CAVES

No. 165 March 2005

The Journal of the Australian Speleological Federation

# AUSTRALIA



# Were you seen at CAVEMANIA?

Au revior to two top cavers!
Aliens in Olwolgin Cave, WA!
Water Cavern Dreaming!
Mexican Cave Rescue
World Depth Record Shattered!



### **Coming Events**

In particular, this list will cover events of special interest to cavers and others seriously interested in caves and karst. A similar list in the ACKMA Journal will give more attention to meetings of specialist scientific interest. Both of these lists will be just that: if you are interested in any listed events, contact Elery Hamilton-Smith on . If you plan to visit North America or Europe, we can probably provide details of the many local-regional meetings which take place there.

2005:

14th International Congress of Speleology, Athens, Greece. Aug 21-28 Sept 7-11 Geomorphology of Evaporite karst, Zaragoza, Spain. Water Resources and Environment in Karst, Belgrade (Serbia) Sept 14-19 and Kotor (Montenegro), Europe.

Sept 23-25 Hidden Earth: national caving Conference, in the Mendips,

U.K.

Oct? 3rd Symposium on Cave Archaeology and Palaeontology, Athens, Greece.

Oct 31-Nov 4 National Cave and Karst Management Symposium, Albany,

NY, USA.

Nov 4-6 CEGSA 50th Birthday Party, see page 7.

TBA FUSSI 30th Birthday Party.

2005\6 TBA, ASF Council Meeting, Location to be advised.

### And Looking Ahead

### 2007 and beyond

January, 26th ASF Conference, South Australia, celebrating 2007

50 years of the Australian Speleological Federation. Start

planning now.

2007 ACKMA Conference, Buchan, Vic. This will be part of the

celebration to mark the centenary of the discovery of Fairy

Cave.

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### Advertising

Contact the Production Manager for commercial, caving community and classified rates. Rates start from \$5 to \$400 for full page B&W back cover. Discounts apply for placements of 4 adverts and an up-front payment.

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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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www.caves.org.au

COVER: Tasmanian Governor, Mr W.J.E. Cox greeted by ASF President John Dunkley at CaveMania, Dover, Tasmania. Photo Jodie Rutledge of NHVSS. LAYOUT AND DESIGN: Jacqui Fry

### ent: Jay Anderson 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

### **ASF Executive**

President: Jay Anderson
Senior Vice President: John Dunkley
Vice President: Chris Bradley
Vice President: Joe Sydney
Vice President: Nicholas White
Treasurer: Grace Matts

General Secretary: Winfried Weiss Executive Secretary: Evelyn Taylor

Membership: Jodie Rutledge



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# 4 www.caves.org.au



### From the new President ...

I hope that all ASF members had a great end to 2004 and are settling into 2005. I was able to attend the recent ASF Conference,

in Dover (Tasmania), which was excellent. I'm sure all who attended will join with me in thanking the Tasmanians for their organisation and hospitality. Those unable to attend truly missed out and we hope to see you at the next conference!!

Yes, there's a new person in the role of President for the ASF. You may ask — who is this person? So, here's a bit about me and some indication of who I am. I'm someone with a deep passion for caves and speleology. I went "adventure caving" as a teenager - down south in WA near Margaret River. I remember clearly that my first abseil was into "Brides Cave" in the Leeuwin Naturaliste National Park. As an active teenager, I was very interested in camping, bushwalking, abseiling and caving and fast became involved with my local youth group as an assistant Leader for many outdoor activities. I went caving as often as I could, this was a time when caving was un-regulated and people went where they wanted, when they wanted. Collectively, visitors to caves caused significant damage to many caves during this period.

In the 1990's, I joined both local caving clubs, caving and leading trips regularly. While an impoverished undergraduate student, I attended the ASF conference in Tasmania in 1993. All of that was the foundation for a deep interest in caving. I was even lucky enough to meet my husband on a caving trip - so we share very similar interests. I particularly enjoy the regular WASG northern Australian caving expedition and am excited to share what we find - if you have the time to listen!! I'm also regularly caving at Yanchep National Park and Margaret River - often taking either beginner groups or experienced cavers underground. As an outdoor leader (particularly caving & abseiling), I am interested in ALL aspects of caves and their management - with particular interests in conservation, leadership, cave rescue, training, cave fauna and ecology.

In one of my roles as a speleological representative on the two W.A. Government cave management advisory committees, over the last few years, I have developed an even greater interest in conservation/impact/management issues. I enjoy working together with others so that we can all ensure that future generations can enjoy the experiences in caves that we currently enjoy today. That interest has led me to postgraduate studies in cave and karst management. I've worked my way through the Certificate of Karst Management (an excellent course offered by Charles Sturt University) and have almost completed the Diploma of Applied Science (karst management). I intend continuing onto a Masters in this area. I particularly enjoy being

involved in community consultation and projects.

Community education about karst is something that I really believe Australia needs more of.

My working background has nothing to do with caves. I have a 4 year degree in Psychology and currently work in the area of counselling/child protection/social work. I am basically a Senior Officer with a Government Department and I regularly work with families and children in crisis and traumatic situations to support families and to ensure that children are safe. It is great to have a job that not only gives me money to fund caving trips but that allows me flexible working hours so I can fit in so much into my week!!

So, I'm an outdoor leader and active volunteer with local WA caving clubs (ASF corporate members WASG and SRGWA) and I also belong to ACKMA. I've been actively involved with the WASG committee since my "Uni" days — participating as Secretary for 4 years, Vice President for one year and I have just completed 5 years as President of WASG. On the ASF side of things — you'll have seen my name down as the Executive Secretary, Vice President and more recently the Senior Vice President. I'm the sort of person who enjoys active involvement of organisations and I look forward to representing the ASF and being involved in all of those important issues that you'll read about in John Dunkley's President's report for 2004.

I would like to thank the numerous ASF and ACKMA members who have offered me support and encouragement to fill the role of ASF President. I look forward to hearing your queries, talking to you or meeting you sometime ... working with you to protect caves, promote speleology or just going underground!

Yours in caving

Jay Anderson ASF President 2005\2006



# ASF Environmental Fund receives a generous donation!

A generous donation of \$500 has been received by the ASF Environmental Fund. ASF wishes to acknowledge and thanks this kind donor who requests to remain anonymous.

You too can make a donation to the ASF Environmental fund! All donations over \$2 are tax deductible!

Send your cheque to: ASF Environmental Fund P O Box 388 Broadway, NSW, 2007



### President's report 2004

John Dunkley

In early 1997 Peter Berrill asked me if I would join the ASF Executive if he became President. That duly happened and over the following 8 years ASF managed to secure ownership of Helictite; take over the assets of the former Speleological Research Council Ltd; put the Karst Index Database project back on track: weather the insurance crisis: obtain registration as an Environmental Organisation and tax-deductible status for conservation donations: obtain, manage and acquit several government grants for conservation issues; obtain a successful outcome in the WA Mining Warden's Court regarding karst values of Cape Range; vastly improve the quality and regularity of what is now Caves Australia; get the 'Jennings' book finished; and greatly strengthen our financial position. There were difficult occasions, but it was a great pleasure to be President for 21/2 of those years, and 2004 was another wonderfully productive year with by far the most productive and harmonious Executive I have ever known.

Somewhere recently I announced rather self-indulgently that I had enjoyed every minute of being President. Jeanette later said that was a straight-out lie, that there were times I'd hated it. Well, fair enough — there were down-sides, maybe I'd forgotten! But as I once said in another context, I wouldn't have missed it for quids. It was one of the highlights of my life. Many thanks for the support of the ASF Executive and Council, and of members.

### ASF and cave conservation

Travelling widely as I have in the last few years, I continue to be astonished that in so many instances, unpaid volunteers among ASF's ranks throughout Australia manage to achieve more for cave conservation than salaried staff in many national parks and similar administrations. Paid staff, admittedly, have to ration scarce budgetary provisions among competing priorities, sometimes with little understanding of caves and karst, and they are frequently constrained in what they can say or do about important issues. In that sense the bureaucratisation of cave management has its disadvantages. In some eastern states particularly, protected area administrations continue to demonstrate that they are incapable of managing caves effectively. The need for a watchdog role by speleologists was seldom more evident than when attempts in 2004 to bulldoze the entrance of Anticline Cave at Wellington, NSW, almost succeeded, before the NSW Speleo Council fielded volunteers to put their back into stabilising it. Where would we be without volunteers then?

We underestimate our achievements, and probably most members don't even know the influence ASF has had nationally, but a public relations campaign since 2001 is now paying off

with land management authorities. Proportional to population, and probably to actual numbers of cavers, ASF is larger than NSS in the USA and larger than BCA in the UK. Indeed, on that basis we are probably the largest national body in the world.

Considering the nation-wide impact our conservation campaigns had on environmental law, politics and administration over nearly 40 years, speleologists have not received the recognition they deserve in chronicles of Australian environmental history. Many current members were not even born when some of these epic events made headlines, but for those involved, they were exciting, life-defining times. Kevin Kiernan and a team have commenced work on a major book. Our aim is to celebrate the flavour of the times and the reminiscences of the players, and set in context those astonishing achievements. It will be a fitting way to celebrate 50 remarkable years at the next ASF Conference in two years.

### Highlights of 2004

During 2004, individual membership was probably the highest we have ever had, and we welcomed Cavers Leeuwin Inc, our newest Corporate Member Club.

- ASF received the Brisbane City Council Award for Outstanding Achievement in our delivery of member services, achievements in cave conservation, and organisation generally
- Review of the ASF Awards system (led by Chris Bradley and Peter Berrill)
- Improvements in size, quality and regularity of Caves Australia (thanks to Joe Sydney and Geoff Crossley)
- ► Completion of Stage 2 of the web-based Karst Index Database project, enabling updating to commence (thanks to Mike Lake, who has driven the project for 6 years)

# Conservation and environmental issues organised by ASF and constituents:

- ➤ Sponsoring (with Greening Australia) of a Karst workshop in Perth, and another planned for 2005 (Jay Anderson)
- Closure of Mt Etna quarry at last ended a campaign lasting 42 years (CQSS)
- Cleanup of Anticline Cave at Wellington, NSW (Keir Vaughan-Taylor)
- ▶ Political and legal action in relation to Jenolan Caves Reserve Trust (NSW Speleo Council)
- Co-sponsoring of two international conference at Naracoorte: Limestone Coast 2004 and a workshop on RAMSAR Subterranean Wetlands,





papers from which will be published in Helictite (Elery Hamilton-Smith and Andy Spate)

- We made provision for Karst Conservancies and Special Interest Groups
- Management submissions on Kosciuszko, Gardens of Stone, Bungonia, and in WA

Some other remarkable achievements in 2004 in Australian speleology deserve special mention: Al Warild set a new world record depth in Abkhazia; Australia's longest cave reached 100km; SSS published a revised Wombeyan book; a great field book by Stephen Blanden on Caves of Gunns Plains (Tas) was published; the Encyclopedia of Caves And Karst, with considerable input by Australian authors, was published in New York.

### Special Interest Groups (SIGs) and karst conservancies

The 2004 Council Meeting unanimously endorsed a Cave Diving SIG open to all members of ASF, authorising the Group to apply for permits in ASF's name. Paul Hosie, Tim Payne, Peter Krahenbuehl and Bob Kershaw did a great deal of work on rules for SIGs, with the general principle that only Members of ASF are eligible. More work is needed before a final decision is made by the Executive. In effect, SIGs operate like a kind of permanent Commission and do not affect the existing club-based system of decision-making at ASF Council Meetings.

Late in 2004 we were approached by two groups seeking a form of recognition by ASF for their activities in cave research, monitoring, cleaning and rehabilitation. There are several others around Australia and an increase in their numbers seems likely. Some are organised by ASF members, others are sponsored by land managers. In general they operate independently of ASF and member clubs and ASF membership is not mandatory, but they seek some form of recognition from the national representative body. ASF needs a mechanism for dealing with these bodies, because clearly they have objectives that overlap our primary objectives relating to safeguarding and protecting the cave and karst environment of Australia, and mutual recognition would be desirable. The Executive recommends that we use the term Karst Conservancies, and establish some broad criteria.

### Insurance

The 4% increase in premium for 2005 was well within our contingency buffer and accordingly the premium

### **ASF News**

### New 2005\6 Executives

During the January 2005 Tasmanian Council meeting, some changes were made to the ASF Executive. The Executive welcomes ASF's first female President — Jay Anderson of WASG\SRGWA. A further warm welcomes is extended to Evelyn Taylor of RSS as a Vice President. John Dunkley steps down into the position of Senior Vice-President whilst all other members and positions remain unchanged.

### New editorial team for Caves Australia!

Winfried Weiss has taken on the role of Editor of Caves Australia Magazine whilst Susan White is our new Publications Commissioner! I'm sure that we'll see some great changes and direction in future issues!

was paid. We also obtained coverage for a few additional risks at no extra cost. While the need for insurance remains arguable, the crisis appears to be behind us and judging from news from other quarters, competitive pressures may result in a decline in premiums next year. In the UK, the British Caving Association has obtained lower premiums for noncaving members, and ASF should investigate this along with an "already-insured" category.

### Membership fees

As foreshadowed last year, we will be able to keep ASF membership fees unchanged for a third year. However the Council should discuss whether to foreshadow a slight increase in fees for 2006 as a contingency against further rises and/or to provide for inflation, or take a chance on premiums stabilising or declining.

