and Systematics, Museum Victoria, Melbourne.
2007 April 29 — May 4	ACKMA Conference, Buchan. This will be part of the celebration to mark the centenary of the discovery of Fairy Cave.
2007 May 15-18	International Cave Rescue Conference, Aggtelek-Jósvafő, Hungary.
2007 August 13-19	International Conference on Karst Hydrogeology and ecosystems, Western Kentucky University (and a cast of hundreds).
September 17-21	UNESCO International Conference on Geoparks, Belfast, Northern Ireland.
2008	19th International Symposium on Subterranean Biology, Perth, W.A.
2009 January	27th ASF Conference.
2009 May	ACKMA Conference, Margaret River, W. Aust.
2009 July 19-26	International Congress of Speleology, Texas, USA.

CAVES AUSTRALIA

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Change of address. Notify us immediately of any address changes to ensure your delivery of Caves Australia.

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HELP SUPPORT ASF

The Federation is run solely by subscription to ASF. Your donation or bequest will assist our work in lobbying to save karst, ensure continued scientific projects and more. To make a contribution or receive an information pack, contact The Secretary or visit www.caves.org.au

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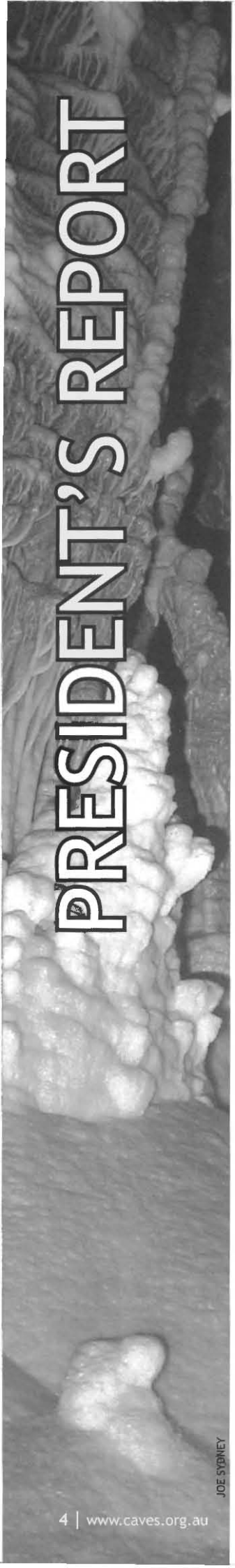
JOE SYDNEY



JOE SYDNEY

President's Report

Well, the year is flying by fast and the next ASF conference is fast approaching. Have you sent in your registrations forms for the Conference yet? You won't want to miss out!! I've seen the organization and planning that is happening and it's all looking like a fantastic conference (as each conference is!!) There may even be a few special surprises.

I've just spent time in two major karst areas. From the humidity and rain of Christmas Island to the perfect northern winter of the Kimberley (although it is a bit chilly at nights!). I was part of an expedition documenting caves and karst features and collecting subterranean fauna. I've found that the best way to understand the complexity, relationships and interconnections in karst systems is to be familiar with the area – the local plants, animal life, hydrology, geology etc. This made me think of an excellent workshop that I participated in a few years ago (2004) at the Cave Presenters workshop in Tasmania. X, a Cave Guide from Jenolan, challenged the group in a quiz. It was a 'how well do you know the fauna and flora of your local karst area' quiz with a difference. In this excellent activity, cave guides and leaders from around Australia discussed aspects of karst areas – features that would also assist in education and interpretation – things like the trees, plants, animals and other living things. It was interesting to see people's responses and the activity remains salient to me, as a reminder of the importance of us as cavers/cave leaders to "know" our karst areas.

So, how well do YOU "know" your karst area? You may go caving in Buchan, Wombeyan, Chillagoe, Hastings, Mole Creek, the Nullarbor or Margaret River (or somewhere else!!). Do you know what unique or endemic plants and animals are found there? Have you observed what life is in the caves that you visit? Do you know whether what you have observed is common or unique and significant? That plant you saw over near the cave, was it a native or an invasive weed? And, that bat, was it a new sighting? That critter – what's its name? What about those isopods crawling on the tree roots near your foot – does anyone know about them? And that orchid over there, do you know its name? Is it unusual to have this much water in this cave? And do you know where the water is flowing from? SO, what sort of things do you write in your trips reports? Is there any way that you can contribute to the knowledge of that karst area? Something to think about.

Yours in caving
JAY

Please welcome Stan Flavel, our new ASF Executive.

Owing to a recent resignation of an ASF Executive member, calls of interest to fill this vacancy resulted in Stan Flavel of CEGSA accepting the position.

Stan has a long-standing involvement in caving and associated activities with a commitment to many aspects of recording and documentation, safety, education and landowner liaison.

The Executive welcomes Stan to this challenging position.

The Executive of ASF

WANTED
ARTICLES FOR CAVES AUSTRALIA!

Whether caving, cave diving or a general exploration, Caves Australia readers are interested in YOUR story. It is only with YOUR contribution that we can produce a quality magazine for all to enjoy.

For writing and style guidelines, contact the Editor or Production Manager for further information.

Inside June ACKMA 2006

- The ACKMA Annual General Meeting Weekend
- Re-lighting The Temple of Baal
- Hydro-electric Power Proposal in East Timor
- Update from Capricorn Caves
- Vale Gary Douglas Anderson
- National Framework for Karst Values Workshop
- The Mammoth Cave Fire Recovery
- Wombeyan Wow!
- A Modern Cave Drip Water Study in SE Australia
- Damage to Crystal Cave, Yanchep, WA
- From the River Timavo to Seven Hills of Rome Pt 2

For more info about ACKMA, please visit:

www.ackma.org

Notes on CA168 — rope testing article.

A few people have raised the potential confusion surrounding my article on drop testing of the STC ropes that appeared in CA168. Concerns generally surrounded the potential that it could be interpreted that we returned the sections of rope that we had tested into active service again. This was not the case and the section tested (a ~2 m length from the parent rope) was thrown away after each test. The remaining section of the parent rope that passed was the part returned to service. I mentioned in the report that for exact details and methods to refer to the previous article by Jeff Butt so I could avoid boring you all excessively with detail. Sorry for the lack of clarity and thanks to those out there that actually cared to read the article thoroughly enough to produce constructive criticism!

Alan Jackson, STC

New Yarrangobilly Caves manager

The ASF welcomes George Bradford as the new Manager of Yarrangobilly Caves. George was originally a Guide at Buchan, and subsequently a Senior Guide at Naracoorte. For the last couple of years he has been working for Greening Australia.

George has a great knowledge of, and commitment to, caves and karst. His appointment is wonderful news, and I am sure all ACKMA members will George well!

Regards to all,
Kent Henderson
[redacted]

Help Save Australian Caves & Karst

A gift to the ASF Environmental Fund is an investment in Australia's future.

Karst and caves,clean alluvial water, fertile soil, beautiful vistas, rich forests, abundant plants and wildlife, and most importantly our true "common wealth". Conserving our natural beauty whether under or above ground is our priority.

With your donation to the Fund our participating projects can continue their good work in protecting karst. You will join a group of caring people who are working for a brighter future for everyone.

Make a donation to the ASF Environmental Fund for Karst now and help keep our karst a great place for all to enjoy!

COCKLEBIDDY CAVE,WA — TO GO DEEPER THAN ANY CAVER BEFORE

Australian Geographic sponsored cave dive of Cocklebiddy

The word is out that a team of cave divers have been sponsored by Australian Geographic to dive Cocklebidy cave,WA. Eight cave divers departed on their expedition to the cave system earlier this month.

Early reports on Ozcavers indicate that they have "started descending into Western Australia's Cocklebiddy Cave, one of the world's longest underwater caves. They'll use underwater scooters to help them push > beyond the current 6km mark. They hope to be the first to get to the end of the cave and take the first 360 degree photo of an underwater cave. They'll try also to recover a 100,000 year-old bat skeleton to give to the WA museum. The team will have 3 weeks in the cave, to give them time for four tries to reach the end", as stated by Sarah Wotherspoon of the Herald Sun.

Good luck guys!

ASF

28 Herald Sun, Wednesday, May 17, 2006

To go deeper than any caver before

SPENDING 20 hours under the Nullarbor Plain is not everyone's idea of a great holiday, but for Brett Rapp it's a dream escape.

The Pascoe Vale man will descend into Western Australia's famed Cocklebiddy Cave tomorrow on a mission to be the first man to travel further than 6km into the cavern.

Described as a caver's Mt Everest, Cocklebiddy Cave is one of the world's longest single-entrance underwater caves at more than 6.2km long.

Mr Rapp, 40, and police officers Steve Trewavas and Chris Ross will use underwater scooters to help them push beyond the 6km mark.

They hope to be the first to get to the end of the cave and take the first 360-degree photo of an underwater cave.

The trio will spend hours diving but will also have to carry diving gear over rocky areas in the cave's air pockets.

They want to recover a 100,000-year-old bat skeleton to give to a WA museum.

"We are keen to help with the bats and not be regarded as a bunch of crazy thrill seekers," Mr Rapp said.

Mr Rapp has been training for about eight months.

The team will have three weeks in the cave, to give them time for four tries to reach the end.

Sarah Wotherspoon

ALAN PRYKE

Ready to dive the Cocklebiddy Cave: Steve Trewavas, Brett Rapp and Ch

NEW! NSW Department of Lands – Lands Spatial Portal

The Department of Lands has launched a new viewer known as Maps NSW.

The viewer may be accessed at www.maps.nsw.gov.au <http://www.maps.nsw.gov.au/> and is available on the internet. Click on the NSW image to launch the Lands Spatial Information Exchange which will open the image viewer. The viewer is based on satellite imagery of NSW and at some point will have all aerial photography available when these have been scanned (there are about 700,000 photos to be scanned). At the moment there is only limited availability of aerial photography in the Sydney and Bathurst areas. It is possible to go to locations by Address, Lot/DP, CMA, City/Town/Suburb, 250k Map Sheet, 100k Map Sheet, SPOT 5 Scene or LG Area. Themes that may or may not be available in all areas include Localities, Suburb, Roads, Property Address, Cadastre, LG Authority, CMA, 100k Map Index, 250k Map Index, Satellite Scene Index and State Border.

The only images available for display at the moment are Topo Maps (current), Sydney Aerial Photos (high res), Sydney CBD Historical Imagery, Colour Satellite Imagery (med res), Bathurst Aerial Photo (med-high res & high res), Bathurst Historical Imagery (1943), Topo Maps (1990-97), B&W Satellite Imagery (med res) and Multispectral Satellite Imagery (low res Bands 123). It is possible to use the pointer to click on any land and information on the selected themes will be displayed. It is fairly easy to use and it should be possible to navigate around the viewer by trying the various themes and images. It should be possible to print the Internet Explorer page to a pdf file then select the image and paste into an image program and save it as an image file.

Bruce Waddington
HCG

A remarkable Pleistocene vertebrate fauna from caves under the Nullarbor Plain

Dr Gavin Prideaux Western Australian Museum

Royal Society of Western Australia lecture 7 pm Monday 19th June 2006.

Kings Park Administration Building, off Fraser Ave, Kings Park Members and public welcome – no need to RSVP

The discovery in 2002 of an exceptional assemblage of vertebrate fossils in caves beneath the Nullarbor Plain attracted worldwide publicity. Initial focus centred on the 'money specimen', the most complete marsupial 'lion' skeleton ever found. Ongoing research focussed on interpreting the remainder of the fossils and the general nature of the deposits – their age, how they accumulated, how different was the environment, and how did the vegetation support 22 different kangaroo species, including two tree-kangaroos? This talk will discuss what is presently understood about one of Australia's most remarkable fossil vertebrate faunas. Gavin is the WA Museum's Rio Tinto Research Fellow. He is interested in the evolution and extinction of Australian marsupials in relation to late Cainozoic environmental changes, and has spent much of the past 15 years excavating old bones from caves or studying them in museums across the world.

Visit the RSWA Website: www.ecu.edu.au/pa/rswa

Above Mammoth Exit.

Exit Walkways Mammoth.

PETER BELL OF CAVEWORKS

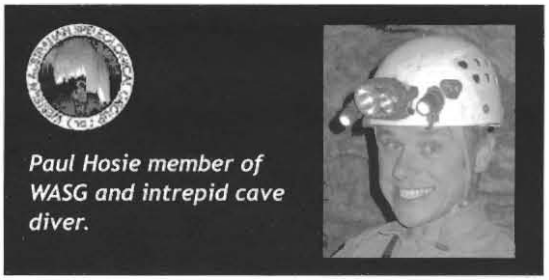
Bushfires in Leeuwin National Park,WA and Mammoth Cave

Recent fires that swept through Leeuwin National Park,WA have affected Mammoth cave. It is reported that Mammoth Cave has sustained significant damage to the infrastructure leading from the exit doline (WI39). There was also a major tree fall into the exit doline with the staircases burnt out and perimiter fencing damage.

