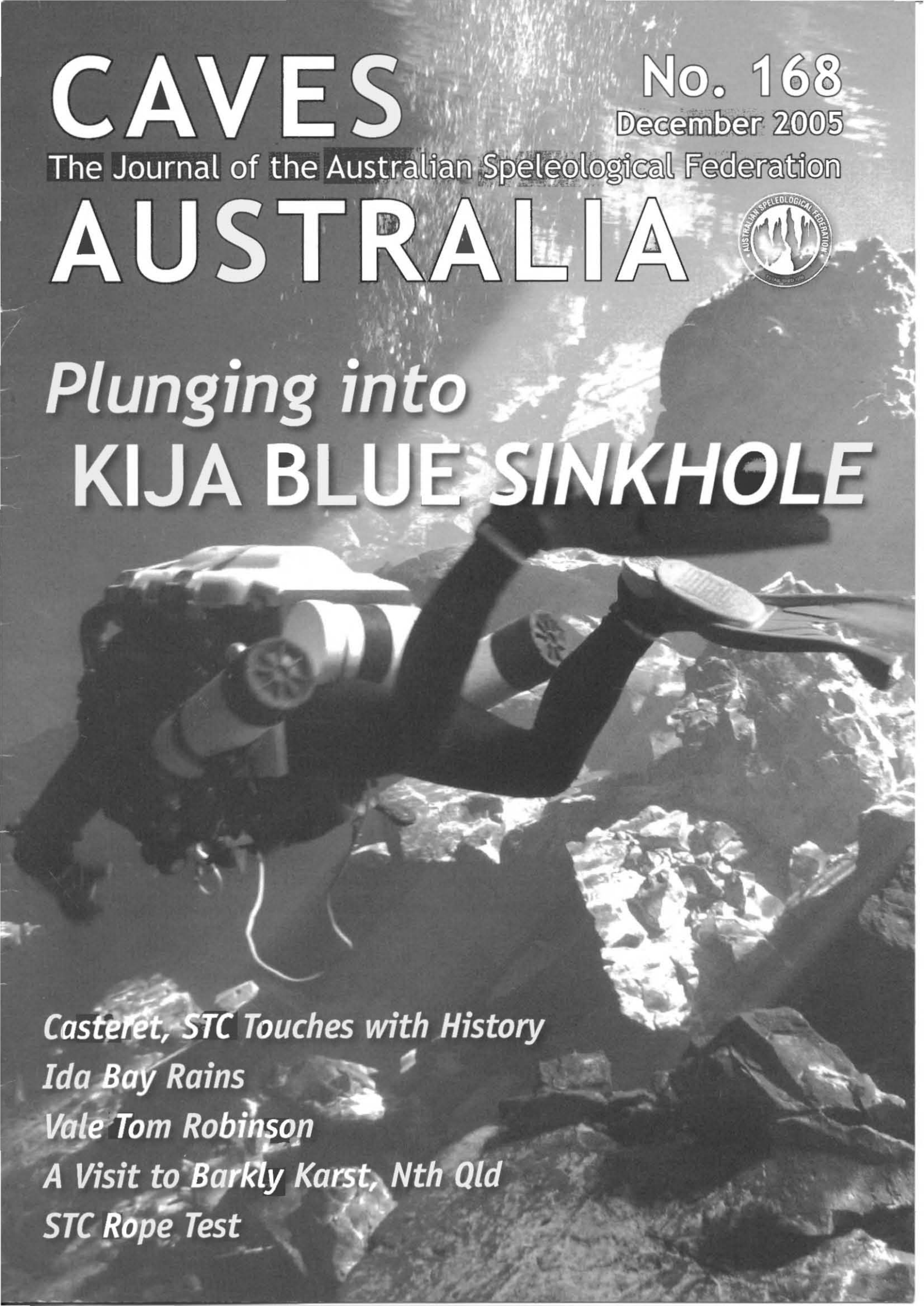
No. 168
December 2005

CAVES AUSTRALIA

The Journal of the Australian Speleological Federation



Plunging into KIJA BLUE *SINKHOLE*

Casteret, STC Touches with History
Ida Bay Rains
Vale Tom Robinson
A Visit to Barkly Karst, Nth Qld
STC Rope Test

Coming Events

In particular, this list will cover events of special interest to cavers and others seriously interested in caves and karst. This list is just that. If you are interested in any listed events, contact Elery Hamilton-Smith for further details on [redacted]

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

2006

Jan 1-2	**ASF Council Meeting, Bankstown, Sydney.**
April 19-21	Australasian Bat Society Conference, Auckland, N.Z.
May 5-8	ACKMA Annual General Meeting, Kangaroo Island.
May 6-7	NSW Speleological Council meeting, Cliefden, NSW. See ASF website or Megan Pryke [redacted]
June	Karst Field Studies Program, Centre for Cave and Karst Studies, Mammoth Cave WHA, Kentucky. (Note: probably seven separate schools on various dates)
June 27-July 2nd	International Karstological School on *Sustainable Management of Natural and Environmental Resources on Karst,* Karst Research Institute, Postojna, Slovenia
July 3-7	Regional Conference, International Geographical Union on *Geomorphology, Hydrology and Management of Karst Terrains* At Queensland University of Technology, Brisbane
July 3-8	International Symposium on Vulcanospeleology, Tepotzlan, Mexico
August 14-19	International Union for Quaternary Research: *Sub-aerially exposed continental shelves since the Middle Pleistocene climatic transition,* Exmouth, Cape Range and Ningaloo Reef, W. Aust.
Sept 21-23	8th Conference on Limestone Hydrology, Neuchatel, Switzerland.
Sept 24-27	International Symposium on Environmental Geochemistry, Beijing, China.

And Looking Further Ahead

2007 Jan 2-6	**January 26th ASF Conference, South Australia, celebrating 50 years of the Australian Speleological Federation. Start planning now! See page 4.**
2007	April 9-12 CAVEPS — Conference on Vertebrate Evolution, Palaeontology and Systematics, Museum Victoria, Melbourne
2007	April 29 — May 4 ACKMA Conference, Buchan. This will be part of the celebration to mark the centenary of the discovery of Fairy Cave.
2009	January? 27th ASF Conference,
2009	May ACKMA Conference, Margaret River, W. Aust.
2009	14 August, IUS International Conference in Kerville, USA. www.ics2009.us

CAVES AUSTRALIA

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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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CONTENTS

COVER: ***Kija Blue lake dive (WA).***
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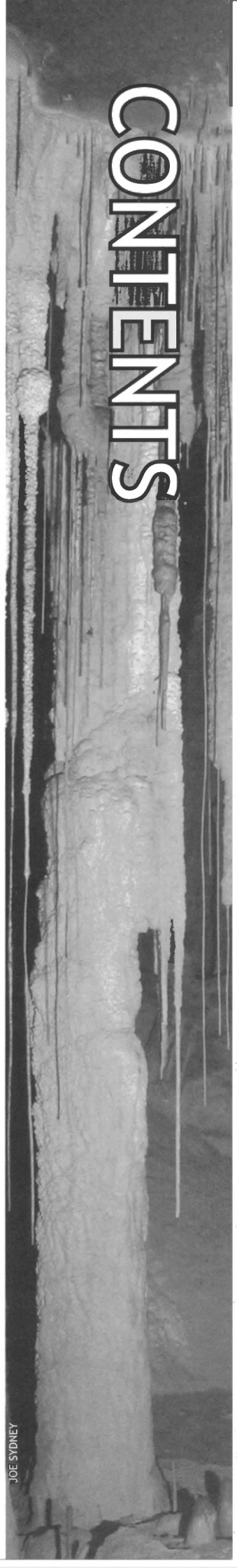
HELP SUPPORT ASF

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



President's Report

Well it's been a busy year. I hope that members have been able to enjoy many club events – whether that is going caving, participating in projects, doing some weekend trips or just attending meetings. I know of a number of expeditions that happened, and even a few people managed some International trips. Some members were really lucky and able to attend the 14th UIS Congress in Greece in August. I have heard one individual's recounting of the trip and it sounded great. It is really amazing to get so many cavers together in the one place.

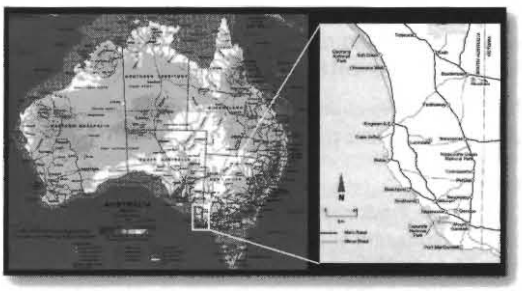
Plans for the next ASF conference are coming along really well. Many of you know that the Federation's conferences are an excellent opportunity to meet other cavers, visit different karst areas and see the fantastic caves firsthand!! You can catch up with old friends, make new ones and learn about what's happening in Speleology in Australia. Not only is this a "conference" and an event not to be missed, but the next conference is a significant event – the ASF has its 50th anniversary!! I hope that you can come along to the 26th Biennial ASF conference being held from January 6-12 2007. It is titled "Caves, Craters and Critters". So get those diaries and calendar's out, mark in the dates, apply for holidays! I look forward to meeting you there.

Yours in caving
Jay

26th Australian Speleological Federation Conference

Celebrating 50 years of Federation

Caves, Craters and Critters. Mount Gambier, South Australia. January 6th – 12th, 2007
www.caves.org.au



Join us in attending the 26th Australian Speleological Federation's Council Conference and help celebrate its 50th birthday where it all started — South Australia.

Meeting and celebrations will be held at the prestigious Mt Gambier Race Course Function Centre Jubilee Highway, Mount Gambier, South East — South Australia between January 6-12th, 2007.

The Mount Gambier Race Complex features two floors suited for Conference, presentations and Art show. The Function room will also host and cater the formal cavers dinner and of course, the bar will be open each evening of the Conference.

Local accommodation may be found close by at various bed and breakfasts, motels, hotels and cabin accommodation at local Tourist Park. Onsite facilities allow us to camp with access to toilets and showers! A bonus for those wishing to stay on-site.

Full day field trips will be happening at Naracoorte caves. The focus will be on cavers and community's contribution to Naracoorte. There will be cave tours, bat viewings and a range of presentations from those involved with Naracoorte.

Those that would like to do something a little different, 'snorkeling' field trips will be run at Piccaninnie Ponds and Ewens Ponds

Forestry SA will present their conservation work and clean up projects of caves found on their properties.

For those wishing to enhance their taste buds, why not participate in the various local wine tasting trips.

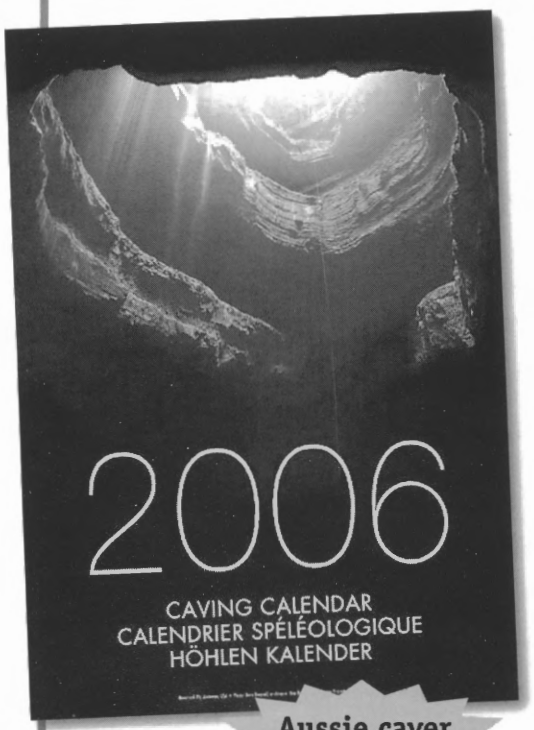
Pre and post conference trips will be run to Western Victoria, Naracoorte, Avenue Range, Yorke Peninsula and to other areas.

Those interested in presenting at the conference need to notify us of their intention by September 30th 2006 and Abstracts must be in by October 31st 2006. For further information on presentations, contact Marie Choi (Conference organiser) on 0429 696 299 or battymariec@picknowl.com.au.

Stay tuned for further updates. Updated information on the Conference and events can be found on the Federation's website: www.caves.org.au

Tour guide and tourists.

Floating over the main trench at Picaninnie Ponds.



Aussie caver photographer!

2006 Speleo Projects Calendar

Now available in Australia. One of the best caving calendars just got even better...

Make a tax deductible tax donation of $35 or more to The NSW Cave Rescue Squad and receive a gift calendar for your enjoyment!

12 stunning images once again takes you on an enchanting subterranean journey to caves around the world. This year's destinations include Papua New Guinea, Cuba, USA, Ethiopia, France, Spain and New Zealand. Features Aussie caver/photographer Dirk Stoffel's (HCG) exciting photo of the inside of the Muller Range, PNG!

Make your donation soon and don't miss out on this great gift!

Send your cheque to:
C\- Grace Matts
NSW Cave Rescue Squad Inc
[redacted]

Or contact: Joe Sydney
[redacted]

Photos wanted for 2007 Caving Calendar

Speleo Projects is now accepting submissions of quality caving photographs for publication in our 2007 Caving Calendar, and possibly other publications.

DEADLINE FOR SUBMISSIONS: MARCH 15, 2006

Guidelines and a submission form may be downloaded from our web page: http://www.speleoprojects.com

For more information or questions, please contact me at sue@speleoprojects.com

Happy Caving in 2006!

Sue

Note: The 2006 calendar featured Dirk Stoffel's photo of the Muller Range, PNG. It would be great to see a few more Oz cave photographers! Joe (CA Production)

FUSSING OVER BRENDAN NELSON'S BARBARISM

By Clare Buswell

Flinders University Speleological Society Inc, commonly known as FUSSI, has been around for 32 years, doing what most speleo clubs do. Last year was an active year with cave hunting and discovery in the middle Flinders Ranges, the usual introductory trip for new members, a flying visit to karst Mecca, Slovenia, by a couple of members on holiday overseas and numerous training activities. Exploration of the middle Flinders Ranges, in Wilkawillina Limestone, has been an ongoing exercise for South Australian clubs since the Quorn ASF Conference in 1997. The difficulty of the terrain, (isn't all karst terrain difficult?), limitations on exploration during the summer months (it's just too hot), and remoteness make this work somewhat slow. FUSSI members continued searching the southern section of Wilkawillina Limestone, east of Wilpena Pound, finding small caves high up in the cliffs. These caves are typical of the area in that most of them have long since collapsed and what remains are remnant caves with evidence of speleothems on the remaining cliff faces. Exploration will continue in 2006.

Training members of the club took some precedence and will culminate in an S&R weekend planned for early 2006. Flinders University has a medical school attached to it and over the last few years FUSSI has attracted members who are doing medical degrees. The S&R weekend adds a new dimension to their medical experiences. Not only that, it means that in the event of a caving accident, cavers can call on doctors who are happy to be underground, skilled in vertical techniques and who understand the constraints of underground rescue and medicine.

In 2005, or importantly on Dec 9th 2005, ex-Flinders university graduate (never a FUSSI member), now Minister for Defence, Brendan Nelson, managed to get through the Federal Parliament legislation to ban compulsory student unionism. This legislation, widely condemned by student unions, universities and many others, will have negative effects on FUSSI (and no doubt on other ASF university-based speleo clubs).

Increasing the membership base for caving organisations is, as most clubs find, a difficult enough task. For some strange reason, the offer of seeing the world from underneath and the associated steak knife deals, free mud packs and dust baths, seems of limited appeal to the wider public. In the university world of students with incomes below the poverty line, competing demands and interests, another layer is added to the issue of membership maintenance. I do not know if FUSSI just happens to attract the impoverished, car-less, works-every-weekend-to-stay-afloat, student type more than any other uni-based speleo club, but this has certainly been the reality for FUSSI for the last decade or so. This situation will now be compounded by the fact that from the beginning of 2007 FUSSI will face the future with no recurrent funding at all. To cover the costs of membership to the ASF, membership fees will rise from a heavily subsidized student membership of $20.00 to $61.00 (FUSSI + ASF student rate in 2006 inc PL insurance). Getting that sort of money out of students is going to be very difficult.

On top of this are the issues of maintaining gear replacement programmes, mapping projects and training members to leadership standards. Brendan Nelson's barbaric act (excuse the pun) of Dec 9th 2005, will not help the cause of uni-based speleology in any way. So the next time you see fund raisers on the street corner dressed in overalls and a helmet, it will no doubt be a student, acting in a seditious manner, trying to raise money to be able to go caving. You never know they may even find a new lead under a certain hill in Canberra!

