

**BULLETIN** *of the*

**S***ydney*

**U***niversity*

**S***peleological*



**S***ociety*

SUSS BULL 30 (2) SEPTEMBER 1990

## EDITORIAL

Welcome to a tardy SUSS Bull. And a mixed bag it is. If you ever wanted to put together a set of caving questions for your Trivial Pursuit game then read on for lists of the deepest caves in Tasmania, New Zealand and the world. And note the new world's deepest, Reseau Jean Bernard, has been pushed from -1535m to -1602m!

For all of you that have recently passed the St John's First Aid course, please read the article by Mike Lake on trip leader requirements because you are now one step closer to being a leader yourself!

I would encourage all of you to put pen to paper and write an article for the next SUSS Bull. Club members have a diversity of talent, experience and knowledge which should be shared with the rest of the club's members as well as with readers from other clubs around the country and around the world. So whether it is a trip report, a scientific, environmental or practical article, send it in and see it in print.

Finally a list of the committee members:

## SUSS COMMITTEE MEMBERS

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*Sarah*

# LETTERS TO THE EDITOR

13 July, 1990.

The Editor,  
SUSS Bulletin,  
Box 35, Holme Building,  
UNIVERSITY OF SYDNEY. N.S.W. 2006

Dear Sarah,

Alan Skea has hoodwinked half of the Club!

To state what should be obvious, the "reprint" entitled "Spelunking as a manifestation of a counterclaustrophobia", SUSS. Bull. 30(1) 25-28, is a fake! There is no such thing as "counterclaustrophobia". Not even on his wildest opium trip could Freud have penned such inventive literature.

It was an enjoyable and well-executed plot.


More entertaining than Alan's original prank, however, were the reactions of the learned "hard" scientists of SUSS. Dr. Michael R. Lake B.Sc., Ph.D.(Syd), was trenchant in his belief that the article was authentic and in his assertion that "those psychologists write this sort of stuff all the time!".

You be the judge. This is a fine example of the "sort of stuff" concerned:

"In spelunking, Mr. A. especially enjoyed hanging by a rope ... In so doing, he became the mobile testicles, the fetus, the phallus and the resurrected dead brother in utero - all riding up in the inguinal canal in a manner he could now control by pulling himself to safety at will ..."

No psychologist wrote that. Who did? Perhaps only a computer scientist had the capacity of mind to do so.

Regards,



PATRICK LARKIN

# EXPLORERS LOST IN CAVE SINCE 1963 FOUND ALIVE!

Excerpt from Weekly World news forwarded by John Dunkley

By IRWIN FISHER

**Explorers who got lost in a cave two days after John F. Kennedy was assassinated in 1963 have been found alive — 26 years later.**

The Danish team of 11 men and women survived by eating mushrooms, moss, fungus, fish and salamanders from underground streams and the occasional rat, rabbit or squirrel that wandered into the cave.

## **They lived on mushrooms, moss and lizards**

When they were found by French adventurers on December 4 they literally went into shock. The first things they wanted to know were how the death of JFK had affected the balance of power in the world and if their friends and families were still alive.

"It's a miracle that these people lived through their ordeal and a miracle that we found them," said Jacques Helliau, one of two French spelunkers

Alan Flemming, Anne Buch, Einar Lindhart, Marie Buller and Karin Stampe — are currently undergoing psychiatric and medical treatment at a Paris clinic.

Their doctors say they are in reasonably good health but find it difficult to cope with the way the world has changed since they got lost in 1963.

"It's as if they went to sleep 26 years ago and just woke up," Dr. Alan Bletner told reporters. "They knew nothing about the war in Viet Nam, America's 1969 moon shot or the rise of Japan as a world power."

"The Berlin Wall came down a few weeks ago. But when these people got lost it had just gone up."

According to Dr. Bletner, the Danes traveled to France from their homes in Copenhagen two days after JFK was assassinated on November 22, 1963.

Led by zoologist Einar Lindhart, the explorers entered the cave to study bats and search for exotic animals but got lost a few hours later after wading across a subterranean lake into a labyrinth of unexplored tunnels.

"No one else knew they were going into the cave so there wasn't a search party," said Dr. Bletner. "They said they tried and tried to find a way out but ran into nothing but dead ends."