5N4 – Koonalda Cave

An unassailable jumble of boulders rose vertically from the water of the terminal lake and up into inky blackness. This was the 'end' of Koonalda Cave that faced cave divers Andrew Nelson, Paul Boler (both NHVSS) and the author (WASG) in January 2005.

Paul Hosie



Paul Hosie member of WASG and intrepid cave diver.

This visit had followed five years of pondering the possibilities of this enormous cave, ever since the SUSS 'Escape the Olympics' expedition in September 2000. Attempts to push the cave as far as possible by cave diving had been made but all leads pinched out. Avens and other roof holes had been climbed near the cave's end with no continuation found. It all came back to the vertical boulder pile that was only accessible by diving a short, deep sump. It offered the only possible way on and it was straight up or whimper home! Being cave divers, these guys weren't smart enough to just leave it and go home, so an effort was made to 'suss out' the challenge.

After several attempts at free climbing the soft, crumbly limestone, a narrow ledge six metres above the water was reached. Before leaving, the author placed two rock bolts and plates using a hand drill (NB. not a recommended technique!!). The top of the rockpile was still some 20m directly above the ledge, but the roof was also visible and it had all the appearances of being the edge of a massive dome chamber roof. The perspective gained from the ledge was enough to convince the team that a return with full rock climbing equipment was the only possible way to scale the obstacle and explore the dome roofed chamber at the top. Digital photos were taken of the rockface which allowed some degree of planning for the future climb.

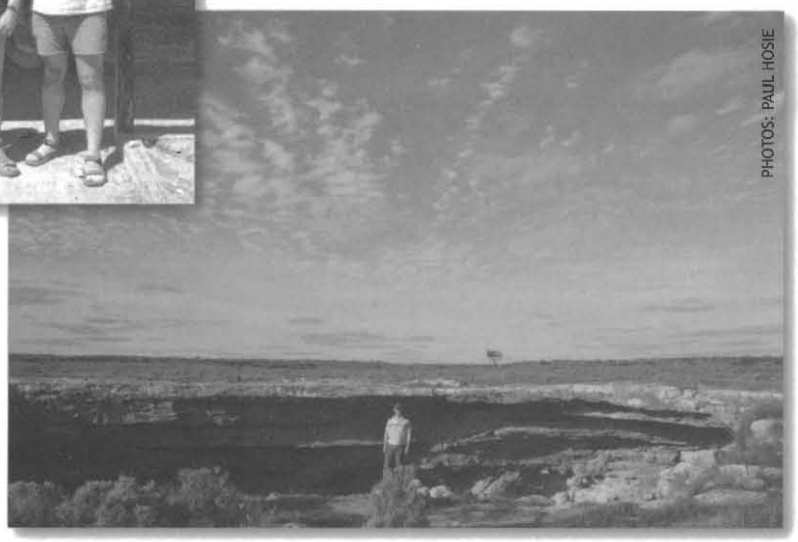
The permit was gratefully extended by South Australia's Department of Environment and Heritage (DEH) for a period of 12 months which allowed sufficient time to organise the return trip(s) as required. After failing to get a team together for a mid year trip, commitment was made to the October school holidays and a lead climber was found – all Phil Maynard (SUSS) had to do before the trip was to become a cave diver!

Return to Koonalda

It is one of the Nullarbor Plain's deep giants and amongst Australia's largest caves – up there with Abracurrie, Mullamullang and Weebubbie Caves. It is also an important heritage site where aboriginal people descended 70m underground to quarry chert (flint) for making into tools which were traded throughout Australia for tens of thousands of years. Koonalda's archaeological importance as well as its significance to indigenous Australians led to the gating of the massive cave entrance many years ago. Apart from being quite an engineering achievement, it also means that access is limited and very strictly controlled. Camping is no longer allowed near the cave and instead, the Koonalda homestead is used as a base camp, which leaves a five kilometre dirt track drive to and from the cave each day.

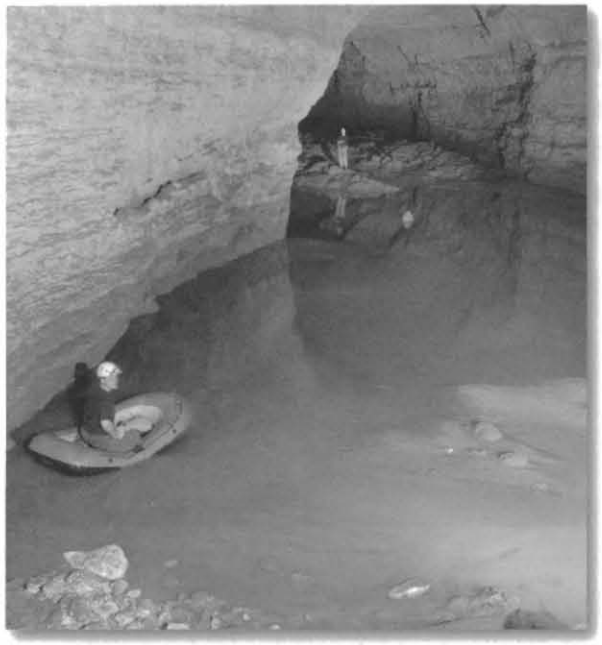
The team, comprising Keir Vaughan-Taylor, Kevin Moore, Phil Maynard (all SUSS) and the author met at Koonalda homestead on Monday 26 September 2005 after being on the road for up to 30 hours. Compressors and dive gear were unloaded, kitchen and bedrooms set up to achieve a fair degree of comfort for the following week it was planned to

Phil, Keir, Paul and Kevin.



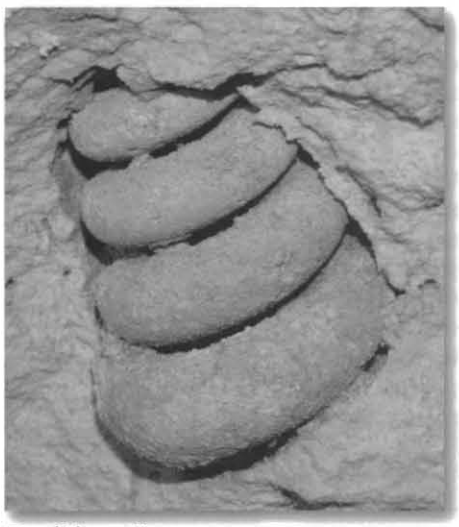
PHOTOS: PAUL HOSIE

Koonalda cave entrance.



Shit Lake ferry.

Koonalda caryard.



Fossil in rock.

stay here. This turned out to be highly suitable as some of the nights were extremely cold, there were fearsome winds and even some rain, all of which would have been quite uncomfortable in a tent. DEH's primary concern however, was not for caver's comfort, but for protection of the cave's surroundings and the minimisation of further effluent being washed into the cave (following decades of sheep manure being washed in).

The Plan

It was expected to spend one day ferrying all the equipment in inflatable canoes as far as possible into the cave, before the three cave divers could make the final transit underwater through to the cave's terminal chamber. Once through, the divers would take it in turns to progressively scale the rockface using double rope and cordless hammer drills together with 4 and 6 inch rockbolts to make the climb as safe as possible. It was anticipated this would take 2-3 days, all going well, but just how wrong could that possibly be ?!!! All the climbing equipment plus harnesses, tools, spares and food/drink were stored in sealed truck inner tubes to keep them waterproof for their underwater portage to the end of the cave.

With the plan agreed, on Tuesday morning, the cars were packed up and everything moved to the edge of the 50m^2 entrance doline. Ropes were set up and the loads prepared for lowering into the doline. A brief 10m abseil is required to access the cave's entrance. At the NW end of the doline the aforementioned gated cave entrance provides access down the very steep talus slope to a branch in the giant passage some 60m under the surface. To the left the passage gently ascends to the archaeologically significant areas. The right hand path descends via a short steel ladder and past an old diesel engine pump left over from the sheep station days when water was pumped out of the cave to water stock. 150m past the pump, though a large low-roofed horizontal passage, a massive 60m^2 dome room junction is entered. The cave continues in two major passages from the junction, one leads off to the south (dry) towards Look Down Lake, while the other heads NW across a shallow lake of putrefaction affectionately known as Shit Lake and onwards to the cave's end. It is at this point that the inflatable rafts are assembled and the inimitable Shit Lake is (carefully!) traversed to reach the mud island in the middle of the passage.

Cave Calisthenics

An awkward paddle, one at a time across to Mud Island enables the canoes and equipment to be ferried across and then carried the 50m to the far side of Mud Island, ready for the traverse of the Second Lake. The Second Lake is approximately 300m long and on average waist deep, with a soft mud base full of large, half buried boulders. The passage is approx 40m in diameter and the water is very cold – approximately 13˚C, probably due to evaporative cooling, at least it doesn't stink of effluent. For these reasons, the group strived to stay dry by using inflatable canoes to raft across the lakes but this proved to be impractical and consequent crossings were made in wetsuits whilst towing the canoes full of equipment. All the dive gear, climbing gear and one of the canoes were then ported over and around the enormous rockpile, down to the shore of the third lake where the water is (finally) crystal clear. With all the equipment on the shore of the third lake, the team retired from the cave and headed back to the homestead for a well earned, overnight rest.

Koonalda Homestead is a beautifully unique place, nestled amongst a group of ramshackle buildings which originally supported shearing crews, work sheds as well as a garage (including fuel pump!) to support the East-West Nullarbor traffic on the old Coach Road. The homestead itself is constructed from railway sleepers and the roof beams are railway track!! DEH have restored the roof with modern corrugated roofing sheets and the toilet can be used with a manual (ie. bucket!) flush system. Mice have made their home here and take great delight in investigating all the food and rubbish bags hung around the kitchen. A careful check for snakes and keeping all the doors closed during the stay. A rainwater tank next to the old shearer's quarters provides a small but welcome supply of fresh water. The truck and car graveyard behind the homestead provides for some interesting fossicking and photography for those so inclined (Keir!). A sadder reminder of the past is the large sinkhole located 500m NNE of the homestead which was used as a rubbish pit. A significant task to clean this up should one day be undertaken.

Finally, To Dive!

With all the equipment now at the third lake, it took a mere hour to travel there from the cave's entrance. Coming out and up the entrance slope takes a little longer! Keir and Phil decided it would be a good idea to load the canoe up with all the gear and paddle it the 300m through to the sump at the end of the third lake with the low roof section (30-50cm high) in the middle. Hindsight is a beautiful thing and so is the video footage the author took of the mighty struggle that took place to squeeze the fully inflated canoe and its overloaded contents under the roof covered with dangling rock projections!! Success at last – the final 60m² dome room was crossed and dive gear donned for descent through the sump and restriction to finally see the rockpile and what all this fuss was for! Due to the amount of equipment, several dive trips were made through the sump to ferry all the climbing gear and ropes through and up into the terminal lake.

While Keir dived back and forth to bring all the gear through, Paul and Phil took out the 20.4V cordless hammer drills bought specifically for this trip and drilled the six inch long, 3/8 inch diameter rock bolt holes into the soft, waterlogged limestone. The bolts were placed 1.5m above the water and served as anchor points from which the climbers would be belayed. Two of the bolts refused to tighten, the shafts simply spinning in the soft, chalky, mud-like rock. Once two bolts were successfully secured and all the gear had been ferried through to the terminal lake, the divers backtracked, leaving all the dive gear in the canoe above the sump and swam out of the cave. After assisting with the porting of dive gear and canoes to the end of the cave, Kevin spent most of the day exercising his new camera the Canon EOS 20D from which the most stunning images in the cave were captured. Combined with his other new toy, a 9W LED 'lightgun' Kevin used a tripod to light-paint the cave during long digital exposures. Some of the results are seen with this article.

The Climb Begins

Wednesday loomed large as the climbing and rockbolting began in earnest, however it proved to be a further five days before we reached the top of the climb. Once securely bolted into the 6m ledge achieved on the previous trip, a careful assessment was made of which was the best route to bolt up the rockface. A narrow vertical gully straight up the middle of the rockpile was chosen and on the first day, about 10m of height was attained. The method of climbing was necessarily laborious due to the risks associated with the soft, rotten rock being climbed. The double climbing rope was secured into the harness and each line travelled through a separate run of bolted hangers and quickdraws down to the belayer hanging off the anchors at the base of the pitch (and off to the side of the rockfall zone!). Slack was taken up on one lead rope whilst the second was loosened to clip into the next point up, thus providing uninterrupted support for the climber. Etriers are a short set of footloops you can hang from a fixed point and they are used to gain a height advantage from each anchor point to drill the next hole up. This process proved to be extremely effective as two minor slips by different climbers that occurred were securely held by the belayer with the only damage being one bent masonry bit!

Accident

At the end of the first day of climbing, whilst changing back into dive gear, Phil Maynard cut his foot open on a sharp limestone projection. After painting the white rocks red, Phil nursed his foot

Phil's gashed phoot!

Nullabor cliffs.

Eucla dunes.

Lake 2 Canoeing.