### Publications, library and abstracts

Helictite: The positive image of speleology engendered through our ownership of Helictite greatly assists the ability of recreational members to go caving. Even if you do not have a strong interest in cave science, subscribe to Helictite for its cave reports and maps, and to lend credibility to your recreational interests.

Caves Australia: It looks much better because of the steady flow of articles and because we secured the services of a professional layout artist. Advertising has more than covered the additional cost and several issues have exceeded the budgeted 28-page limit.

Other publications: A team is working on a new, revised 3rd edition of the Wee Jasper book. A steering committee is also working on the cave conservation book foreshadowed in 2004. Key authors have been contacted, support generally is very strong and meetings will be held in Dover during the Conference to review progress.

Library, Archives and Abstracts: Greg Middleton coordinated Australian abstracts for the International Union of Speleology and abstracted a cupboard full of scarce and mostly unpublished management-related reports and submissions in the ASF Library, a list of which will be published in Caves Australia in 2005. Librarian Cathy Brown also again updated and shelved acquisitions.

### Membership

With membership strong, streamlining the membership register was a priority for 2004, and Jodie Rutledge obtained quotes, but should we review the sheer complexity of 22 (!) different membership categories before effort is expended on the necessary web-based system?

### International Congress of Speleology 2009

ASF has been approached to make a bid for the 2009 Congress, following our unsuccessful attempt for 2001. IUS Past President Julia James will speak on this at the Council Meeting.

### Cave leadership and risk management issues

What goes around, comes around. Some wonderfully productive work culminated a few years ago in wide recognition of ASF's widely acclaimed National

Leadership Scheme. External pressure subsided, risk management became flavour of the day, and the Scheme is perhaps under-utilised. Is it time to revisit both the Scheme itself, and our structure for handling these functions?

### Aboriginal sensitivities

Members should be aware that access to and publicity about caves and karst in northern Australia may raise important issues of aboriginal sensitivities. This is seldom a problem in south-eastern Australia. so when travelling north, members should not assume that similar relaxed procedures will apply.

### Representation

There is speleological representation on advisory committees at Mt Etna (Qld), Bungonia, mid-north Coast, Northern Tablelands and Wellington (NSW), Yanchep, City of Wanneroo and Leeuwin Naturaliste Region, (WA), Riveaux (Tas), and in Victoria. The Jenolan Caves Reserve Trust Board, three members of which had speleological experience, was replaced by an Administrator in February 2004. Megan Pryke will report on the failure of several meetings with him to resolve our concerns about long-term protection of Jenolan in particular.

### **Unresolved** issues

In NSW, legislation to abolish Jenolan Caves Reserve Trust was shelved when the government realised that it would be blocked in the Upper House. The ASF is monitoring this closely.

In Queensland, no-one appears to want responsibility for the now-closed quarry at Mt Etna. Although recent staff changes may assist, QNPWS has failed to honour its contractual obligations for the reopening to the public of Cammoo Cave. At its specific request, the ASF supported the Commonwealth Department of the Environment and Heritage, another party to the contract, in efforts to resolve this.

In WA the World Heritage nomination for Cape Range has been deferred for a year. The ASF strongly supports placing a Nullarbor nomination back on the agenda.

### And what about 2005?

The Executive recommends the following priorities for 2005:

- ► Make progress on the cave conservation book
- ▶ Update the Karst Index Database
- ▶ Plan for 50<sup>th</sup> Anniversary Conference in South Australia
- ► Continue representations, monitoring and seek a satisfactory outcome of the Jenolan issue
- ► Finalise operating procedures for Special Interest Groups, particularly for cave divers
- Forge working links with karst conservancies, and encourage further joint initiatives between ASF, clubs and like-minded organisations such as that undertaken in WA in 2004
- ► Complete revised 3<sup>rd</sup> edition of Wee Jasper book
- ► Streamline our membership and insurance structure and procedures
- Review the Cave Leadership standards
- Secure return to ASF of all ASF archival material

### CEGSA'S 50th Birthday Party

November 4th-6th 2005

Naracoorte — South Australia

All Welcome especially past members. Come along for a weekend of caving, partying, reminiscing and celebrating. Caving on Saturday around Naracoorte BBQ dinner Saturday Night. And for those still with a desire or energy, caving on Sunday.

Cost of BBQ Dinner — \$15 per adult, children under 10 — \$10. BYO Drinks. Share Bunk Bed Accommodation available at Wirreanda (that's Naracoorte Caves Accommodation) at \$10 a bed per night or camp sites available for \$5 per person per night.

Camp kitchen available with cooking utensils, cutlery, plates, stoves and microwaves. Only two fridges available so you will need to bring eskies. Accommodation will be available from Friday night.

Should you require private accommodation, Naracoorte has a range of accommodation available, but you need to make your own arrangements.

Dinner fees must be paid in full by October 15th (NON REFUNDABLE). Accommodation Deposits (\$5) to secure a bed must be paid at the same time. For more info & registration forms contact Marie Choi on or better still email me at

### **Environmental Fund** by John Dunkley

The Environmental Fund (or "Gift Fund") is registered by the Australian Taxation Office and the Commonwealth Department of the Environment and Heritage as a Registered Deductible Gift Recipient, meaning that donations are tax-deductible. It is managed by five Directors appointed by the Executive, and is constitutionally part of and therefore accountable to ASF, but otherwise ATO rules require it to be managed largely autonomously.

The driving force behind the Environmental Fund, Peter Berrill was very ill in 2004, requiring hip replacement surgery with a second one scheduled early in 2005. Additionally, the President was overseas for two lengthy periods as well. Accordingly, work on administrative procedures for operating the Fund has not been finalised. A draft has been prepared for discussion at a meeting in Hobart in January. Donations to the Fund increased steadily and the first approach was made for assistance with an environmental issue. The Fund is now in a much stronger financial position, and the ASF looks forward to being able to use it effectively to support conservation projects.

### **AUSTRALIAN CAVER FIRE SALE!** 50¢ EACH

To make room for storage of future issues, we are offering a 'fire sale' of a selected range of back issues.

Be quick to ensure you don't miss out on this opportunity to gain your piece of Australian Speleological history. Available back issues commence from No.52. This offer now includes some rare issues!

Issues on 'fire sale': 52, 53, 54, 58, 59, 60, 62, 63, 65, 66, 67, 68, 72, 73, 75, 76, 77, 78, 79, 80, 81, 82,

Sorry, sold out! 55, 57, 61, 70, 71, 74

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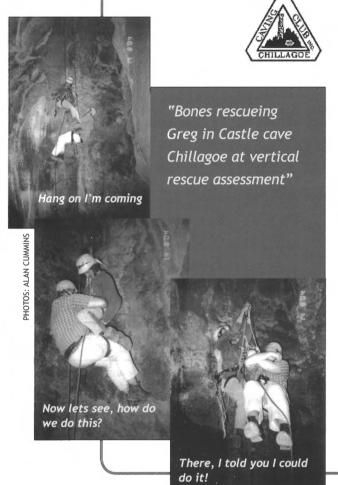
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Under 10 magazines add \$2 10 to 20 Magazines add \$5 21 or more add \$10.



NEWSLETTER Spring, 1975 No.

Caves Australia No. 165 7



### Chillagoe Caving Club provides some background into what's happening to recognised training standards in Queensland.

ARE YOU OUALLIFIED?

I'VE BEEN CAVING FOR 40 YEARS!! Yes, but what can you do, how well do you do it, proof for insurance, litigation, etc. etc.

Well three to four years ago, after many years of drafts, re-drafts, passing around Clubs, suggestions, (not to mention disagreements, I remember one meeting at Chillagoe, 14 attending for a full day of discussing Trip Leaders, all terminated after discussion on "what is vertical"!!!), there appeared a "National training package" on caving.

Now once you have the training package, you need people to teach & people to assess — but no-one was "qualified" !!! About this time I went caving with Tim from Outdoor Recreation at TAFE. Tim saw the possibilities and discussed with me my being the "first" to be qualified. After three years of meetings, paperwork on Tim & his colleague's part & TAFE courses, (Workplace trainer & assessor) on my part it was ready to happen. Finally my qualifications arrived & then my paperwork started. With help from others we at last produced the necessary "Assessment Tools" that is paperwork, checklists etc.

All that done, ready for action. There are now ten, plus myself, (all members of Chillagoe Caving Club) with TAFE issued national qualifications in Caving.

From SROCVE001A: Move through a cave with minimal impact. To SROCVE024A: Instruct vertical caving skills (multi pitch).

Yes it is hard work, but we need to keep up with the times, even if we can "go underground" whenever we like! If you want to know more you can contact me at

> Alan Cummins (President Chillagoe Caving Club)



### 10th Conference on Australasian Vertebrate Evolution Palaeontology and Systematics (CAVEPS) and Quaternary Extinctions Symposium

Naracoorte, South Australia, AUSTRALIA March 29th to April 2nd 2005. The 10th CAVEPS will be held at the World Heritage listed Naracoorte Caves National Park and nearby Naracoorte township, approximately 340 km SE of Adelaide (capital city of South Australia), in the Limestone Coast region of South Australia.

CAVEPS is a biennial meeting of Australasian vertebrate palaeontologists. CAVEPS 2005 will consist of three days of general sessions including papers on all aspects of vertebrate palaeontology, followed by a two day symposium which will focus on Quaternary extinctions and dating applications.

Included in the general sessions will be a special session Devonian fish and a session on cave palaeontology which will be held in the historic Blanche Cave. In addition to the main sessions, a student forum will be held where students can present their project proposals or work in progress and benefit from professional input.

### Web site

All circulars will be posted on the Naracoorte Caves website along with registration forms and other relevant information. Please go to http://www.environment.sa.gov.au/parks/naracoorte/ events.html. The URL http://www.naracoortecaves.sa.gov.au is also in operation as an alternative address.

### \*\*NEW SESSION\*\*

"Exceptionally preserved Devonian fish faunas of East Gondwana - faunal context for tetrapod origins". Convenors: Dr Gavin Young & Dr John Long

### TENISON-WOODS Cave palaeontology session

The Naracoorte Caves National Park is a World Heritage listed fossil site, so it is appropriate that a session deals specifically with cave deposits.

### **Quaternary Extinctions Symposium**

A two day thematic symposium exploring Quaternary extinctions will follow the general and cave sessions.

This posting provides only a brief summary of the final circular. For full details regarding CAVEPS 2005 and the Extinctions Symposium please go to http://www.environment.sa.gov.au/ parks/naracoorte/events.html where the complete final circular, registration form and other important documents are available for download

Contact:

Liz Reed:

### Formal postal address:

CAVEPS 2005

c/- Naracoorte Caves National Park, PO Box 134, Naracoorte South Australia 5271, Australia Phone: +61 (08) 8762 3412

### Lucas lights 'switched off' naturally! (Jenolan, NSW)

Electric lighting of caves goes back a long way with Chifley cave at Jenolan being amongst world's first (1880). 14 years later in 1894, Lucas Cave was added to the fast growing list.

In 2004, one of Jenolan's most popular tourist caves

— Lucas Cave, underwent a major refit incorporating new
energy efficient globes with improved electronics. Tourists and
cavers have been awed at seeing caves in such new lighting.



Recent storms have put a temporary halt on the showing of Lucas Caves due to a lightning strike at the top of caves. This strike seems to have affected the electronics of the system and had electricians frantically trying to fix the problem. In the meantime, this gem of a cave was closed until repairs could be made. Lucas Cave was closed for a short period and re-opened on 7 Feb!

## Another two great issues of ACKMA now available

Dec Issue 2004

- New Zealand Conference Update
- Limestone Coast Workshop 2004
- Two New Show Caves at Waitomo!
- West Coast, South Island, NZ Karst Evolution
- Fig Tree Cave Re-discovery at Wombeyan Caves
- A Lighting for Darkness Postcard
- Environmental Education
- Lucas Cave Upgrade Officially Opened
- Wombeyan Caves Book Launch & SSS 50th Anniversary

### March Issue 2005

- March issue of ACKMA journal contents:
- Best Management Practices in Canada
- Earthquakes and Caves
- Managing an Artificially Built Glowworm Cave
- David Attenborough at Waitomo
- Fire on Karst at Yanchep Caves
- ASF Conference in Tasmania
- Old Bones, New Insights at Naracoote Caves
- Sannur Cave in Egypt
- Buchan Revisited

For more information about ACKMA, please visit:

http://www.ackma.org

### Cavers win ACKMA award!

It was announced on 7 Feb that ASF and ACKMA members Tim Moulds and Serena Benjamin have both won the 'funded attendance award for students' to attend the 16th ACKMA Conference in New Zealand.



Tim Moulds (University of Adelaide) submitted his paper on Guanophilic Arthropod Ecology and Conservation in Caves whilst Serena Benjamin (University of Tasmania) submitted her paper on Management of Agricultural Activities in Karst Environments: A Case Study of the Gunns Plains Karst.

ASF congratulates both Tim and Serena on such a fine achievement!

# Australian cave diver dies in attempt to recover body!

Dave Shaw died from carbon dioxide black-out! A post mortem has concluded that an excessive



build-up of carbon dioxide caused the black-out and death of rebreather diver Dave Shaw. The Australian died deep in a cave while trying to raise the body of another diver.

Shaw, 51, was trying to recover the body of Deon Dreyer, a 20-year-old who disappeared while diving in South Africa's inland Boesmansgat Cave in 1994. The operation was carried out at 270m — far deeper than any previously attempted working dive, outside commercial dives using recompression bells.