"Their fuel and batteries gave out after the first day. They lived in utter darkness for the next 26 years, getting around by feel."

Lindhart and his team had knives and fishing line which enabled them to catch fish from underground streams and kill the small animals that wandered into the cave.

They also ate a variety of mushrooms and fungi that they plucked from cracks or scraped from the caves' clammy limestone walls.

"The temperature in the cave was only 62 degrees but they were outfitted in warm clothes and their bodies slowly adapted," said Dr. Bletner. "It seems odd but the passage of time really meant very little to them. You have to remember that they were in

their mid to late 20s when they went into the cave. Now they are in their 50s.

"They had no contact with the outside world and lost all touch with reality as most of us know it. But intellectually they are in remarkably good shape."

"They passed the time in their underground prison discussing politics, literature, science and mathematics. Their only other concerns were food

and water and they seemed to have plenty of that."

The explorers hope to return to Denmark in time to celebrate Christmas with the members of their families that are still alive. In a statement released through Dr. Bletner, the explorers said simply: "We are thankful to be free after all these years."

who found the explorers 1,500 feet inside a mountain near Megeve in the French Alps.

"I can't begin to calculate the chances against us stumbling on them like we did," continued Helliau. "It was like finding buried treasure. I still have trouble believing it."

The Danish explorers — Tom Hansen, Erik Gade, Martin Fons, Heinz Andersen, Christian Gazan, Rhonda Dall,



**FRENCH spelunkers found the lost explorers deep inside a mountain cave near Megeve.**



**EXPLORER** Martin Fons is in remarkably good shape after his rescue earlier this month.

# CORRECTIONS

## CORRECTION TO 30(1)

Due to a printing error in the last bulletin the title to one article appeared as "The Final Word". It should have read "Slacking It With Scaling Poles: The Final Word".

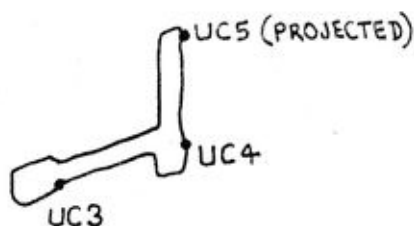
## ADDENDA TO 30(1)

"Scaling Poles In Jubilee Cave": according to Patrick Larkin the unscaled aven mentioned in the report has been checked with scaling poles and doesn't go.

"Coral Cave And Other Nomenclature Problems at Colong, Billy's Creek and Church Creek": on a trip lead by Robert Crowe in August 1986 (at which time we were unaware of Coral Cave's rediscovery by Martin and Armstrong) one of the objectives was finding Coral Cave. I managed to find it and then explored it with Rolf Adams. We also assumed it to be the Coral Cave and what we found matches the map in Martin's article. I can make an addition to the map in that we climbed the 3-4m aven at X-section L to find a continuation of the upper level drawn at D heading back at least as far as K. Also on this climb was a distinctive drop of blood (?) with lots of old formation on the upper level, all of a deep orange colour. As for the cave assigned to the name "Coral Cave" in the 1985 Australian Karst Index, during our visit a cave was found matching this description not far above the Arch Cave on the bluff and was explored using a ladder by Steve Keenlyside, Chris Young and others in the group (excluding myself). As far as I know it was untagged, and I can't recall mention of the presence of "good decoration".

"Dive Slug Lake, Mammoth Cave, Jenolan": on dive 4 (Mar 1990) Ron mentions that the level of Slug Lake was up by about 2m. This was also the increase in level of Ice Pick Lake observed by my group on the same weekend.

Correction to Map of part of  
Mammoth Cave, Jenolan.  
SUSS BULL 29(3) page 60.  
Modify your copy now! JR April 1990





## Mt Etna bat home wins protection

By MATT ROBBINS

THE home of Queensland's Mt Etna bent-winged bats, a former conservationists' battleground, is to be given the protection of national park status.

The Minister for the Environment, Mr. Comben, announced yesterday that 15ha around Mt Etna would be included in the Fitzroy Caves national park to protect Bat Cleft, the bats' home.

Bat Cleft near Rockhampton on the central Queensland coast comprises 23 bat caves and is home for two endangered bat species.

The Minister for Resource Industries, Mr. Vaughan, said Queensland Cement and Lime (QCL) had agreed to relinquish related limestone leases to allow the park declaration.