Favourite locations

Do you have a 'favourite' place.

Many of us have a favourite spot, location or cave. Why not share it with us with a photo and a brief description. Send details of your favourite location to jsydney@choice.com.au or snail mail to: Joe Sydney
ASF Publications
[redacted]

Mystery Creek Cave Warning December 2005

See page 28 for a detailed observation.

Cavers are warned not to enter Mystery Creek Cave in Southern Tasmania until further notice for safety reasons. Parks and Wildlife Service general manager Peter Mooney said that specialist advice will be sought as soon as possible in order to determine whether there are safety issues in the cave.

"We were notified recently of safety concerns in the cave and we are acting on that information by advising cavers not to enter the cave until further notice," he said.

Mystery Creek Cave is in the Tasmanian Wilderness World Heritage Area, near Lune River.

Further information: Sue Bailey [redacted]

Source: Liz Wren, Communications Consultant, Parks & Wildlife, Department of Tourism, Parks, Heritage and the Arts.

Orange Speleological Society (OSS) celebrates 50th Anniversary.

OSS held a celebratory dinner in Orange on 26 November 2005 to mark the occasion of the club's 50th year since formation on 18 January 1955.

The dinner which was held at the Canobolas Hotel where the inaugural meeting to form the Society took place 50 years before, was attended by current and former members, friends and associates, including representatives from SSS, SUSS, CSS and BMSC.

Special guests included Mrs Coral Selwood, wife of the late Linton Selwood, one of the club's foundation members, Mrs Pat Dunhill and club Patrons, Anthony and Rosalin Dunhill of "Boonderoo". Anthony and Ros were presented with bottles of wine in recognition and appreciation of their family's continued support of OSS and the wider caving community over 3 generations of the Dunhills.

Guest speaker was Janece McDonald from the Environmental and Climate Change Research Group, Discipline of Earth Sciences, School of Environmental and Life Sciences, the University of Newcastle. Janece gave a short presentation about her recently completed research work conducted at Cliefden and Wombeyan Caves.

Guests were also entertained with a series of slides and PowerPoint presentations and a DVD, reproduced from a video filmed in the 70s by the local TV station with the assistance and starring a number of former club members.

Everyone enjoyed a great night amid much nostalgia.

Daleks invade Wookey Hole, UK: 'Kidnapped' Dalek found on Glastonbury Tor'.

14 June 2005

A Dalek that has been missing for more than a week after it was allegedly stolen from a tourist site turned up safe and well today on top of a mythic landmark. The owners of the 5ft Dalek issued a £500 reward after it was stolen from Wookey Hole Caves, near Wells in Somerset, last Monday.

Alleged kidnappers then left a ransom note pinned to a plunger arm that had been severed from the prop.

The Dalek was found early today at the top of Glastonbury Tor and is now being ferried down via a stretcher. Staff from Wookey Holes Caves have denied that the theft was part of an elaborate stunt to boost ticket sales for a Doctor Who Convention they are staging this weekend. Wookey Hole Caves spokesman Daniel Medley said: "We are very relieved to have the Dalek back with us. We received a call in the early hours of this morning from the kidnappers – they sounded just like kids. "They said they had left our Dalek on top of Glastonbury Tor because it had become too hot to handle.

"It's left us with a problem though because it's very heavy, so we've had to get Mendip Cave Rescue Team to bring it down on a stretcher. We've decided to give the £500 reward to the team for their help.

"This wasn't a publicity stunt, we haven't engineered this at all, but it did seem to happen at a very good time for us – just before our Dr Who weekend."

The Dalek, reportedly worth thousands of pounds, had been on display at the recent Bath and West Show and was in temporary storage at the Wookey Hole site when it was taken.

PHOTOS: HTTP://WWW.WOOKEY.CO.UK/DALEK-NEWS.HTM

Police launched an investigation to trace the Dalek after it was snatched.

Avon and Somerset Police spokesman Darren Bane said: "We are obviously delighted that the Dalek has been returned just in time for Wookey Hole Caves, Dr Who weekend. "We received several anonymous calls to our Crimestoppers number last night saying that the Dalek was on top of Glastonbury Tor.

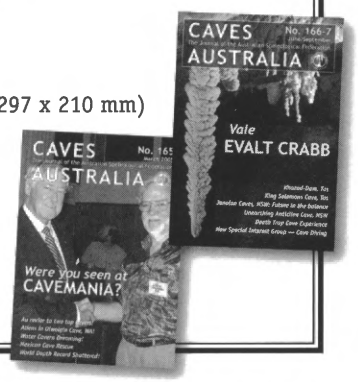
"Our investigation into its disappearance is still ongoing and we would appeal for anyone with any information to contact us." Mr Medley said the Dalek's appearance at the Dr Who weekend was "touch and go" as it would have to undergo repairs to its damaged plunger.

Do you have a good front cover photo?

At times, article photos may not be of a high resolution suitable as a front cover for Caves Australia. In the event that we strike this problem again, we are seeking good quality high resolution photos as future covers. Submit your photo now!

Recommended format:

Image file type: Jpg, Tiff, Eps.
Resloution: 300dpi
Size: Suitable for an A4 page (297 x 210 mm)
3 mega pixels or greater
Email: [redacted]
or snail mail to
Joe Sydney
ASF Publications
[redacted]



Aborted bat foetuses discovered near Naracoorte.

The discovery of aborted bat foetuses in caves near Naracoorte has raised some concerns.

Naracoorte Caves manager, Steve Bourne, says it is the first time it has been seen locally.

He says that about 15 foetuses have been found in the Naracoorte Bat Cave and another cave.

"We don't know what it really means; if there's something wrong or whether it's a reflection of the sudden cold weather that we've had," Mr Bourne said.

"If there's not enough feed for them around, the mother bats abort their babies to save themselves, and if that's the case we would expect to see lower numbers of bats born in Bat Cave this year."

Source: http://www.abc.net.au/news/newsitems/200311/s981828.htm

Finding the meaning of Stalactites & Stalagmites

Recently a non-caver asked me about the common caver phrase stalictites go up whilst stalagmites go down. She asked me to explain as to how this came into being and what does it mean. I posted this bit of curio on Ozcavers and here are some interesting answers.

> Stalagmites might get to the roof, and stalactites have to hang on tight....
>
> Tights.... tight fitting thick stocking and underwear combination similar to panty hose, similar to Damart Thermal long johns...
>
> Girl sits on ants nest. Mites go up so tights come down.
>
> Mites might reach the roof. Tites hold on tight to stop falling down.
>
> I think it's after the mites have gone up that the tights come down.
>
> Mites are "mighty" and Tites "hold on tight"
>
> Stalactites hang on "tite" from the ceiling, and you "mite" trip over a stalagmite. The word stalactite has a "c" in it for "ceiling", stalagmite has a "g" in it for "ground".

Which would you would believe....another bit of quality chat from Ozcavers!

Joe Sydney

WANTED ARTICLES FOR CAVES AUSTRALIA!

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

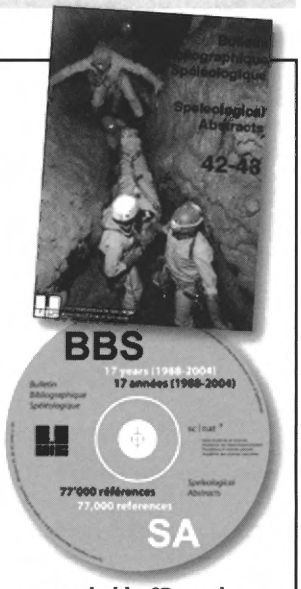
For writing and style guidelines, contact the Editor or Production Manager for further information.

Can you help? Slicing and polishing pieces of limestone.

ASF recently acquired some small fist sized pieces of limestone from a recently closed quarry — about a small crate full. ASF would like to slice these pieces into thin slabs and polish one side. (More about the closed quarry and use of polished slabs in a future issue of CA).

Can you help with this slicing and polishing? Cost of materials can be reimbursed if required. If you can help, contact Joe Sydney: [redacted]

SPELEOLOGICAL ABSTRACTS BULLETIN BIBLIOGRAPHIC SPELEOLOGIQUE



The latest edition, a combined No. 42-43, covering 2003-04, was published by the IUS Commission on Bibliography in August 2005. It contains 6,475 abstracts of articles about the world's caves and karst, 680 of them relating to Australia and/or New Zealand — for 2003 only. (Unfortunately 577 more, from 2004, have been held over till the 2005 issue.

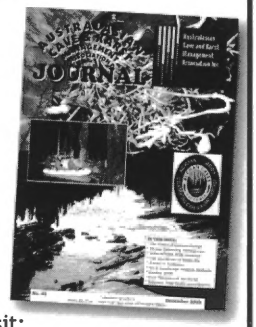
This issue is available in hard copy or searchable CD, each costing 50 Swiss Francs (currently A$52) + 32 CHF ($A33) postage for the hard copy or 2 CHF for the CD. Hard copy + CD are 90 CHF (A$93), including postage.

A 17 year CD-ROM (1988-2004) containing 77,000 abstracts is available for 220 CHF (around AU$228).

Orders can be placed through the web at www:isska.ch/bbs

ASF supports Speleological Abstracts — you can too, and obtain a great reference work at the same time!

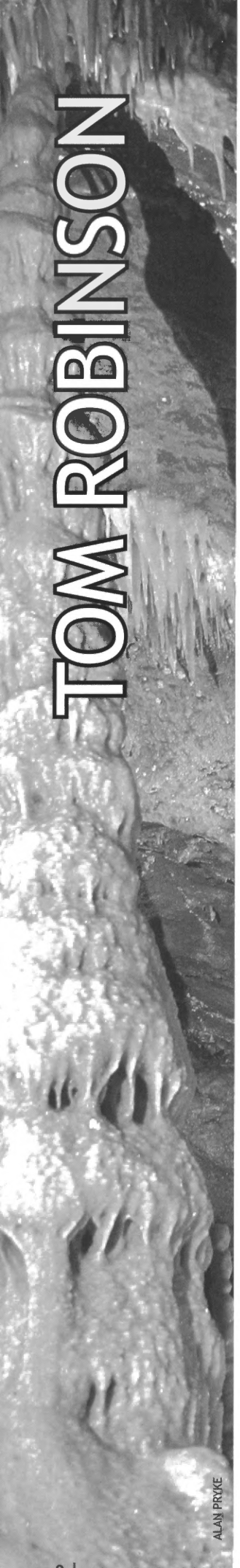
Inside December ACKMA 2005



- The Caves of Eastern Europe
- Pecina Vjetrenica, Herzegovina
- 2006 ACKMA AGM Weekend
- Use and Abuse of Sinkholes
- A Visit to Tasmania
- Gabfest 2006
- Cave Statistics of the World
- National Tour Guide Accreditation

For more info about ACKMA, please visit:

www.ackma.org



Obituary

Tom Robinson

First printed in Chillagoe Caving Club Annual report 2005.

Tom was born in Cairns on 19th July 1935 to Leonard and Jan Robinson, their only child. He grew up on their cane farm and was schooled at Caravonica and North Cairns State Schools before being sent to Church of England Grammar School in Brisbane for his secondary education. On returning home Tom worked on the farm with his father and gradually took over the management and operation of the farm. He also became involved with management of the cane industry becoming a member of the Hambledon and later the Mulgrave Suppliers' Committee. When a nearby cane farmer filled in the district's main drainage channels, in levelling his farm, Tom became the Chairman of the Canegrowers' Drainage Board for the Smithfield area and supervised the re-establishment and maintenance of drainage in the area.

As a young man he became a member of Smithfield Junior Farmers' Organisation (later called Rural Youth) where he progressively became involved in the management of his club. In the 1950s Tom took a Rural Youth exchange to the United States of America where he lived with several families for approximately six months gaining wider experiences in farming practises. At the end of this exchange he took an opportunity to visit the United Kingdom before returning home. Tom later became an adult advisor for Rural Youth assisting various Clubs in management of their activities.

I first met Tom in late 1972 in the Queenslander Cave at Chillagoe on his first surveying attempt with Paul Wilson. We were all surprised at meeting anyone in the cave as it then had little visitation. This first survey was done using a compass with paced distances, as they had no tape or clinometer. This survey gave a very rough indication of the cave layout. However, in subsequent years he became more insistent on accuracy and often sent cavers back to resurvey sections of the Queenslander where he noted inaccuracies or unsatisfactory close errors. Tom's exploration and mapping of Queenslander Tower became a dominant activity for the club for several years and the result is something for him to be proud of.

On 23rd April 1973 Tom was present at the inaugural meeting of the Chillagoe Caving Club along with fifteen others. When the Club got going Tom took the position of Survey and Record Keeper, a position he held until 1990. During this time he established a system of caving records which enabled him to edit the Club's publications Chillagoe Karst and Mitchell Palmer Karst that are essential documents for cavers in these areas.

In 1984 Tom's work on Chillagoe and Mitchell Palmer caving records was recognised by the Australian Speleological Federation with the award of a Certificate of Merit. In 1991 the Chillagoe Caving Club awarded Tom its first Life Membership. When the Caving Club went on its first trip to Mitchell Palmer in May 1977 farm work prohibited Tom's joining the expedition. However, during the cane slack season he led numerous exploratory trips searching for better access to this quite inaccessible area and to the individual towers, making up for his earlier absence. Tom was an outgoing personality and was usually at the centre of social activity. Over many years he involved a number of young people in caving, which he saw as a challenging and character building activity.

He had much satisfaction when he saw development in these young men as a result. Tom married Miriam Anderson on 9th April 1988, but unfortunately, they have no children. The Cairns Penny Bank invited Tom to become a Director about 1990 as his background was seen to be useful to the Bank. Unfortunately soon after he commenced he began to show signs of memory loss due to his then undiagnosed terminal Alzheimer's disease and was unable to continue. After a steady decline in his health Tom was moved to the Carpentaria Nursing Home earlier this year when he could no longer walk making it impractical for Miriam to look after him at home. After several months there he died in his sleep on 18th April 2005, a few months short of his 70th birthday.

Tom had many friends and they will remember him for his generous and kindly friendship.

Les Pearson.
Chillagoe Caving Club

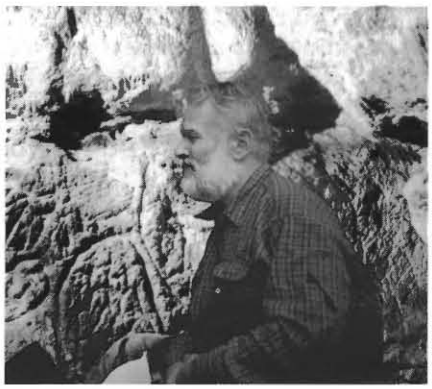
5th Speleo Art Exhibition

Caves Craters and Critters
January 6th - 12th, 2007
www.caves.org.au

SPELEO ART DOWN UNDER MT GAMBIER, SOUTH AUSTRALIA.

Bringing together speleo artists from around the world.

This is your chance to take part in the 5TH Speleo Art Exhibition down under at Mt. Gambier, in southeast South Australia. During 6th - 12th January 2007, Australia will be holding its 26th Biennial Conference of the Australian Speleological Federation at Mt Gambier, South Australia. During that time an exhibition of cave art will be held during the conference at the Mt. Gambier Race Course.



PERMISSION GRANTED BY R BEDNARIK

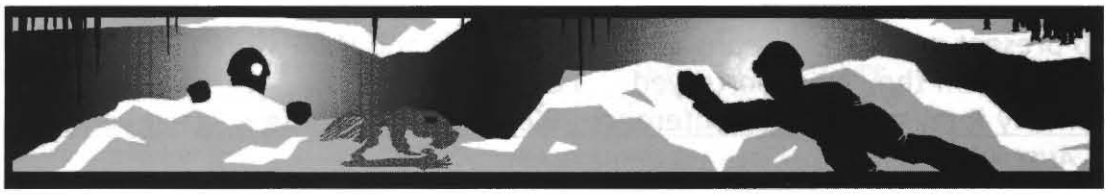
Robert G.Bednarik archaeologist at Karlie-ngoinpool Cave near Mt. Gambier, sight of the most extensive non-figurative cave art known in the world.