In addition to a bodily examination, Shaw's equipment was inspected and his gas mixtures analysed. Investigators even re-enacted his breathing patterns, based on footage from Shaw's video camera. This showed that his breathing became increasingly laboured before stopping.

It was seen that Shaw started work to free Dreyer's body but, as pre-arranged, aborted the effort when he had not succeeded after six minutes. Ascending, he became entangled in the line previously used to mark the body. While attempting to free himself, he stopped breathing about 22 minutes into the dive.

The forensic report has been published by the International Association of Nitrox and Technical Divers.

"Overfilling of his re-breather appears to have prevented him from exhaling properly," the report states. "The breathing impairment, combined with the increased activity of recovering the body, led to a critical build-up of carbon dioxide over a period of 10 minutes. This is sometimes called "deep-water black-out".

"David became increasingly incapacitated, eventually lost consciousness and ultimately drowned. While relatively swift, the duration of the process favours carbon dioxide build-up as a cause rather than a lack of oxygen."

The report adds that an element of nitrogen narcosis may have "significantly interfered with his ability to solve the problem before it was too late".

"Calculations suggest that he may have experienced the narcotic equivalent of a 44m dive on air, but this would have been compounded significantly as the carbon dioxide levels rose," it says.

Source: Divernet News.



### **Southern Tasmanian Cavers farewell Stu**

Stuart Nicholas (17.7.1954 - 14.4.2005)

For those of you who knew him.

Stuart Nicholas passed away this week aged 50. Stuart was a very keen and inspirational caver in the late sixties, throughout the seventies and into the early eighties. He was instrumental in many of the deep cave discoveries in Tasmania which occurred at the time, including Khazad-dum when he was a mere schoolboy! He endured many long, cold, wet caving trips despite being an insulin dependent diabetic for almost his whole life.

Stuart was a maintenance service engineer by default and entered the world of computing at the very ground floor. With the rise of the throw away society he found it increasingly difficult to survive as a maintenance engineer and began trading shares for a living. Nervertheless there wasn't a piece of technology old or new that Stuart didn't know how to fix or it worked. Despite

lacking any formal qualifications, he was an extraordinary man in this respect.

Stuart was the TCC quartermaster for ages and was invaluable for making and fixing things. Stuart was one of the few persons in Australia to launch caving into the computer age. All the cave survey data was crunched at his place on the SMAPS program which made Rupert Ave a hub for caving. He guit caving in the mid nineties when THE Tasmanian Caverneering Club amalgamated with the other Hobart clubs to form the Southern Tasmanian Caverneers.

"But we've lost the name!" "Stuee it's only a name?"

"NO. The name is everything! We are THE Tasmanian Caverneering Club!" He always emphasised the THE.

Stuart was the TCC representative at ASF. He attended the 1969 Conference, was Convenor of the 1984 Conference and he gave me good advice for CaveMania 2005. As well as this he had numerous other

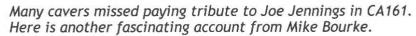
strings to his bow, most of which he kept quiet about. He was very shy and modest. At some stage he was Tasmanian Rally Car Champion (sometime? about three years in a row? I think? I never knew for sure.)

Stuart was my first friend in Tassy. He never really made close friends but he was a good and reliable friend to a lot of people. He was a fifth generation Australian, his ancestors having arrived in Tasmania in 1823(?) from Wales. His family survives by two cousins.

At one stage I thought "If Stuee goes who'll fix all the old cars?" These days no-one fixes old cars. It is now a matter of who'll debug the computer that no-one else is able to, explain mobile phones, internet banking security, antivirus codes, Mars missions and GPS scramblers? We will miss him.

Bye, Stephen Bunton - STC

### CONTINUING TRIBUTES TO JOE JENNINGS.





### Joe Jennings in Papua New Guinea.

Mike Bourke, Canberra Speleological Society, Canberra

Here are some stories from Joe's work in PNG. The sources are Mr John McAlpine, formerly of CSIRO Canberra and now semi-retired and living in Brisbane; and Professor Jack Golson, an emeritus professor at the Australian National University and a noted archaeologist who was a contemporary of Joe at the ANU. John did fieldwork with Joe in 1960 and again in 1961. Jack did not do field work with Joe in PNG, but he heard his stories and heard of him from expatriates in PNG.

Joe visited PNG on a number of occasions in the late 1950s. He took part in two of the CSIRO Resource Surveys in the PNG highlands. The first was the Wabaq-Tari Resource survey in what is now Enga and Southern Highlands Province. He joined the CSIRO party for 3-4 weeks in the field (they were in the field for some months). Joe took part in a major walking patrol from Wabag to Porgera (site of the present day gold mine). From the township of Wabag, they walked to Laiagam (over the Sirunki Plateau at 2700 m), to

Kandep (2300 m), to the Wage River, west from there into uninhabited country in the headwaters of the Andabare River, to Tibinini, and to Porgera.

The walk through the high country of the Andabare River headwaters is demanding and it is cold and wet country, but the scenery is magnificent and it is stunning country. The lowest point on this section of the walk is 3400 m above sea level — the hills and mountains are higher! It was in this area that Joe took the photo of the Andabare River which passes through a limestone hill. The photo is published on page 62 of his book "Karst" (where the name is spelt as Angabara).

As always on his PNG trips, Joe was always looking for limestone and caves and managed to divert the CSIRO party towards that noble cause. Other photos from that trip published in "Karst" show the Lagaip River emerging from a cave near Kepilam (page 76) and an aerial shot of the extraordinary arete and doline karst on Mt Kaijende, near Porgera (page 194), both in modern-day Enga Province.

The following year (1961) Joe joined the CSIRO team again for the field survey in the Southern Highlands. He took part in a 10-day walking traverse from Kagua to Lake Kutubu. This route took the party over the infamous limestone

"broken bottle" country. This country was named by the first European explorers who went there from 1910 onwards. The first European visitors were prospectors, government staff, and a rescue mission sent out to find an overdue party led by a senior Australian Administration official.

The country consists of a limestone surface which resembles a field of broken bottles. Navigation is difficult as it involves placing one's boot in the soil-filled crevices between the limestone pinnacles. This is awkward and slow for able-bodied people. But for Joe it was a nightmare as his chronic knee problem did not allow him to do this freely, making the trip extremely difficult. Joe told Jack Golson that, to get over the "broken bottle" limestone, the party resorted to crawling over the vegetation where there was some low vegetation

Joe had a reputation in PNG for being an very hard walker. Jack Golson recalls a visit to the Catholic Mission at Pureni, near Tari in the Southern Highlands where Jack met a priest with a reputation as being the hardest walker amongst all the white folk. But the priest said that the academic from ANU who was interested in the karst and caves was even tougher than he was.

### **Bungonia runs fowl of sand mine?**

A recent proposal to commence a large poultry farm on the outskirts of Bungonia was recently quashed by Mulwaree Shire Council. Not long after this failed venture, a recent DA lodged at NSW DIPNR shows that the same owners have submitted a proposal for a sand and rock quarry about 4.5kms south of Bungonia Village.

Operations of this magnitude consume mega litres of water per day for washing and grading sand. The proposal is to use local ground water which may impact on the surrounding water table and also affect Bungonia caves!

The operation also includes the transportation of the sand via a major trucking route planned between the site and highway via the tiny township of Bungonia.



School bus on Bungonia village bridge. Will trucks affect their safety?

### The Cave — the movie!

'There are places that man should never go... if you ever want to see the sun again, follow me now!"

With such a classic one liner this could be Hollywood's ultimate caving horror flick yet! 'The Cave' will hit our screens in 2005. It has everything that a caver ever dreamed of in finding, ropework, water, caverns, tight passages, babes & hunks and an evil nasty that eats cavers!

So what's it all about? "A rescue team is sent down into the world's largest cave system to try to find the spelunkers who first explored its depths. But when the group's escape route is cut off, they are hunted by the monstrous creatures that live down below the original spelunkers that have all mysteriously

mutated into primeval beings." Can't wait for the movie to open!

(Joe: Now we know what Fox Studios were working on in 2003. The secret production mentioned at the 2003 NSW caver's dinner!)





Eddie Cibrian in Screen Gems 'The Cave'

### Membership of the Australian Speleological Federation — What does it mean?

The federation is a nationwide group of caving clubs and individuals who adhere to similar high standards of behaviour while caving and consider karst landscapes to have a high conservation value.

To be an ASF member you must adhere to a number of codes and guidelines that have been developed and adopted over many years at the annual ASF council meetings. These include the Minimal Impact Caving Code, Code of Ethics and the ASF Safety Guidelines. The ASF council is a representation of all of the member caving clubs. All member caving clubs are required to appoint councillors and must attend or send proxy representation to all council meetings. Basically the Council meeting is an ASF Annual General Meeting where a club is represented by their councillor. The intention is that the rules and direction of the ASF be governed by the ASF council, which is in effect all member clubs.

An individual member of a Corporate Club or a Provisional Member Club is automatically, an individual member of ASF. As a Federation ASF relies on the Member clubs to uphold the high standards of caving that have been already developed by the Federation and instil these into their individual members.

Individual ASF membership can also be granted by the ASF executive, outside this club framework. While it is difficult in some cases to assess an applicant who is sometimes not known to the current executive members, the executive do investigate such applications thoroughly, including consulting referees, and admission is granted only when the executive are satisfied that the applicant will uphold the same high standards.

In recent times Individual Memberships granted by the ASF executive have increased. Historically there had ever only been a few ASF Individual members. The ASF now has around 25 such members. With this increase there has been a little confusion as to what 'rights' Individual ASF members have. For example I have been asked on a number of occasions, "Can an Individual Member apply for a cave permit?"

ASF membership either through a club or through the ASF executive does not automatically confer rights to cave access on any property or to permit approvals. This is completely the prerogative of the land manager alone.

The other difference between Individual membership 'through a club' versus 'outside a club' is that outside a club the member does not have voting rights at the ASF council meeting. While within a club the member can formulate viewpoints that the club councillor can bring to the council meeting. An individual member outside a club is not part of such a framework in which to voice opinions. However all members can attend and engage in discussions at the council meetings regardless of whether or not they are a member of a club.

The issue of Individual Membership granted outside clubs has been a topic of discussion lately. There is an argument for preferring that individuals join ASF through a Corporate or Provisional Member Club rather than outside club frameworks. The member has better access to club training and leadership opportunities, a club activity list and has better opportunities to share knowledge with other members. These members also benefit from great social opportunities with like-minded people!

Nevertheless, there are some people who are not able to or do not wish to join the ASF via a Club for various reasons such as their geographically location or the nature of their employment. While the ASF constitution allows for members to be accepted outside club frameworks, the ASF executive will continue to adhere to these rules and do their best in assessing applicants to the high standards we hold.

If anyone has further questions about ASF membership please forwarded them to myself at jodie@rutco.com.au.

> Jodie Rutledge ASF Membership Secretary

### NHVSS receives government funding for Timor Caves Project

Jodie Rutledge, President NHVSS



I am pleased to report that the Newcastle & Hunter Valley Speleological Society Inc has been successful in obtaining a \$17,159 Environmental Trust grant (Environmental Education program) to undertake a documentation project at the Timor Caves in the NSW Hunter Valley. The Environmental Trust's Environmental Education program, funds projects that encourages the community to gain greater knowledge about their environment as well as promoting responsible attitudes and behaviours towards protecting and enhancing the environment.

Our members will be spending the next two years documenting the Timor Karst and caves, and adding to the published works already carried out over the last 30 years by the Sydney Speleological Society and more recently by the Hills Speleological Club. We aim to publish a book in two years from now. This book will document the Karst, and will contain many resurveyed maps of the caves. More importantly the book is planned to be a resource for local governments and other stakeholders of the Timor reserve that interprets cave processes and highlights the importance of cave conservation.

The funds we are receiving will be spent mostly on the book production itself. We also have funds to spend on consultancies, travel costs and hire of equipment needed to conduct our cave

### 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.

Environmental

TRUST

### 2005 Field Trip list

9/10th April

21/22nd May

9/10th July 23/24th July

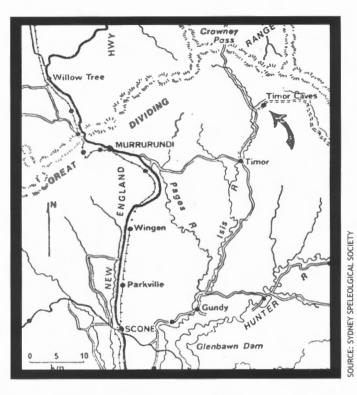
6/7th August

17/18th September

15th to 23rd October (week long field trip)

12/13th November

This two year project was made possible through the State Governments Environmental Trust: Reimbursement of some fuel costs will be offered to participants. For more information or to participate please contact the project manager Jodie Rutledge on



Background:

The caves have been known by the local community since the mid 1800's and up until 1984 it was classed as a water reserve. In 1970 the local council considered running a commercial operation at Timor and the matter was referred to the Sydney Speleological Society via the NSW Department of Tourism. After three years of investigations SSS in early 1974 presented a detailed report to the Murrurundi Shire Council and recommended not to develop the caves to the same extent as other karst reserves around the state (James et al., 1976). The report has since been used as the primary resource by all interested. The publication is now out of print and the society is hesitant to reprint it as some cave descriptions are out of date and the number of known tagged caves has increased to 53.