"We came into government after a history of conservation battles on Mt Etna had produced some unfortunate outcomes," Mr. Comben said.

In 1988 after a protracted battle with conservationists, QCL blew up two other caves on Mt Etna which were claimed to have been vital to the continuation of a second endangered species, the Ghost Bat.

The area was then declared a scientific reserve by the former National Party government as a compromise between the company and the conservationists.

THE AUSTRALIAN

Tuesday June 26 1990 - 6

## READ ME™



Farallon  
July / Aug  
1990  
Vol 2 No 4

## 101 uses for Timbuktu/Remote

by John Williams  
Multimedia Engineer

Most people who purchase Timbuktu/Remote™ use it to connect their office Mac to their Mac at home, or vice versa. Most people work in normal offices, with windows, elevators, and walls, and live in normal houses. However, a very small segment of the Timbuktu/Remote market works in caves, and another small segment roams the ice sheets of the North Pole.

While most of us do not bring Macs with us while spelunking in caves, Emilio Reyes' situation is unique. He is the star player in an experiment coordinated by Apple-Spain, along with

research organizations and governments from around the world, to study the effects of human isolation.

Reyes occupies a cave in the Pyrenees Mountains along the French-Spanish border. He is not allowed to hear or see

any humans, but his activity is monitored at all times by video cameras and a support team based in another part of the Anas cave system. Reyes, referred to as a "speolog" by our Spanish distributor, CTA, will be isolated in the cave for 9,000 hours (375 days). His only communication with the outside world is through a Macintosh, a modem, Timbuktu®, and Timbuktu/Remote. Ironically, Reyes builds fish tanks in his free time in the cave.

Many thousands of miles away, Emilio's friend Nil Bohigas is in the process of becoming the first person in history to hike alone to the geographical North Pole. No dogs, snowmobiles, or Mountain Dew's—just one man, his skis, food, a Macintosh Portable, and Timbuktu/Remote.

The plan is to get these two unique friends to communicate via Timbuktu/Remote and satellite phone lines. So far,

intergalactic interference has proven unsuitable for modem transmissions, but they're trying.

Farallon International Account Manager Jill Hedrick happened to be in the area one day recently and caught up with



"Regular guys" Emilio Reyes and Nil Bohigas like caving, polar exploration, and Timbuktu/Remote.

Reyes in the cave (after hiking up a rugged slope in her dress shoes). Never one for understatement, Jill remarked after exiting the cave, "This is one of the more unusual applications for Timbuktu/Remote."

## Nullarbor Caves Closed

Pending a draft management plan due at the end of this year, the NPWS has closed all caves in the new extensions to the Nullarbor National Park, including Warbla and Koonalda caves.

Source:

Nargun Vol.23, No.2 (August 1990)

Chris Norton

Take  
Note  
Martin!



McClungs Cave, West Virginia: On May 27, 1984 a caver experienced a carbide explosion on opening his pack resulting in his hair catching fire (Massachusetts Caver, September 1984).

# TIMOR

Friday 29/6/1990 to Tuesday 3/7/1990

Chris Buechner, Mary-Clare Colyer, Ian Cooper

## Friday

The 5 hour drive north to Timor was almost uneventful. My car and a truck decided to get intimate about 10 kilometres from Timor resulting in lost trims and mirrors and the need for minor panel beating to both vehicles.

## Saturday

We walked over much of the Isaacs Creek caves ridge and looked at the following caves;-

- TR 2 Belfry Cave
- TR 3/17 Shaft Cave
- TR 4 Helictite Cave
- TR 5 Nibelung Cave.

Three other features of note were also found, (see Surface Plan):-

- A - A small untagged phreatic remanent involving a tight sloping climb into an earth floored 3m x 1m x 1m room.
- B - A vadose seepage cave with a tag site marked but no tag present. It is a simple 6 metre climb down to an earth and rubble floor.
- C - An untagged vadose seepage cave that is a 4 metre climb down to a 2m x 0.5m x 2m slot.