Lake 3 Reflections.

until it could be kept dry and the wound dressed. By the following morning it was clear that the wound needed stitches so the nurses station at Eucla was telephoned and the team went to Eucla for a rest and 'repair' day! Little Sahara, the old jetty and the old telegraph station half buried in dunes are attractions that make Eucla a beautiful and fascinating place to visit. The next day Keir and Paul continued bolting a further 10m up the gully whilst Kevin and Phil took photos and rested.

The trip from the cave's entrance to and from the climbing point each day was quite a physical effort. The inward journey involved two hours of steep entrance descent, paddling in canoes across shit lake, wading or canoeing the length of 2nd lake, climbing over the rockpile, swimming the length of the third lake and finally donning cave diving gear to traverse the sump and restriction to finally surface in the terminal lake. On Saturday, Phil's foot was well enough for him to continue climbing.

Phil prussicked 20m up to the last bolt point Keir had placed the day before, stood high in the Etriers and started drilling the next hole up the slope. A shower of small rocks as well as loose sand and dust rained down into the water below as Phil moved slowly up the rockface. Three hours later, Phil secured his position just a few metres from the top to abseil back down to have lunch and a break from the physically demanding work. After lunch Phil placed another six anchor points and had to place the last bolt before he could safely go off rope and explore the dome roof chamber. It was late in the day, the last bolt refused to tighten in the soft rock and Phil was too exhausted to drill another hole. The team exited, taking empty scuba cylinders for refilling and tired bodies that needed refuelling and recharging.

Summit

On Sunday the last bolt was secured and Phil finally got to explore the chamber 30m straight up above the water's surface. Years of pondering had come to this – did Koonalda continue into caverns measureless to man? The words that came from high above provided the answer: "Sorry Paul, it doesn't go! The rocks meet the roof, there's definitely no way on." It took two hours to de-rig the pitch, remove all the hangers and rockbolts. After packing everything into waterproof housings, it was all dived back through the sump and repositioned on the entrance side of the rockpile. The next day was spent removing all equipment from the cave and included a photo session using a 250W video light to illuminate the cave passage above the second lake whilst the canoe ferried equipment back and forth.

With everything removed from the cave and packed back into our vehicles for the long trips home, Koonalda homestead was left just as we found it. It was likely we wouldn't return to this cave again, particularly following the disappointment we had just striven so hard to attain! Although Koonalda didn't 'go off', we did have a great time together out in the bush and some adventures in between. There is still plenty of exploration to do in the Nullarbor caves – Cocklebiddy, Mullamullang and the extensive Roe Plain systems, but probably not in Koonalda Cave!!

Art exhibition shows off our best in caving art talent

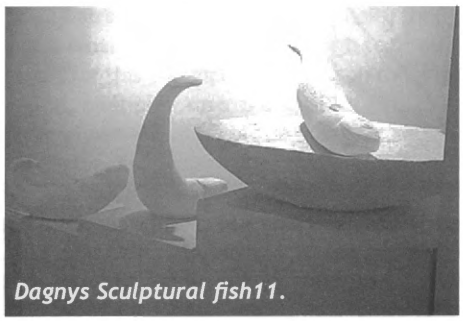
ASF's 50th anniversary conference will show the best of what cavers can offer in cave related art. Entry is now open to all local and international artists with many categories to suit all artists. Entries are being received with six from Mt Gambier's artists as well as international talent from England, Spain, and USA. Not to forget we have also received some great local entries.

Do you have a hidden talent or have artistic flair or have that photo that your friends say 'you should enter that! Why not enter? Entry details can be found on the ASF website, in Caves Australia issue 169 or by contact June MacLucas.

All artwork entered will be for sale! Please support our caving artists by buying one of their works. They have gone to great lengths in sharing their talents and your purchase would be appreciated....so, support our artists and bring your dollars.

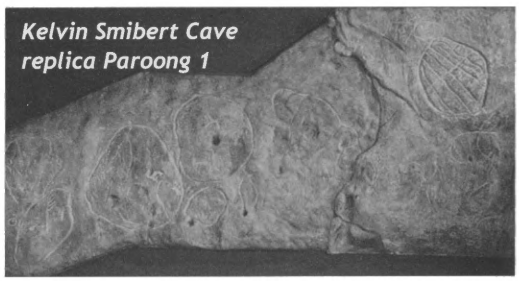
June [redacted]

Representations of the quality that local artists can produce.



Dagnys Sculptural fish11.

CREDIT: REPRODUCTION OF PHOTOS WITH KIND PERMISSION OF ARTIST



Kelvin Smibert Cave replica Paroong 1

Kelvin Smibert Paroong section

26TH AUSTRALIAN SPELEOLOGICAL FEDERATION CONFERENCE

C. E. G. S. A.

Caves, Craters and Critters — Celebrating 50 years of Federation Mount Gambier, South Australia January 6th — 12th 2007

Conference bookings have started to trickle in. Some are also enquiring about local and on-site accommodation. So book your conference attendance and accommodation early and don't be disappointed!

Be welcomed by CEGSA's friendly BBQ on the first night and meet their club members along with the many faces of ASF and their guests. Trips to great places are being organized such as Naracoorte Caves, Ewan Ponds, snorkelling at Piccaninnie Ponds, a 'reflections tour' of cave accident sights and more. Don't forget to enter into the SRT races or Speleosports and Art Show!

An informal dinner will be held with reflection on ASF's history with attendance from many past members from our 1st conference!

Details for both conference and accommodation can be found in Caves Australia issue 169 or at www.caves.org.au. More local information can be found at: http://www.mountgambiertourism.com.au/

Don't wish to slum it! Here are a few local motels:

Blue Lake Motel ★★★★ (4kms to conference)
Kennedy Avenue
Kathryn Bayly & Andrew Kriesl
Ph: 08 8725 5211

Jubilee Motor Inn ★★★★ (3kms to conference)
180 Jubilee Highway East
David & Jackie Connell
www.welcomeinns.com.au
Ph: 08 8725 7444

Mount View Motel ★★★ (5kms to conference)
14 Davison Street
Tom & Kathy Bland
www.mountviewmotel.com
Ph: 08 8725 8478

Photo competition

Dust off your photo album or pull out that digital image and start sorting you best images for the ASF photo competition. Details are being finalized now and will be published in the next issue of Caves Australia (Sept) along with them being found on the ASF website www.caves.org.au. Entry open to all!

Book early and we hope to see you all at the 50th!
Marie Choi — [redacted]

Our thanks to ASF's 50th sponsors:
Naracoorte Caves — DEC
Willow Vale Caravan Park, Mount Gambier, SA.

Cauldron Pot: a neglected sporting gem.

Cauldron Pot, 305m deep, is the fifth deepest cave in Australia and has one of the most beautiful entrance pitches you will see in Australia. It is a great sporting trip.

By Janine McKinnon, STC
(Reprinted with kind permission from STC)

Cauldron Pot (JF 2) is in the Junee Florentine karst near the township of Maydena in Southern Tasmania. As its identification number suggests it was one of the earliest discoveries in the Junee Ridge area, which is a bit surprising as it is not exactly easy to find!

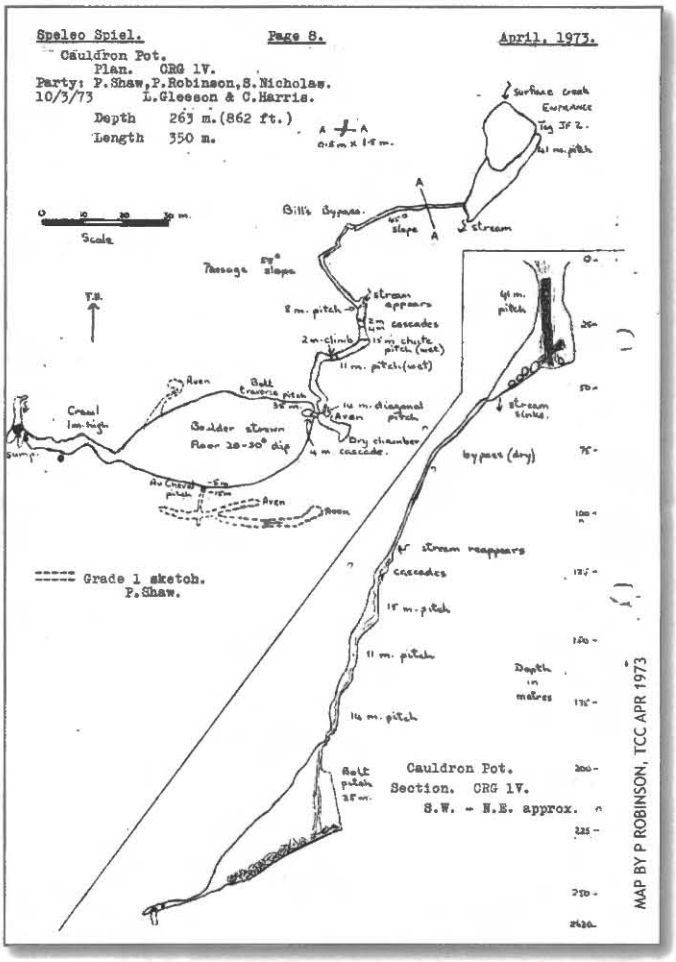
It's a pity that it hadn't been visited for many years. There are probably many reasons for this long neglect but one significant factor was the state of the rigging. I remember looking at the eyebolts and spits when I last did the cave in the mid 1980s and shuddering. (This didn't stop me using them though – but gently!). They were originals from the exploration days of the early 1970s and time had not served them well. Nothing had been done to improve things since. So Ric Tunney and I decided late last year it was about time we went there again and we'd just have to take the time to rebolt as necessary.

This revisit started in January and eventually took three trips to complete. (OK, five if you count the first trip when we couldn't find the cave because a new turnoff from the Kazad Dum track had been added in recent years, which we forgot, and took by mistake. Hey, we hadn't been there in 20 years remember! And we have to discount the last trip where we'd purposely left the entrance pitch rigged so we could go back to take some photos at our leisure.)

The first trip saw Ric rebolt the rebelay on the 41m entrance pitch and four of us (me, Alan Jackson, Amy Ware, Serena Benjamin) drop down the 150m or so of grotty Bill's Bypass, and do some bolting on the 15m Cascades Pitch and 15m Chute Pitch to reach the top of the 11 m pitch.

The next trip had to wait for a while as we had decided to rebolt the 35m Bolt Traverse Pitch with stainless steel bolts instead of the cadmium plated steel we were using elsewhere. That way we could leave the hangers in place to make the rigging easier for future parties. Acquiring these proved more difficult than we anticipated and we had to wait 6 weeks for them to arrive.

Once we were finally underway again we (Ric, Amy, Serena, me) rebolted and rigged the 11m, 14m and 35m pitches to the bottom. The following weekend the same party returned to spend some time looking around the several hundred metres of cave at the bottom (discovered and surveyed in 1989)and de rig.



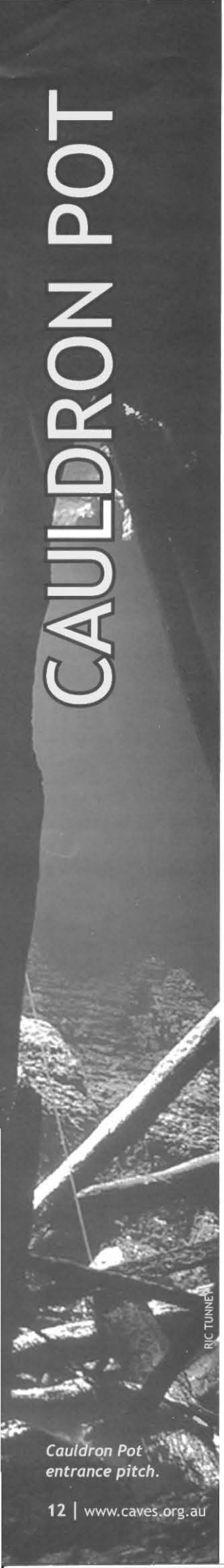
The extensions mentioned in the article have not been published yet (it has only been 15 years after all!). The drafts person is still tidying up a "few loose ends".

It was as enjoyable a cave as I'd remembered (with the exception of Bill's Bypass, which was as much of a pain in the arse as I'd remembered). The bottom pitch (Bolt Traverse pitch) fits in with the character of the other pitches at this level in the nearby caves like KD and Dwarrowdelf, just magnificent.

Cauldron Pot is a sporting trip well worth doing by lovers of vertical caving and there is no longer an excuse to neglect it for another 15 years.

JF-2 Cauldron Pot – Updated Rigging Notes 2006.

Note: All directions are facing downstream.
Note: Eyebolts are originals from early exploration. All other bolts are 8mm Powers Throughbolts. Except where stated, all bolts have had hangers removed and are marked with plastic tags.



Cauldron Pot entrance pitch.

Pitch 1 Entrance Pitch (41m):

- Belay on tree on ledge on LHS of waterfall. Rebelay off two bolts at lip 8m down. Redirection (1m tape over small projection) on LHS about 3m higher than rub point above final free-hang. (Ensure redirection always pulls down a bit so it doesn't come off projection.)
- 2 x 8mm hangers required.