In 1984 other 'lots' were added and the reserve was reclassified as a "Reserve for the Protection of Caves". So currently the reserve is made up of six lots of land.

In recent times some attempts have been made to form a Community Trust to oversee the Caves Reserve. This process has been slow and the ASF Membership will be kept up to date when this progresses.

### Location:

The Timor Karst area lies in the Upper Hunter Valley 24km East-North-East of Murrurundi.

### More information:

If you have anything to contribute or would like more information please email the project manager Jodie Rutledge at

James, J.M. et al. (1976): Timor Caves. Sydney Speleological Society Occasional Paper No.6, Broadway, NSW, 50pp.

### Recent Canberra Speleological Society activities

During February 2005, the Canberra Speleological Society Inc (CSS) worked with cave managers to continue cave cleaning projects at Cotter Cave in the ACT and in the tourist area at Yarrangobilly

At Yarrangobilly, a small but determined team spent a day and a half on several cleaning tasks in Glory Hole Cave before moving on to the Saddle Creek valley to pick up rubbish.

Glory Hole Cave is a self-guided tourist cave and so it is not surprising that it needs a bit of a clean every now and then. Small amounts of dirt get tracked in on the feet of its many visitors and lampenflora is quick to establish around the track and feature lighting that may be in use for long periods each day.

The National Parks and Wildlife Service now undertakes a regular lampenflora control program. This program, combined with remedial action to address lighting levels (eg lower wattage bulbs, lamp placement and direction), ensured the task faced by CSS was not too demanding. Nevertheless, the team had to check all lights in the cave and, where necessary, apply control measures.

The build-up of dirt, essentially mud and organic matter, was most noticeable along the first 60m of passage from the entrance gate. Dirt accumulates in small depressions in the pathway and gets washed onto surrounding areas of rock and flowstone. Using low tech but effective equipment (buckets, trowels, scrubbing brushes and cave water) we scooped, scrubbed and washed. In the process we collected an estimated 40kg of mud, which was removed from the cave.

At one point, a couple of team members, including the Caves Manager, wandered outside for a brief rest and somehow started pulling exotic weeds (mainly Hypericum sp and blackberry) on the breakdown pile in the entrance area. Some 90 minutes later, they had cleared about one-third of the area. We understand local staff members have since continued this work.

In the Saddle Creek area, the party picked up about 25kg of glass fragments and the remains of steel and aluminium cans that were scattered along the roadside and amongst the vegetation.

CSS has also been working with the ACT Government in an effort to improve management of the Cotter Caves, just outside Canberra. The area has not been actively managed for some time and was then badly affected in the January 2003 bushfires. In fact, fire severely damaged a wooden platform and stairway inside the entrance to the main cave. The Government is now focussing on the area as part of it bushfire recovery initiatives.

The initiatives already implemented in the Cotter River area include new picnic facilities, interpretive signs and a walking trail to the karst. At a later date, the walking trail will be extended onto the karst and CSS has successfully argued that the work should be expanded to include the construction of a less



Marjorie Coggan and Rosemary Nicholson track cleaning in Glory Hole Cave, Yarrangobilly.



Peter Bell attacking lampenflora. Glory Hole Cave. Yarrangobilly.

obtrusive and more bat-friendly entrance structure for the main cave. If all goes according to plan, this will result in the installation of a simple viewing platform and safety rail to replace the existing massive but ineffective metal barrier/ gate and the damaged platform and steps. In other words, visitors will be afforded an unimpeded view down into the cave, rather than be confronted with a massive metal barrier with a heavy wooden platform beyond.

In mid February, CSS helped to implement the first stage of the cave works. A team of eight members worked with a chainsaw-wielding ranger to remove the remains of the wooden platform and stairs. With some difficulty several team members also pulled out the handrails and posts that lead further down into the cave. While this was going on, other team members collected a huge pile of broken bottles, beer cans, pieces of wood, candle remains, dozens of used sparklers and a variety of homemade smoking 'appliances'. It must have been some party!

> John Brush Canberra Speleological Society

# 14 | www.caves.org.au

### The many aspects of speleo art

Artists taking part in the 4<sup>th</sup> International Cave Art Exhibition during the 25<sup>th</sup> Biennial Conference of the Australian Speleological Federation, Dover, Tasmania.

June MacLucas

By now most cavers who attend the Australian Speleological Conferences have become familiar with the speleo art exhibitions that have become part of the conference since 1999. However, there are many sides to speleo art and artists besides exhibiting the finished work that few of you have heard about. Let me share with you a few snippets of interesting stories gathered from the artists exhibiting in the 4<sup>th</sup> International Cave Art Exhibition held earlier this year at Dover, Tasmania.

For a start, Robin Gray of Cheddar, Great Britain, a founding member of ISSA (International Society of Speleological Art) has participated in all four of ASF Speleo Art Exhibitions and has sold many artworks during our previous ASF exhibitions. Robin, who lost an eye while chipping a stone in a cave is an accomplished artist in various fields of interest. He also organises and takes part in many 'drawing on the spot' workshops in various English and European caves. You don't have to look long or hard at his work to realise that it has been carried out with skill and speed while on the run through a cave. Not an easy task in their very damp, wet and humid caves where all paper has to be carried sealed in plastic bags and the different mediums, especially pencils, most often refuse to mark the damp paper.

Although Australia has its own wet caves, I have drawn in but a few. The Nullarbor is where I do most of my 'on the spot' charcoals and pastels. One such memory was my first chance to paint on small boards deep inside a cave. This was Purple Goringe Cave, on Mundrabilla station in Western Australia. I took in a gas light then setup my board, easel, paints and brushes. I was relatively new to caving and was left completely on my own to get on with it while Max Meth, Graham Pilkington and George MacLucas, had moved further into the cave to continue their exploration and surveying. After several hours I became well aware of the silence, it was heart stopping. Then I heard noises as stalactites fell one at a time from the ceiling, hit the ground and rolled along, just like a glass coke bottle rolling down to the front of a picture theatre. I looked up and there were thousands of various sized stalactites shaped spears, ancient, dead and decayed hanging over my head. Then I heard voices coming from under me, I thought I was on solid ground and suddenly I realised I was standing on the other side of a ceiling. That was it, I was terrified and I could not get out of the cave quick enough. After this experience I have endured many other incidents from freezing to a standstill through standing too long painting in Abercrombie Arch water filled tunnel in New South Wales, to scorching beyond repair my near completed artwork as I bent over while wearing a carbide lamp to search amongst my pastels laid out on the ground in Thampanna Cave on the Nullarbor.

Other interesting tales come from Brent Fraser of Dover, Tasmania — exhibiting with us for the first time, two wonderful digitally enhanced photographs

of ice caves. Brent smiles when he relates the tale of how he came by these great photographs. The story goes that recently while on an expedition to the Antarctica, Brent along with others travelled the icy surface all riding three wheeled skidoos, or motorised toboggans, when they came upon a great find. They discovered one of the icebergs had developed a huge cave. They immediately set about exploring inside this cave while taking several photographs. They decided to hurry back to the station camp to tell others of their spectacular find, only to return shortly to discover that this huge cave had completely collapsed with mountainous clumps of ice lying where they had recently been taking photographs. Needless to say, they narrowly escaped with their lives.

This last exhibition in Dover was full of surprises including a private preview visit of the artworks by the Governor of Tasmania The Hon. William J.E. Cox and Mrs Cox, accompanied by their aide de camp (Steve de Haan). His Excellency viewed and commented on all the art works, mentioning that although he admired our tenacity, unfortunately caving was not for him. Other surprises appeared with local cavers exhibiting their hidden talents for the first time. Arthur Clarke, a reluctant participant at first, exhibited two confident early pen and watercolour artworks completed back in the 70's. and an artistic photograph of a Chinese cave scorpion. Robyn Claire also a hesitant exhibitor, presented a delightful embroidered cushion, depicting a Tasmanian cave spider and Steve Bunton's artwork circulated Dover in the form of a poster. Since the exhibition, Robyn Claire reports that she has since completed several other similar works selling them in a local gift shop. This is wonderful news, through the sale of her art work which sold at the exhibition in the first five minutes, Robyn has gained a sense of self confidence and Arthur plans to exhibit more of his artistic photography in the next ASF Conference.

Another welcoming surprise in this exhibition was the work of Ian Ellis Chandler a member of ISSA now living in Spain. This is Ian's third time he has exhibited with us but in this exhibition his work has shown tremendous growth by amalgamating his talents. Ian combined his sculptural work along with his love of poetry to produce four interesting and delightful works.

There were other artists in the exhibition that exhibited interesting and successful artworks. Coral Thompson of Western Australia, sold her two oil paintings one depicting the cave used as a hideout of the legendary Aboriginal warrior Sandamarra, an ex-police tracker who became an outlaw in the Kimberleys in the 1890's. Coral claims she is not a caver, but since she was approached by the organizers of the Bunbury ASF Conference exhibition, she has delighted in painting caves entrances wherever her travels take her.

Each exhibition brings in a new group of artists such as, Rosemary Balister from USA, her mother

came from South Australia. Brigid Larkin a young caver from Mt. Gambier included five works, and Marjorie Winning, Robyn Claire's mother, an octogenarian now living in Queensland, paints from a wheelchair. Local artists are always encouraged to join us, Howard Whitehead exhibited seven pieces of beautiful silver jewellery and Meryl Moscrop set up a beautifully captured view of rocks, water and caves of Hastings, set to music and verse in a video called "Soperifica".

The 4th International Cave Art Exhibition could be considered successful, exhibiting 89 pieces of artwork contributed by 14 artists that included three from overseas, five from around Australia and six local artists from Dover. Altogether selling 19 works during the five days of the exhibition.

Many thanks must go to various people for undertaking many tasks. First, Adrienne Eberhard an accomplished Tasmanian novelist and poet opened the exhibition, giving an enlightening speech with a rendition of her poetry. Jenny Robson, a guide from Hastings Caves entertained us with a delightful melody of a locally composed song of the epic construction of the road to Hastings Cave during the depression. Special thanks must go to Robyn Claire who baked delightful sweet meats to be served at the opening along with various donations from Pale ales by Cascade Brewery, CaveMania 2005 "Limestone Coast" wines, fruit and flower wines from the local Bates Creek Winery, and fresh cherries donated by the local orchard of Bruce Morrisby. Add to this list, our thanks for the varied selection of pizza from the nearby wood-fired pizza restaurant — all wonderful tastes to the palate. Our thanks must also go to Jane Thiele, Caroline Amos, Wren Fraser Cameron, Denise Young, Howard Whitehead and his daughter, all members of the Far South Regional Art Group who carried out a tremendous job serving drinks and food to at least 100 cavers and visitors that attended the opening. Special thanks must go to Steve Bunton and Arthur Clarke, especially for all the assistance in organising this exhibition. Each year the exhibition has grown, but this year the layout, support and effort carried out by the above mentioned people was truly outstanding.

Once the exhibition was under way, the gallery needed to be staffed on a roster basis so all had a chance to undertake the various lectures available at the local nearby high school. Thanks must go to Robyn Claire, Brent Fraser, Julia James, Grace Matts, Rhonwen Pierce, Jodie Rutledge, Meryl Moscrop, Howard Whitehead and June and George MacLucas. My special thanks must go to my husband George, without whom all would have been considerably more difficult.

Call for 2007 art submissions!

The next exhibition, the 5<sup>th</sup> International Cave Art, will be part of the 26<sup>th</sup> Biennial Conference of the Australian Speleological Federation and will be held in 2007 at Mt. Gambier. Due to the enormous interest



Adrienne Eberhard addressed the opening of the 4th International Cave Art Exhibition at Dover Gallery, Dover, January 3rd 2005.

shown towards the cave photography competition and the art exhibition itself, it seems apparent that there is a need to amalgamate and include artistic digitally enhanced photographs as part of the 5<sup>th</sup> International Speleo Art Exhibition. Therefore, ladies and gentlemen, set your pace and start working on your art work be it painting, drawing, sculpture, craft or photographic images. If it's to be photographs, I will need to select from your slides and/or prints for the 2007 exhibition. You can contact me on 08 8261 4180 or email junemacl@senet.com.au.

### 2005 Caving Calendars

2005 caving calendars will soon be available.

A new selection of 12 stunning images plus the title page once again takes you on an enchanting subterranean journey to caves around the world. This year's destinations include Austria, Switzerland, Germany, USA, France, Slovenia, Mexico, Spain and Borneo.

Makes a great gift. Get your copies now, for you and your friends!