ASF Grade 1  
I. Cooper 5/7/1990

Cave A



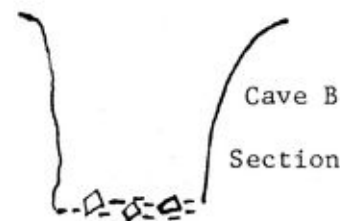
Plan



Section

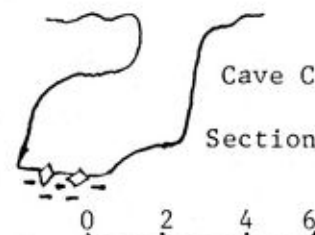
## Sunday

Heavy overnight rain had caused Isaacs Ck. to flood, cutting us off from most of the caves. This, incessant rain and apathy stopped caving for the day. Instead we went for a walk around TR 7/8, (Hill Cave). The TR 8 tag has been damaged and needs to be replaced. A spring was observed beside Isaacs Ck. at GR. 222 917, (Isis River 9134-IV-S). This spring was flowing from under a clump of blackberries at about a  $\frac{1}{2}$  cubic metre per second. We tried a surface dig in the same area with no luck. Further south one of the tributaries of Isaacs Ck. was seen to be sinking underneath a jungle of blackberries at GR. 224 914, (Isis River 9134-IV-S). A blackberry remover is a must at Timor!