Opening the Art Exhibition is Robert G.Bednarik, archaeologist. Robert has an association with caves and specialises in ancient rock art. He is currently Convener, President and Editor of International Federation of Rock Art Organisations (IFRAO) and Secretary and Editor of Australian Rock Art Research Association (AURA) and more. Visit his website for a fascinating insight into the world of ancient rock art: http://mc2.vicnet.net.au/home/aura/web/index.html

Open to all cave enthusiasts including photographers and artists, the theme is caves and caving. Caves can inspire one to be creative in many various ways. We encourage you to submit a painting, drawing, photograph, printmaking, literature, poetry, sculpture, ceramics, glass work, craft work, textiles, interpretive dance, performance art or whatever you feel that inspires you. No limit on entries.

For details and classification, see page 10 or visit the ASF website www.caves.org.au

Entries close 30th November 2006.



International Geographical Union 2006 Regional Conference Brisbane, Australia

Held at the Queensland University of Technology (QUT) in Brisbane, Queensland from 3-7 July 2006. The IGU Commission on Karst will hold its annual meeting with a special session on the theme "Geomorphology, hydrology and management of karst terrains" being convened by Professor David Gillieson, JCU.

Papers presented will be on the themes of human impact on geomorphology and hydrology of karst, sustainable development of karst terrains and natural and anthropogenic hazards in karst areas.

Also enjoy a 6 day pre-conference field excursion trip to tropical North Queensland: Limestone and Lava visiting locations as Chillagoe and Undarra.

For registration details visit the conference website www.igu2006.org

HELP SAVE AUSTRALIAN CAVES & KARST

The *ASF Environmental Fund* is completely funded by donations from cavers, caving clubs and public. Your donation or bequest to AEF will assist our work of informing Australians, and conserving Australian caves and karst. To make a contribution or receive an information pack, contact The Secretary or visit www.caves.org.au. Registered as an environmental body by *'Environment Australia'*.

envirofund

What's happening in your state?

Has your state or club recently organized a social or caving event? Caves Australia readers are eager to know about happenings in all states. Send details of your state's event to the Editor or Production Manager.

Caves Craters and Critters
January 6th - 12th, 2007
www.caves.org.au

5th Speleo Art Exhibition Details

Bringing together speleo artists from around the world.

This is your chance to take part in the **5th Speleo Art Exhibition**

An exhibition of cave art is to be held at the
Mount Gambier Race Course, Mount Gambier, South East, South Australia,Australia
during the **26th Biennial Conference of the Australian Speleological Federation,**
6th - 12th January 2007.

Be creative, include whatever the caves suggest to you.

Submit: ★ Painting, ★ Photography, ★ Drawings, ★ Printmaking,★ Literature, ★ Poetry, ★ Sculpture, ★ Ceramics, ★ Glass work, ★ Craft work, ★ Textile work, ★ Interpretive dance, ★ Performance art, or whatever you feel is appropriate.

The Sky's the limit but, if you are mailing art work, then it is to be no larger than 40cm x 60cm, no frames (unless you are delivering the work yourself). All appropriate work must *be mounted and titled. Entry is free!*

Each artist to present a few paragraphs about themselves and their work and something about the cave or item they have portrayed. For all artwork sold, ASF will charge 20% commission on any item sold at the conference. Please include these costs in your pricing. *Prices are in Australian dollars!)*

To submit your entry in the Art Exhibition, use the entry form and please contact:

Entry details and enquiries contact:

June MacLucas

[redacted]

All work to be delivered to:

Kevin Mott

[redacted]

(Please allow time for your artwork to arrive well before the exhibition date).

All care will be taken in handling your work but no responsibility will be entered into if damaged.

Artwork will be returned to owner at the earliest possible convenience, or collected at conference!
Conditions do not include return postage (unless specific arrangements have been organised with June MacLucas).

Entries close 30th November 2006

5th Speleo Art Exhibition Entry Form

Caves Craters and Critters
January 6th - 12th, 2007
www.caves.org.au

Application to enter

Application to enter the Art Exhibition is now open. You are invited to submit as many entries as you wish. For details, please refer to www.caves.org.au Conference website. To enter, please include a few lines about yourself, your art work and cave or subject details. There is no limit on number of entries. One entry per form please. *Entry is free!*

Name: .....

Address: .....

Club\Individual member\Non-member.....

Title of the work: .....

Medium Used (*Please tick*):

Mailed artwork: Maximum submitted non-framed artwork size mailed - 40cm x 60cm.

(Larger & framed permitted if you bring it!)

Painting: ❑ **Drawings:** ❑ **Printmaking:** ❑ **Literature:** ❑ **Poetry:** ❑ **Sculpture:** ❑

Ceramics: ❑ **Glass work:** ❑ **Craft work:** ❑ **Textile work:** ❑ **Interpretive dance:** ❑ **Performance art:** ❑

Other: .....

Photographic: SLR: ❑ **Digital** ❑ ***(Please tick)***

About the Artist: Please submit a few lines about yourself and your interpretation of submitted art!

.....

.....

Sale terms & conditions

Sellers price:	AU$
ASF contribution: *add 20% of sellers price:*	AU$
Total Sale Price:	**AU$**

Entry details and enquiries contact:

June MacLucas
[redacted]

All work to be delivered to:

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Entries close 30th November 2006

ANDREW BAKER

STC Rope Testing 2005

Originally published in STC Speleo Spiel No. 349 July — August 2005. Permission kindly granted by Alan Jackson.

The vertical nature of most of southern Tasmania's caves creates the need for experience with Single Rope Techniques – the most important component of this technique is the rope itself (it really doesn't work without it!) Unfortunately, despite the technique name suggesting otherwise, these caves require much more than a 'single rope' – it's usually anywhere between three and fifteen of various lengths! Perhaps we could rename it Multiple Rope Technique? As a result, STC has a gear store full of rope (in fact, over a kilometre of it!) When one decides to dangle themselves precariously over a 100 m pitch on this stuff we call rope, it's nice to have confidence that it is going to support one's weight. While plummeting down a 100 m pitch sounds ominous, falling only 3 metres can lead to the same consequences. Having confidence that your ropes are not going to fail is therefore paramount.

This article, while more or less being an account of recent rope testing of the STC rope store, aims to remind other Australian caving clubs the importance (and ease) of implementing regular rope testing.

Since the passing of the Southern Tasmanian Caverneers' Gear Store Officer extraordinaire, Jeff Butt, STC had let the rope testing regime slip a little. Some of the more regular rope users in the club started to worry about this, particularly as they hung 50 metres off the ground on a piece of the club's old 9 mm rope. All our fears have been allayed following the testing day we held in August. This article doesn't offer a lot of technical detail regarding testing specifications etc. To research this aspect then a thorough read of Butt 1998 and the two main sources referenced within (Elliot 1986 and Warild 1988) is recommended.

Here is a brief run down of the day and its findings.

The Rig

The first thing we had to do was to set up a new test rig (dragging all the ropes back up to Sarah's place and Jeff Butt's old testing tree didn't seem like much fun). A new rig was soon engineered off the end of Gavin Brett's car port. The new rig had some short comings that were mostly ironed out during the course of the afternoon. Height was the main one, (it's amazing how much even static rope elongates during testing), but we overcame this by making a new 80 kg weight that was half the length of the old railway track sections that had been used previously. The simple solution to this would have been to make the top of the rig higher, but we didn't have any longer bits of timber! The main differences between the old and the new rig, however, were its improvements! The winch on Gavin's Landcruiser was used to raise the weight, rather than a human operated pulley set up, and the old method of tying it up with baling twine, which would then be cut to release the weight, was circumvented via the use of a manually operated quick release latch. These two improvements brought the time between each drop down from about 3-5 minutes to 30-60 seconds. In total we tested 19 individual ropes sections and released the weight 114 times, all in about three hours. Room for more improvements to the system was noted and will be incorporated into the rig for future testing sessions (particularly an even smaller weight – lead instead of steel would be good, and some longer pieces of timber to make the whole system higher).

The Aims and Methods

All the ropes in the STC store originate from about seven or eight 'parent' rolls. This is represented in the rope labeling (e.g. all the 'A' ropes are 9 mm ropes of the same brand and age, and so on for 'B', 'C', 'D' etc...) We wanted to test at least two representatives from each parent roll (extra from the 9 mm rope though). Once again, for a good rundown on our logic behind our rope testing refer to Butt (1998), but essentially each test piece, after being soaked in water (wet rope is weaker than dry rope), is subjected to a series of fall factor 1 drops with an 80 kg weight (actually an 86 kg weight this time!) until they fail. If a rope survives 3 consecutive falls then it is deemed 'safe'; if it fails on the first or second then further testing of that rope is required to be sure of its condemnation.

Perhaps the most crucial part of our methodology was to have someone on full time scone cooking duty. This keeps group morale and energy levels at a peak and helps mask the fact that you're going to be trying to break ropes for a few hours.

The Results (briefly!)

We didn't quite go to the same level of detail as Jeff Butt used to when he was in charge (once again, see Butt 1998 for details!) Basically, if a rope survived six or more consecutive falls then we were pretty happy

Damian Bidgood reattaching the winch cable to the test weight.

with it – we didn't see the need to continue dropping it till it failed (I remember dropping some sections of rope in excess of 15 times in the past, and they still didn't fail. We didn't think that rope testing was a fun enough exercise to warrant this!)

'A' ropes – these are 9 mm and are about 13 years old. We were expecting these to perform poorly as 9 mm rope is notorious for failing once it reaches even a few years of age, even without actual usage (i.e. still on the roll). We were pleasantly surprised. Of the 14 or so different lengths of 'A' rope in the store, we tested 10 of them. All of them survived three falls. Two failed on the fourth drop, some on the fifth, and others we got sick of it after about eight!

'B', 'C' and 'D' ropes are all 10.5 mm diameter ropes of varying age. All this rope survived in excess of six falls.

The numerous 'R' ropes constitute a variety of diameters and ages, but are generally 10 mm or 11 mm and up to 20 years old. All survived an excess of six falls, but some didn't behave all that nicely after the first fall – they still didn't break, but looked ugly and very static (no bounce left in the rope).

A few miscellaneous ropes were tested too:

- A short 10 mm rope that was recently rescued from JF-10 Splash Pot, after being left behind for about five years, failed on the fourth drop.
- Gavin Brett's retired dynamic cowstails that failed on the second drop!
- Alan Jackson's retired dynamic cowstails that failed somewhere around the fifth or sixth drop.

The Conclusions

All the 9 mm 'A' ropes have been returned to service. Some broke on the fourth drop, which is starting to get scary, but still well within our safety parameters. However, this rope needs to be tested again within 12 months if it is to remain in service.

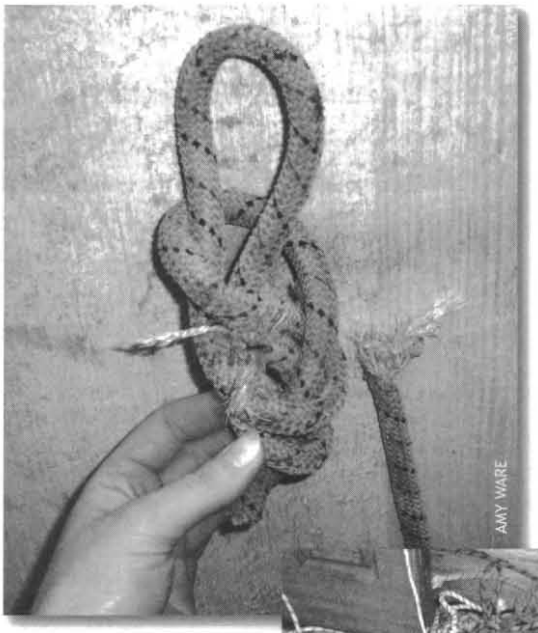
All the 10.5 mm 'B', 'C' and 'D' ropes are fine and remain in service

Of the various 'R' ropes we have only kept the 11 mm Bluewater lengths in service. The other main 'family' of 'R' ropes were retired, as while they didn't actually fail any tests, they did loose any signs of 'dynamicness' after the first drop. These retired pieces were all short lengths (less than 12 m) and didn't make much of a dent in the rope stores.

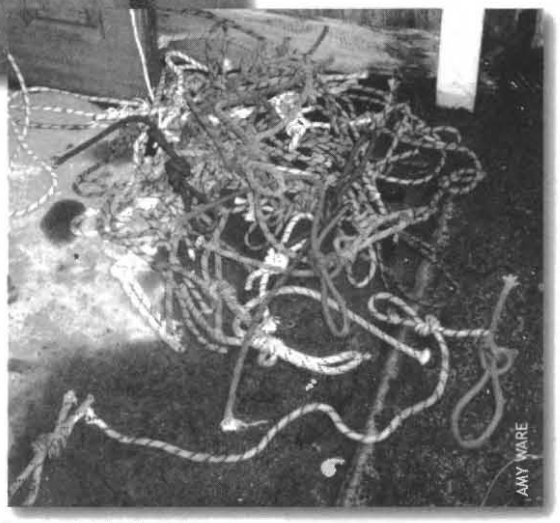
The miscellaneous Splash Pot rope has been retired (any 10+ mm rope that fails on the fourth drop is too sick in our minds).

Gavin's cowstails were an interesting situation. It was dynamic rope, but he had not used the traditional figure 8, 9 or stopper knots in the ends. Being an ex sailor and having once worked in a chandlery he is quite taken with whipping (no, not that kind of whipping!) The two ends of the cowstails had been internally stitched and then whipped to form a loop. On the first drop the internal stitching failed and the whipping was looking pretty sick. The whole lot failed on the second test. Conclusion – maybe whipping is not a good idea for cowstails.

Alan's cowstails were 10 mm dynamic rope of about 3-4 years of age. Unfortunately the testing process was a little flawed for this rope, as the stretch generated in the first two falls was not allowed for in the height of the test rig and they both allowed the weight to hit the ground. Nonetheless, these first two drops certainly removed a significant amount of the dynamic properties of the rope. The section was then tied shorter and subjected to drops that didn't deck out. On the first proper drop



A failed figure eight knot – 99 times out of 100 the rope will fail in the knot, unless a severely damaged section exists mid rope.



The pile of tested rope sections for the rubbish.

the outer sheath on the rope ruptured most of the way round. The second drop caused the outer sheath to completely fail and two of the nine internal cores also snapped. The third drop caused additional snapping of internal cores, but still no failure! The fourth drop completely failed the rope. This was an interesting result – none of us could believe how long it held on even after the sheath and central cores had started failing. Conclusion – this was a good set of cowstails, what a shame they'd been ruined!

In addition to all the testing that was going on all the ropes in the store were inspected visually and by feel – looking/feeling for damaged sections of the sheath or core. Where damaged sections were found these were cut out and used as the test piece for that rope. All the ropes were re measured and re labeled at both ends. The rope has been re sorted onto the rope rack also. Ropes have been sorted by diameter and length, i.e. all the 9 mm rope is at one end of the rack and is placed on the rack from shortest to longest, and likewise for the 10.5 and 11 mm ropes. This should make selecting ropes for future trips a little easier.

Hopefully this article has been remotely interesting to non STC members of ASF. I guess the take home messages are:

- Test your ropes regularly
- Label your ropes systematically to allow you to know their age and usage
- Winches are heaps better than man power
- Whipping is not a good way to make cowstails
- With enough freshly baked scones and jam, rope testing can be a fun social activity for your club

References

Butt, J. 1998. Safety Assessment of the STC Ropes. *Speleo Spiel* 308:13-17

Elliot, D. 1986. *Single Rope Techniques.*

Warild, A. 1988. *Vertical.*

Casteret

Southern Tasmanian Caving Club (STC) recently published this piece of early Australian caving history, a letter from France by Norbert Casteret to the Tasmanian Caverneering club, Australia's first caving club. The Tasmanian Caverneering Club amalgamated with STC and their correspondance over the years has led them to contact with the greatest of international cavers. This is just one piece of their own caving history.

A LETTER FROM FRANCE

Norbert Casteret

[The Tasmanian Caverneering Club must have written to French caving legend Norbert Casteret late in 1954 or early 1955, for on 12 April 1955, he replied and forwarded a packet of 14 of his own black and white photos showing some of his exploits. The letter is reproduced below, followed by a rough translation into English and the 14 photographs, with a table indicating where some of them have been published – Editor.]

N. Casteret [translation]
à St. Gaudens
(Hte. Garonne)
12 April 1955

Dear colleagues,
Your letter and your nice consignment of colour slides have reached me after a long delay.