Donations of \$30 or more and we'll give you a 2005 calendar and a past
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Send cheque\money order (with name and address) to:



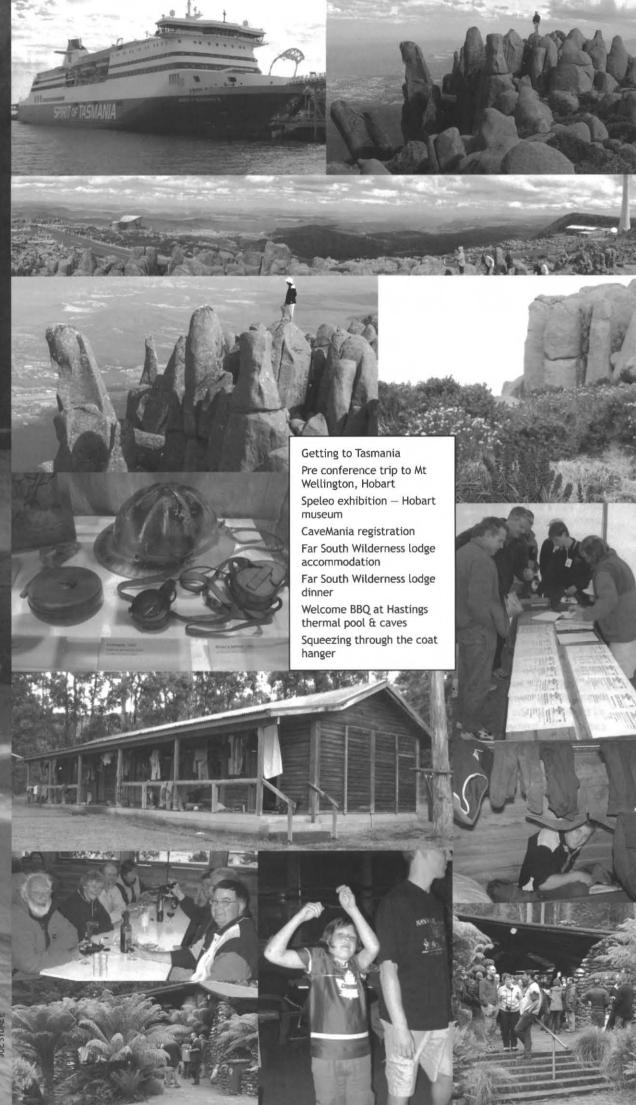
Caves Australia No. 165 | 15

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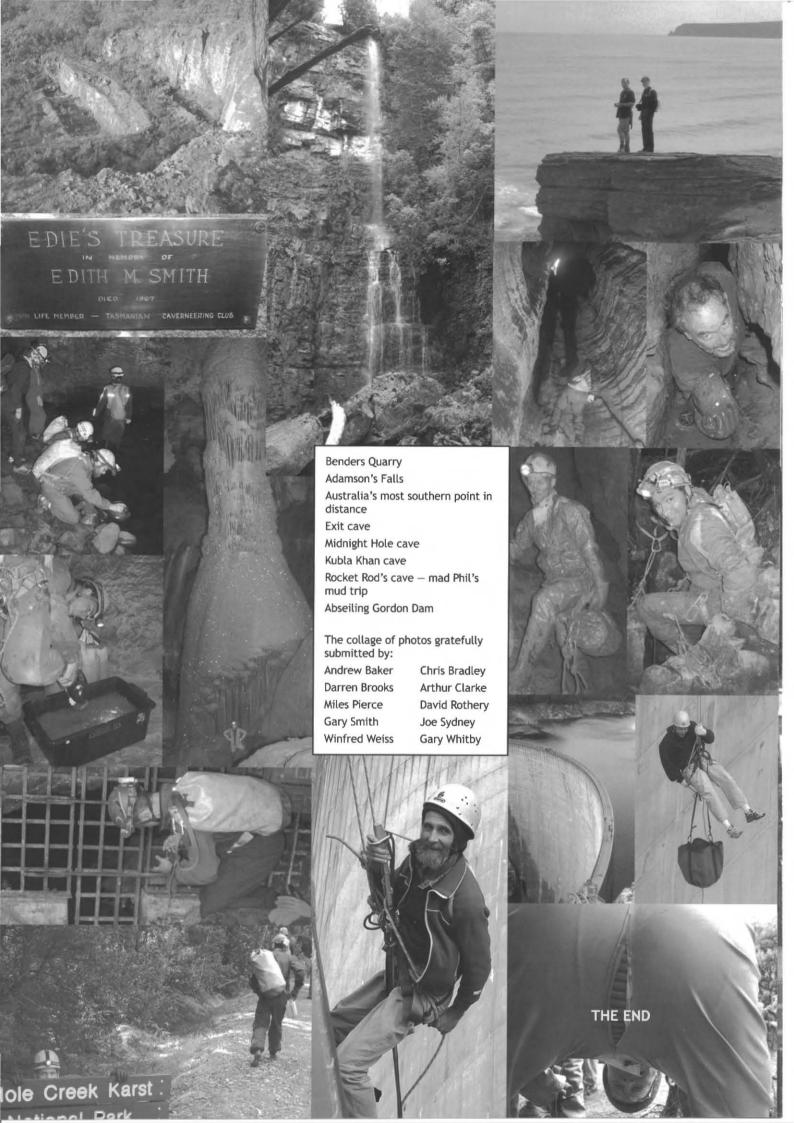
Limited offer!













ENTRANCES
Print: Brent Fraser — An Ice Cave



Slide: Norm Poulter - Talia Sea Cave



Digital: Ross Anderson - Window Cave



**Passages** 



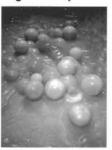
Print: Garry Smith — Pleasure Dome Wall Slide: Norm Poulter — White Chamber, Ngilgi Cave Digital: Garry Smith — Croesus Cave



Cave Deco Print: Arthur Clarke — Stalactites



Slide: Norm Poulter - Halite Filigree



Digital: Gary Whitby - Mothers of Pearl



Scientific



Print: Arthur Clarke - Asilid Fly on Fungus Slide: Norm Poulter - Male Tartarus Spider



Digital: Garry Smith - Two Trapdor Spiders



Cavers in Action

Print: Dirk Stoffels - A Caving Photo

Photo unavailable at time of publication

Slide: Mick Williams — Cavers in Croesus



Digital: Al Warild - Marta Luz



Curious and Humour Garry Smith — Headless Caver



People's Choice Steve Blanden – Calcite Flower



Photographer of the Year Garry Smith

Photographer of the Year: Runner Up Arthur Clarke



### LIMESTONE COAST 2004 WORKSHOP

Naracoorte Caves in South Australia recently hosted the final Closing Workshop meeting of IGCP (International Geoscience Program) 448 — Global Karst Correlation, together with the First International Workshop on Ramsar Subterranean Wetlands, from 10-19 October 2004.

Kent Henderson of ACKMA

IGCP (project No.) 448 (World Correlation on Karst Geology and its Relevant Ecosystems) was approved by the UNESCO/IGCP Scientific Board at its 28th meeting, held in early February 2000 in Paris. The Project was accepted for implementation from 2000 to 2004, under the chairmanship of Prof. Yuan Daoxian, of the Institute of Karst Geology, Guilin, China. It was supported by all major international karst organizations, and many individual karst scientists around the world. Several intervening meeting were held in various countries, culminating in the final meeting of the project at Naracoorte. For details see www.karst.edu.cn/

Ramsar is the name of the international UNESCO-organised Convention signed by many nations to protect the world's wetlands (named after Ramsar in Iran, where the treaty was promulgated in 1971). There are presently 141 contracting parties to the Convention, with 1387 wetland sites, totalling 122.7 million hectares, designated for inclusion in the Ramsar List of Wetlands of International Importance. The Naracoorte meeting was the first to focus specifically on subterranean wetlands. See www.ramsar.org/

The instigator for the combined workshop was Elery Hamilton-Smith, and he was supported by a Workshop Committee comprised of Steve Bourne, Andy Spate, Mia Thurgate, Ken Grimes, Nicholas and Susan White, and Armstrong Osborne, with myself as Workshop Secretary. As would be expected, a number of organisational meetings we held prior to the event!

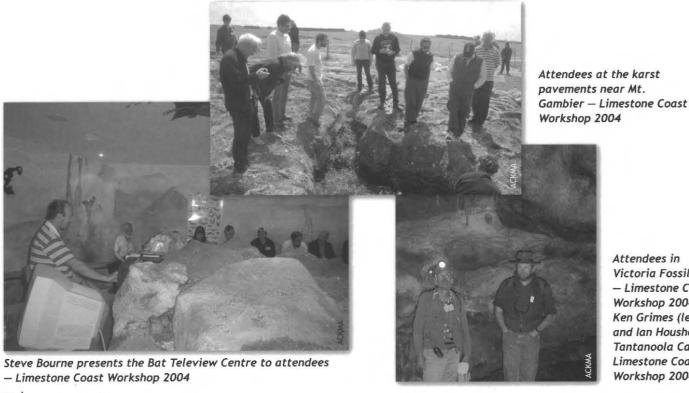
It all came together very well in the end, not without (as is often the case) considerable heartburn en route. Fifty attendees registered. Many were Australians, but we were delighted to welcome a substantial number from Europe and Asia, especially from China. Day 1- Monday 11 October.

After arriving the previous day and attending a most pleasant welcoming cocktail party at the Russet Ridge Winery adjacent to Naracoorte Caves, attendees assembled at the Naracoorte Town Hall (our Workshop venue) for the first session, focusing on 'The Evolution of a World Heritage Area'. After Opening Remarks from Steve Bourne, we were favoured by four papers, starting with Ken Grimes (presenter) and Susan White presenting The Geological Development of Naracoorte Caves. I had heard similar presentations from Ken before, and this was of the expected high standard!

Liz Reed followed with a fascinating presentation entitled The Story which the Fossils tells us - an wonderful overview of palaeontological research at Naracoorte. Tim Moulds continued with The Guanophilic Arthropods of Bat Cave, Naracoorte: an Isolated Community? - dealing with his PhD research. It was extremely well presented, and intensely interesting. The final offering for the session came from Professor Elery Hamilton-Smith, who dilated on the subject Why World Heritage? He readily answered the question, expansively, to the satisfaction of all!

The Second Session, starting late morning and continuing into the afternoon, focused on 'The Gambier Karst Region'. The first offering was from John Webb (presenter) and Susan White dealing with Karst Development at Naracoorte: When? Why? How? - an excellent geologic treatise on the area. The second paper came from Ian Lewis, Ruth Lawrence and Kevin Mott (presented by Ian) entitled Origins of the East Naracoorte Range Cave Systems - A New Examination of Structural Influences. In my opinion, it was one of the best papers presented at the Workshop. Ian addressed the issue of why the major caves on the Naracoorte Ridge are basically located in a straight line and at pretty much equidistant intervals. He proposed an extensive new theory - which even made sense to me!

After lunch, and a poster viewing, the Second Session continued with Ken Grimes providing A Review of Syngenetic Karst in Australia



Attendees in Victoria Fossil Cave Limestone Coast Workshop 2004. Ken Grimes (left) and Ian Houshold in Tantanoola Cave – Limestone Coast Workshop 2004.

- again, excellent stuff, followed by John Webb (presenter) and Stan Lithco enlightening us with Controls on the Water Chemistry of Cenote Lakes in South Eastern Australia — a relatively technical paper, but interesting nonetheless. The session was rounded off by a discussion on issues of 'Landscape Evolution in the Naracoorte and Western Otway Basin Area'.

In the late afternoon, it was off to Naracoorte Caves for tours through Victoria Fossil Cave (including a viewing up the main Fossil Bed) which excited the interest, and favourable comment, of all present.

### Day 2 - Tuesday 12 October.

The second day of the Workshop saw us back at the Naracoorte Town Hall for the Third Session - 'Cave and Karst Features and Characteristics', which mostly featured papers from overseas attendees. The opening paper, High Resolution Paleoclimate environment records from a Stalagmite of Dongge Cave since 15000 years in Libo, Guizhou, came from Zhang Meiling et al - again, quite technical in nature, but well presented and illustrated. Our Slovenian attendee, Andrej Kranjc, then presented Periodical Karst Lake of Cerknica (Cerknisko Jezero) - 2000 Years of Man versus Nature. It was a fascinating presentation of how, since Roman times, many efforts have been made (always without success, of course!) in dam this polie, and otherwise modify it.

The third offering of this session came from Zhang Cheng et al, entitled an Analysis of the Short-term Scale Variation of a Typical Epikarst Spring in Southwest China. Finally, Liz Reed produced an intensely interesting paper entitled Sedimentary and Infill History of the Victoria Fossil Cave.

After morning tea, the Fourth Session of the Workshop — 'Karst Correlations and Comparisons' - commenced with Dr. Armstrong Osborne's paper: Karst Correlation and Gondwana/Laurasia Comparisons. It was a fascinating survey indeed. He was followed by Professor Yuan Daoxian presenting Karst Ecosystem Types, in which he noted that karst ecosystems in different parts of the world are quite distant, and that for a their proper understanding and management, it is necessary to distinguish these different types and their characteristics. An excellent, extremely well presented paper. After lunch, Elery Hamilton-Smith gave us the final formal

offering of the IGCP part of the Workshop: Is it Feasible to Develop a Representative sample of World Karst Areas? An excellent presentation, as expected, but clearly the question is still open.

Elery's paper was followed by the Closing Session of IGCP 448, a discussion on several related topics — Where do we go from here? What potential is there for geological correlation in Cainozoic Karst? What other projects are envisaged for the IGCP? There was a great deal of input into the discussion, which will undoubtedly bear fruit in due course. After afternoon tea, attendees were bussed off to tour of the local Henschke's Limestone Quarry, Blanche Cave, and participate in a session in the Bat Cave Teleview Centre - all of which created considerable favourable comment from our oversees attendees, in particular.

### Day 3 - Wednesday 13 October.

This day saw a full-day field trip to various sites in the lower south east, including Town Cave in the middle of Mt. Gambier, the karst pavements and cenotes out of Mt. Gamber, Ewen's ponds, and returning to Naracoorte with stops at Mt. Burr Cave and Gran Gran Cave - the latter being an important aboriginal site.

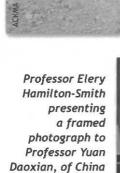
### Days 4-6: Thursday 14 October to Saturday 16 October.