Cave B

Section



Cave C

Section

0 2 4 6m

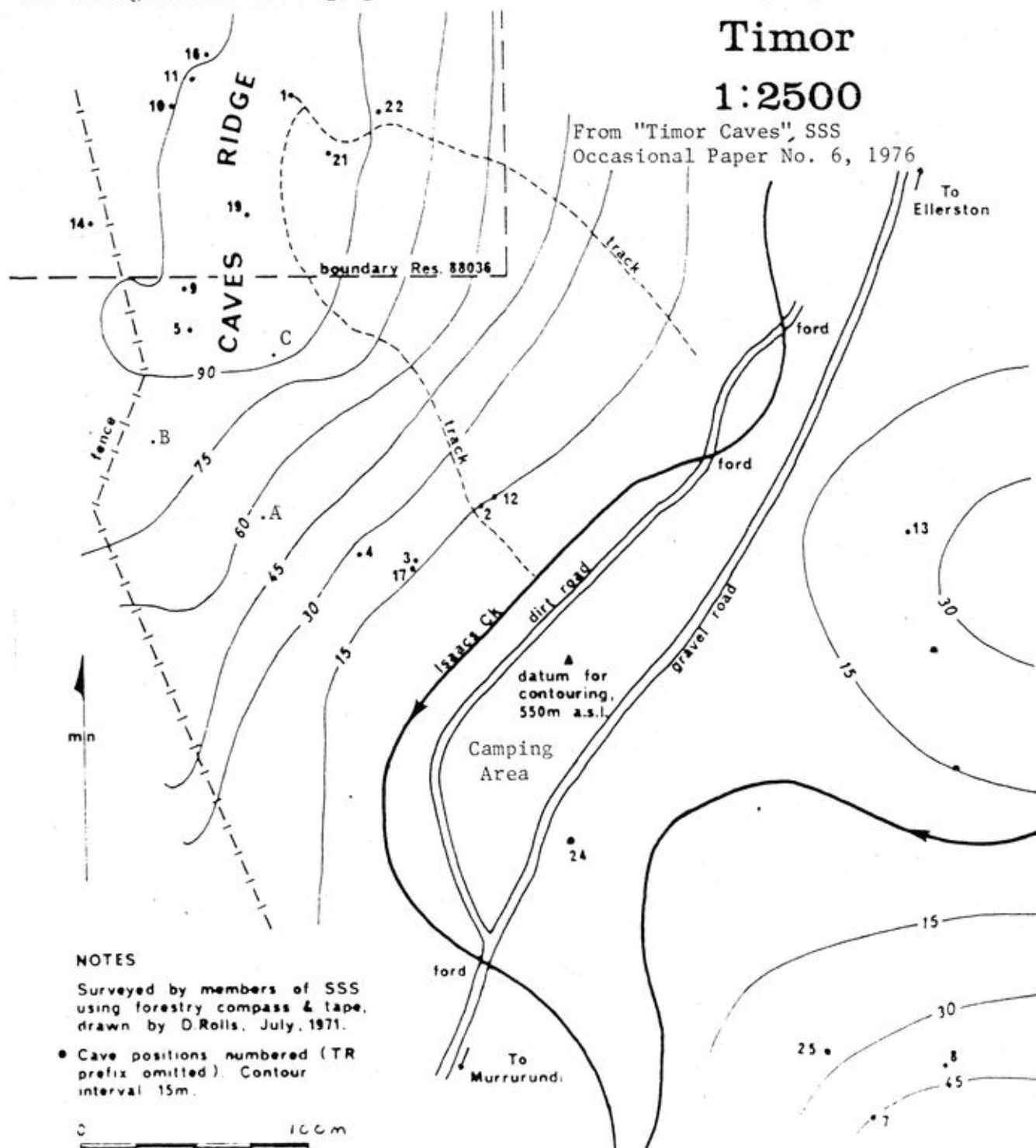
## Monday

Still raining but you could get across the creek to go caving. Firstly we went to Hill Cave (TR 7/8), stopping to look at TR25 on the way. In the literature this cave is called TR 25 but has been tagged, (wrongly?), TR23. TR 23 is described as a spring occurring some 3 kilometres away. After lunch we walked up the ridge to Main Cave, (TR 1), and also examined TR 21 and TR 22. The TR 21 tag has been defaced so that no number is visible and a tag could not be found at TR 22.

We packed up and headed north for Crawney Pass and Nundle. The rain continued and we only just crossed a rising Isis River after stalling the car in half a metre of water. Greatly discouraged by the weather, the Crawney Pass limestone was examined from the car only. This limestone outcrops along the Nundle - Timor road between grid references 148 055 and 153 070, (Crawney Pass 9134-IV-N). There are currently about ten tagged caves in the area but much of the limestone remains to be explored. We went on to Nundle, (15 kilometres north of the limestone), and indulged in the luxury of an on-site van.

Tuesday

The van was an excellent move. When we woke it was sleeting with plenty of snow higher up the hills. The morning was spent having snowball fights and making snowmen at Hanging Rock before the drive back to Sydney.





# WYANBENE, 23rd-24th JUNE 1990

Present: Francis Chee (Trip Leader), Mike Lake, Jill Rowling, Keir Vaughan-Taylor, Susan Willis, Phillip Maynard, Ron Allum, Robyn Allum and Danielle Gemensis.

Saturday 7:30am saw the arrival of the flaming red stanza at Braidwood Park to greet Ron, Robyn and Phillip. After obtaining the necessary supplies of meat (yes, the butchers are open at 8:00 am) we headed off to the Big Hole campsite to meet the others. After a quick hello and an examination of the destructive nature of wild pigs we vacated the area and drove to the Wyanbene campsite. The road to Wyanbene has seen considerable attention since my last visit 5 years ago and certainly doesn't require the use of a 4WD.

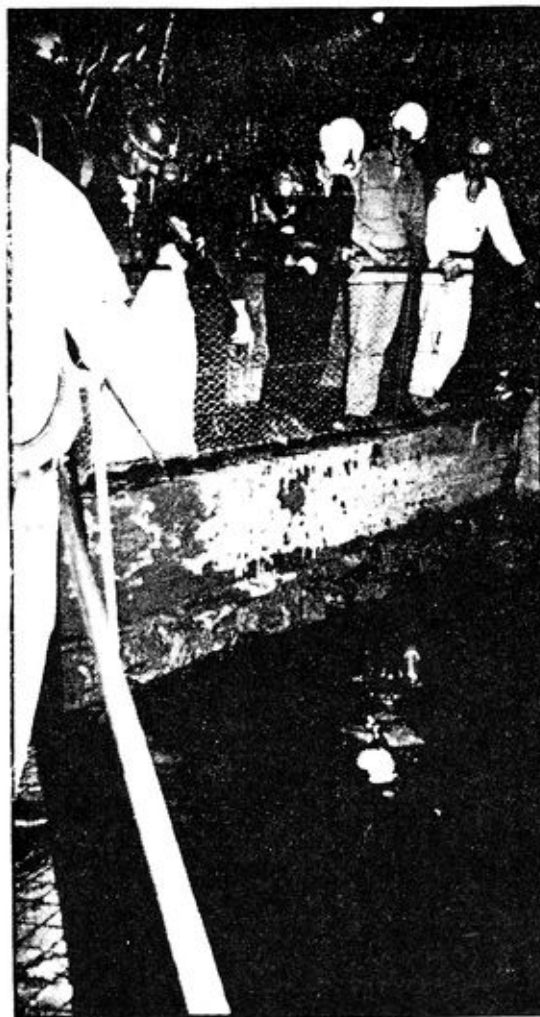
A small party entered the cave at 12:10 (typically a late start) and spent the next 7.5 / 8 hr underground. This cave system has been gated for some years now and the reasons are quite obvious. Throughout the cave were chipped names, initials, destruction of formation and mud wiped over formations. These things did not appear in my recollection of this system from some years back. However, the cave is still quite alive and beautifully wet and muddy. Most of us went to Frustration Lake while Mike and Jill attempted to find the infamous Gun Barrel. Aragonite formation in this cave is magnificent and it really is worth the 3hr trip to the lake.