Pitch 2a First Cascade Pitch (14m):

- Eyebolt on LHS as back up. There is an excellent natural above bolt on LHS for main anchor.

Pitch 2b Second and third Cascades (2m & 4m):

- Two bolts on LHS.
- 2 x 8mm hangers required.

Pitch 3 Chute Pitch (15m):

- Belay on eyebolt on LHS at top of pitch. Tie in to previous pitch rope if back up desired. Rebelay on bolt RHS around corner 5m down. There is no plastic tag on this bolt and it may be a bit hard to find.
- 1 x 8mm hanger required.

Pitch 4 Eleven Metre Pitch (11m):

- Bolt on LHS 2m back from lip. Rebelay on bolt on RHS 1m past lip.
- 2 x 8mm hangers required.

Pitch 5 Diagonal Pitch (14m):

- Belay on eyebolt 2m back from edge on LHS. Rebelay on bolt in roof on LHS at lip. Second rebelay bolt in roof approx. 8m further down to left gives freehang to bottom.
- 2 x 8mm hangers required.

Pitch 6 Four Metre Cascade (4m):

- This can be easily free-climbed or a short rope can be belayed around the "extremely dangerous looking boulder" at the top of the climb.

Pitch 7 Bolt Traverse Pitch (35m):

- Belay off eyebolt in floor on RHS. Descend and traverse around right hand wall. There is an unnecessary rusty carrot and keyhole hanger about 3m around and 3m down. A further 3m round and 3m down (away from waterfall!) are four bolts. Facing the rock, the top two are old carrots. The bottom left has a loose hanger and should not be used. Rebelay from the bottom right, an 8mm stainless throughbolt with stainless hanger and a hero loop. This one is safe! Rebelay on bolt about 10m further down at lip of free hang. Drop to bottom is not totally dry!
- 1 x 8mm hanger required.

Pitch 8 Au Cheval Pitch (5m up, 15m down):

- Fixed 5m rope in situ on up climb. Rig descent rope off same natural as fixed rope.

PHOTOS: RIC TUNNEY

Janine McKinnon near top of entrance pitch.

Janine McKinnon on entrance pitch (does my bum look big in this pitch?).

Janine McKinnon starting up entrance pitch.

In The Name Of Exploration

The Vast Kimberley region of northern W. A. is one of Australia's last unexplored wilderness ares. Situated in the dry tropics it covers an area nearly twice the size of Victoria. It still remains largely untouched, as the area is very rugged and sparsley populated. Not to mention the awe inspiring, majestic beauty of the place leaves you breathless.

David Woods, WASG.

David Woods, member of W.A.S.G for the last 14 years is and has been living in the East Kimberley for the last 8 years. Being self-employed allows him to explore the karst of the Kimberley, a huge passion and past time!

In the middle of 2001 I received a telephone call from Jeff Swan, a cave diver living in Darwin. It was out of the blue, as I had not met Jeff before, but as Kununurra's visiting orthodontist, he'd heard that there were resident cavers in the East Kimberley. He was keen to catch up so we could talk caves, and had found my number through The West Australian Speleology Group (my caving club). I was happy to have a yarn with him as I can talk about caves until the cows come home! He was in particular looking for information about a supposed sinkhole with a lake.

Wow, this sounded interesting but I had no info to share, as this was the first time I had heard of such a thing in The Kimberley. I told Jeff that along with my partner, Donna and long time caving buddy John Cugley (Johno), we would be keen to see if we could help him locate this sinkhole. After all locating and exploring caves is what we do! As simple as it first sounded, little did I know how much time and patience I would need as this became an all consuming passion to locate this mysterious sinkhole!

All Jeff could tell us was that a noted outdoor enthusiast (John S) from the local area had visited the sinkhole less than 2 years ago. Whilst there, he Scuba dived in the lake. Because of the uniqueness of this sinkhole, John S had made sure the location was a well kept secret and rightly so. Jeff did try the direct approach but to no avail. It was sounding like a very special place that needed proper consideration in respect to conservation and management issues.

As a Speleologist I felt that by locating the sinkhole and exploring it we would not be jeopardising this, if not forming a good foundation for conserving it. If the sinkhole was to be of major significance then who better to do undertake this than experienced speleologists. We are able to carry out observations, measure conditions, record and collect data in caves. Not to forget our minimal impact code, which we adhere to when underground. Also to assist scientists in proving the significance and value of such sites, can help protect them.

We had a rough area of two cattle stations to search in, amounting to hundreds of thousands of acres, oh yeah! This Country was also difficult to access as most of it is steep and rugged terrain. One last bit of info was that John S (the local outdoors man) had used a helicopter to get there. This last bit of info ended up being crucial. For the next six months Donna and myself periodically poured over the maps in this area, trying to get a picture on where the best place would be to start looking. A needle in a haystack I hear you say, well you wouldn't be wrong! Was it a spring, in a creek system or part of a gorge? Perhaps it was in a fault or a doline? Was it in good old limestone or sandstone, which is more cavernous in the Kimberley than first understood? We had no idea. It was becoming rather obvious that we would need to spend some time on the ground in the area, to better understand what we were looking for.

2002 saw attention shift from the sinkhole as we discovered some awesome caves in the Ningbing Range. We spent most of our dry season surveying, mapping and exploring in this limestone north of Kununurra. The Sinkhole was only a fleeting thought until I met someone who brought it back to the forefront of my mind in late 2002. At a local waterhole on an abseiling open day, I met this genuine fella who I shared a lot in common with regard to our outdoor pursuits.

At the end of the day we were swapping stories and he briefly told me about an amazing sinkhole he had dived, not that long ago with John S (the noted outdoors man). I couldn't believe it! He told me that they flew into the sinkhole by chopper. They then dived the lake in this sinkhole to a depth of 28 metres. The water had great visibility and they could see about another 20 metres below them at that depth. He gave me a brief description of the sinkhole but could not help with its location as that he never knew. He knew the name of the station it was apparently on, which was very helpful and confirmed we had the right area. Hearing this somewhat motivated me again to find the sinkhole.

Through the wet season of 2002-2003, we drew plans to hike some of this country in search of the sinkhole. We discussed using aircraft to speed up the search process. This would allow for better use of time on the ground. Easter would be the soonest after the wet we could get into this country. So Easter 2003 was booked for a fixed wing flight over the area, which would be followed by 5 days hiking into some of the more accessible areas. Jeff Swan from Darwin would join us on our first search by air.

Closer to the Easter Weekend I was asked by a client (Roch) what we were doing with our time over the break and when I told him about the sinkhole search, he said "oh yeah I did some hiking in that area about 10 years ago and we found some fairly

ANDREW BAKER

deep pools". Coincidence or what! He carried on "I used to be in the army and I have a 1:50 000 map of some of that area if you would like a copy". Since the best we had was 1:100 000 maps, I jumped at the chance. He was very helpful and wished me the best of luck on our search.

Easter had arrived, the fixed wing search did not reveal anything dramatically obvious, but we did GPS a few large pools in some very faulted country. This is where we would begin our ground search. Johno, my caving buddy had rung the land managers and received permission to access this country earlier in the week. After the flight Donna, Johno and myself loaded the car and headed off. Four hours later we had arrived in the country we were only hours before flying over.

We set up a base camp and over the next few days, Donna, Johno, and I hiked into some amazing country. We explored some stunning gorges, found some great water holes but unfortunately none were anywhere near the depth of what we were looking for. On one of the days we stumbled onto an old vehicle track whilst returning to camp. Judging by how this track looked, it was obvious no one had driven on it for many years. Upon checking our copy of the 1: 50 000 map I had acquired, it showed a track leading deeper into country we where yet to explore. Over dinner that night, we discussed whether or not it would be feasible to push a vehicle, down this track. If this were possible, considering the poor condition of the track, it would enable us to set up another base camp for future trips.

Johno awoke with that look in his eye; he was keen to give this track a go in his Toyota. I was to walk the track in front of the car, guiding him through areas where the track had since been washed away. The track was very intermittent, incredibly rough and very slow going. Four and a half hours later and we were only another five kilometres down this horror track. We agreed that was enough track reconstruction for now and we left the car to explore this area for the rest of the day. Once again this country floored us, we found some beautiful pools, some quite large, all crystal clear but none the depth of 'the sinkhole'.

Cold beer was the motivating factor to getting us back to camp that afternoon, as we were all exhausted. At one point we lost our track temporarily and when Johno drove over the windrow he hit a clunker of a rock. It didn't sound good! This was our last night for this trip and it was obvious we would be back sooner rather than later to continue our search. That night around the fire, we agreed to return in June for another crack at locating the elusive sinkhole. The next morning when back on the bitumen Donna noticed Johno's rear suspension was rather misaligned. Upon inspection we found out that nasty rock Johno cracked the day before, had busted off the U clamp, which holds the leaf springs together. Thankfully Johno had Roadside Assist, which does work in the Kimberley, just not very quickly!

June had arrived and the weeks leading up to our second search were fraught with anxiety and sleepless nights, wondering if we would be successful this trip, in locating the sinkhole. It is important to remain optimistic on such searches but

First ground search Dave, Donna and Johno and Oi the dog.

Landscape shot of rugged country we searched in.

the reality of the fact was that we had an incredibly large area to investigate. Two other hiking buddies were to join us, Chad and Micka. This would allow us to have two search parties and therefore cover a bit more area.

We were going to make use of the track that we had rediscovered/rebuilt a couple of months earlier. This would allow a second base camp right amongst our next search area. Johno didn't mind pushing his car down this old track again, as he had once more, that look in his eye!

We decided to leave my car back at the first base camp, as a back up. Just in case we broke Johnos car, again! So we loaded Johnos car with only essentials (how did that Beer get in the esky??) to see us through the next few days. Being one of the roughest tracks we had driven, it was decided to not put the car under any more stress than necessary. So Donna co piloted Johno in the Toyota while Chad, Micka and I walked the track. It took the better part of the morning to get too our second base camp and all were happy to be greeted by a cool, clear stream shaded by beautiful paperbarks. Perfect!

Exploration began that afternoon and continued for the next three days. Over these days we crossed countless pools and waterholes off our list. All spectacular but none of them fitted the description of the sinkhole. Jeff Swan, the Darwin cave diver had spoken to someone who also had accompanied John S to the sinkhole and like the fella I had met who dived it with John S, he did not know the location. Jeff had an opportunity to show this person a map of the search area and although nothing obvious stood out, he circled a possible location with a pencil. Jeff had asked if we could check it out on this trip. It was a little out of our search area but we had to eliminate all possibilities. So on one of these days, I paired up with Chad and we went to investigate. Within a few hundred metres of the possible location the, country changed from sandstone to limestone and I started to get excited! This was short lived as a thorough search of the area revealed nothing.

On our last search day we stumbled into a gorge that had me buzzing with optimism. It ended at a large, deep pool. On the right of the pool a waterfall cascaded fifteen metres down a shear sandstone rock face. Thermal water flowed from four large fissures that worked along the left wall just above the water level The whole area was lined with hanging ferns and mosses, and had all of us in awe as we struggled to absorb all of it's beauty. We spent some time taking photos before I went in for a swim. From the edge it appeared deeper than any other pool we had visited, over the last two trips.

I donned my mask and swum out into the pool to find that it was quite deep but unfortunately I could see the bottom, worst luck. It turned out to be eleven metres deep and although not the sinkhole, it was a lot deeper than anything else we had found so far. After spending a few hours enjoying this amazing waterhole we headed back to camp. We packed up and made a start on our long drive back to the highway, and then finally home to Kununurra. We were still full of determination and it didn't take long before new tactics were being discussed for our next search.

We had been informed that the helicopter pilot that John S had used was sworn to secrecy about the sinkhole's location. Chad who works in tourism, and knows quite a few chopper pilots informed us "after a few beers they'd tell you anything". As amusing as it sounded, I knew we didn't have any better options. So Chad agreed when the next opportunity arose, he'd ask them.

Within about three days of being back at work, I came home at lunch to see Donna smiling and excitedly waving a bit of paper with a name on it. She told me that Chad had been up to his crafty ways and had shouted his pilot mates a beer or six to get them in the right frame of mind, so to speak. After plying them with enough grog Chad casually asked if they had heard about a sinkhole that had been visited by helicopter in the last couple of years. Chad was stoked when one of them said, "yes he had heard about it" but did not know much more than what a fixed wing pilot had told him in passing one day.

The fixed wing pilot that Chad's mate spoke to had flown over what she called an, "obvious sinkhole". She went on to say, "that the only reason she noticed it, was because a helicopter was parked on the edge of the hole". Chad couldn't believe his ears and explained a little more about our search for the sinkhole. Chad had to calm himself as he asked if she was still around these parts as pilots come and go very frequently in the Kimberley. His mate seemed to think so and was happy to give Chad her name and what company she flew for. Chad excitedly thanked his mate and in return for his help shouted him several more drinks.