As I was personally tied up with business appointments for most of these three days, I missed almost all of the sessions of the Ramsar Program, but I understand it went swimmingly (pun intended, of course!). I did get to the Workshop Dinner at the Naracoorte Hotel on the Thursday night, which was very convivial, to say the least! The program over the three days consisted of a field trip, plus a dozen papers, almost all relating to karst groundwater ecosystems in Australia, but with a few focused overseas.

Many of the abstracts from the Workshop, and perhaps some of the full papers, will (in due course) be published in *Helictite*. It only remains to thanks Steve Bourne (in particular for his superb local organisation) and all those many who contributed in ways large and small, from organising committee members, to the bus drivers, lunch preparers, and hosts at various venues — an extensive list too long to relay here. They have all been individually thanked. All in all, it was a tremendous week, and did much to showcase Australian hospitality in general, and the Limestone Coast karsts in particular, to many colleagues from around the world.

Attendees examining a quarry face in Henschke's Quarry — Limestone Coast Workshop 2004.

Attendees relaxing over lunch at the Goulden's Hole cenote -Limestone Coast Workshop 2004.



Workshop 2004.







### Water Cavern Dreaming — Spider/Jubilee

I was just a kid when I first came to Jenolan Caves but I was blown away by everything I saw

Mark Starai (SUSS)

Mark has been caving since 1985 as a member of SUSS and is rarely found anywhere but Jenolan!





One place in particular left a life-long impression on me. Water Cavern. This huge tunnel that yawned into the distance and out-of-sight around a gloomy corner teased my imagination. Where did it go? Why does the tourist path end here? It dwelt in my dreams and sealed my fate as a future cave explorer although I entered the game rather late at age 20.

It was now December 1987 and I'd been caving with SUSS for almost exactly two years.

I said good-bye to my wife-to-be and a car packed to the rafters in our junk destined for a new house. I bid her a safe trip to Wollongong but she did not seem to understand my need to be on yet another trip to Jenolan instead of helping to unpack a thousand boxes of belongings. Of course only another person obsessed by caving would make sense of these life

Nonetheless I went to Jenolan on a small trip with Pat Larkin, Sarah Gillis, Ian Cooper and Andy Ives, a cave diver from the UK. We squirmed into Spider Cave. It was my first trip in here since helping to excavate Pirates Delight some months before and

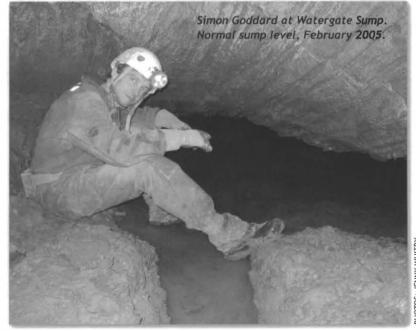
it was a real eye opener to finally come face-to-face with a couple of hundred metres of walk-along Jenolan Underground River.

The agenda was simple. We were to discover a way into the Jenolan Show Caves that lay downstream. In the 1950s the Underwater Research Group (which included such notables as Ben Nurse, Fred Stewart and Denis T. Burke) had in spectacular fashion over a number of years pushed over half a kilometre upstream from Imperial Cave and were stopped by a formidable rockpile that could not be bypassed or breached. Pat, Keir Vaughan-Taylor and other cave divers from SUSS had been investigating this Rubble Trouble rockpile from Imperial

but with not a lot of success. Pat wanted to resume the cold, wet, squeezy, submerged pushes into the base of the rockpile from the Spider Cave side that had been abandoned some years before when courage had petered out before the leads did.

No one there that day really believed we would connect. We would happily settle for any sign of progress. So Pat had organised a special permit for a diversion to Caverna Alba — a restricted pretties section more than thirty metres above river level but also in the vicinity of the Rubble Trouble rockpile.

We crossed the airy, leery and disturbingly narrow ledge known as Terror Traverse to enter the impressive entrance of The Eyrie - once long ago the route of the Jenolan Undergound River. The climb to Caverna Alba is a detrog affair and I couldn't be bothered. I was hungry to make discoveries. This was after all another really prospective area for connecting the two caves together. Ignoring Pat's admonition that it had already been thoroughly looked at and was considered hopeless (especially by himself) I began a solo combing of the area and looked into anything that could be loosely termed a hole. By the time the group began to return I had reached the bottom of the chamber where it was both wet and muddy and slipped through underneath a rockpile to gain a short passage on the far side. Clearly I was not the first. Ian soon joined me and checked one side and I went the other. I climbed over a large rock that blocked the passage but instead of dropping straight back down I paused and noticed a way on that could not be seen from the floor. I completed the 4m climb to discover a small cavern with some nice decoration. A corridor appeared to lead off but choked in formation. The others were called through to see the find. I'll never forget the look on Pat's face - disbelief that a 'junior explorer'



JENNY WHITBY

### cave connection (Jenolan, NSW)

and fell in love with it.

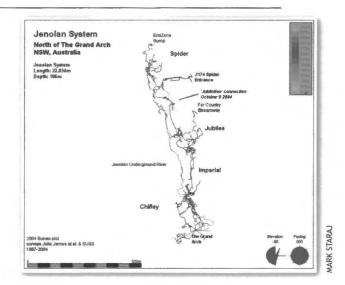
should readily find something in an area he had already written off! It was a small victory and my very first cave discovery. But it was modest in the extreme and there was no further way on. I named it

There were certain things I had seen in Last Resort that convinced me that here was in fact the way on and judging by the maps the passage should lead to Water Cavern and a connection with the Show Caves. Thusly I wrote in my first trip report. I had been caving only two years but my instincts told me that here was a place to find more cave. Last Resort was imprinted on my memory.

Only a few months later in August 1988 and the club heavies (including Pat and Keir) completed the task on a truly memorable trip and cracked the Rubble Trouble rockpile to make the connection. Spider was now just one more section of the Jenolan System. Whatever interest my article on Last Resort had triggered was forgotten. Except by me. Focus now switched to a connection upstream with Mammoth Cave.

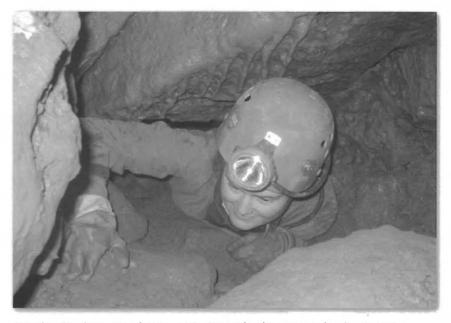
In December 1993 I got to see what Jeremiah Wilson had encountered when exploring Jubilee Cave one hundred years before. The tunnel of Water Cavern ended in a sump. This time I was with Keir, lan, Ron Allum and others and we had set to bypassing the siphon by pumping it dry. We all knew well enough that success would only bring us into Spider Cave. It would be an achievement of much merit but little value. I didn't mind - here was the place of my earliest childhood dreams and I would get the chance to explore it! I didn't know what motivated Keir but that was enough for me.

After two days of work we had "emptied" the sump so that a cold gale blew in from beyond. A plank of wood in the lowest part reminded us that we had not been the first. A drought some forty years before had drained the sump for the first and last time in living memory. Digging trips were spearheaded by Fred Stewart in 1952. Rains filled the sump in early 1953 but it was to be a prolonged drought and intermittent opportunities for digging presented themselves over the course of the next two years. One digger was a young and impressionable John Bonwick. Inspired by the written exploits of French speleologists he turned his ingenuity and skill at lathing to producing Australia's first scaling poles, caving ladders and the like. For the dig in Water Cavern he developed a trenching sled that would keep the digger off the horrendous muck on the floor and had a scoop for holding the spoil. Mounted on rollers the sled was simply pulled back by others when the scoop was full. Brilliant! But such enterprise was no match for this formidable dig. The mud clung like thick glue, impregnated everything and weighed like cement. The rollers behaved more like wheel chocks and were discarded as an abysmal failure. The mud steadily trashed both cavers and equipment. It was freezing cold. It was the worst sort of dig. They were getting through! It rained.



Elevation showing all mapped passages of the Jenolan System north of the Grand Arch. Highlighted area shows the potential for upwards development in the new passages. Exploration continues.

Today the water was gone but the muddy dig remained to be conquered. It would have to await the trip in January 1994 and I missed my chance to fulfill my dream. The dig was finished and the breakthrough made. Keir, Chris Norton, Andrew Matthews and others explored around 150m of passage. Fortuitously it was the beginning of another long drought. Long enough for the surveyors to run out of excuses to stay away. By the end of 1994 I finally made it on a trip through the now christened 'Watergate Sump' to survey the main drag. The results were somewhat dismaying. There was no large Water Cavern-like tunnel on the other side. It was mostly small and



Carolyn Dowler squeezing through the Jubilation connection in The Long Expected Party passage, January 2005.



Grant Commins in the infamous mud of Watergate Sump, Jubilee Section January 2005.

tortuous passage and after covering 2/3 of the distance northwards towards Spider it then turned eastwards and away. And then it turned south to double half way back towards Jubilee.

The rains came and Watergate refilled. So had my interest in the mysteries beyond Water Cavern. In 1993 when we drained the sump I went back into Spider to Last Resort. A breeze was blowing out from the direction of Water Cavern. This was definitely the way on. Furthermore, the way I read the signs in the new bit, I saw the possibility of huge amounts of cave waiting to be discovered where originally I had only anticipated a connection. Further brave excursions by Ian and Andrew in 1998, our next window of opportunity, only served to confirm it. In 1997 while thwarted by the sump I led Phil Maynard back to Last Resort where he found the breeze blowing from a tight hole. Phil, Chris and other thinner members pushed the blowing lead some 10m into rockpile



Mark Staraj in Water Cavern, Jubilee Section, February 2005.

where further progress seemed hopeless. Surveys showed a separation of less than 20m. In 1998 a voice connection was attempted but was not successful. Watergate again refilled.

In 1994 I had found and noted a possible lead on my sketch as I kept book during the survey. The sketch was lost soon afterwards and no one present found the lead when the voice connection was attempted. Fate had put me in another cave that day and fate decreed that trip through Watergate would be the last for another six years. Existing in my memory alone, the lead taunted me.

High hopes again in December 2002 but it was not to be. It rained the night before our attempt and we were greeted in Water Cavern by a stream.

In September 2004 I found myself in the vicinity of Water Cavern on a trip to the nearby Bell Chamber below. On a hunch I went to check the sump with Simon Goddard in tow. Incredibly it was "dry". In short order I refound my lead and Simon penetrated a couple of tight and dangerous squeezes to find walking passage twenty metres long ending at a constriction. We had no survey but I was convinced that this was the long sought passage to Last Resort in Spider.

I announced we were on the verge of connecting and planned accordingly. We returned a month later with two teams on election day, October 9 2004. Phil Maynard and Verity Morris entered Spider for Last Resort. The rest entered Jubilee expecting Watergate to be full of water after a 50mm dump two weeks before. It was very wet but was definitely open. Simon and Michael Bates set forth with the hammer to find Phil and Verity. Myself, Steve and Annalisa Contos began a survey. After seven arduous and exciting hours we had cleared away the large rock that lay wedged in place and terminated the survey on one side of the blockage. We only needed someone to squeeze through to claim the first connection between Spider and Jubilee. As we wanted to head out as soon as possible we voted the thinnest to go through. Simon obliged. It had been thirty years since I first dreamt of what was beyond Water Cavern. It had been seventeen years since I dared to dream of a connection from Last Resort to Jubilee. And it had been 10 years since I penned the question mark beyond Watergate. Simon named the connection "Jubilation" but my overwhelming emotion upon leaving the cave that day in October was of immense satisfaction. Completion. A job finished and a dream realised. I named the connection passage "The Long Expected Party". It had been One Hundred and Eleven years since Wilson had been stopped by the sump. But the sump no longer mattered. We had ourselves a 'back-door'.

This new area of the Jenolan System sends streams both south into Water Cavern and north into Khan Passage. It pumps air both south and north into Water Cavern and Last Resort. Lots of air and lots of water. Lots of mud and lots of blank space to the east and upwards on the maps. Lots of potential. Plenty more dreams.

### Krubera Cave: the first 2000m+ cave on Earth

Arabika Massif, Western Caucasus: October 2004 expedition news

The Call of the Abyss" Project is a multi-year project aimed to the exploration and study of deep caves in the two outstanding limestone massifs: Aladaglar massif in the Eastern Taurus (Turkey) and Arabika massif in the Western Caucasus (Abkhasia). An ultimate goal of the Project, officially adopted in 2000, was to discover, explore and study the first 2000m+ deep cave on Earth. The project is run by the Ukrainian Speleological Association, and involves institutions, individual cavers and karst scientists from Ukraine, Turkey, Britain, France, Spain, Moldova, Russia and Abkhazia.

### -2000mt finally broken!

The Ukrainian Speleological Association is happy to inform speleologists around the world about a historic accomplishment: the first 2000m+ cave on Earth became a reality. The 2000m milestone in deep cave explorations has been vanguished in Krubera Cave, Arabika Massif, Abkhazia, during the third expedition of "The Call of the Abyss" project in the year of 2004, conducted between October 1-28.

The expedition led by Yury Kasjan was composed of nine Ukrainian cavers representing caving clubs of Yalta, Kiev, Kharkov and Uzhgorod (Igor Ishchenko, Sergey Bogutsky, Dmitry Furnik, Kyryl Gostev, Ilja Lapa, Ekaterina Medvedeva, Emil Vash and Shantor Chervits). The main goal was to continue exploring the new section discovered by the previous Ukr.S.A. expedition in August.