Later that evening a certain person who shall remain anonymous (bush tucker man) gave lessons on how to BBQ fatty lamb chops; the do's and don'ts of camp fire cooking.

Sunday: FCC retrieves the ladder from the first pitch then heads off with Mike, Jill and Phil to look for Ridge Mine Pot and any other caves in the area. Keir and Sue went to Big Hole. After an exploratory recon. trip and rendezvous at the campsite, everybody made their own way back to Sydney after a great weekend in a cave system which, in my book, is the closest thing to expedition caving in N.S.W.

Abseiling into Big Hole was planned for Sunday, however a permit was not granted (yes, a permit is required) on the grounds that the Lyrebirds are nesting.

-FCC



# Century of garbage removed from Caves

Over 100 tourists, cave guides and speleologists, responding to the national Clean Up Day campaign last weekend, took part in "clean up at Jenolan Caves."

As volunteers in the campaign to reduce unsightly litter, the public were invited to attend Jenolan Caves' first ever co-ordinated clean up.

Tourists were asked to gather litter from around the caves and walking trails while the more experienced speleologists scoured the interior of the caves.

Members of the NSW Cave Rescue Squad, the Sydney Speleological Society, Sydney University Speleological Society, the Metropolitan Speleological Society and the Macquarie University Caving Society attended.

It was rumored one speleologist drove more than 800 km just to attend!

The speleologists spent most of the day crawling among the rock piles, tourist routes and the more inaccessible areas searching for litter.

Among the speleologists who attended were two cave divers who combed the bottom of the many lakes collecting unsightly rubbish, visible through the water.

Memorabilia found throughout the day included old globes, bottles, coins and artifacts from the early tourist industry dating from

around the turn of the century.

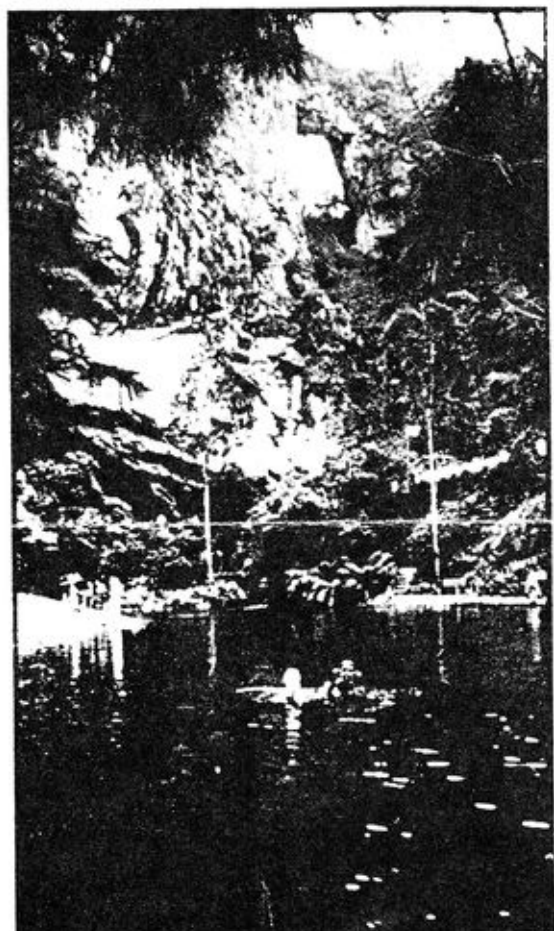
In all, five tonnes of rubbish were collected and removed from the area.