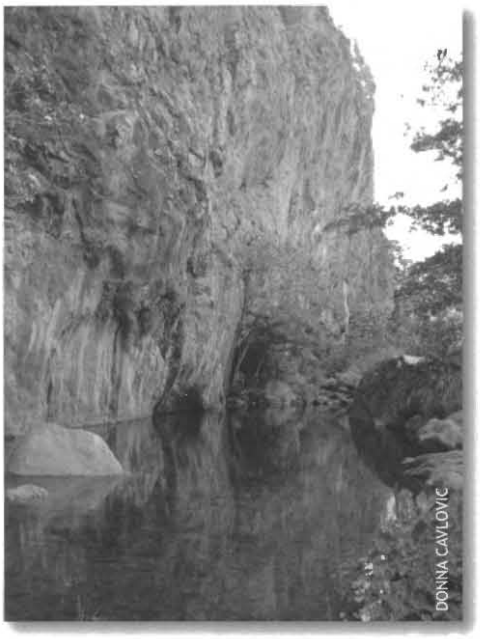
The next day Donna received a call from Chad with the latest information. As Chad was working long hour's tour guiding and out bush, for weeks at a time. It seemed logical to pass this info on to us back in town. It was to good to be true I recalled thinking as Donna filled me in that lunch break. We were excited at the prospects of gaining more information to help us locate this sinkhole. So that afternoon Donna called the local airline company in hope of getting in contact with this female pilot. Much to our horror Donna was informed that the pilot had left the Kimberley only a day ago, returning back to the east coast. The local airline said they would do their best to pass a message on for Donna.

Two days later and after much anticipation, Donna received a call from our female pilot. This was fantastic news and she was happy to tell Donna what she saw that day. The pilot described flying over a helicopter shutdown next to a big opening in the ground. This sounded promising already! It sparked her curiosity and she instantly checked the elevation of the country she was flying over and made a visual check for any obvious landmarks that she could see. Coincidently in her view were two obvious navigational landmarks that she was very familiar with and had used regularly. Although they were some distance apart she recalled the sinkhole being roughly between the two. This was great news and Donna excitedly thanked the pilot for her help.

This would narrow down our search area significantly and that night, the maps came out again. With our fresh information put into use, a new search area came together in no time. This area posed problems in regards to access, as there were no vehicle tracks unlike the other search area. This area was walking only country, very rugged and although the search area had been reduced, it was still bloody big. I was thinking another fixed wing search would be the smart way to go.

The rest of 2003 flew by and 2004 followed in the same hectic fashion. This unfortunately left little time for sinkhole searching over that period. Until I received a call from Paul Hosie in early 2005.He's an exploration cave dive diver based in Perth and a member of WASG. Paul was in the midst of planning a mid year cave diving expedition to the Kimberley. Having visited previously, he knew about our search for the sinkhole and was interested if we had located it yet. I filled him in on our progress and that we were ready to do another flight over a new area. This was as a result of our new information. Paul was as keen to find the sinkhole as we were, so I suggested that we do our next air search in June when he was in town. He thought that was a cool idea so I went about organising our next fixed wing

Some of the easier sections of the old track and Johno's Toyota.



One of the many stunning pools in Winnama Springs Gorge.

flight in June, when Paul and the other two Cave divers were visiting.

June had arrived, along with the cave divers, Paul Boler, Paul Hosie and Ken Smith. They were to Join Johno and myself in a fixed wing search for the sinkhole. If we were successful, the cave divers would Chopper in the day after our flight to explore the cave and dive the lake. If there was not enough pressure already on finding this sinkhole, then that capped it off well and truly. The high tech gear was out for this trip including a laptop running Oz Explorer, multiple cameras and GPS's galore! If the female pilot's elevation of the area was accurate, then the sinkhole was in the middle section of our new search area. It was decided that we were to start our search there.

The next day we all piled into a small plane and headed off to our search area. I was quietly confident about success, as we had eliminated a good chunk of the area over the last few years. Still keeping in mind the chance of not finding it was also possible as this was some incredibly vast country to cover. About an hour into our flight we reached the centre of our search area and began our outwards spiral to cover the area effectively. Some twenty minutes later we had covered our first search area and no sinkhole. Paul H had a look of concern as he asked me where we should look next. After covering the middle of our search area we had two chunks at each end that needed checking and my gut feeling was that the eastern section was where we would find it.

Sometimes you have to bugger the technology and go with your instinct. This is what I did as I proceeded to direct the pilot to the eastern area and went with my gut feeling. We were travelling in our new direction for only a few minutes when we came across a large pool at the base of a cliff. The water was far from crystal clear and was being fed by an intermittent waterfall. It didn't fit the description of the sinkhole but we started a circle around it to check the surrounding area. Only seconds into this turn Paul H said loudly "There it is!" Out his window on the right side of the plane he had spotted an obvious doline. I couldn't believe it as our pilot changed course and headed towards the doline.

Our first pass revealed a huge doline collapse with a big rock pile in the bottom. It was an awesome sight as we all thought simultaneously that this must be it! We couldn't see any obvious pools and this we still needed to confirm, especially for the divers. As it would be an expensive trip in helicopters, to find no water! The next pass was a nice circle around the hole allowing the pilot to tip one wing towards the ground enabling one side of the plane to have a good look into the sinkhole. And under one overhang, sure enough water was spotted. It was official; this was the sinkhole we had been searching for! The search crew began rejoicing with cheers of joy. We circled the sinkhole a few more times to get some accurate GPS readings. This also allowed us to get some great photos and video footage.

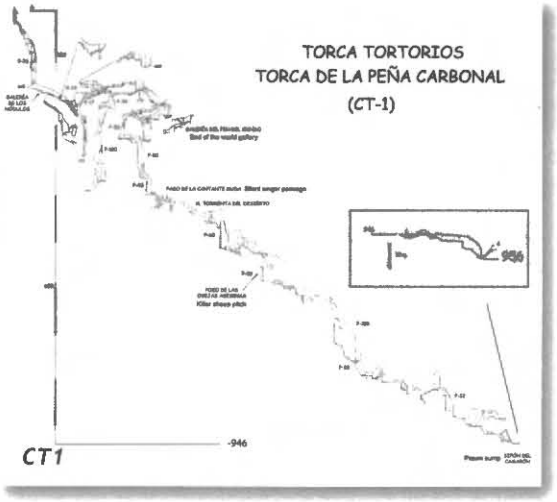
Over four years ago we began searching for this sinkhole and finally to locate it was to mark the end of a long search. I found myself with mixed emotions of excitement and triumph, not to mention a little relief. The cave divers were now assured of a destination and the next day they would helicopter in, and start exploring the sinkhole. The Kununurra crew and myself were to visit later in the year to begin an extensive survey of the sinkhole. I couldn't of been happier as everything fell into place perfectly at the end. This was achieved with persistence, determination and not to mention, the help of many people. In the name of exploration, I must thank every person that contributed in our search, to locate this incredible wonder of the Kimberley.

THANKS HEAPS!

Cabezo Tortorios 2001 Expedition in the Picos de Europa, Spain

28th July to 25th August 2001

by Carol Layton.
Originally published 'Cabezo Tortorios 2001 Expedition', SUSS Bull Vol 42(2)
Participants: Enrique Ogando Lastra *Zape* – trip leader, Marta Candel Ureña, Alfredo Moreno Rioja, Javier Hernandez *Javi*, Ruben Taboada, Alfonso Calvo Fernandez, José Luis Rubín *Currás*, Ignacio Rafael Ramos *Nacho*, Eduardo A. Puerta Elorza *Momi*, Manuel Jimnenez Sánchez *Lolo* (Spanish clubs); Bernard Tourte *Buldo*, Natalie Rizzo *Nata*, Olivier Guerard (French club); Fernando Pinto, *Nunobebe* Lorenço Pires Gomes (Portuguese club); Al Warild, Carol Layton (SUSS). *Nicknames in italics.*



More than 4 years have passed since I was fortunate to take part in an expedition to explore and map caves on the central massif of the Picos in Spain. I remember how deep, cold and unforgiving these caves are but most of all, I remember a pitch where I came very close to losing my life. And Al's.

Naturally, very pleased that in the end, it didn't end this way. Thankyou Al and the rope for hanging in there. More about that later.

First of all, the expedition:

I had heard about the deep vertical caves of a kilometre or more in the Picos, limestone mountains near the Spanish north coast, consisting of eastern, central and western massifs. The aim of the month long trip was to push two caves, Torca de la Peña Carbonal (CT1) and Torca de Fresnedal (CT14), and of course look for new caves. CT1 was surveyed the previous year to a depth of 946m, ending at a sump. Al´s plan was to dive it if there were no other leads. CT14 had been surveyed to 180m.

We camped in a flattish perched doline on the side of a mountain called Cabezo de los Tortorios (2146m), what the Spanish call 'summer camp'. Spread out within the larger doline was a number of tiny 2m dolines, a mixture of nice soft grass and piles of scree. It looked serene with funny looking sheep with bells grazing the green fields amongst the limestone rocks.

On that first day, before the sun had barely shown itself, there were some very strange sheep clattering around on the scree. It sounded like a dawn raid on the camp. Do Australian sheep do that? I haven't camped in a paddock with sheep so it is hard to compare. I found out later that they will hunt for food scraps, they will even eat the dirt where the dishwashing water is thrown.

Carol Layton started caving in 1981 first with the Monash Bushwalking Club,then VSA and for the last 16 years with SUSS. Over the years Carol has enjoyed expeditions to places such as Tasmania, Canada, Java, Vietnam, Mexico and NZ and is grateful to all the people who have organised trips and supported hers.

Our days of caving began with rigging CT1 and CT14. The group split up into teams to rig both caves. Rigging in CT14 was not difficult as the spits had already been drilled from the previous year and the knots were already in the rope so it was join the dots with the rope. When Alfredo, one of the Spanish cavers, couldn't find the spits he just got the electric drill and sealed lead acid battery out of his pack and whacked some more spits in. Lead acid batteries were kept charged by the solar panels at camp. Over ten short pitches Al and I counted 45 spits. Electric drills sure make a difference to putting bolts into hard limestone.

CT14 has sharp edged limestone with prongs and spikes, with short pitches broken up by short tight rift meanders. Stopping for any length of time isn't popular as you cool quickly with the cave between 4 and 6°C. Cold enough for large snow plugs at the bottom of the first and second pitches. However, overheating was the problem on the walk back to camp as it involved a 250m climb up a steep narrow valley.

One of the days I offered to help survey in CT14 with Alfonso. Alfonso is an expert surveyor who is very slow and methodical. The others thought the situation hilarious as Alfonso didn't know any English and of course, I don't know Spanish. It ended up being six hours of surveying with me going sí?, sí?, sí? with the tape. As in here?, here?, here? 'Sí' actually means yes but it seemed to work.

CT1 was relatively straightforward to rig as rope had been left at the top of the pitches from the previous year and only the hardware (bolts and bolt plates and karabiners) were needed. Cavers took turns to carry packs of equipment down to the bivouac at 400m to 600m and beyond. On my third day of caving, I ended up reaching my deepest point in a cave ever.

The first challenge at CT1 was to get to the entrance. Because the entrance is some distance

ANDREW BAKER

down a steep hill, ropes had to be rigged as safety lines to prevent people heading down half a kilometre into the valley if they lost their balance.

CT1 proved to be a testing vertical cave. From the entrance there was 165m of small pitches with some constrictions between them and lots of sharp spikes to catch a pack on. The largest pitch of 76m lead to a large sloping mud boulder chamber. The next section contained three short pitches that had to be prussiked with some climbs and a traverse with a section where you would have to hang from the rope to use both cows tails to cross the knots at the bolts. Then a 50, 80 and a 40m pitch got us down to 400m. Many pitches with traverses and many fiddly rebelays.

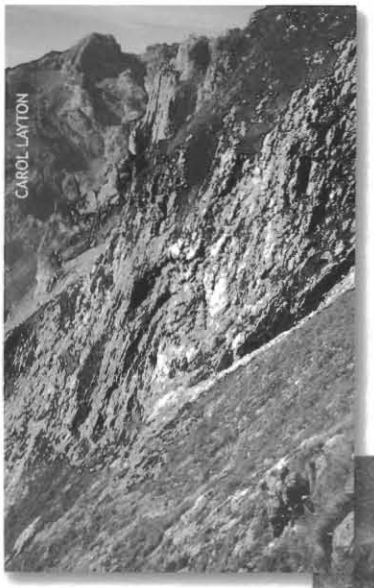
The next section was hard work to get to a depth of 600m. A number of pitches, the largest being 80m, were broken up by tight rift meanders and a couple of serious squeezes. The second squeeze was called Cantante Mudo (Dumb Singer – two of the early explorers were singing on their way down the cave but when they got to this meander, they went quiet...). The rock is dolomite and everything becomes covered in abrasive coarse sand, getting into gloves and down your cave suit.

I was amazed at the wear on the bobbins on my descender. Because the rope in CT1 had been in the cave for the last four years it was covered in grit. It was calculated that the top bobbin would only last 2000m.