Based in the camp at -1645m behind the first sifon, the group of five cavers explored a lead deviating from the main branch some 55m above the terminal siphon. The newly explored part, named "Windows", consist of a series of inclined passages and vertical pits (up to 40m deep), which form a complex structure in plan and profile of the total length of 1070m and depth of 290m. No big stream (active collector) has been encountered so far. The new part ended with a dry chamber (named "Game Over") plugged with sandy and silt sediments. There are many side openings through the Windows series suggesting good possibilities for further exploration, including advance in depth.

Based on a standard topographic survey made during the August and October expeditions (Suunto compass & clinometer and DisoLite laser distometer; BCRA Grade 3-4) of the post-siphon section below -1440m, added to the previous Ukr.S.A. survey for the whole cave, the total depth of the cave is estimated to be of -2080m. The 2000m mark and the lowest point were reached on October 19.

With the entrance located at the altitude of about 2250m, the deepest point of the cave has reached the altitude of 170m above sea level, but it has not reached the top of the phreatic zone yet. The system is hydrologically linked to major springs located at 1 to 50m altitudes at the Black Sea Coast at the distance of 12-16km, and also to submarine springs. Such a low gradient (less than 170m/13,000m) suggests the low hydraulic resistance of the deep sections of the massif, which is probably because the well developed conduit porosity had formed during Pleistocene periods of low

**Ukrainian Speleological Association** THE CALL Krubera Cave, The first 2000+ deep cave on Earth

Article header pic.

Arabika Massif - schematic profile:

Schematic profile of Arabika Massif.



-2080mt - where to now!

sea level stands, when the drainage level was at much lower position than at present.

The world's depth record in Krubera Cave was first established at -1710m by the Ukr.S.A. expedition in January 2001. During this year the advance in 370m has been made, unparalleled in the history of deep cave explorations.

The "The Call of the Abyss" Project will continue exploring Krubera Cave to its ultimate limits, and will seek to "grow up" another 2000m+ cave in the Aladaglar Massif in Turkey, yet another project study area where Kuzgun Cave has been explored to -1400m

> Alexander Klimchouk, Yury Kasjan and Nikolaj Solovjev "The Call of the Abyss" Project coordinators,

Ukrainian Speleological Association



# Cave divers face Aliens in Olwolgin Cave!

ASF cave divers led by Paul Hosie dive, explore and map yet another classic West Australian cave. In this article Paul shares with us his experiences of visiting stunning submerged passages, an alien world filled with troglobitic fauna, bizarre bacterial colonies and amazing hanging tree roots.

Olwolgin Cave — Roe Plains, Nullarbor WA By Paul Hosie (WASG)

Olwolgin Cave is one of the recently discovered diveable caves on the Roe Plains south of Madura. The water table is only 10m below the surface, the horizontal passage development is very extensive and has been likened to that of the Yucatan Peninsula in Mexico where the world's longest underwater cave systems are to be found.

Olwolgin Cave is very special as it has features that make it a unique Australian diving experience — the hanging root 'formations', bacterial colonies and extensive troglobitic fauna communities; all distributed over 2km of intersecting network passages with a stunning variety of passage shape, sizes and forms. The last visit to the cave in Jan 05 closed out several leads, added another 100m to the survey and collected more troglobitic fauna from a noxious 'air' chamber called Babylon Lake, deep within the cave system.

### Exploration

The double doline of 6N1951-2 was spotted from the air by Max Hall [sic] of CEGSA during 2001. Dry cavers from ISS, CEGSA and WASG visited the cave that year and the first ASF cave divers visited in January 2002. Realising the cave was a significant discovery, it was named Olwolgin after a bluff on the nearby escarpment. Cave diver Andrew Nelson and the author explored and mapped over 1.3km of passages on a long weekend trip from Perth in February 2002. Heavy rainfall in the area during winter 2002 prevented further work at that time, but subsequent visits in 2003 and 2004 by ASF cave divers have extended a number of leads and established several lengthy underwater circuits within the cave. As at February 2005, the cave has over 2.0km of surveyed underwater passages.

During the ASF visit led by Paul Boler (NHVSS) in 2004, several important discoveries were made including the fauna of Babylon Lake and at least six excellent leads. These leads were followed up and the remaining passages surveyed during a one week visit to the cave in July 2004 by cave diver Alan Polini (WASG) and the author. Many new passages were explored and surveyed during this trip, video footage taken and fauna was collected for analysis by the WA Museum.

During this time the line in the cave was prepared for subsequent divers and signs were placed in the cave to help protect the amazing hanging roots (some hang up to 3m below the surface). What has been done is effectively underwater track marking with the signs requesting divers stay directly above the line whilst traversing past the hanging roots. The line has been placed such that divers exhaust air does not disrupt the hanging roots. Although there is no doubt the signs are ugly and distract from the cave's natural beauty, they are considered a necessary evil to assist in minimising impact to the hanging roots which are very fragile and if inadvertently destroyed, may take decades to re-grow to their current dimensions. More signs still need to be placed to complete this task.

The most recent visit to the cave in January 2005 closed out several leads and completed taking video footage as well as still photography, by cave diving underwater photographer Peter Rogers (CEGSA). There are still some leads in the cave that need to be pushed and surveyed as well as a couple hundred metres of unsurveyed passages. Cross connections made within the cave enable some very lengthy circuit dives to be made, the longest of which is approximately a 900m round trip with only the first 30m being repeated during the entire dive. Even doing this will only allow a diver to see less than half of the cave!



### Mapping

The cave has been mapped using line knotted at 3m intervals and compass bearings within 3 degrees. The accuracy of the survey was established as within 5% by Ken Smith (CEGSA) in 2004. This was done using the 'Pinger' magnetic loop direction finding equipment and averaged GPS readings for eight different points within the cave. The use of the Pingers has been applied extensively for mapping Australia's current longest underwater cave system - Tank Cave near Mount Gambier in South Australia. More work remains to be done but mapping is largely completed with an estimated 40 dive-hours spent in the cave so far gathering the data that has been used to construct the current map.

### Foul Air

It was realised that the atmosphere in Babylon Lake was not breathable on the first visit there. The air was taste tested and the metallic taste indicates that there are very high levels of carbon dioxide (CO2). There may also be a high level of hydrogen sulphide (H2S) and a low concentration of Oxygen (O2). The results of, or intentions to conduct atmosphere monitoring at 'air' chambers in Olwolgin Cave and others on the Roe Plains will be very interesting and should be communicated through whatever means possible to other cave divers visiting the area.

Divers attempting to remove their facemask or breathe the atmosphere in Babylon Lake will probably experience excruciating pain followed by less desirable effects! Exposure to high concentrations of H2S can cause death from breathing and poisoning by absorption through the skin. It is strongly recommended that divers do not remain on the surface of Babylon Lake for any longer than necessary and that facemasks and regulators are never removed whilst there.

### Fauna

Amphipods were sighted in the entrance lake and collected for the WA Museum under special permit during the first visits to the cave. It was only in 2004 that the fauna population of Babylon Lake was noted. Specimens of cockroaches, centipedes and amphipods have been collected for identification by the WA Museum. It is suspected that there may be species new to science in Olwolgin Cave but it will take time for the experts to do the identification work needed to show this. What was believed to be a millipede was collected on the last trip but early indications are that it is in fact a member of an unusual family of centipedes - very fine (body diameter 2mm), long (approx 70mm) and pure white. Nearby Burnabbie Cave has proven to be a richer fauna site than Olwolgin with a new genus of Gnaphosid (Naff-O-sid) spider being collected by Sara Zylinski (WASG) in 2004 (see update at end of this article for latest diving discoveries in Burnabbie Cave).

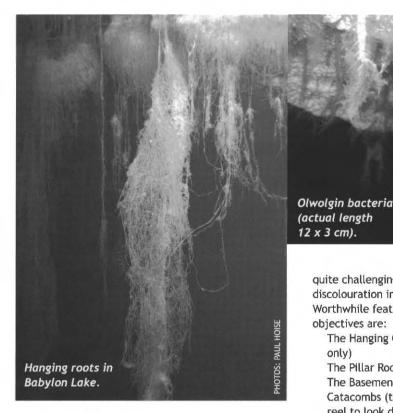


Olwolgin Cave entrance.



Paul Hosie and Alan Polini after a big dive in Olwolgin!





### **Diving Recommendations**

It will take several very long dives to safely visit all parts of the cave within the thirds limitation imposed on all cave divers. All diving in the cave has to be done using side-mounted tanks as the restrictions between the entrance and the Main Conduit are too low to enable diving with back mounted tank configurations. Recommended cylinder sizes are 7ltrs for the near reaches of the cave (ie Sculpted Parallels, Alien World) and 10-12ltrs for comfortably visiting the furthest reaches (ie Pillar Room, Nest of Avens, The Basement & Catacombs).

The maximum depth is -13.5m which tends to be low flat silty rooms and tunnels. The average depth is -7m as this is where the horizontal dissolution is occurring although there are a number of different levels of dissolution identified from -3m down to -12m. Severe haloclines within the cave do cause visual distortions and blurred vision which makes taking photographs and video footage

Olwolgin Cave - Plan View Preliminary WinCompass Diagram by Paul Hosle Babylon Lake Plan view of Olwolgin cave. quite challenging! One often sees a yellow or green discolouration in the water throughout the cave. Worthwhile features within the cave to set as dive objectives are:

The Hanging Gardens / Babylon Lake (main line only)

The Pillar Room (two jump reels from line end) The Basement (one jump reel, access from 4-Ways) Catacombs (two jump reels plus a 90m exploration reel to look down the side passages, access from 4-Ways)

Nest of Avens (one 90m reel to right from Big Junction)

Alien World (one jump reel from Main Conduit) Sculpted Parallels (250m of line from Tag1 to 4-Ways)

### More Information - Maps and Video

More information, including trip reports, full development maps and photos are available at www.trimixdivers.com and will be available through the ASF-CDG section of the ASF website at www.caves.org.au when this is fully established. The cave has been fully video'd by cave divers Paul Boler, Alan Polini and the author. Copies of the edited footage on DVD can be purchased through the trimixdivers website.

Olwolgin is a fantastic cave to dive because it is so extensive and complicated. It is possible that the cave is much more extensive than what is currently known and the effort over the next year or two will be to complete the underwater track marking, push and survey the leads as well as conducting gas analysis of the noxious air chambers. Anyone wishing to join in and assist with this effort is invited to contact the author via the trimixdivers website.

### **Burnabbie Cave Update**

Following several push dives conducted in January 2005, Burnabbie Cave has up to 2.5km of passages (2.2km surveyed) which makes Burnabbie the third longest underwater cave on the Nullarbor and the fourth longest in Australia. The furthest penetration distance in the cave was extended by 170m and continues in the same direction following a trending faultline. The maximum penetration distance in Burnabbie Cave is currently 940m and this will be extended again using sidemounts and staged cylinders OR sidemounted closed circuit rebreathers during 2005. Stay tuned!



### **ESPELEO RESCATE MÉXICO**

Chiapas, "Saraos" Rescue Report, November 2004 Palenque, Mexico

Antonio Aguirre Álvarez of Espeleo Rescante Mexico, gives us an insight into a land deepset in old beliefs and a region of rugged limestone with ancient buildings hundreds of years old deep in impenetrable rain forest. This is an account of the sad loss of two young lives as told by Antonio. For more information of the region visit:

http://www.sacredsites.com/americas/mexico/ palenque.html

http://www.travelchiapas.com/map/map-2.php

### THE INFORMATION I

### November 02

The evening of November 2, I was in the Sierra de Alvarez, flagging a few points for a trekking practice with the San Luis Potosí group. At 6:00 pm I was on the way back, and about 25 km from the city I got a phone call from Ricardo Sierra (ERM- SLP), informing me of the request of help for the Chiapas Red Cross to rescue two kids that were trapped in a cave near Palenque. Almost immediately after that Ricardo Zaragoza (ERM-SLP) caught up with me on the road, he had gone out to look for me, since he knew where I was and couldn't find me on the phone earlier. I contacted Omar Carrizales (ERM-SLP), who had received the call for help at 4:30 pm. He informed me everything would be ready to leave at 8:00 pm. With no further information, I stopped at my home to gather my gear and inform ERM and place them on alert/stand-by.

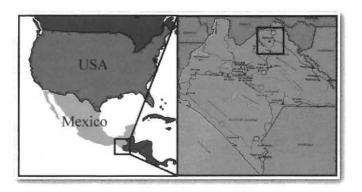
### THE TRIP

Five rescuers (two of ERM/San Luis Red Cross and three of San Luis Red Cross' Cave Rescue) left on two Red Cross vehicles to Mexico City. There we picked up six rescuers from Red Cross, one from Base Draco and one from Mexico City's Proteccion Civil. At midnight we started driving towards Villahermosa, Tabasco, where we were informed we would be flown to the rescue site on a PGR (Procuraduria General de la Republica, equivalent to the FBI) helicopter.

### November 03

At about 8:00 am, at the junction of the Veracruz-Villahermosa highways, the pick-up truck I was on broke down. I stayed there along with 4 of the crew, we asked for help from the Veracruz Red Cross, while the rest of the group kept on driving to Villahermosa. Afterwards I learned that the group decided to drive to Tuxtla Gutiérrez, Chiapas, where they were flown to Palengue by plane and then on helicopter to the rescue site.