Sue Hardy, senior Jenolan guide and organiser of the event, wishes to thank the public for their efforts and hopes that next year's event will be bigger and better.

For a review of Lithgow's big cleanup effort, turn to page seven.

PICTURED: Top right, divers emerge from the Blue Lagoon near the Grand Arch; left, a game diver prepares to dive in one of the caves' "indoor lakes"; and bottom, speleologists brave the dangers to clean up rubbish in one of the more inaccessible areas.

Photos courtesy of the NSW Cave Rescue Squad.



Lithgow Mercury 27 Jan 1990

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Anne Grey

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### The SUSS Trip Leader Requirements

In this bulletin you will find the new SUSS Trip Leaders Requirements. The old Trip Leader requirements (SUSS BULL 26(3):3) needed to be updated because of changing caving practices and also because some sections on procedures for becoming a Trip Leader were not working. Additionally the Committee didn't have a list of current Trip Leaders and had no way of knowing when Trip Leaders First Aid Certificates expired (for several years now all SUSS Trip Leaders have had to have current First Aid Certificates). What was needed was an update of the Trip Leader requirements and some system to record who was made a Trip Leader and when. Also the Trip Leader requirements should provide a guide for new members as to what skills they should be learning. These updated requirements are designed to achieve these objectives. Lets have a look at some of the changes.

One of the changes in the Trip Leader requirements which reflects changing caving practices is the deletion of the requirement to be able to tie a bowline. Bowlines are used as end knots, however these days they are not considered suitable for use with kernmantle rope designed for caving. Alpine butterflys have now been included as they are excellent for midrope knots and are now used extensively on rebelay. The requirement to be conversant with the use of a cows tail has been deleted because the use of a cows tail is now considered a standard part of knot and rebelay crossing and does not need to be specifically mentioned.

I mentioned above that some of the procedures for becoming a Trip Leader were not working, for instance;

"Trip Leaders shall be expected to have attended appropriate SUSS field days."

This causes some problems for Trip Leaders from other clubs or societies who may well be competent leaders but havn't attended SUSS field days. Therefore this requirement has been changed to;

"to have attended appropriate SUSS field days or equivalents."

It will be up to the discretion of the Committee to determine whether someones prior knowledge or experience is equivalent to our own requirements.

Another important change is the following requirement;

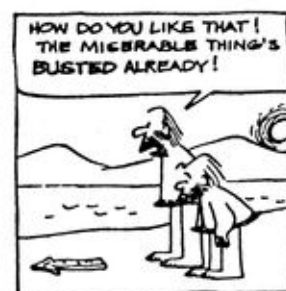
"All Trip Leaders will be reassessed annually on a compulsory field day, the date of which is to be set by the Committee".

Over the last few years the Committee has not enacted this requirement. Apparently the major difficulty was getting all the Trip Leaders to be present on the field day (also the Committee was slack). This has now been deleted, and rather than reassess Trip Leaders regularly the Committee now considers that Trip Leaders will allways remain a Trip Leader so long as they have a current First Aid Certificate and they abide by the SUSS Constitution and By-Laws. However now that Trip Leaders may be more secure in the knowledge that they are Leaders till death do us part it is more important that the Committee ensure that the prospective Trip Leaders are suitable and that current Leaders maintain their standards. To this end the record sheet will enable the Committee to keeptrack of who is a Trip Leader and to notify them when their First Aid Certificates approach expiry.

In summary the purpose of the Trip Leader Requirements are to ensure, as far as possible, that; all SUSS Trip Leaders are responsible individuals who can capably lead a trip in a safe manner, someone on the trip has a current First Aid Certificate, andthe Trip Leader has the technical skills to carry out the activities on the trip in a safe manner. Hopefully the requirements adopted by SUSS will continue to ensure that our society remains one of the most friendly, safe and technically skilled caving group in Australia.