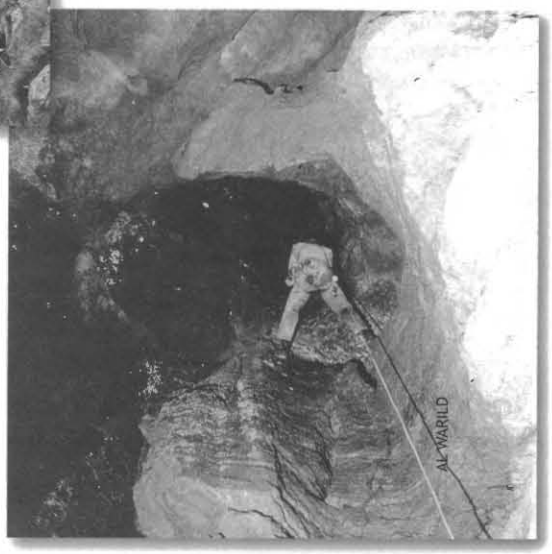
Finally the whole of CT1 was rigged down to 946m, and it was Al's job to dive the sump at the bottom. Many of the cavers had looked for a way on past the sump but had been unsuccessful. Al, Javi and I descended to the sump with our first task to move the diving equipment from a spot four pitches short of the sump.

This ended up being a trip to end all dive equipment lugging trips for me. We entered at 1.30pm and descended down to the bivouac and fuelled up for the next section. Past 800m it got nastier with wide slippery meanders. Many of the meanders closer to the surface had rigged traverse lines but not at the depths. At 900m more packs of equipment had to be carried. A flood had surprised the previous gear carrying team at this point and they had abandoned their three packs. So we now had six packs between the three of us. Teamwork got the packs down to the sump at 946m.

The sump was a small puddle with an even smaller passage heading out the back of it. Al spent an hour in 6°C water looking for a way on. He returned with news that the sump ended up being 6m long and that he had found a low, winding crawl passage that went up and down with a few stretches where he could walk. At about 100m, the passage became clean

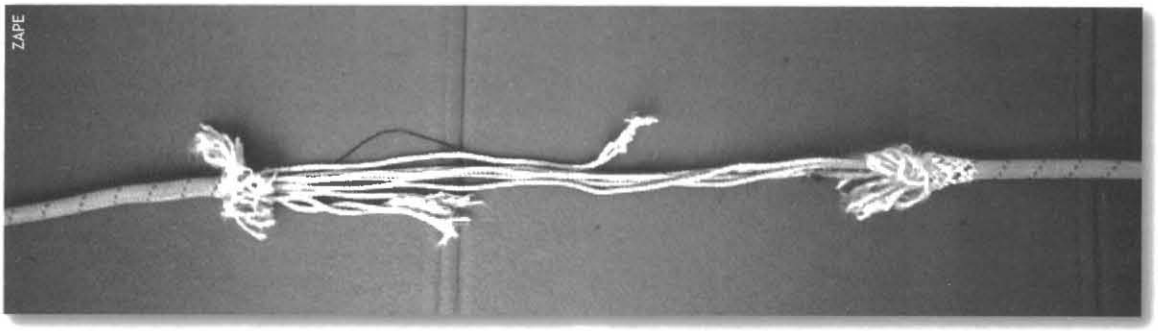


Al and Javi preparing to enter CT1.



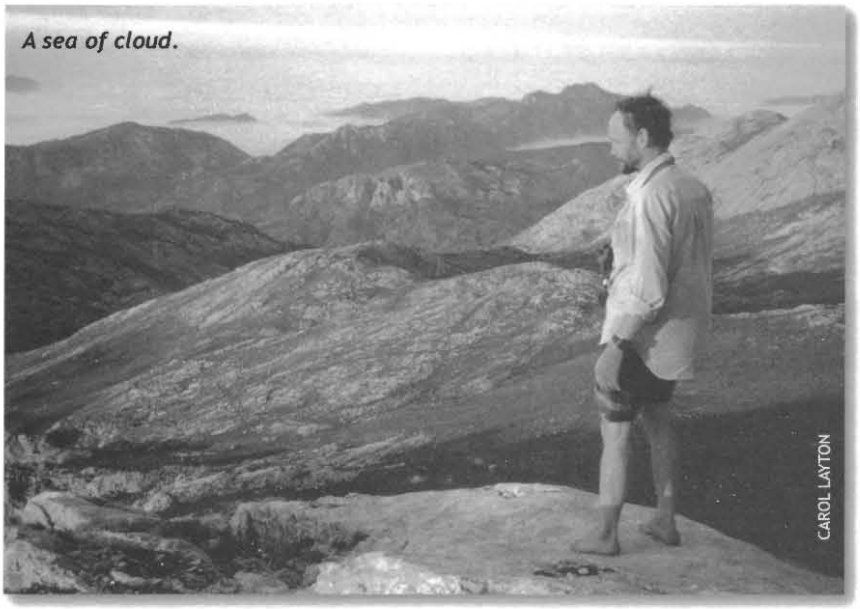
Carol descending a pitch in CT1.

Current map – CT14 is on the right



How many elephants can 4 threads support?

View of the camp towards the northern coastline of Spain.



A sea of cloud.

Group photo with that rope.

with lots of solution teeth and rock spikes. Then the passage went back into a muddy duck under squeeze that required digging. This added an extra 10m of cave depth.

We headed back to the bivouac at 2am and got there by 6.30am. We slept till woken up by Zape at 3pm and finally were out by 11pm.

Now, the bit about the rope:

Al and I had gone down CT14 to push the cave past the last explored and surveyed section. First we descended the cave to a chamber at 400m with the last pitch measuring 103m. We surveyed on into short pitches broken up by meanders, ending up with 50m depth out of 80m of rope. Al was not pleased with having to manually put bolts in to rig the short pitches but the heavy lead acid battery that was charged on the surface contained no current to fire the electric drill. We continued till we ran out of rope.

I went first back up the cave. On my mind was food and sleep back at camp since we had entered the cave at 1pm and it was now 10.30pm. We made our way back to the chamber at the base of the 103m pitch.

I prussiked up to the first rebelay, about 7m off the floor, crossed over, then a short pendulum to the left and started prussiking up the next section, about 34m to the next rebelay. I concentrated on keeping my breathing even and pacing myself to get out of the cave. This means a lesser likelihood of bouncing aggressively on the rope, thankfully.

After prussiking some distance, the rope lost its bounce as if I was approaching the rebelay. I looked up to see if I could see it with my light. What I saw baffled me. Instead of a rebelay with the compulsory loop of rope to the side I saw the rope move quickly up and down on the wall, caught on a spike. I could see in the dimness that there were furry bits sticking out from the rope.

I stopped moving and braced my legs against the wall to try and get a better look. This enabled me to stand up straighter and I saw the rope come to a stop in its see sawing against the wall and it went 'twang'. I swung in a pendulum further to the left. The rope was now clear of the wall. I could see a serious rub point on the rope and felt concerned. It had not hit me yet just how serious the rub point was.

I yelled out to Al that something was wrong. The chamber was acoustically poor with lots of echo and he had trouble understanding me. Pretty vague statement anyway. I carefully prussiked the short distance to the rub point and it was only then that I realised just how serious the rub point was.

Centimetres from my lead ascender, the 8mm Roca rope was shredded at one point to four very skinny threads, two of them rubbed and the sheath broken and completely in ribbons.

The rub looked so bad that I thought there was a very strong possibility of not going home. In horror I looked at the rope and my first thought was that I did not want to die. A bit of a cliché but that is exactly what happened. Thankfully standing out from the wall had freed the rope from the spike that was cutting it.

So, there I was hanging about 35m above the floor on a rope that had lost its sheath (30% of its strength) and 4 out of 8 threads cut and the others abraded. Not that I was thinking about the mathematics at that point – all I could see were four very slender and stretched threads connecting two shredded ends of a rope and me on the wrong side of them. Due to the weight of me and the hanging rope, the four still connected looked like flimsy cotton threads.

My first thought was to prussik above the damaged section and put a knot in the rope but when I placed the lead ascender above it, the sheath simply unravelled. My ascender ended up on the four

threads. This had not been my intention at all and I was further horrified. The adrenaline was well and truly pumping. My lead ascender didn't even grip the threads and came sliding down. The thought of the ascender cutting what was left of the rope frightened me and I placed it carefully back underneath the damaged section.

I yelled out to Al, "The – rope – is – shredded!" He yelled, "Come – back – down!" D'oh!. I changed carefully over to abseil thinking this was not the place to stuff this up and as smoothly as possible descended.

Finally, clipping my cows tail into the rebelay lifted what felt like a huge weight off me and then a huge sense of relief to be back with Al on the chamber floor. We discussed the problem. I was in shock and all over the place digesting what had just happened. I kept thinking no, no, no, no, no, not again! I had been trapped in a freezing cold cave before – Falcon Cave in the Ellis Basin, New Zealand in 1990. This brought back memories of trying to keep warm for hours on end. More frightening was the thought of stopping whoever came down the cave from abseiling on the shredded rope.

Al decided the best thing would be to prussik up to the rebelay and tie the rope as tight as possible so that it would be impossible for anyone to clip their descender on. Great idea but I was in such a state that I completely confused how many rebelays there were before the damaged section of rope. I gave Al the impression of two rebelays when I knew there was only one. Al carefully prussiked up, crossed the rebelay and then ascended about 15m and he too could see the shredded section. I was so angry with myself for being so confused. As soon as Al realised what had happened, he prussiked to a nearby thin ledge and got his weight off the rope.

To get back down, Al needed a bolt kit and rope. All of which we had left where we had got to surveying. I took off, very conscious of not making any errors as I abseiled down and prussiked back with a loaded pack. Al had to wait over an hour on a ledge measuring about a metre long and a third of a metre at its widest.

On my return, I attached what Al needed to the end of the rope that happened to be knotted into the first rebelay and he pulled it up. He hammered in a couple of bolts, tied in a new rope and abseiled down. The relief of seeing Al unharmed could have been sliced!

We discussed what to do. Our choices were to wait till someone turned up but this could be many hours wait. It was 2am by this time and we didn't expect any movement in camp till after 9.30am. It would then take several hours for people to descend to the chamber.

The thought of huddling together for warmth with our safety blankets appealed to me but the hours would pass very slowly. Al proposed a bolt climb from the ledge to the level of the damaged section of rope where he could put in a knot. I would belay. Al estimated a 15m distance to cover, requiring 15 bolts. Boy, we wished the electric drill was working.

We both prussiked up to the ledge and Al got started. He hammered in a bolt by hanging off the previous bolt using his cows tails and a shortened foot loop. The belay rope passed through a carabiner like a rockclimbing hanger. The non-dynamic belay rope never was weighted as it was just a backup.

This is what a rope rub can look like.

Carol climbing in CT1.

After many hours Al had hammered in 11 bolts for protection, 3 bolts for belays which adds up to 21 for the trip, a record at that time for Al (still is! and Al hopes to never out do it). He had to rest his arms often and all I had to do was concentrate on the belay and sing. He asked me to sing so that he wouldn't fall asleep. First time anyone has asked me to sing. Just shows how desperate we were.

At about 1pm, Javi and Momi appeared way above us. They came zooming down the ropes and I felt very glad to be near the damaged rope otherwise we would have had enormous difficulties yelling up from the floor of the chamber. Al calculated that he was only two bolts, about 1 hour from the shredded section of rope. Wow!! I just wanted to get out of the cave and be warm again. Javi and Momi had food for us, which was massively appreciated.

Apparently the group were concerned we hadn't returned during the night and wondered if something had gone wrong. I was happy to hear the Spanish conversation as Al described what happened. The look of horror on their faces showed they understood the danger of the pitch.

We prussiked out very tired and reached the surface after 5pm. The sun was shining, the sheep were bleating and we collapsed gratefully onto the grass. When we walked up the hill, a wild looking Spanish caver ran down towards us and wrestled us for our packs. It was much appreciated.

This incident took place before Al and I went down CT1 to push the sump. It was good to go underground again once I had rested. Afterwards, people took turns to derig CT1. Interest in pushing CT14 waned but on the next summer´s trip it was connected to a nearby cave at around -800 m to reach an overall depth of 1028m. But that is another story.

General Grant Cave, New Zealand

A tale of a sailings ship, shipwreck, gold and caves.

By Paul Jay Steward, USA
www.paulsteward.cityslide.com

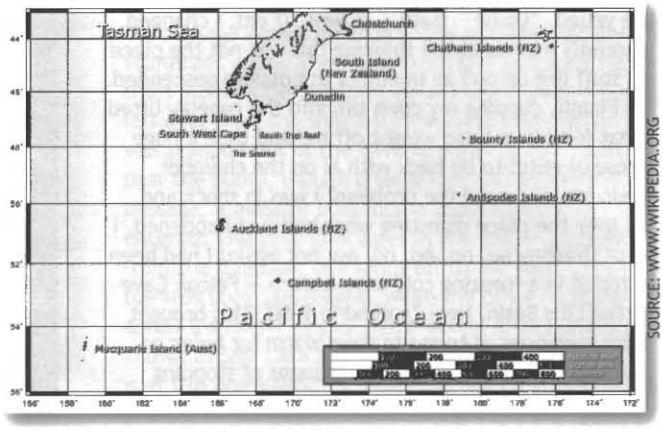
On May 7, 1866, the General Grant, an American-made ship, set sail from Melbourne, Australia, for London, England. Named after Ulysses S. Grant, this majestic ship, with its three tall masts and full sails, was almost one hundred and eighty feet long, thirty-five feet wide, and weighed over 1,100 tons. Along with its eighty-three passengers and crew, the ship carried a load of wool and skins and, according to the ship's manifest, 2,576 ounces of gold.