A Veracruz Red Cross vehicle helped us by towing the truck and at about 2 pm they took us to Palengue on an ambulance, where we arrived at around midnight. From there we drove on the same ambulance to the site, arriving at Jashid (Joshid, Yochib) around 1:00 am. We reported to the command center (set up in a school of the village).



### THE INFORMATION II

### November 04

We were briefed on the accident. The father and his two kids were hunting tepezcuintles (small guinea pig like rodents) the night of October 31 (Sunday). Their strategy was for the kids and their dog to get the tepezcuintles to run through the south entrance of the cave and the father waited outside the north entrance, his machete ready. That night an animal was only wounded, not killed, and retreated into the cave. Seeing the animal was not coming out the father sent one of the kids looking for it. When his kid didn't come out either, he sent his second son. When in turn he didn't come out, the father went home to look for another of his sons, older.

This one went into the cave, went into the narrow passage branching from the main passage but it was very narrow and he decided to exit. Family and neighbors tried to get the kids out, to no avail, so they decided to call the police. They, in turn, called the Red Cross. The rescue maneuvers started on Monday afternoon, the first groups on the scene being ERM-Chiapas, Red Cross of Tuxtla Gutiérrez, San Cristóbal de las Casas and Palenque.

According to local customs, hunting at night is forbidden. So is hunting more than five tepezcuintles. The father had been doing both for some time and the community frowned on this...Besides Proteccion Civil, also local police was present. Their function was to set a perimeter for the work zone. This was a difficult task, since there was considerable publicity of the event and one day there were 3000 onlookers.

These agencies also helped in other tasks like clearing the access route to the cave, set steps to ease the access to the cave, etc. Their willingness to help was remarkable.

### THE WORK PLAN

In the command center were two Chiapas ERM members: Salvador Rodriguez Pola and Ulises Garcia Zorrilla. They informed us that Chiapas Proteccion Civil was in charge of the operations. That the passage was being widened with hydraulic tools and that the groups were working in 90 min shifts.

Since we had plenty of sleep on the road we decided to head to the cave to support the maneuvers and relieve Omar (ERM-SLP), since he had been working for a long time.

At the site I was informed they had enough groups to work all night, so I decided to sleep by the entrance of the cave in case they needed extra hands.

At the rescue site we found Pemex (Petroleos Mexicanos, the oil company) who had orders to help in any way they could (people, gear, etc). They had geologists, surveyors and drillers, along with heavy machinery. One of the options was to drill a passage, but this option was left as a last resort, given the possibility of collapsing the cave.

Another option was to find alternate entrances to the cave. This search was done with the help of locals, but we didn't find anything that could help us.

### THE CAVE

It is located 500 m from the village. A very muddy path leads to the cave. At 100 m from the cave a stream crosses the road. The main entrance is a sinkhole ("A", zone designations, used for the rescue logistics), 7 m deep, easily down climbed, there you reach "B". To the south there is a room, 3 m of ceiling height (sloping) and a few puddles. Further south there is one of the entrances of the cave. To the north there is a low and wide passage, 60 cm (24 in) high, 8 m long, with a mild slope (5-10 degrees). At the end of this passage there's a room big enough for 5 or 6 persons, seated. On a side there's a small dome, 2 m high, and some small breakdown blocks that lead to another entrance.

In front of the dome, west of the end of the low and wide passage ("C"), is a narrow passage, starts at 0.5 m high, 1 m wide, "T1", which then decreases its dimensions and was called "T2", and then "T3" after further reduction of its dimensions. Two light bulbs were placed in T1. At the end of T3 there's a 90 degree turn ("U"), which was impossible to pass except for the shortest and thinnest. From there, the passage keeps getting narrower. The point of deepest/longest penetration was called "X".

### THE MANEUVERS

The plan was to enlarge the passage. At first we could use hydraulic tools, but as the passage got narrower we had to switch to chisel and hammer and after "U" only the hands could be used, due to the

nature of the passage. People would scoop mud with their hands and then inched back to pass the mud and dirt to the ones behind. It was slow and tiring and the closed quarters didn't help.

Several of the rescuers said they heard the kids talking, crying and throwing up. Once, thinking they were close to the kids, some food and dehydrating drinks were tossed down the passage, with hopes for them to reach the kids. But as the people advanced they found the food and beverages, intact. In all this time, even when people claimed to hear the voices, there was no visual contact or any other proof.

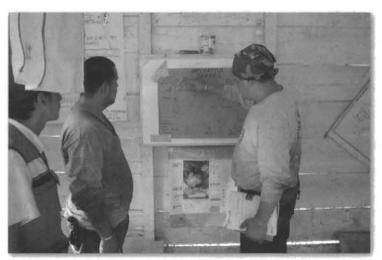
One of the village elders said that we would never find them. "The cave is playing with you", he said. "When you think you're close it will move them and it will keep playing with you... Don't insist much, because the cave could get angry and then it won't let you out. If you want the kids out, you have to trade them for their father. But the cave won't give you both kids, it'll keep one. Let the father go into the cave if he wants to save one of his kids."

Several times, when people thought they heard the kids and thought them really close, after gaining a couple more meters there was nothing there. The closest I was at the second light bulb. I must confess I never heard them, I guess I was not close enough.

One of the most tiring aspects of the rescue was the air quality, so we requested equipment to promote air circulation. We could only get two air cylinders, which were connected to a hose and used to refresh the air in the cave, but it's clear that this was a short lived solution. According to some accounts, the kids were drinking water which was contaminated with their own urine. Hypothermia was a big concern, but also was dehydration. Two doctors were permanently on duty and their diagnosis was that the kids could still survive for another 48 hrs, but with severe kidney damage.

### THE FLOOD

A Villahermosa Red Cross member, Martha, arrived on Thursday morning. She's short and thin (1.47 m, 41 kg/4ft10in, 90 lb). She checked the passage and asked the passage to be enlarged for another 0.6 m more (2 ft). She considered that enough to reach the kids, since she said she could hear them. The group worked hard given this hope. Martha entered the passage again, but she then found another 90 degree turn.



Cavers making a rescue plan.



Cavers talking about the restrictions they've found inside the cave.

At around 9 pm I was in charge of the entrance of the cave. There was nobody else working at that moment since there had been some problems with the locals, who said that all we wanted was the gold that was hidden in the cave. Three locals insisted on entering the cave to see what we were doing. Given the situation I decided to let two of them enter the cave. They confirmed that there was no way on and that there was no gold either. They told me that that's what they wanted to know and that they would tell the community so they would let us work without further hassle.

That night, while the locals entered the cave to check on our work, I was talking to an uncle of the kids, about 25 years old. He said "forgive me if I'm speaking behind the back of my brother, but I ask what were the kids doing in there? We all know the cave and that hole was not there. My brother did wrong, a lot of it, and the cave is only taking what it's owed to it. If you offend the owner [the lord of the cave], you have to pay him with what's dearest to you. I believe my brother is paying. What the cave wants is my brother. He must go in if he wants his kids out".

We were talking while the rain started. Given the chance of flooding we called everybody out of the cave, and were told to rest until they were called again. Twice I was called to the command center, but the chat was interesting and I said I would be there shortly. Water started to pour into the cave down the slope. We built a small wall to deviate the flow to the southern entrance. We started bailing water out of "B". We had already checked the passage zone and water was not flowing into it. While a group kept bailing water I went in to check the passage up to F2, where I noticed water in the passage. The water level had increased so much that water was starting to come out of the cave. It was until later when I realized that the passage where the kids were was most probably completely flooded, since that level was 1 or 2 meters below "B".

The water level kept rising until it reached "B". It soon reached knee level, so we climbed out of the cave, since there was nothing else we could do. In less than an hour the cave was completely flooded, up to the main entrance.

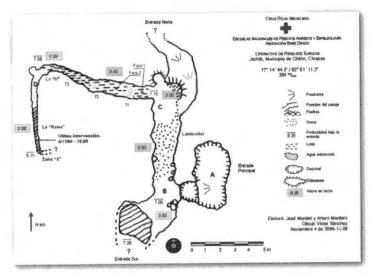
The only other ones at the site were a Proteccion Civil guy, a Yucatan firefighter, a few local policemen, and a Televisa news team (cameraman and reporter). Everybody else went home or to their tents. I wanted to tell this to the command center, but there was nobody manning the radio, since he was checking on the batteries. Three of us tried to go to the base camp, but the small stream on the way to the cave had grown to 10 m wide and heavy flow. We gave it a try, but the water was very deep and the current very strong. We decided to go back to the cave and wait.

In about 90 min the water level in the cave went down, so we could go down to F2 to check the passage. This was full of mud. Given that it was still raining, we decided to wait until it was completely gone so we could enter the cave and check the changes in the passage.

### **END OF MANEUVERS**

### November 05

The rain was not stopping, so at 3 am we headed for the river again, to see if we could cross it now and we found there several members of the Jaguar



caving group, from Tuxtla Gutierrez. They had set up a rope and now we were able to cross. In the meantime, a local policeman who speaks Tzeltal relayed information that the village was preparing "something" against the rescue group. They wanted to take one or two hostages until the kids were out alive. Given this, the police insisted on us abandoning the zone. Everybody packed up and somebody was sent to look for me. When I reached the command center, besides giving the latest news, I was only thinking of getting out of my clothes and sleeping a little bit. I was surprised to find everybody awake and ready to leave. I was informed of the villagers' plan and I was not comfortable leaving, since the two locals that checked our work said we could work peacefully. I guess I was really motivated to stay by being extremely tired and cold, but given the present risk, the small chance the kids had to be alive jumped to a second place, being the first one the well being of everybody involved in the rescue.

A group of policemen, arms ready and with no lights (as they asked us to be) escorted us to the highway, about 400 m from the command center. There we packed ourselves and our gear into Red Cross vehicles and we were moved to Palenque. Most of the Proteccion Civil elements also left, in their vehicles, so in the cave only policemen and the TV news guys (who refused to cross the river because of possible water damage to the camera). We arrived at the Red Cross buildings around 6 am, where we changed clothes and rested for about 2 hrs.

In Palengue, after breakfast, we reviewed the whole situation and decided to leave. We drove to Villahermosa City to leave Martha and from there we went to Tuxtla Gutiérrez to be debriefed by the Red Cross. We met there Raul Cano (ERM-Chiapas) and Manuel Hernandez (ERM, Chiapas coordinator) and Jesus Torres Cid (ERM-DF). After hearing the news, Jesus decided to head back to Mexico City the next day.

### November 06

We slept there and the next day, after writing and filing all the reports, we left. It was 9 pm.

### November 07

We arrived at 8 am to Mexico City, where we dropped the locals. After having breakfast at the Proteccion Civil guy, we started driving to San Luis Potosi, where we arrived at 4 pm.

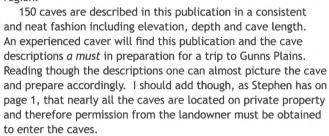
Antonio Aguirre Álvarez LEO RESCATE MÉXICO

### **BOOK REVIEW**

### Caves of **Gunns Plains**

Author: Stephen Blanden (NC & SRCC)

Where: Gunns Plains is a Karst area in the NorthWest Tasmanian region.



Even if you're not preparing for a trip to Gunns Plains anytime soon, this is a nice reference publication to have on your caving bookshelf but you will need to be quick as only 150 copies have been printed. Each copy is numbered and signed by the Author. It has 95 pages, is A4 in size and features an attractive high-gloss sturdy soft colour cover. Included are 23 colour photographs (including one very sultry looking one of Stephen on the inside back cover) and features 11 very neatly drawn cave maps.

The book also features a brief outline of the areas history, geology and in the appendix's lists the 20 longest and 20 deepest for quick reference as well as a map symbol reference and glossary. For us mainland cavers who are used to warmer underground climates, a list of recorded cave temperatures has also been included (nice thinking Stephen!).

Two big thumbs up from me.

Jodie Rutledge NHVSS

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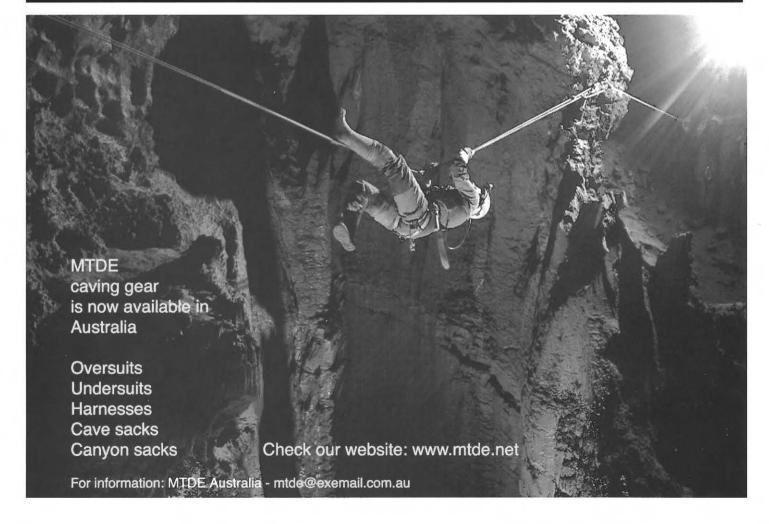
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Photo: Reseau de Bufo Fret, in the French Pyrenees. © Christophe Levillain