I thank you very warmly, and also I congratulate you on your activity and dynamism. I am delighted to know that in at antipodes of France there are speleologists committed to the same activities as ourselves. Your colour slides interested me, especially those showing stalactites growing geometrically. I do not know this variety. Your long stalactites are equally interesting. In France we call them "macaronis"; they are rather rare, but they are known, nevertheless.

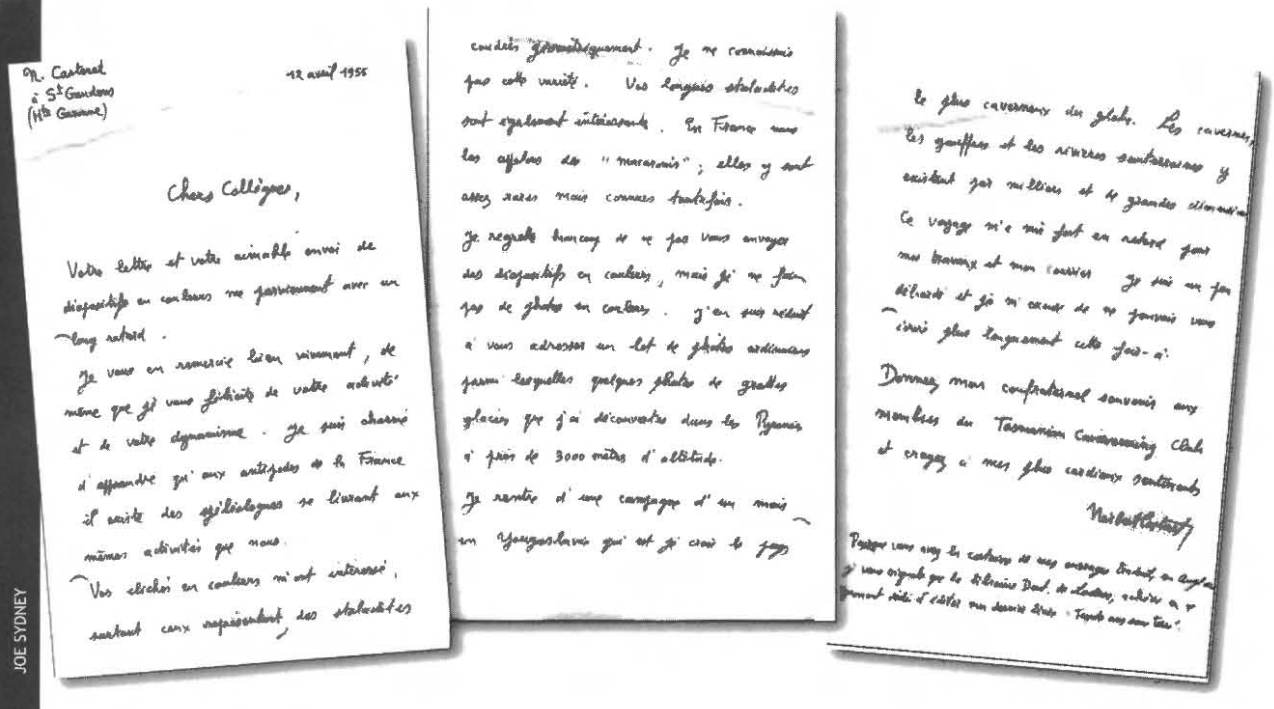
I am very sorry not to be able to send you any colour slides, but I do not take photos in colour. I am sending to your address a packet of ordinary photos among which are several of ice grottos which I discovered in the Pyrenees at an altitude of about 3000 metres.

I have just returned from a month's trip to Yugoslavia, which is, I believe, the most cavernous country on the globe. Caves, pot-holes and underground rivers exist there by the thousands and are of large dimensions. This trip has set me back very much in my work and correspondence. I am a little "hard put to it" and would excuse myself for not being able to write to you at greater length this time.

Give my fraternal greetings to the members of the Tasmanian Caverneering Club and believe in my heartfelt sentiments.

[signed]
Norbert Casteret.

As you have read certain of my books translated into English, you may be interested to know that Dent's Book Company of London are at the moment finishing editing my last book "Thirty Years Under the Earth."



JOE SYDNEY

*Casteret emerging from a squeeze. His caption translates as: **Crawling: usual exercise of cavers. My Caves1947, opp. p.57: "Getting through a cat-run". [Doubtless also used elsewhere.]***

Subterranean iceberg The darkness under the Earth 1952, opp. p. 25 "A subterranean iceberg" — the discovery of this is recounted on pp. 26-28.

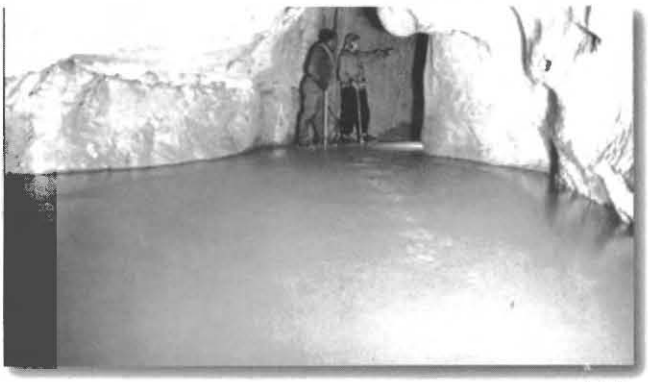
Climbing the 'Frozen Niagara' in the Grotte Casteret. The darkness under the Earth 1952, opp. p. 22 "Maud Casteret descends Niagara".

The transparency of some ice tongues is ideal The darkness under the Earth 1952, opp. p. 19 "A stalactite of purest ice" — in a cave on the Gavarnie Massif in the Spanish Pyrénees.

On the subterranean glacier of the Grotte Casteret. Tenebres. 1952, p. 274 [French edition of The darkness under the Earth] "Une salle de la Grotte Casteret".

Entrance of the Grotte Casteret ice cave, Gavarnie Massif. Not known if published (though other photos of this entrance have been).

The ice caves of Marboré (Gavarnie Massif) are the highest in the world. The darkness under the Earth 1952, opp. p. 13 "The level surface of an ice river".



Scaling a waterfall on a metal pole in the Grotte de la Cigalère (Ariège). Ten years under the Earth 1940, after p. 208 "Climbing cascades, Gouffre Martel". This ascent is described in detail on pp. 149. Climbing 32 feet up a 2.5" pipe under a waterfall is no mean feat! — but one of these captions must be wrong.

A swarm of bats on the ceiling of a cave Mes Cavernes, 1942, p. 255 (Ouvrage couronne par L'Academie Francaise. Librairie Academique Perrin Editeur: Paris.)

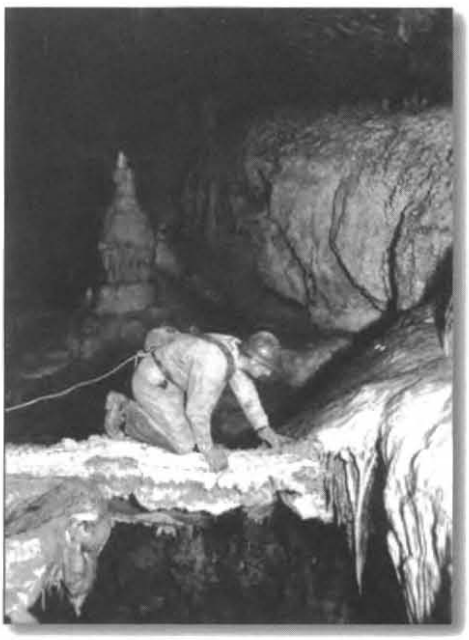
Climbing a cascade of ice in the Grotte Casteret. The darkness under the Earth 1952, opp. p. 33 "Climbing a frozen waterfall". Casteret called this one of the Caves of Chamois in the Upper Aragon, Spain.

READY TO REPEAT THE DARING FEAT THAT LED TO A GREAT ARCHEOLOGICAL DISCOVERY

Norbert Casteret in the subterranean stream through which he swam to explore the Montespan Grotto. At several points, although he did not kno whether there was an open surface beyond, he dived through siphons where the water [illegible]

Walking alone in a subterranean river. As this was taken by an Illustrated London News photographer, this photo probably appeared in that publication. This appears to be the only photo in the collection which is not an original print.

Subterranean decoration in the Gouffre d'Esparros (High Pyrénees) Paysages Souterrains [by Casteret and Germain Gattet], 1943, p. 43 (French edition) "Contemplation, Esparros"



Crossing the Devils Bridge in Gouffre d'Esparros (High Pyrénees) The darkness under the Earth 1952, frontispiece "Crossing a bridge of ice". This is obviously not correct — the 'bridge' is of flowstone; perhaps the publisher wrote this caption.

Helictites in the Gouffre d'Esparros Paysages Souterrains, [by Casteret and Germain Gattet.] 1943, p. 66. The photo, captioned "Excentriques, Esparros", shows just the helictites, Casteret having been cropped out.

Google Earth flies you to any caving area — free!

Have you ever thought that you'd like an aerial photo of a location before setting off on a trip. Google Earth may help you here!

Before you check this out on your PC\Mac here's a warning — you'll need a very fast connection such as Broadband for this to work effectively.

What is Google earth?

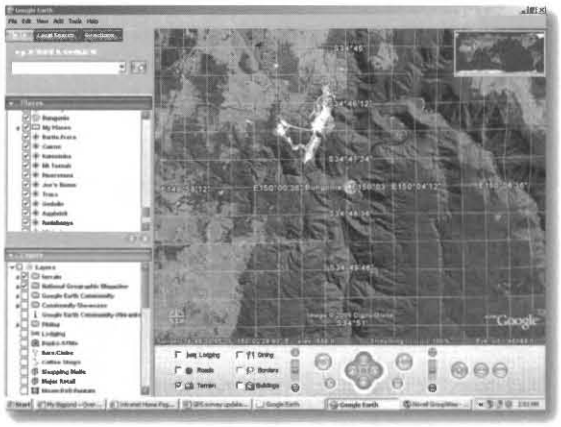
Imagine the entire planet being photographed by satellite and having this available at your finger tips. Yes, any location, city and caving area. Resolution of area depends on how sensitive the area is (military) and varies from low, medium to high.

How do I get Google Earth?

For you to view Google Earth you will need the free software, visit http://earth.google.com/ Once downloaded and installed an icon appears on your desktop for quick opening.

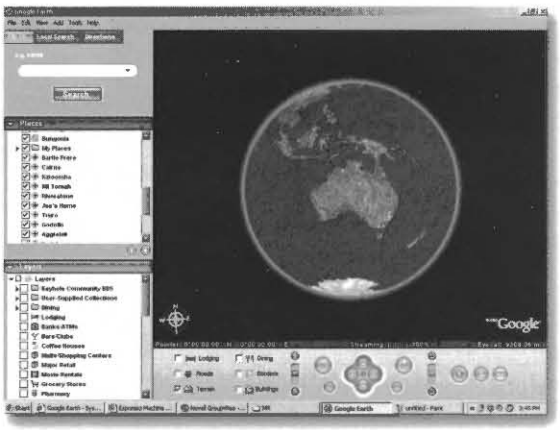
Use the tools and fly

The home page commences with a picture of earth floating in space. Click on a given location example or enter your known location and the planet starts to spin, zooming and 'flying' you to the location. The



Flat overhead Image of Bungonia, NSW showing gorge, mine and plateau with latitude & longitude grid lines, world map and side bar with tools.

Image showing height perspective of Bungonia, NSW.



final picture can be zoomed in and out, rotated to look from any direction and tilted to give a height perspective.

Tools offer latitude and longitude grid lines as well as a small world map for quick location reference. Other features include saving a location into your favorites for quick visiting, adding country borders, city names etc. It also offers an export feature so that you can save known locations on your PC/Mac or email them to a friend.

Manual searching

If you have the latitude and longitude of a caving area, enter it into the search box and watch the planet rotate 'flying' you there. If you only have a rough idea of the location, the image can be moved around manually until you find what you are looking for. Google Earth offers all this for free.

Google Earth Plus and Google Earth Pro

For a fee, Google Earth Plus and Pro offers you much more! Some of the 'paid for' features are better printing, linking your GPS and up/downloading waypoints and references, presentations, importing spreadsheet and better tools.

Checkout a few of my favorites, enter the latitude and longitude into the search box and fly:

Uluru (NT) - 131 01 48e 25 21s
Wolfs Creek Crater (WA) — 127 47 41e 19 10 19s
Bullita (NT) - 130 29.3e 15 56 21s
Bungonia (NSW) — 150 01 30e 34 47 42s
Big Hole (NSW) — 149 39 35.1e 35 43 39.9s
Ning Bing (NT) - 128 33e 15 19 48s
Chillagoe (Qld) — 144 31 30e 17 08 42s

Contact me for a small Google Earth file of most of Australia's karst locations as listed in the Australian Karst Index.

Also check out Google Moon! http://moon.google.com/ Don't forget to zoom into the Apollo landing sites: It's as easy as eating cheese!

The planet is now yours...happy flying!

Joe Sydney
HCG

The Gulf Epistles

In July and August 2003, a VSA expedition headed 3000 km north for the winter to investigate the Barkly Karst in northwest Queensland. This was to visit a large area seldom visited by cavers but recommended by VSA's "man in Mt Isa" Hank Coppus. The southerners were exposed to scorching sun, spinifex, deadly crocs and lots of undocumented karst just waiting to be explored.

Margaret P James first went caving (and climbing, and all the usual outdoor things) in the mid 1960s, and now has more time to get away on regular caving expeditions to places like the Nullarbor, North Queensland and the Northern Territory. Currently President of Victorian Speleological Association, and a member of Parks Victoria's Cave and Karst Advisory Group.

Marg James assisted by the rest of the expedition Victorian Speleological Association Inc.

Genesis

Easter 2001, out on the Nullarbor.... Mt Isa-based VSA member Hank Coppus regaled us with stories about all the exciting limestone in North Queensland (especially around Lawn Hill) but lamented that he had nobody to explore it with. "Why don't you come up?" Hmmm..... So over the next 2+ years we talked about geology, looked at maps, discussed areas, and considered our options. Winter 2003 seemed a good time to plan for, being the dry season, and hopefully "cool" enough for a bunch of wimpy Victorians.

On VSA's behalf, Hank and Nicholas White busily negotiated with officers from the Queensland Parks and Wildlife Service and local indigenous groups for access. We formally agreed to all conditions for our proposed visit to Lawn Hill National Park, and Hank undertook an exploratory field trip with Parks and Boodja indigenous representatives, at their request. After all that effort, imagine our bewilderment to find approval for Lawn Hill suddenly and unexpectedly withdrawn. Damn! More heroic efforts from Hank resulted in approval to visit several huge stations in North West Queensland. Thank goodness. The trip was still on!

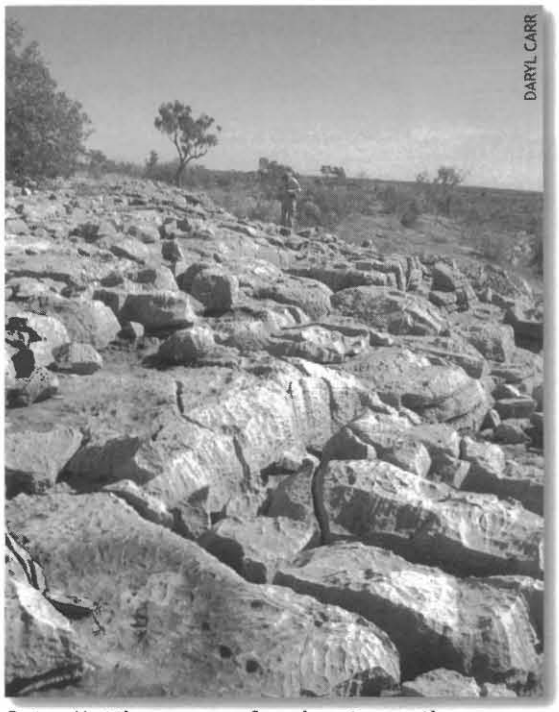
Many essential aerial photos were acquired at absolutely the very last moment (phew). Food and cooking were the subject of much talk and too many emails, with nothing resolved (dammit – we'll sort it out when we get there). Gear was desperately resuscitated (or not) from the Nullarbor expedition that some of us had only just returned from. Panics were had, dummies were spat and killer wogs were caught just in time for departure.