The passenger list included many prominent English miners returning home from the rich Victorian goldfields with an undisclosed amount of gold. It was also rumored to be carrying nine tons of gold bars disguised as zinc ballast. Eight days into its journey, in the early hours of May 14, the ship encountered a severe storm near the Auckland Islands, a group of five uninhabited volcanic islands, three hundred and fifty miles south of New Zealand. Since their Discovery in 1806, harsh weather and poor land conditions have foiled all attempts to settle on these sub-Antarctic islands. As the storm intensified, high winds, thick fog, and strong currents forced the ship toward unseen Auckland Island, the largest of the five, distinguished for its shear basalt cliffs and huge sea caves.

Along the western coast, the ship struck a large rock that damaged its rudder. Without the ability to steer, the ship floundered northward along the shoreline until the current pulled it into a large cave whose entrance was approximately one hundred and fifty feet high and sixty-five feet wide. Passengers and crew ran for cover as rocks and wood rained down on the ship as its masts scrapped the ceiling and splintered. One falling rock went through the forecastle deck and another destroyed the starboard deckhouse. The sides of the ship were ripped open as it crashed along the cave walls. It continued to be drawn deeper into the cave until it was thoroughly wedged. Although battered and broken, the ship held tight in its dark tomb, and the captain ordered everyone to stay onboard until daylight. The ship also carried three boats: two 22-foot-long quarter boats and one 30-foot-long long boat.

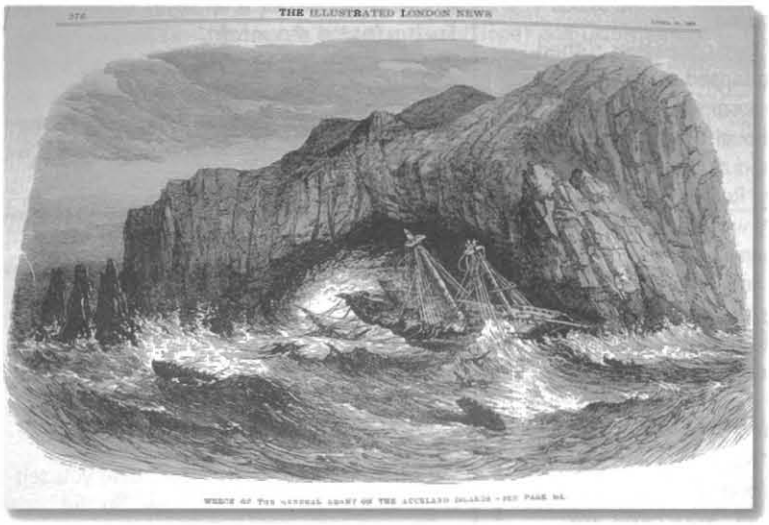
At dawn, one quarter boat was launched with three crew members. Their job was to scout the shoreline outside the cave for a safe place to land, and then return to start transporting survivors. Before the boat returned, the rough seas forced the main mast, which was wedged against the ceiling, through the bottom of the ship. The second quarter boat was launched carrying the chief officer, three crew members, several passengers, and all the food and supplies it could hold. As the General Grant began to sink, the third boat floated off the main deck with over forty people onboard. At the mouth of the cave, the overloaded long boat capsized in the rough waters. Three people were rescued; the rest were washed back into the cave and drowned along with Captain William Loughlin and those still clinging to the sinking ship. In all, sixty-eight people died in the cave, but for the fifteen survivors (nine crew and six passengers, including one woman), the ordeal was far from over. The shear cliffs of the island's shoreline left no place to land the boats, so the group sailed six miles west to Disappointment Island. The boats required constant bailing to keep from swamping, but by nightfall the cold, exhausted, and sea sickened survivors reached the island.

After two days, the castaways again manned the oars and sailed along the coast of the larger island until a suitable landing place was found. This would be their home for the next eighteen months. One match was found among the group. They carefully lit a fire that was kept burning for their entire stay. Shelters were built from materials found on the island. As provisions dwindled, seals provided the staple for their food and clothing. Other food included sea birds and fish or wild pigs, goats, and rabbits that lived there since early settlement attempts. After enduring eight months of harsh weather and near inhospitable conditions, the chief officer and three crew members decided they had had enough. Using one of the boats, the quartet attempted to sail to New Zealand without the use of maps or instruments. They unknowingly set a course for the empty South Pacific and were never heard from again.



Auckland Islands, south of New Zealand.

Paul, author of of True Tales of Terror in the Caves of the World gives us an insight into a time of wind, sail and a tradgedy that shocked the region.



SOURCE: HTTP://FREEPAGES.GENEALOGY.ROOTSWEB.COM/~NZBOUND/GRANT.HTM

Wreck of the General Grant on the Auckland Islands. Illustrated London News, 1868, page 376.

In September 1867, one from the group became sick and died, leaving ten survivors. Boats were occasionally seen along the horizon. On one occurrence, as a boat neared, the excited islanders set fires, but the flames and smoke were not spotted, and the boat sailed by. Two days later, on November 21, 1867, another boat was seen. The marooned survivors jumped into their final boat and set chase until seal hunters from the whaling ship Amherst finally spotted them. But for the surviving ten, they would have to wait six more weeks before the sealers returned them home. As news of their rescue spread, it was not the stories of survival or the loss of life that everyone talked about; it was the rumors of gold sitting on the bottom of the cave that caused the most excitement.

Within one year of returning home, James Teer, one of the original survivors, led the first attempt to salvage the gold, but the expedition never entered the cave because of bad weather. In 1870, the search for the cave and the gold claimed the lives of six men, including David Ashworth, another original survivor. In 1876, a third surviving member, Cornelius Drew, led an unsuccessful attempt to find the gold. In 1877, searchers claimed to have found the ship, but no gold was recovered. In 1907, an expedition ship crashed into the cliffs, killing twelve men and stranding sixteen others for seven months on Disappointment Island.

To date, there have been sixteen attempts to locate the General Grant's treasure, including the most recent in 1996. The lore of its wealth has cost the lives of twenty-nine people and millions of dollars. Divers have recovered numerous artifacts, as well as gold and silver coins from over a dozen wreak sites on the islands, but nothing identifying the General Grant has ever been found. The ship and its cargo simply vanished in the cave; a cave well guarded by high winds, deep waters, and rough seas. In 1996, the Reserve Bank of New Zealand released a gold ten dollar semi-proof "Sinking of the General Grant" coin to commemorate the event.

Today, the islands are a protected wildlife refuge and marine reserve and are home to many endangered species of birds, plants, and animals.

Access is limited, and permits are required to venture into the area. Grave markers and memorial plaques are located across the islands as a haunting reminder to the harshness of this land.

Further information about the wreck can be found at: http://www.maanz.wellington.net.nz/projects/gengrant.htm

http://www.teara.govt.nz/1966/G/GoldSunken/GeneralGrant/en

http://freepages.genealogy.rootsweb.com/~nzbound/grant.htm

SOURCE: WWW.WIKIPEDIA.ORG

Satellite photo of Auckland island (Satellite STS089-743-5).

Caver dies in rock fall at Pikehall.

An experienced caver died in a rockfall while excavating new passages to explore underground.

David Briggs' two colleagues rushed to get help after a section of cave collapsed at Aston Hill Farm near Pikehall on Saturday morning – launching a desperate rescue operation. It is thought to be the first caving death in Derbyshire for about 15 years. A spokesperson for the Derbyshire Cave Rescue Organisation (DCRO) said: "People go caving every week and the vast majority do so very safely. "But like anything else, like driving your car, things occasionally, tragically, go wrong."

The three-man caving party were said to be "swallet holing" – a practice of digging to extend cave networks. They had been working on the site, near to the Via Gellia Road, for a number of weeks. Police named the man as 37-year-old David James Briggs, a tiler, of Warmwells Lane, Ripley. A DCRO spokesperson added "Many people try to excavate and extend caves as this is one of the only original exploration opportunities on the planet. More caves are found and extended all the time. A lot of swallet holing goes on and, for the most part, can be done safely. The exact circumstances of this death we don't know, but this man appears to have been the first to enter a chamber and this boulder struck him. Paramedics experienced in caving were the first to reach him and confirmed he was dead. The conditions were very difficult even though he was not too far underground – about 15 feet down a shaft."

"The safest way of recovering his body was by using a JCB to excavate the surface and break into the cavity where he was trapped. The whole operation took about seven-and-a-half hours." A file on Mr Briggs' death is being prepared for the coroner. Caving had been Mr Briggs' hobby for 20 years, and had taken him all over the world. He was unmarried and had no children. His mother Margaret and twin sister Kathryn said: "Although we are very upset about the death of our son and brother, we get some comfort believing that if he had to go any way, he died doing the thing he loved."

Richard Wooley
29 March 2006

Base-jumper's heart-stopping leap

Base-jumper Nicolás López has become the first person to leap from Venezuela's Sarisarinama mountain.

The Argentinean made extreme sports history by completing the 350m jump in the Tepuy mountains after free-falling for five seconds and then parachuting for a further 15-20 seconds before landing safely in the treacherous cavern below. López said: "It's the most confined landing I have made in my entire whole parachuting career. There was no margin of error. The floor of the cave is totally uneven. It's of collapsed stone blocks the size of a house crowned by a jungle over millions of years and there are holes, trees, all kinds of rocks, you can't walk, you have to climb, crawl, drag yourself to be able to get out of the cave. So the landing, well, there was no chance for it to go wrong. It was that or treeing myself hard and a very complicated rescue," López said. López, who has been parachuting for years but first base-jumped in 1999, spent months preparing for the jump and wore a specially-tailored parachute to manoeuvre between the various obstacles in his path.

WORLDS LONGEST CAVES Compiled by: Bob Gulden - March 10, 2006
CAVES WITH TOTAL LENGTH OF 15000+ METERS (9.321 miles, 49,213 feet)
Send updates and corrections to caverbob@aol.com

#	CAVE NAME	COUNTRY	STATE	COUNTY	LENGTH MILES	LENGTH METERS	DEPTH FEET	DEPTH METERS	SOURCE	DATE
1	Mammoth Cave System	U.S.A.	Kentucky	Ed./Hart/Bar	367.000	590629	379	115.5	CRF	5/5
2	Optimisticeskaja (Gypsum)	Ukraine	Ukrainskaja	Ternopol	146.000	234964	49	15.0	Alex Klimchouh via Art Palmer e-mail	10/99
3	Jewel Cave	U.S.A.	South Dakota	Custer	135.002	217265	632	192.6	www.nps.gov/jeca/exploration.htm	10/5
4	Wind Cave	U.S.A.	South Dakota	Custer	119.580	192445	664	202.4	Rod Horrocks e-mail	1/6
5	Hoelloch	Switzerland	Schwyz	Muotatal	119.247	191909	3079	938.6	Andreas Christen e-mail	5/5
6	Lechuguilla Cave	U.S.A.	New Mexico	Eddy	116.380	187295	1604	488.9	Stan Allison	12/5
7	Fisher Ridge Cave System	U.S.A.	Kentucky	Hart	109.284	175876	356	108.5	http://home.flash.net/~mfitch/	6/6
8	Siebenhengste-hohgant Hoehlensystem	Switzerland	Bern	Eriz/Beat./Ha.	92.584	149000	4396	1340.0	Stalactite V53N2P55-56	12/3
9	Sistema Ox Bel Ha (Under Water)	Mexico	Quintana Roo	Solidaridad	88.765	142854	110	33.5	Jim Coke e-mail	9/5
10	Gua Air Jernih (Clearwater Cave-Black Rock-White Rock)	Malaysia	Sarawak	Mulu	80.450	129471	1165	355.1	Matt Kirby e-mail	10/5
11	Ozernaja (Gypsum)	Ukraine	Ukrainskaja	Ternopal	77.000	123919	67	8.0	Sergey Yepifanov via Peter Lenahan	08/03
12	Systeme de Ojo Guarena	Spain	Burgos	Merindad de Sotoscueva	68.351	110000	633	193.0	http://www.grupoedelweiss.com/	9/5
13	Reseau Felix Trombe / Henne-Morte	France	Haute-Garonne	Coume Ouarnede	65.721	105767	3199	975.0	Sylvestre Clement e-mail	01/04
14	Bullita Cave System (Burke's Back Yard)	Australia	Northern Territory	Gregory N.P.	65.244	105000	75	23.0	Mark Sefton (Cave Exploration Group of South Australia)	8/5
15	Toca da Boa Vista	Brazil	Bahia	Campo Formoso	63.380	102000	164	50.0	Lilia Horta e-mail	01/03
16	HirlatzHoehle	Austria	Oberosterreich	Dachstein	59.179	95240	3510	1070.0	Gottfried Buchegger e-mail	3/6
17	Sistema Purificacion	Mexico	Tamaulipas	Villa Hidalgo	58.257	93755	3127	953.0	http://www.amcs-pubs.org/longanddeep.html	06/02
18	Zolushka (Gypsum)	Moldova/Ukraine	Moldarskaja	Onestrovsko-P.	56.048	90200	98	30.0	RISC	1996
19	Shuanghedongqun	China	Guizhou	Suiyang	52.997	85290	869	265.0	http://www.grottes-et-karsts-de-chine.org/npds/gkc_rcdev50.php?	12/02
20	RaucherkarHoehle	Austria	Oberosterreich	Totes Gebrige	51.379	82686	2487	758.0	http://www.nhm-wien.ac.at/NHM/Hoehle/lth.htm	2/5

ANDREW BAKER

Message from the European Speleological Federation.

Date: 27/2/2006

Dear Caving Friends

We are really happy to give you news of the European Speleological Federation in this beginning of year. We hope that you had a good start and wish you the best for this year 2006 in your projects. The first good news is that finally the FSUE has a unique email address that is valid for all the Bureau members and the webmaster which is: contact@XXXeuros peleo.org (remove XXX). This will help to make always closer the cavers and federations in Europe.

The other big news is about the EuroSpeleo Forum 2007 and the very expected European Congress in 2008 ! So finally we have the big pleasure to annonce you that the EuroSpeleo Forum 2007 is the "BALTIC Speleological Congress" (BSC) that will be held by the Swedish Speleological Federation (SSF) from 13 to 15 of August 2007 in Wisby Strand, Visby, Gotland, Sweden. It will be a great opportunity for all European cavers to know better the speleology of Scandinavia and Baltic countries. You can find all the information on the FSUE Agenda (http://www.fsue.org/main4/events.html) and on the BSC site (http://www.speleo.se/bsc/).

About the IVth European Speleological Congress for which an annoucement had been made by UIS secretary during the congress in Greece on last August, we have the immense pleasure to annonce you that, after Sofia-Bulgaria 1980, Hellecine-Belgium 1992 and Lisbon-Portugal 1999, the next European Speleological Congress is "VERCORS 2008" that will be held by the French Federation of Speleology (FFS) from 23 to 31 of August 2008 on the mythic altitude karst of Vercors where stand the "Gouffre Berger" near Grenoble. Vercors 2008 proposes to be a quality Speleological meeting in a festive and friendly caving context that enables all European cavers to meet and exchange. Vercors 2008 is organised by FFS with the support of the FSUE, and we invite every european cavers who would like to help to the organisation to contact the Comitee of Organisation (CO) at contact.vercor s2008@XXXffspeleo.fr . (remove XXX) You can find all the information on the Vercors 2008 multilingual website (http://www.vercors2008.ffspeleo.fr). At this occasion a new forum about European Caving and Congress is now opened, look at http://www.vercors2008.ffspeleo.fr/advertisement.htm (option Forum Vercors 2008).

About the last email where you were asked your opinion about 2 points for these EuroSpeleo Forums, thank you for those who answered and here are the results. Globally, people are very in favor of reduced prices for long-distance countries, especially in central europe. And it is suggested to call it "long-distance prices" in order not to focalise on such or such area. About a contribution of each participants of EuroSpeleo Forums to the EuroSpeleo Projects Fund, people are also very in favor but they say it should be between 2 to 5 euros per person and no more, according to the size and lengh of the event. So about these 2 points and the special fees for young cavers under 26, we will see with the organisers of next EuroSpeleo Forums in order to implemente these suggestions, in order to encourage more people to participate.

As you could see this beginning of year was a sad period with several big accidents. Especially the one of an Ukrenian team in Abkazia. You can find all the news on it on "Worldwide Caving News" site maintained by our Greek friends on http://www.zenas.gr/wcn , and always the Speleomania site on http://www.speleomania.com/. You can find all these links on the links-page of the FSUE website (http://www.fsue.org/main5/2_links.html). The FSUE site is now becoming multilingual with german, spanish, italian and portuguese automatic translation from the english/french version, thanks to our webmaster, Bernard, alias BTH! The EuroSpeleo Projects is still under construction, we should have news about it soon,

Very Best Speleo Wishes.
Olivier Vidal
Secr. General FSUE
Website : www.fsue.org

Don't try this at home!

Russian Air Force Pilots to Fly Through Cave in China.

A team of Russian pilots will reportedly fly fighter jets through a narrow cave in central China in a tourist stunt that will cost people up to 840 dollars to watch, the AFP news agency reported on Wednesday. The agency quoted a report in Chinese newspaper Hunan Daily that read that the Russian air force jets, including advanced Sukhoi Su-30s and Su-27s, would fly through the famed Tianmen Cave in central Hunan province on March 17-18. The cave, which resembles a rock archway, is only 57 meters (188 feet) wide at its widest point and 28 meters wide at its narrowest, it said. The cave is about 280 meters long and 130 meters high, and according to the China Daily, "is the highest water-eroded cave in the world". Local officials are hoping to reap huge profits from the March event with 20,000 tickets on sale for up to 6,800 yuan (840 dollars) each, the China Daily said. Publicity and ticket fees from a similar event in 1999 helped generate 2.5 billion yuan (308 million dollars) in tourism revenues over the following three years, the press reports said. Organizers have already paid 52 million yuan to put on the upcoming event, including 2.7 million yuan for insurance, the Hunan Daily said. The event is part of the "Year in Russia" celebrations in China.

To see the stunt performed in 1999 visit:

http://www.haute-voltige.com/inter/photos/gallery/tianmen_cave99/index2.htm

http://www.haute-voltige.com/inter/videos/videos.htm

Sukhov Su-30 to be used in the fly through.

Not really a cave but still an impressive arch.

STOLEN AMBULANCE FOUND IN FOREST

An off-road ambulance stolen from a specialist cave rescue team has been recovered from a forest in south Wales.

Thieves broke into the headquarters of the West Brecon Rescue Team near Abercrave last Sunday and stole the £34,000 Land Rover.

The vehicle was discovered apparently undamaged in Rheola Forest near Neath. Police believe thieves had found it too specialised to sell.

A team spokesman said it was a "real relief" to get the ambulance back.

The Land Rover was recovered by the rescue team on Monday night and is now being examined by forensic officers.

Valuable medical equipment damaged by the thieves will have to replaced. The vehicle will then be fitted with new locks and tracking device.

Helicopter search

Gary Evans, lead call-out warden and team medical officer, said: "We went and collected it last night. It's a real relief to have it found and it's even more of a relief to have it in relatively good condition.

"It had been driven down deep into the forest. It does look intact and the equipment we expected to be in there appeared to be there."

Mr Evans said a man involved with the Red Dragon rally at the weekend had spotted the vehicle.

"He couldn't quite locate where he had seen it, so he gave a rough description to the police and they found it from the air using a helicopter," he said.

Grant funding

Mr Evans added it would cost about £2,500 to get the Land Rover back in service, which the team hopes to do within a week.

The team had warned response times could be seriously hit by the theft of the 4x4 ambulance.

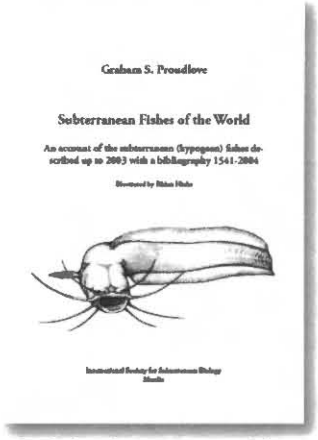
The ambulance is used to rescue people trapped in caves.

The west Brecon rescue team, which is based in Penwllt, helps save people trapped in caves and old underground mine workings across mid and south Wales. It celebrates its 60th anniversary in August.

The stolen and damaged equipment was bought with charitable donations and grant funding.

BOOK REVIEWS

Subterranean fishes of the world



There are currently described 126 species of subterranean fishes, also known as stygobiont fishes. These are fishes which are restricted to subterranean environments (caves and groundwater) and are found nowhere else. In 1969, at the time of the last review, there were 35 species so it can be seen that the discovery of these animals has been very rapid in the past thirty years.

This new book is a summary of 104 species (the others were desrcibed when the book was being produced). The species are covered in systematic order and details of distribution, habitat, conservation status and other data are provided for each species. The most important part is the bibliography for each species which includes all literature references to that species. The full bibliography for all species is over 2000 entries and covers all works ever published on subterranean fishes from 1541-2005. There is an extensive "Note added in proof" whichwas written diring the final editing and production phase. It includes the 21 extra species and over 80 further references. Each species is illustrated with a line drawing (87 Figures in all) and there are 20 colour plates. The book is 304 pages in length.

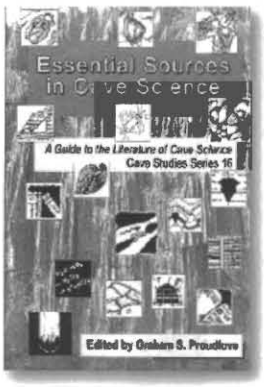
Available from speleobooks.com

Essential sources in Cave Science.

British Cave Research Association Cave Studies series #16 (2006). Edited by Graham S. Proudlove.

This book contains 15 chapters covering all of the disciplines within cave science. Each chapter (see below) contains an introduction to the discipline and then a list of literature sources which provide up to date information on the breadth and depth of the subject. A third section contains links to internet based (web and listserv) resources. The book is aimed at three audiences, the novice who needs to read up on a discipline, the researcher who wants to expand out of their normal field (e.g. for interdisciplinary research), and the ordinary caver who is curious to learn more.

Each chapter is written by a recognised authority and all chapters were peer-reviewed by at least two world class reviewers. This is the first collection of its type to reach publication.



CHAPTERS

1. Introduction
2. Geology – Dave Lowe
3. Geomorphology – Tony Waltham
4. Hydrology + Hydrogeology – Chris Groves
5. Chemistry – Simon Bottrell
6. Physics – David Gibson, Clark Friend, Phil Murphy
7. Speleogenesis – Dave Lowe
8. Minerals and Speleothems – Charlie Self
9. Palaeoenvironments – Andy Baker
10. Biology – Graham Proudlove
11. Bats – John Altringham
12. Archaeology and Palaeontology – Andrew Chamberlain
13. Conservation and Management – Graham Price
14. Speleology – Ric Halliwell
15. Periodicals – Graham Proudlove

See bcra.org.uk/pub/cs/index.html for details. Price £4.50 GB pounds (8 US dollars, 6.5 Euro). Available from BCRA sales. Publications Sales (publicat ions-sales@bcra.org.uk) Village Farm, Great Thirkleby, THIRSK, YO7 2AT. UK. 01845 501424

And from Speleobooks.com

TIMOR PROJECT ASSISTANCE REQUIRED

NHVSS is calling for assistance in the documenting of the Timor Caves in the Upper Hunter Valley of NSW. Do you have...

- Experience in cave surveying?
- Knowledge of the local Timor Caves area history?
- Artistic skills and might like to assist us in drawing diagrams for the final production?
- Knowledge & Experience in identifying cave invertebrates?
- Fauna knowledge/identification skills?

We also would love to hear from you if you have any old photos of Timor Caves or if you or your club has done any tagging or survey work in the last 20 years.

2006 Field Trip list

29/30th July
5/6th August
16/17th September

Environmental TRUST

NHVSS

Reimbursement of some fuel costs will be offered to participants. For more information or to participate please contact the project manager Jodie Rutledge on [redacted].

This project has been assisted by the New South Wales Government through its Environment Trust.

Helictite

Vol 39 (1) 2006 *OUT NOW!*

CONTENTS

Cover: *Thylacoleo carnifex* from Victoria Fossil Cave, Naracoorte. Assembled by Ed Bailey. Photo by Ken Grimes.

[redacted]

DUO Range of Headlamps

The DUO range of headlamps provide economical waterproof* hybrid lighting.

DUO LED

The DUO LED comes in two models with either 5 or 8 LEDs, giving a very white close proximity light and a long burn time, alongside a halogen bulb for long range light (up to 100m).

The 8 LED model has three switchable lighting levels and a long duration survival light function. Uses 4AA batteries in a battery pack carried on the head.

DUOBELT LED

The DUOBELT LEDs are 6V headlamps with dual light source. Available with 5, 8 or 14 LEDs and a halogen bulb for long range light (up to 100m).

The 8 and 14 LED models have three switchable lighting levels and a long duration survival light function. Includes 4 x C Cell batteries in a rigid, belt mountable pack.

*Waterproof to 5m using IP X8 standard.
These lights are NOT intended for diving!

hands **free** lighting®

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www.petzl.com

Photo: Reseau de Bufo Fret, in the French Pyrenees. © Christophe Levillain

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