Exodus

By the time we actually left, there were nine of us. Daryl Carr, Marg James, Peter Matthews and Brian Franz travelled directly north from Melbourne, braving the interminable kangaroo crash belt through outback NSW and Queensland. Yvonne Ingeme and Reto Zollinger drove from Hamilton straight up through the Red Centre. Hank Coppus was already in Mt Isa, while Nicholas White drove over from his Bullita expedition in the Northern Territory. Paul Brooker flew in from Morwell – straight out of a frost and into a comparative heat wave (and we won't tell you what he said about the temperature!)

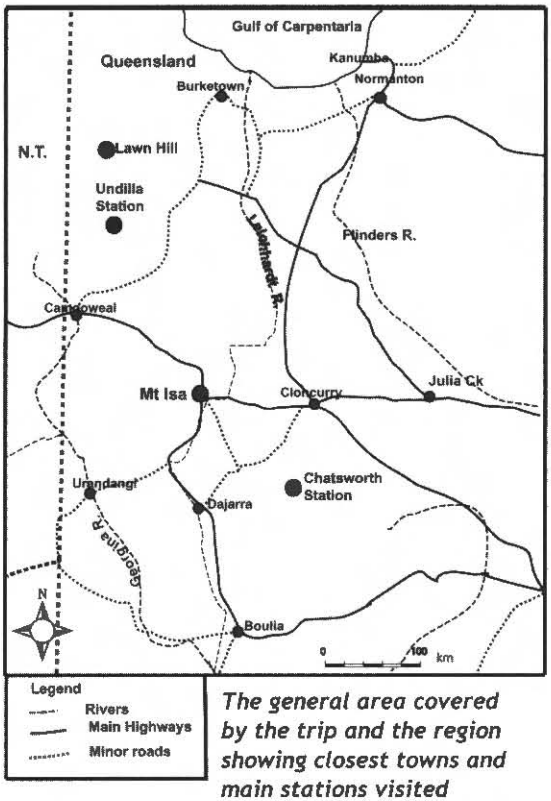
After nearly 3000 kms of driving in 3 to 4 days, then arriving in Isa after 7.00 pm and having to look for somewhere to stay, you can imagine what condition some of us were in when we finally hit the Irish Club for a much needed feed, (or was it just the effect of that very loud and overly cheerful country "music" band?! It can't have been the plonk!) Food and other shopping lists were desperately cobbled together, and the next day supermarkets were attacked by teams of weary zombies. "Team Organised" (Hank, Nicholas and Paul) headed off on the afternoon of Tuesday 22nd July for Undilla Station to introduce themselves to the landowner. "Team Exhausted" sensibly waited for Reto and Yvonne to arrive later in the day, planning to meet the others at Undilla the next morning.

The distance from Mt Isa to Undilla didn't sound too far; only 120 km on sealed road, then 100 km on gravel to the station gate, then 50 kms on station



Peter Matthews on surface karst near the O'Shannassy River, Undilla Station.

JOE SYDNEY



The general area covered by the trip and the region showing closest towns and main stations visited
Map drawn by Susan White

tracks to our proposed camp on the O'Shannassy River. No probs eh? Alas, Queensland roads are not genetically the same as Victorian ones. They are also overrun with severe infestations of road trains (travelling in groups, way higher than the speed limit, and undulating like drunken pythons), and speeding grey nomads with giant stone-spitting caravans. This is where Reto started to acquire his winning margin in the Stake and Chips Award: his new windscreen (peppered and chipped by a passing grey nomad) saved only by everyone else's screen patches, followed at Undilla by the first staked tyre for the trip. Negotiating the station tracks (indeed, even finding some of them) was another noteworthy experience; not to mention the industrial levels of dust. Suffice to say that we eventually camped well above the O'Shannassy River, and that places with lots of good-looking limestone are not good for putting in tent pegs or digging any other essential holes!

Chronicles: a series of edited excerpts from the diaries

Thursday 24th July:

Marg: We start late, and split into three groups which head off in different directions. Daryl, Peter and I head south for a rocky hill with grike fields, then circle down to a tributary and head for the O'Shannassy River. Good karst scenery, interesting towers and lots of karren that is rotten to walk over, but which is where you might find caves; except that we don't. To add insult to injury, Nicholas, Paul and Hank radio to "casually" let us know that they've found a cave. Ooh, THREE caves. WALK-IN caves, and with Common Sheath Tail bats. Showoffs! Later we find the shade down near the river a relief, and are looking forward to the deep pools shown in the aerial photos. But there aren't any! Just a dry rocky riverbed. Lesson One: always check the time of year the aerial photos were taken, and whether it was straight after a record wet season (it was, and this isn't). As Brian recorded in the Group Log Book, "camp wallahing was then attended to". Paul: The heat of the day proved too much for one of our party – me! After 6 hours of wandering over the karst we had covered a reasonable distance – not enough for Hank though. If he had his way we would still be walking!!

Friday 25th July:

Daryl: We were woken early and up by 7.00 am – a record! Packed and away from camp by 9.00 am. The ultimate aim was to drive cross country and on the way look at some dolines identified on the aerial photos. The roads/tracks require thought, lots of low ratio over exposed limestone and rubble. At one stage we managed to drive to within about 2 kms from a feature. Hank and Franzi made the sacrifice and walked the distance to find a classic doline, but no entrance. Later we found a campsite a kilometre past Korallah bore, most will sleep under the stars – eat your heart out Miles!

Saturday 26th July:

Daryl: Half the group crosses the dry Harris Creek to check out the "five out of five" doline identified by Hank from the aerial photos. Radio calls back to base and we spoilt the morning for Nicholas, Brian and Paul. The order was for a full caving equipment supply. Paul was a bit disbelieving of our glowing reports, but when Peter Matthews stormed back to camp for his helmet and light the others thought, "hey maybe it's not a fib". Paul appeared over the saddle with two packs, front and back – red and hot, looking for shade. The pitch was fifteen metres to a fine floor but only 2-3 metres of passage. Nevertheless a fine hole-in-the-ground. Marg: Much excitement about this shaft, which obliges a return to camp for vertical gear. Reto finds another shaft nearby, which Hank free climbs. It doesn't go either. We decamp and head north again, past Clifford Park bore, where we clean up, past Devil's Elbow, and eventually prop near Rosehill Bore on the Thornton River.

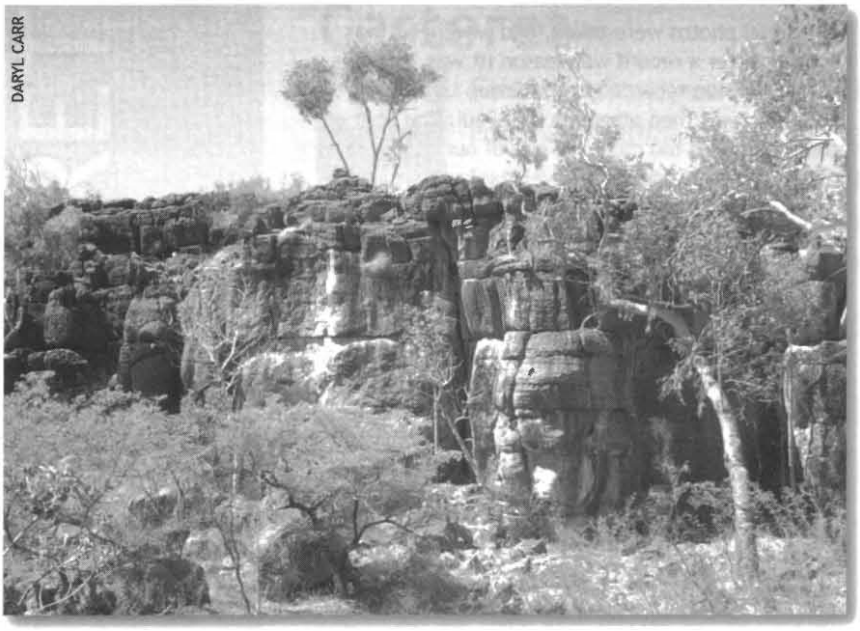
Sunday 27th July:

Brian: Somewhere in northwest Queensland. Here we are, camped among the ghost gums beside the river. The camp fire pit is too long, the logs contain too much habitat, and the sun is too slow to reach camp on cold mornings. Perhaps later on today some caving might happen.

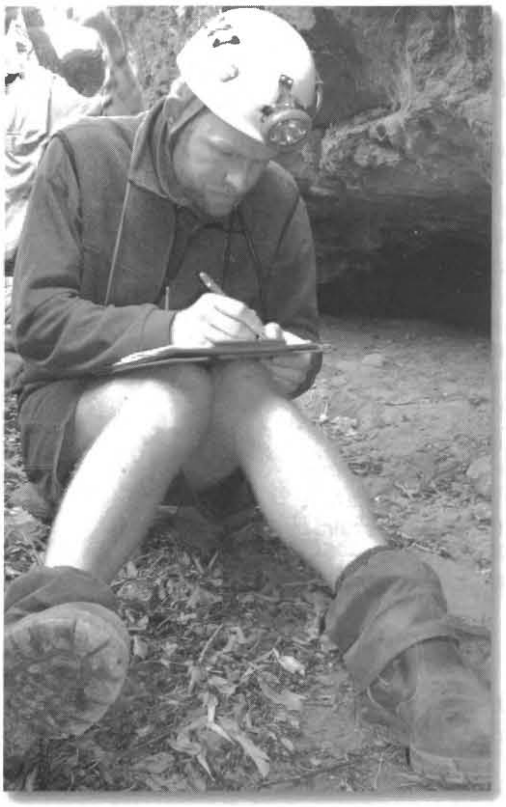
Daryl: Bloody cold night in the $10 Dimmey's sleeping bag – survived to the morning only by dressing for bed. The party split areas with some going back to the Devil's Elbow area. Hank, Marg and Daryl jumped into D's Toyota and went bushwalking on wheels, downstream along the Thornton. Hank was happy that a car could go so far down the Thornton. D was not so sure, but took the whole episode as target training when trying to slip between trees. Still no luck finding a REAL cave.

Nicholas: Went out towards Devil's Elbow – Reto, Yvonne, Paul and

Abseiling into the "Superdome".


DARYL CARR

Limestone bluffs in a side gully, O'Shannassy River.



Paul Brooker in "doco-mode" outside "Lollipop Cave" Chatsworth Station.

Nicholas investigated various bluffs. First cave was a small vertical cave, too tight to enter – but rocks rolled down about 8-12 metres. (Later) very good karst but only a couple of arches with rat droppings.

Paul: Having trouble picking appropriate footwear for tramping around the limestone. The comfortable boots don't really give adequate support and the sacrificial walking boots are causing blisters. NOTE: next time bring normal walking boots and let them suffer the wear and tear. The terrain is certainly tough on footwear! The sock protector gaiters have proven their worth – the Bathurst burr and numerous other seeds and burrs are kept at bay – great! The temperature during the day although not overly hot (generally) is knocking some of us southerners coming from the thick of winter around a bit. We will try to get away earlier in the morning to avoid the midday sun!

Camping near a waterhole is great for the wildlife we are seeing – mainly the birds. Numerous flocks of rosellas, willy wagtails, kites, a jabiru, red tailed black cockatoos flying over. Given the perennial waterholes and our northern latitude we have several varieties of palms and paperbark trees, along with the majestic ghost gums lining the river banks.

Monday 28th July:

Marg: Nicholas, Daryl, Peter and I head up towards Devil's Elbow. We go right across the grain of the country, crossing many gullies and grikefields. We find the locations picked up from the aerial photos, but nothing of interest caving-wise. Still, it's fascinating country if you don't mind not finding what you were looking for.

Paul: After a week on the go, I have decided to have a rest day. Have done my washing and tidied up a few bits and pieces. Am enjoying numerous cups of billy tea, sitting in the shade and just taking in this wonderful area. There is a limestone escarpment about 200 metres from camp on the northern bank of the Thornton River that I may wander about later this arvo. Can't be totally slack ... maybe I can! Hank, Brian, Reto and Yvonne have headed down the Thornton on foot to check out some features on the southern side of the river. Nicholas, Daryl, Marg and Peter have headed back to the Devil's Elbow area to check on some identified features, which we didn't manage to check out yesterday.

Tuesday 29th July:

Marg: Decamp and head north again. Drive from the Thornton River to the Seymour outstation, where a muster is in full swing. All the cattle up north are Brahmans or related breeds, and they are ENORMOUS: even Paul says he has to look UP at them. Meet the owner Lindsay Miller again, and briefly report on our progress so far. Head west down to the junction of the O'Shannassy and Seymour Rivers, which involves crossing some interesting gullies. The last part entails driving along the rock-strewn river-bed in 4-wheel drive and trying not to get bogged in the alternating sand, gravel and shingle deposits that lie between us and our campsite at the junction. Large shady trees (including the ubiquitous figs), lots of pandanus and other palms, and good-looking bluffs along the Seymour. At last we have a real water supply instead of having to ration our precious containers. Much washing of grotty clothes follows!

Wednesday 30th July:

Marg: We head upstream – check cliffs and gullies in the opposite bank in the morning. It's been hot for days now, so we collapse back in camp for lunch, then bludge under a large shady fig tree. The great white hunters manage to catch a fish (which gets turned into our entrée), and Hank and Paul cook up an enormous roast dinner in the camp ovens. Paul is going down with a sore throat.

Daryl: We checked out the two caves that Paul had seen yesterday. One was the "bat cave", a good cave with a passage leading into a main chamber, about 50 metres long, and Reto surveyed it.

Thursday 31st July:

Brian: Well today the heavy caving team really got going. Hank, Reto and Brian left camp at 8.15 after giving instructions to a pickup team where to meet them. After jungle bashing for 1½ hours upstream they headed inland. Rugged terrain confronted them but the intrepid team pushed on, narrowly avoiding falling into 5 metre diameter pits as they progressed. After some hours exploring the badlands the pointy-enders were forced to retreat down a precipitous ravine to rendezvous with the designated taxi service. Another hard day in the salt mines.

Daryl: But the taxi team, not as laid back as some might expect, fired up the "Taliban truck" (Nicholas's 4x4), bogged in the river, then after about 3 or 4

attempts sped off in a cloud of embarrassment. Leaving in wake a team of disappointed photographers. While waiting for the pointy team, they checked out a few cliffs above the Seymour River. The Seymour was flowing a torrent at that point, but no caves were found on the north bank, where we looked! Then after lunch and a snooze, the taxi team checked out the hole they had been staring at; this proved to be a 30 m cave, with Sheath Tail bats and formation, so a survey was made. Daryl, Peter and Marg played walking games on the west side of the O'Shannassy. Later that afternoon they found two caves in the cliffs above the Seymour.

Nicholas: Found tufa banks and waterfalls about 1.5 kms upstream of camp, and looped around to the Seymour – no caves. Paul and Nicholas drove up the Seymour and found two caves – both outflow with phreatic side passages. Second cave about 30 m long, with formation.

Marg: This was a heart attack day for some. Daryl was 8-9 metres inside one cave when he surprised a decent-sized snake – and "exited rapidly"! Elsewhere Paul shinned up a cliff to enter another hole, and just as he was about to haul himself up into the entrance a startled flying wallaby leapt straight over him, out of the cave, crashed some 5 metres to the ground almost on top of Reto, rolled around and bounded off. Don't know who got the biggest fright!

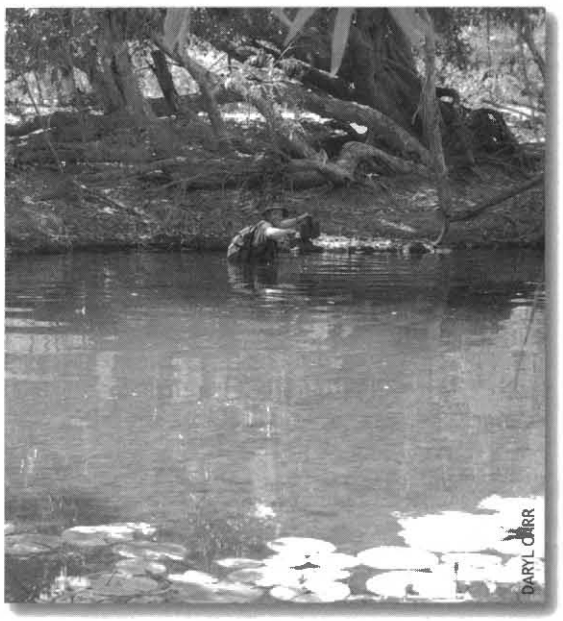
Friday 1st August:

Daryl: Hank walked downstream, north on the eastern side to large karst area. No dolines or sinks were found, although the area had looked "pretty" on the aerial photos. Meanwhile Peter and Daryl walked upstream on one side of the river, with Reto and Yvonne acting as spotters from the opposite bank. After investigating one very impressive entry (surveyed) Daryl returned to camp. Peter continued on with Rob and Yvonne to the tufa banks. On the return journey from the tufa, Peter (a) slipped and fell on the river rocks, (b) stepped on a log, then slipped and fell, then the log trapped his leg – Yvonne had to rescue him, and (c) fell once again after stepping onto a mound covered in ball-bearing berries. Daryl found some mussels in the stream – further bait for fishing.

Marg: Wandered up to the tufa dams with Nicholas and Brian, passing Yvonne and Reto. Beyond the tufa, the forest is marvellous – huge paperbark trees maybe 1.5 metres in diameter and 25 metres high, and many pandanus and other palms, but pig wallows are everywhere!

Saturday 2nd August:

Marg: Peter and Brian leave the expedition, heading north for a quick look at Lawn Hill, then heading home. The rest of us pack up and head north to our next campsite downstream on the O'Shannassy. On the way out we find more holes in the cliffs (one at least with bats) although some are inaccessible. More photo stops are facilitated by continuing halts for tyre repairs. After one of these, Nicholas accidentally leaves Paul behind, believing him to be in another car. Paul claims he chased us for 3 kms, and nearly caught up a few times only to watch everyone accelerate away again. He was eventually rescued, but I suspect some of us found it funnier than Paul did, especially given the heat! En route



Keeping a sharp eye out for wildlife.

we stopped for Hank and Nicholas to do a 5-6 kms return walk to a doline seen on the aerial photos. As usual, great doline, no cave. Head back to Seymour outstation camp, and chat to Lindsay Miller while the final cleanskins from the muster are branded, castrated and dehorned. Then off north to our hard-to-find turnoff, and spend the rest of the day trying to follow an old track that mostly wasn't there down to the river. Good navigation, Hank!

Sunday 3rd August:

Daryl: Campsite deep amongst the fig and pandanus trees. Just enough space for the smaller party – a cool oasis. Hank, Yvonne and Nicholas had a rest day. Reto explored upstream, while ever hopeful Paul, Marg and Daryl walked back along the track in for 2 kms, checking out the cliffs for caves – no good. Returning to a leisurely lunch and swim in the river, but still watchful for crocs – hopefully only freshies up here.

Monday 4th August:

Marg: Nicholas, Paul, Daryl and I wade the river at our campsite then head downstream for around 2 kms. Pass a few cliffs with small caves. Have to cross back before a 6 km long waterhole, or walk an extra 12 kms around it (no way!). So Paul blazes the apparently shallow crossing – boots off, shorts hitched ... deeper, past knees, up to shorts, ouch – right up to his chest! Gets out, strips off with dignity, wrings clothes out and puts them back on. The rest of us stop laughing and put our cameras down when we realise we're next. We all agree that skin dries faster than clothes – so forget dignity. With packs on heads, the others go in up to their armpits, while I hit a hole and manage a wet chin!

Daryl: On our return, another cliff, this time with a few solution holes in limestone breccia. Later Nicholas followed up the most impressive looking feature thus far – a gully cut into the rock with a wall at the end – just looks like a major cave entrance. That's it – a plunge pool but no cave.

Tuesday 5th August:

Daryl: Major walk day – Nicholas, Reto, Paul and Hank set out early to do a few targets 5-6 kms upstream. Yvonne remained behind to actively

have a rest day – chair amongst the forest beside the river, and a good book. Marg and Daryl set off upstream to the big bend, looking for caves. No luck, even after checking out holes and going high on the ridges. At our lunch spot Marg saw our first freshwater croc – and quickly moved right away from the river bank! After lunch the 2 parties briefly met, going in opposite directions. We crossed the river, and one of the two-way radios took a swim (Marg's note – all right, it was mine), but it seems to have survived. After disturbing a family of feral pigs with piglets (and trying not to get between the mothers and babies!) we only had time to thoroughly check out one of the cliffs we passed. Some features in the other cliffs looked good for further investigation, but no time left after a 13 km round trip.

Marg: We scare a nervous horse into the river, and see the usual complement of turtles, gorgeous birds, frisky teenage bulls – and the biggest feral pig I've ever seen in my life (or at least it's behind). "Keep walking", says D nervously. "I AM keeping walking", as I urgently change direction. "Walk faster!" "You want me to run, and attract its attention?!" "NO!" Later on there's the crocodile, cranky pig mothers, and that's enough wildlife for the day, thankyou!

The others did a longer walk right over the tops (hot and tiring!), and found several caves and some other significant features. Nicholas and Paul were astonished by THEIR first freshie sighting: possibly 3-4 metres long, and thrashing noisily while traversing shallow water between deeper pools. Boots and socks reportedly went back on very quickly, and a rapid retreat was made! The four of them were also caught in a stampede, for which they blamed Daryl and me (not guilty, we were over the river by then). They did hear the usual startled-animal noises in the scrub, which normally just move away again. But this time, Paul said he suddenly heard Reto (behind him) say something softly in that Swiss accent – what was it? "Stampede"? STAMPEDE?! Quick look – YES! Coming straight at them at the gallop. Reto's disappeared somewhere, Nicholas's sprinting for a tree, Paul grabs Nicholas around the waist and cuddles up behind him (Nicholas later – I didn't know Paul liked me so much!), Hank's behind a skinny sapling which any self-respecting beast would go straight through, but none do ...

And was this the day when the other group got back to camp to find a huge black Brahman bull peering over the roof of Daryl's 4x4, sneakily watching Yvonne reading only a few yards away? She didn't know until the others told her! That's enough drama for one day!

Wednesday 6th August:

Marg: Total bludge day for all after yesterday's excitement and long hot walks. More washing, snoozing, reading and swimming (but with an extra eye over the shoulder, after yesterday's crocs). Reto, the great white hunter, retrieves his reputation by catching three fine fish, which feed us all. Cooked as per Paul's instructions, they're perfect.

Thursday 7th August:

Nicholas: Packed up from O'Shannassy River and drove back up track. Found several caves in the karst up the creek.

Marg: We farewell Hank, who wants to check out a few more features on Undilla while the rest of us head off to Lawn Hill. Six of us camp even further north on the O'Shannassy, near another long waterhole. We bivvy under a giant fig tree, which Paul climbs – and discovers a huge hoard of whisky bottles tucked away in a fork. He said they weren't his!

Friday-Sunday 8th-10th August:

Marg: Head northwest to Lawn Hill National Park. Aaarrgh! As soon as we get off the station, there's grey nomads and tourists all over the place!! En route, we visit the Riversleigh Fossil Centre in the proclaimed World Heritage Area. This limestone is only around 25 million years old, while the Barkly Karst is Cambrian, and goes back about 530 million years: and they DO look different. In the NP we walk over the tops to Indarri Falls, which are enormous tufa dams that totally bridge the waterway. Too hot after that to do anything else but swim. Later we have our first shower and hairwash for 17-18 days – wonderful! The next day we walk up Island Stack (stinking hot up there!), recover with a swim at the Cascades (more tufa), then head out to the Wild Dog Dreaming art site. Farewell Yvonne and Reto at Lawn Hill, then head back to Mt Isa on Sunday to meet Hank again.

Monday 11th August:

Marg: After replenishing supplies, Hank, Nicholas, Paul, Daryl and I head off for Chatsworth Station. Meet manager John Jones. Bivvy out in the open, in the dark, somewhere up the creek near the homestead. Woken in early hours by ship's foghorn – oi? Back to sleep, but woken again by more foghorns, closer. Anxious dozing, interrupted by two DUELLING foghorns – even closer. Leap to feet clutching sleeping bag – me and nearly everyone else. See a huge black Brahman bull awfully close, pawing ground and exchanging bellows with an invisible but equally noisy rival, just in the scrub on our other side. We're right between them! Softer roar turns out to be Nicholas, still snoring away while the rest of us nervously check that the vehicles are unlocked. He has the nerve to complain about being woken up by all our panicky noise! Of course nothing happens, including much sleep (except for Nicholas).

Tuesday 12th August:

Marg: Hate spinifex! You get speared even through overalls over daks plus long gaiters (and anyway, it's taller than my gaiters). After much tippy-toeing through the spear field, we (as usual) find a good doline with nothing else to show at the co-ordinates. But then, on to Superdome. This is a known cave, and is most impressive – a huge shaft, maybe 30+ metres deep, with a large domed chamber below. Hank, Paul and Nicholas ladder it, while Daryl and I take photos, and try to keep out of the scorching sun. The station manager generously radios us to offer a flight over the entire station for one of us tomorrow morning early, to check out the limestone. Wow! On our return to the station we move to a new campsite. No bulls, but some noisy bovine traffic over the river at times.

Wednesday 13th August:

Marg: Hank flies off before 7.00 am. When he returns a few hours later, we all head west again, towards another fine known cave, Animate. Several connecting shafts, of similar depth to Superdome, are rigged for SRT, and down go Paul and Hank. Another

most impressive pitch! Nicholas, Daryl and I all go for separate wanders while the others are below, but don't see any other opportunities. Meanwhile another large muster passes right beside us, in a cloud of dust and cracking whips – very atmospheric. Later we go on to another area, guided by the aerial photos and Hank's reconnaissance. More blasted spinifex, and the odd small cave with bats and ticks. Also a likely slot which we call Eagle's Cleft (after the enormous eagle's nest in tree beside it). It doesn't go far, of course. Oh well ...

Thursday 14th August:

Marg: Out to the east this time, and south of the road, chasing two points cross-country. We reach one, but the other is hard to get to. The terrain is rockier, scrubbier, with lots of gullies that are hard to cross in vehicles. Hank tries industrial strength bush-bashing, and promptly gets a puncture. Oops. After changing tyres, we do a major loop to approach from another direction. More bush-bashing, and another skewer, which totally writes off Daryl's tyre. While repairs are under way, Nicholas, Paul and Hank dash off on foot to reach the feature, which isn't much further than a km away. It turns out to be a really promising shaft that bells out in all directions, so needs vertical gear – and they haven't got any with them. Stomp back to the cars in disgust. We'd ALL walk out there with the gear ... except that the manager and his wife have very kindly invited us to a BBQ at the station, and we haven't got enough time to do the cave as well, and tomorrow people have to start going home. Damn! Next year maybe?

Friday 15th August:

Marg: Departure day for Nicholas and Paul. Of course it's rained heavily overnight, just in time to sog up the tents that are to be packed up, not to mention the "road" south to Boulia which is where they're heading. Hank, Daryl and I start off an hour or two later for Windsor Park, also down on the Boulia road, but it's got so wet that we turn back before we either kill ourselves skating off the edges, or get bogged to the eyeballs somewhere. Too wet to do anything else. Darn it – time to head back to Mt Isa and home. So we do!

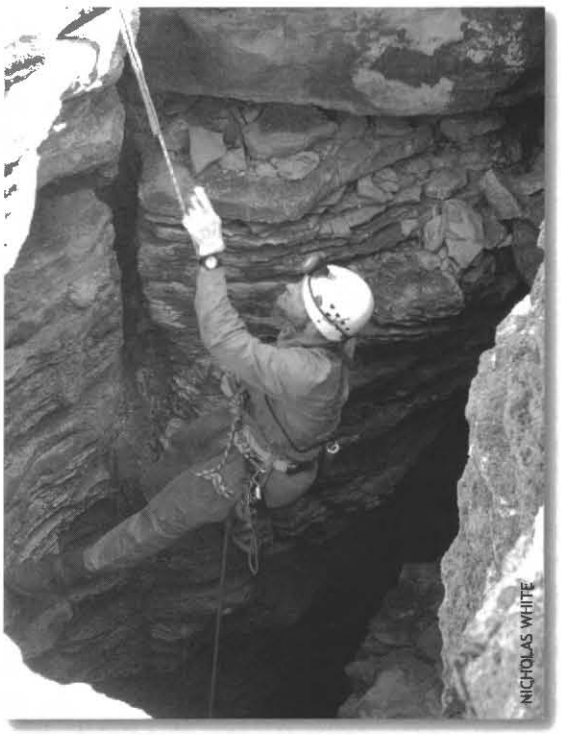
Summary

In the past this area has received only sporadic attention from experienced speleos, perhaps because of its distance from major population centres. So fuelled by geological reports and local knowledge from Ken Grimes and Hank Coppus, we intended to examine the broader potential of this area for cave development. Perhaps we might discover another Bullita, or Kimberley system.

Given the need for further knowledge about this region, the decision was to sample broadly rather than to thoroughly explore any one particular location, with the aim of establishing the most likely productive areas for future focus. Camp was therefore a moveable feast!

Two major limestone areas were visited. Most time was spent on Undilla Station, close to the Northern Territory border between Camooweal and Lawn Hill. Later the group spent four days at Chatsworth Station, south of Mt Isa and Cloncurry, about halfway to Boulia.

Twenty or so days were spent exploring in the



Paul Brooker in "Animate Cave".

field, although a sizeable proportion of this time was spent in driving to and from the stations, or traversing the often very rough terrain within property boundaries to reach sites identified from the aerial photos. In this limited time, 70 new caves were found and surveyed. Most were quite small, often only a few metres in length. The longest single cave length was 110 metres, and the total distance of surveyed passage was 553.5 metres. Nevertheless, some of these short caves were still impressive, such as a huge doline with a large entrance opening directly into a shaft many metres across and 15 metres straight down.

So would we go back? Yes. Given our time limitations, this expedition only scratched the surface. Many areas remain totally unexplored, while others have received only cursory attention. There also remain promising localities that we were unable to access this time: however, this situation may well change in future. We also recognise that many other notable systems remained undiscovered for the first few years of exploration in their neighbourhood: the huge Bullita system springs to mind. What if the original explorers had not persisted?

The main problems for participation are time and remoteness. Given the huge distances covered (around 3000 kms to get from Melbourne to Undilla by the most direct route), a number of days were spent in travel to and from Queensland. Most participants also took a few days off to visit Lawn Hill National Park. Otherwise, many miles of rough country were covered by battered four wheel drives and legs, numerous tyres were exterminated, suspension systems (vehicle and personal) suffered greatly, heat stress was endured, countless blisters were acquired, stomachs were refractory, spinifex was universally detested, and the wildlife and environment were fascinating,. WE ALL HAD A TERRIFIC TIME!

So of COURSE we'd go again! Is anyone else coming too?

Our thanks to Nargun for permission to re-print this article.

Kija Blue Sinkhole, Kimberley, Western Australia

Western Australia's, and one of Australia's deepest sinkhole has been re-discovered by ASF cavers after four years of searching.

by Paul Hosie

Paul Boler, Paul Hosie & Ken Smith about to take off.

The re-discovery of Kija Blue is a separate story that is sure be told in the coming issues of Caves Australia, but this story is about the diving. The result of this re-discovery was the partial exploration and mapping of the site by ASF cave divers Ken Smith (CEGSA), Paul Boler (NHVSS) and Paul Hosie (WASG) during June 2005. The divers achieved depths of 65m and could clearly see at least another 10 to 20m below into an as-yet unexplored void. Plans are already underway to return with mixed gas and closed circuit rebreathers to continue exploration, mapping and other research in this magnificent site during 2006.

After positively identifying and locating the sinkhole from a fixed wing aircraft, the three divers and over 350kg of diving and camping equipment were choppered into the site on Monday morning 20th June 2005 in two flights. As the sinkhole is on the side of a hill, the helo could only safely land 500m from the sinkhole which is where camp and the compressor were set up. The landscape around the sinkhole is spectacular Kimberley sandstone – red rocks and Spinifex grass. The sinkhole is in fact part of a double doline feature with the second (blind) doline further up the hill to the north. Initial research shows that they have formed in a layer of ancient stromatolitic dolomite beneath the sandstone.

A tape ladder was set up and we climbed down to check out the inside of the sinkhole and the access to the water. As can be seen from the photos, the sinkhole is very big. The long axis is 100m, oriented N-S and the narrow E-W axis is 70m wide. There are five lakes distributed around the inside of the sinkhole under enormous overhangs. The two main, deep lakes are on the West (First Lake) and South (Second Lake) sides of the sinkhole. The water level is 35m below the surface on the SW side and 50m below the NE side of the sinkhole and is believed to be a perched water table.

The lakes are stunningly clear, yet distinctly blue coloured fresh water. In the shallows along the edges of the main lakes the rocks are covered in red and green algae and large aquatic plants which give a beautiful green colour. The rocks on the roof are coloured orange, pink and grey from the sandstone and dolomite and they reflect perfectly on the still water's surface. It really is a stunningly beautiful site and when the sun climbs through the sky during the day, it shines down into the main lakes creating a spectacular, silent light show. Underwater proved to be even better !

The equipment had to be lugged to the edge of the sinkhole above the main lake – vertical gear, rebreather, air and oxygen cylinders, dive gear, video equipment, lights and reels. The dive gear was then lowered down and set up at the water's edge. On the first day they only managed one dive before sunset, but it was an impressive beginning. Ken and Paul H dived around the southern end of the First Lake and down under the roof until they were on the Western side of the Second Lake. Having previously agreed to leave exploration of the Second Lake to Paul B, they followed the base of the wall at -20m back around to the First Lake.

Aerial View of Kija Blue.

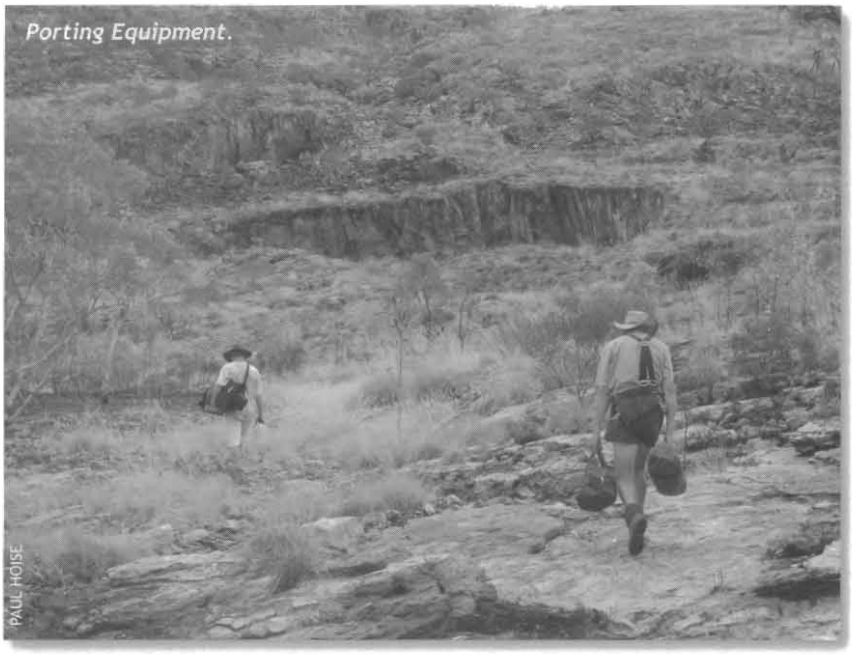
Chopper over Kija Blue.

The light in the water was deep blue and crystal clear but the sun wasn't shining in as it was overcast. Back under the First Lake, the wall fell away from −20m down a steep slope into darkness. It beckoned and they followed, Ken first ensuring a good tie off while Paul H followed his progress with the video camera. At −30m a horizontal passage that was big enough to drive a truck along (formed between a large roof step and the sloping rubble floor) headed to the North, but below them it opened further and down they went. At −40m the wall on their left opened up and allowed Ken's 20W HID to spotlight down to depths in excess of 60m. Not wishing to shorten their dive by descending straight down, the divers continued Northwards across the talus slope with the roof generally 3-5m above their heads. A large rock at −50m provided a good point to tie the line off and turn the dive. The slope continued large and wide ahead of them with the bottom somewhere below them nowhere in sight all the way along for the 50m or so traversed at depth.

The ascent included several microbubble stops and when the deep blue light from the lake again became visible at about 35m, the stunning beauty of the site was truly appreciated. Paul B was sitting on the rocks patiently waiting, and clearly visible to the divers doing deco from −15m and up. The entrance of the sinkhole was also visible with rock features and trees easily seen some 50m above the water's surface. Amongst the boulders in the shallows, there was a hive of activity as freshwater snails, beetles and an insect larvae-looking critters were observed grazing on the algae and aquatic plants. Specimens were collected for the WA Museum to identify but they do not show the stygobitic (ie cave adapted) features seen in other WA cave diving sites. On surfacing from the dive, gear was prepared for the next day's diving and the team headed back to camp in the day's fading light.

Tuesday morning began with refilling air cylinders and Paul B heading in to explore the Second Lake. While Paul dived, some breaks in the clouds permitted the sun to shine down into the water for a brief time and illuminate the water and rocks. It was a spectacular light show and the memory cards in the cameras were quickly filled ! Paul returned from his dive after one and a half hours and had explored some floor holes along the wall at −20m before discovering a slot between two massive rocks in the floor at the very back of the Second Lake. The Slot dropped from -12m down to −18m where a steeply sloping, narrow passage headed down to the NE. Paul shortly achieved a depth of −40m where he tied off and exited, noting that the passage was getting bigger as it continued down and the right hand wall had opened up into deep darkness.

On the following dive that afternoon, Ken decided to extend Paul B's line while Paul H shot video footage around the Second Lake and extended the Western line down to -60m (and still going). Ken returned out of the Slot after 30mins or so and was very excited by what he'd seen. He had extended the line further to -50m depth and it was getting even bigger and deeper !! This was proving to be an impressive cave diving site – now WA's deepest cave dive with Weebubbie Cave on the Nullarbor a runner up at −45m. The weather started clearing later in the day and the cameras captured the beautiful scenery



Porting Equipment.

Kija Blue Reflecting.

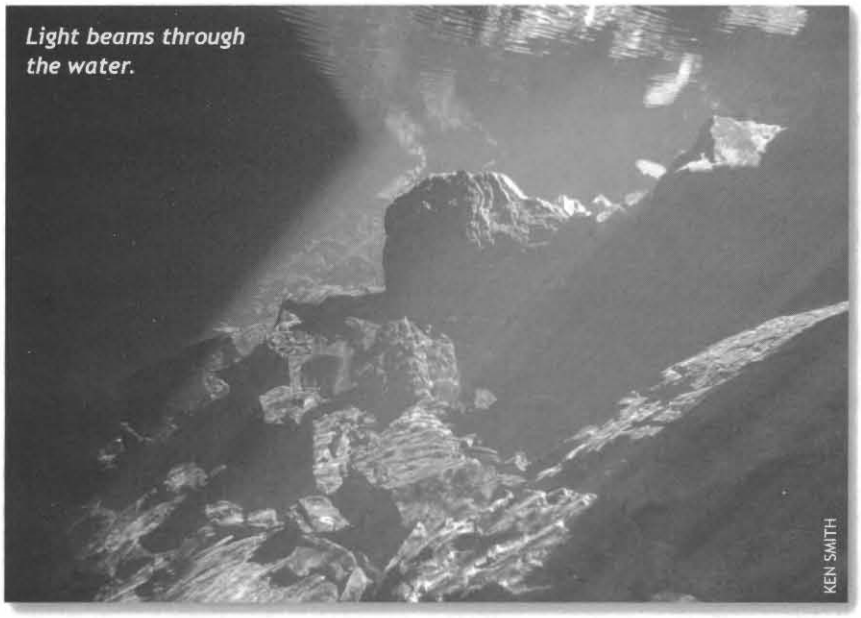
Lake Reflections.


KEN SMITH

Kija Blue Diving.


KEN SMITH

Aquatic Plants and Algae.


KEN SMITH

Light beams through the water.


KEN SMITH

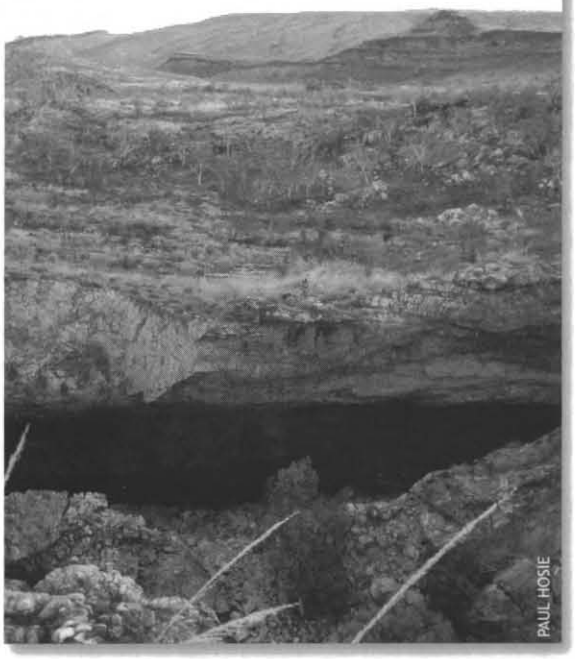
Kija Blue Lake Dive.

surrounding the sinkhole. Tanks were filled, oxygen decanted and gear prepared for the last day of diving for the trip. Paul H recalls: "It was a little sad but we had a full day in front of us and we slept soundly (some with more sound than others as it turned out!!!)

Wednesday morning dawned bright and clear – the sunrise was beautiful and everyone was excited about the day's diving with the chance to see and film the sun shining down through the clear blue water. Following a strip and temporary repair job to the rebreather's cracked handset (see Paul H's Article in Caves Australia No.166-7), Paul and Ken dived in the water of the First Lake while the sun shone through it. The sunbeams cutting through the water was indeed a mesmerising sight. The dive plan was to extend the line in the Second Lake to a maximum depth of -60m and survey it.

Paul H recalls the dive: "Once we had dropped down The Slot, Ken was straight into the task of exploring and surveying. The narrows passage follows the talus slope floor down to the North while the roof is never more than a few metres above. At -45m the floor on the right hand side dropped away steeply while the roof angles only slightly, creating a massive room. I'm excited, because this is like diving in a real cave, not just under a lake of a sinkhole. As we approached a depth of –60m (heading to the North East), the roof is now 10m above us and the boulders on the sloping floor are enormous – the size of caravans and houses. I shot video of the area and used the video light to look around the place, while Ken tied off at –60m and began his survey back up and out. The roof meets the floor at –62m and it is clear to see we have reached the bottom of the talus slope, out to the West is a vast, flat, plain of silt. The water is crystal clear and the room is Colossal – some 100m wide across the base of the talus slope, 10-15m high and at least 50m to the back wall across the silt plain. In the back corner of the room I discovered a 10m diameter, 2m deep pit in the floor where the silt is funneling down to deeper, as yet inaccessible levels – amazing !"

Kija Blue Landscape (Ken Smith on Ledge).



"The ascent and many deco stops following this dive were the most enjoyable because when we eventually popped out of The Slot to complete our 12, 9 and 6m deco stops, the view up to the surface of the Second Lake and out of the sinkhole was breathtaking. The dappled light though the blue water, Ken's exhaust bubbles running up the roof to ripple out onto the water's surface, the vivid green plants in the lake's shallows and the white clouds passing in the blue sky far above was simply mesmerising. What a wonderful place to off-gas!"

The final dive was conducted by Paul B who took the remaining open circuit gas and did a 'deepy' down the First Lake where he extended the line a further 50m and visually confirmed that the deepest point on the Western side was at least 80m deep. After doing as much deco as possible, Paul B exited and rested while Paul H and Ken lifted all the gear out of the sinkhole to be carried back to the camp and organised into loads for the helicopter the following morning. The helicopter arrived at 8am sharp as pre-arranged and lifted us and all our gear back out of this amazing and remote place. After packing everything back into the car-trailer and making a few very excited phonecalls, they drove for the next two days straight to get back to Perth. Ken and Paul B flew back to Adelaide and Sydney the following day.

Author's Afterword:

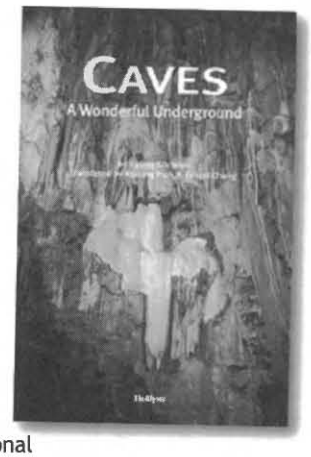
Kija Blue, as we have named it (we are trying to find out if there is a traditional name for the site), is a remarkable and spectacular place. We are very privileged to have been able to dive and explore it and could not have done so without the help of Donna Cavlovic, David Woods and John Cugley of WASG in Kununurra. Detailed planning is already underway to return to Kija Blue with a team of trimix qualified, CCR cave divers in July 2006 to explore and survey the entire system as far and as deep as we safely can.

More information, maps, video footage and photos are at www.trimixdivers.com (look for Kija Blue under the Website Index).

BOOK REVIEWS

Caves: A Wonderful Underground

Woo Kyung-sik

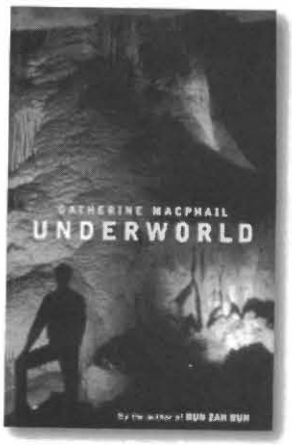


Many people don't appreciate the geological environment that has been inherited from their ancestors. This book was written to encourage the readers to love and care for caves as part of the nation's geological heritage. The book explains what a cave is and gives detailed accounts of the formation and characters of caves, living organisms in caves, and the present status of natural caves in Korea and other countries. Through beautiful pictures and specific explanations, the readers will be able to learn more about caves and understand their importance and fascinating features. Woo Kyung-Sik, the author of this book, graduated from the Department of Oceanography at Seoul National University. He has been a professor at the Department of Geology, Gangwon National University, Korea, since 1986.

Softcover, 230 pp

Underworld

Catherine MacPhail

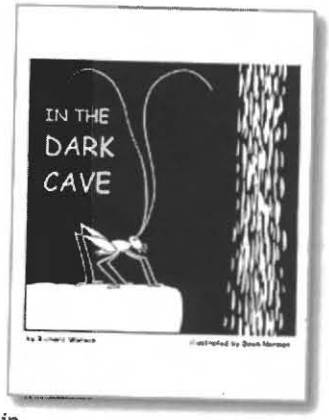


A school trip goes disastrously wrong when five troubled high school students find themselves trapped in an underground cave. Their best chance of escape is to stay together. But when a member of the group disappears, their hope of finding a way out starts to fade. Does one of the remaining four know more than he or she is letting on, or is there something evil lurking in the caves?

Hardcover, 284 pp, RRP $15.95
Age Range: 5 to 12

In the Dark Cave

Richard Watson



(From www.amazon.com)
A cave cricket, a rat and a bat live quite contentedly in the dark depths of their cave. Each one has a unique way of navigating in a world without light, and they have each other for company. But one day, a cave explorer arrives, and the beam from his helmet pierces the darkness. Just as suddenly as he appears, he climbs up and out of the cave, and the three friends are left wondering whether it was just a dream. Illustrated in black and white and written in simple verse, this book is both a perfect early reader and a great story to read aloud to younger children.

Buy from www.amazon.com

Illustrated by Dean Norman.
Softbound, 40 pp, RRP $5.95.

ANDREW BAKER

Ida Bay

Recent heavy rains has taken its toll on the Ida bay Karst. Arthur Clarke international expert on cave biology and member of STC explains the impact this has caused.

By Arthur Clarke
February 2005

Most STC members will know about the freak storm event that swept across Tasmania in early February 2005. Some of you may have seen or heard about the recent flood effects at Ida Bay, following these torrential downpours over a few hours of Thursday afternoon: February 2nd this year. However, you may not be aware that some significant changes have occurred at Ida Bay: both on the surface and underground in the caves.

At least two of the known gated entrances to Exit Cave are now impenetrable, blocked by a deluge or avalanche of rocks and logs, ie, IB-120 (Valley Entrance) and the IB-86 (Slip-In) "side door". There have also been some dramatic effects in at least two caves: Exit Cave and Mystery Creek Cave. Most evident are the changes associated with streamway morphology: the shape of stream channels and their sediment banks. Stream channels have been widened or deepened due to scouring, erosion and movement of bedload rock: small boulders, cobbles, pebbles and sand have been re-located, generally downstream. Elsewhere there has been washout of cobble bank deposits or soft sediment banks, slumping and collapse of sand or silt banks including walkways and dumping of silt or clay on rock ledges, sand banks or in other hollows and low-lying areas. A combination of high turbulent stream levels and back-flooding in both Exit Cave and Mystery Creek Cave has removed the glow-worm populations from wall sections of both caves. No doubt the massive influx of organic matter into the cave will act as a tremendous springboard to reinvigorate a new population explosion of glow-worms in the months or years to follow.

Rainfall records from the Bureau of Meteorology in Hobart reveal some interesting statistics from the readings in rain gauges on Friday morning February 3rd 2005.

The winds had been south-easterly and although there were heavy storms and torrential downpours in some areas, the rainfall was much localised, albeit restricted to just a 4-5 hour period as the storm front passed over. In the city of Hobart, 49mm was recorded, but at Mt. Nelson – barely 4km away – they had 85mm and further south at Kingston: 91mm. On the eastern shore Risdon Vale had 70mm. Going south down the Huon Valley it was more variable: 57mm at Grove, 30mm at Judbury, Geeveston (44mm), Hartz Ranges (32mm), Warra, out near the Huon River (16mm), Dover (67mm) and Southport (46mm). Across on Bruny Island: 26mm at Lunawanna and only 18mm at Cape Bruny. The highest rainfall was at Hastings: 101mm and judging by the effects seen at Ida Bay, it was significantly higher on the Southern Ranges, perhaps around 150mm... 6 inches or more on the old scale. (Although this was the highest ever recording for February at Hastings, there have been higher readings: 105mm during January 1970; 143mm in March 1983 and 164mm in March 1946.)

Some of the most marked effects of this freak storm event are evidenced in Mystery Creek Cave (IB-10), reflecting a high degree of turbulent stream activity combined with back flooding, plus the influx of silt, sand and massive amounts of organic debris including what looks like a scummy chocolate-brown slime deposit. At the entrance to the cave, some very large rock slabs have been moved half a metre or so, as evidenced by the change you see today compared to a photo taken in 1914. Some of the stream channel in IB-10 appears to have been lowered by half a metre or more; in fact some sections are definitely ¾ a metre deeper. Stream diversions have also occurred. For example the majority (estimated $^{7}/_{8}^{th}$) of the water in the main stream channel has been diverted into Cephalopod Creek at the point near where the drowning occurred back in 1991. The evidence of flooding is everywhere. A large log – nearly 2m long – lies against the base of the wall on RHS at the end of the Walls of Sorrow passage. Leaf litter lines the walls of the Cephalopod Creek passage and extends almost up to the top of the Laundry Shute, suggesting the back flooding has taken water levels to around 12-15m above normal stream levels. Small logs lie perched on the 15-20cm depth of leaf litter at the base of the Laundry Shute.

Entering the Cephalopod Creek side passage is now a new experience. In fact before you get there, you will see some differences. The vertical squeeze rift at the end of what was the last section of glow-worms – in the Walls of Sorrow stream passage – has now been undercut, creating an overflow channel which in times of heavy rainfall will now divert more water down into Cephalopod Creek. Similarly, at the end of this Walls of Sorrow passage (just past the vertical rift), the former stream channel has been widened and deepened, so you now have an alternate route if you don't mind stooping down and stepping across a small boulder strewn stream channel, then veering left to emerge in the chamber beyond the vertical rift. Entry from this chamber into Cephalopod Creek used to involve a step down into a rift; now there is

Swirling froth doughnut in Hatwalk Passage stream.

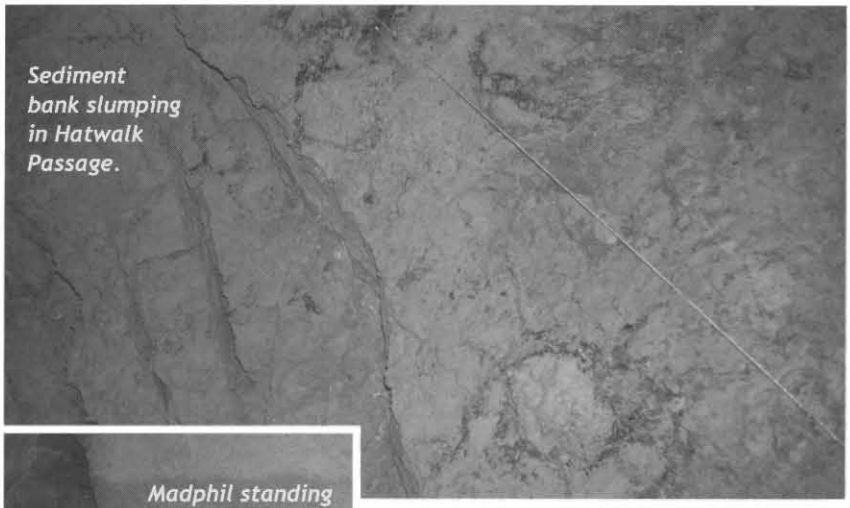
a scoured overflow channel from the main chamber and at the bottom you simply walk in: virtually no stepping down required.

Once inside, you will see some more immediate changes. The small stream that used to come in on the LHS is now dry: almost all the water now comes into the main creek channel via the top waterfall. On the route down to Cephalopod Creek, you see that some of the large fallen "station wagon" sized slabs of limestone have been almost completely undercut loosing much of their support boulders and smaller slabs of rock. Two of these smaller (?) slabs of rock have toppled into the vadose canyon section of Cephalopod Creek, just downstream from the former bottom plunge pool/ waterfall, where the passage does its first LHS turn facing downstream. So... the bottom plunge pool/ waterfall no longer exists! A large 2m x 1m slab of rock sits vertically in the stream canyon, supporting a smaller 0.75m diameter slab sitting diagonally above, all back-filled with a mass of smaller boulders and cobbles forming a new elevated stream bed with water flowing over the new "dam wall". Downstream, the passage walls and upper ledges are covered with deposits of sand and leaf litter. The main waterfall (upstream) contains a mass of organic debris and sand; the former small pools at the base of the LHS wall (facing in) have all been drained out.

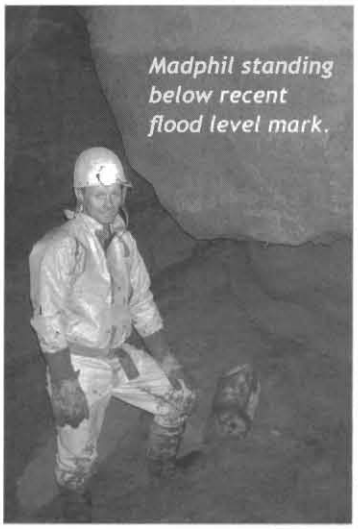
There are similar changes in Exit Cave, though the environmental effects are not quite as dramatic as in Mystery Creek Cave. Although there is some evidence of stream channel changes and shifting bedload in Exit Cave, the first most noticeable effects relate to deposition of enormous amounts of mud. Most of the normally soft sand banks or firm silt banks along the main stream passage and in side passages such as Eastern Passage are plastered with a very slick muddy surface, making it very difficult to stay on your feet. (Can you imagine it... a grown man reduced to crawling on all fours!) Further downstream in Exit Cave towards the (IB-14) efflux entrance, there are some 25-30cm deep black organic silt deposits, eg, in the Wind Tunnel and downstream from the D'Entrecasteaux Inlet. These black sticky organic ooze deposits now resemble the Herpes Passage section beyond Avons Aven in Growling Swallet (GS).

The presence of this organic ooze in Exit, along with the sedimentation on stream passage banks, plus the leaf litter and sand deposits in Mystery Creek Cave suggests there must have been a huge lake of relatively calm, slow-moving and swirling water back-flooding inside both caves. These lakes would have occurred on the rising limb of the flood (hydrograph), after the initial rush of high energy turbulent cave stream floodwaters created the erosion or scouring of stream channels and movement of bedload, boulders and rock slabs. Even six weeks after the event, there are still a number of unsettled "wobbly" boulders in the stream sections of Mystery Creek Cave.

One has to wonder whether this black organic ooze in caves like GS and now Exit Cave isn't in fact due to surface run-off carrying the soil humus scratched up by our feral lyrebirds. As an adjunct to helping to save what was then being considered an endangered species in Victoria, small numbers of lyrebirds were introduced into Tasmania in the mid-1940s... ostensibly to enhance the tourist visitor experience in the rainforests at Mt. Field and Hastings. These

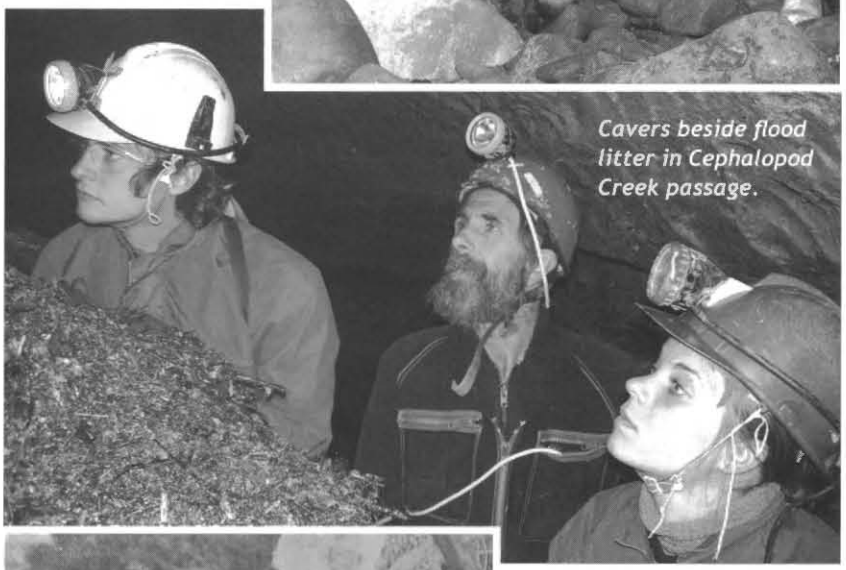


Sediment bank slumping in Hatwalk Passage.

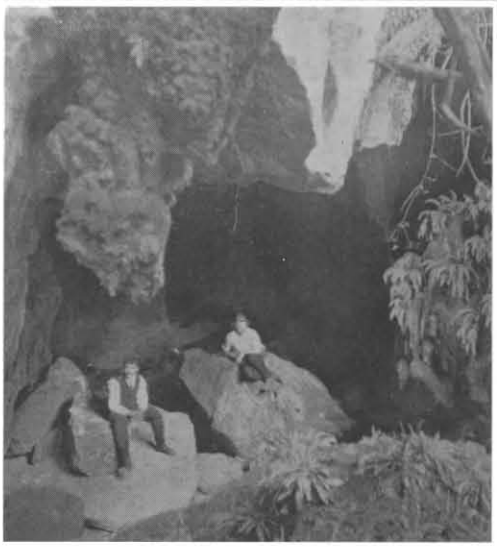


Madphil standing below recent flood level mark.

Undercut slabs & new boulders in side passage.

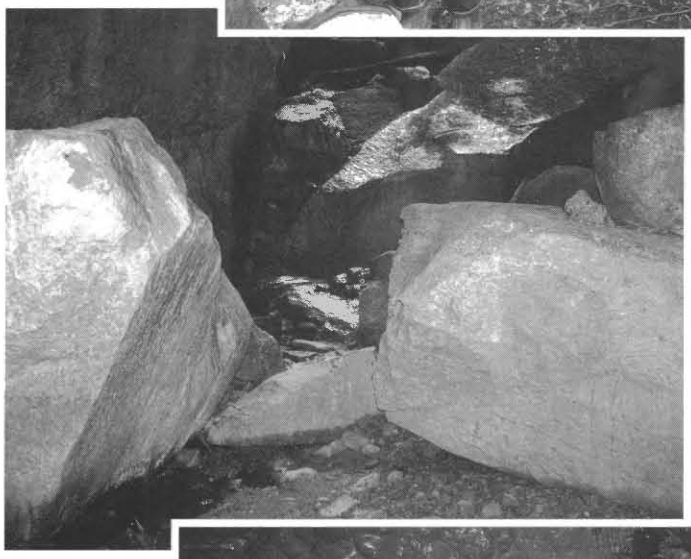


Cavers beside flood litter in Cephalopod Creek passage.



Mystery Creek Cave entrance (WC July 16 1914). First is a B&W shot of entrance to Mystery Creek Cave that was published in the Weekly Courier, July 16th 1914 when it was proposed to quarry the nearby limestone for a Cement Works that never happened. Note that the large rock on RHS at the bottom where the guy is standing has shift by half a metre or more during recent deluge.

Tom Porritt outside Mystery Creek Cave.



Moved rock slabs in entrance creek bed.

Tom Porritt standing on top of new rock fill dam in Cephalopod Creek.

two populations have now expanded enormously throughout southern Tasmania, so widespread in fact to now be one continuous merged population. Apart from scratching up soil humus and forest litter, these feral birds are also depleting the populations of macro-invertebrates which themselves in their own minute way contribute to the acid producing soil biota that help maintain karst processes in carbonate rock areas.

During a visit to Exit Cave on February 10th (with "Madphil" Phil Rowsell and Tom Porritt), there was an obvious fresh high tide mark around about 4.5m above present stream level in the region upstream from the Rockfall. Some parts of Exit Cave had been flooded to the roof, eg, in the Hatwalk Passage, where the glow-worm population has been removed and stringlets of bark and small leaves are now dangling off the ceiling. In a few areas of the Hatwalk Passage, the walls and ceiling are littered with the tiny now dead shells of stranded aquatic (hydrobiid) cave snails. Some of the stringlined route in the Hatwalk Passage has collapsed and slumped, particularly through the formerly protected leaf litter section: another previous high flood debris deposit.

Further upstream in Exit Cave, rock ledges presently a metre to 1.5m above the streamway in Eastern Passage are covered with a fine grained sloppy clay deposit... perhaps evidence of continued flushing of clay sediment from the on-going legacy of many years of limestone extraction from the Benders Quarry site.

The walking tracks to both caves show the evidence of this significant storm event, along with its associated erosion and flooding as well. Some tracks have been gouged out; small stream channels have been converted to minor canyons. The track to Exit Cave – along the banks of the D'Entrecasteaux River – has been washed away in places. About a quarter of the 0.75m diameter log across the river that was our "bridge" crossing has disappeared: been washed away. Flood debris is sitting perched up amongst tree trunks; in some places a metre above the track which itself is about 2.5-3.0m above normal river level. There are now huge gaping holes in the track beside the river, eg, just below the logs you climb up just outside the entrance.

My initial thoughts relating to the dramatic effects in both caves at Ida Bay from this freak storm event and the subsequent flooding that occurred, were in part to blame some of it on what I saw as inappropriate management practices. For example, over the past four to five years of semi-regular visits into Exit Cave, I have seen a gradual build up of organic matter clinging to the intersecting cross bars of the steel mesh grate that now stands in the efflux streamway. Obviously designed to prevent illegal entry of humans into the cave, it was now progressively slowing and hindering the "legal" exit of cave waters and organic matter from the cave. Similarly, I figured that the cave gates to Valley Entrance and Slip-In may have acted as coarse sediment traps and become a catalyst for the accumulation of debris from surface runoff.

However, having now seen the broad spectrum of evidence on the surface reflecting the considerable spread and height of floodwaters that overflowed stream banks and the effects of the deluge that has lead to slumping, collapse of streambanks, minor landslips and mini-avalanches, plus development of small canyon stream channels, I'm now more forgiving! A short term/ short-lived, but more intense rainfall event obviously has a more dramatic effect on the morphology of a cave, than a flood surge resulting from a prolonged period of rainfall or snow melt. In fact, this recent flooding possibly represents a once in 20 year event, perhaps even a once in 50 year event. Although this is hard to determine due to lack of baseline data, based on a description of a tour to Mystery Creek Cave in 1892, the dramatic changes that occurred in early February 2005 suggest this was in fact a "once in a 100 year event"! Natural events like this are what create and shape or flush out the stream passages of our caves...

TIMOR PROJECT ASSISTANCE REQUIRED

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

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

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

2006 Field Trip list

11/12th February
11/12th March
29/30th July
5/6th August
16/17th September

Environmental TRUST

NHVSS

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

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

A piece of caving history

Do you have an interesting historic caving photo or item? CA is interested in publishing anything of historical interest. Send your photo, pic of item etc with a short description to Joe Sydney, Caves Australia — Historical Pics

[redacted]

[redacted] *Grand Arch, Jenolan Caves NSW, 1895.*

Early 1900's postcard pf Chillagoe.

Early postcard of Naracoorte Caves, SA, 1905.

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

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

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