Wishing you safe and enjoyable caving,

Michael Lake,  
SUSS Safety Officer  
6th September, 1990





## SYDNEY UNIVERSITY SPELEOLOGICAL SOCIETY

### TRIP LEADER REQUIREMENTS AND SELECTION

22nd May, 1990

#### 1. GENERAL REQUIREMENTS

Before considering any person as a Trip Leader the Committee shall be satisfied that the applicant has sufficient sense of responsibility and discipline to conduct the activities of a trip in a safe manner, and to ensure the conservation of any cave or cave reserve visited. In addition the Committee shall be satisfied that the applicant has fulfilled the following requirements:

- (a) to be sufficiently experienced in the practical aspects of caving to capably lead a party, under the variety of conditions likely to be encountered.
- (b) to be in possession of a current St. Johns Ambulance First Aid Certificate (or equivalent) and be familiar with procedures associated with caving emergencies.
- (c) to have attended appropriate SUSS field days or equivalents.
- (d) to have attended either a SUSS or NSW Cave Rescue Squad cave rescue exercise.
- (e) to be aware of and uphold the guidelines of the Australian Speleological Federation.

#### 2. TECHNICAL REQUIREMENTS

Trip Leaders must have a working knowledge of the following:

- (a) General
  - (i) rope choice: static versus dynamic.
  - (ii) basic rope knots including the following:
    - figure of eight knot
    - alpine butterfly knot
    - double fishermans knot
    - Prusik knot
    - tape knot
  - (iii) assessment of the security of natural and artificial anchors.
  - (iv) rigging in such a manner as to minimise the possibility of anchor or equipment failure.
  - (v) voice and whistle calls for laddering and S.R.T.



(b) Laddering

- (i) setting up and operating a ladder and belay.
- (ii) body belay methods.
- (iii) mechanical belay methods.
- (iv) self belay techniques.

(c) Single Rope Technique

- (i) correct placement and security of rope protectors.
- (ii) descending and ascending over rope protectors and knots.
- (iii) setting up and negotiating rebelay and redirections.
- (iv) changing from ascending to descending a rope and vice versa.
- (v) vertical caving equipment and the safety of S.R.T. systems.

(d) Rescue

- (i) abseiling down with an injured person after having ascended or descended to them on the same rope.
- (ii) setting up and operating a safe hauling system.

(e) Additional Requirements

- (i) Trip Leaders shall be expected to compile a report of each trip both for the SUSS archives and to be published in the Bulletin at the Editors discretion. This task may be delegated to other trip members.

3. SELECTION

The following procedures are to be followed in the selection of Trip Leaders:

- (a) Those wishing to be Trip Leaders should propose a trip to the Committee and attend the trip with two Trip Leaders, appointed by the Committee, acting as observers. The prospective Trip Leader's application will then be reviewed and put to the vote of the Committee.
- (b) The Committee shall, from time to time, and in any case at least once annually, reexamine the list of authorised Trip Leaders with a view to appointing additional Trip Leaders and revoking the appointment of those who have failed to fulfill their obligations under the by-laws.

**SYDNEY UNIVERSITY SPELEOLOGICAL SOCIETY**

**TRIP LEADER RECORD FORM**

This record form refers to the Trip Leaders Requirements and Selection section in the By-Laws dated 22nd May, 1990. The information should be filled out by the SUSS Trip Leader named below (circle the appropriate Yes/No option) and the form tabled at a Committee Meeting for consideration.

Name of Prospective Trip Leader: .....

Name of SUSS Trip Leader: .....

Dated: .....

The above SUSS Trip Leader has ascertained that the following requirements have been demonstrated or fulfilled by the Prospective Trip Leader

**1. GENERAL REQUIREMENTS**

Responsibility and Discipline: ..... Yes / No

(a) practical experience: ..... Yes / No

(b) current First Aid Certificate: ..... Yes / No

number: .....

expiry date: .....

(c) attended appropriate field days: ..... Yes / No

(d) attended a cave rescue exercise: ..... Yes / No

(e) awareness of the A.S.F. guidelines: ..... Yes / No

**2. TECHNICAL REQUIREMENTS**

(a) General

(i) rope choice: ..... Yes / No

(ii) rope knots:

figure of eight knot: ..... Yes / No

alpine butterfly knot: ..... Yes / No

double fishermans knot: ..... Yes / No

Prusik knot: ..... Yes / No

tape knot: ..... Yes / No

(iii) assessment of anchors: ..... Yes / No

(iv) rigging: ..... Yes / No

(v) voice and whistle calls: ..... Yes / No

(b) Laddering

- (i) ladder and belay: ..... Yes / No  
(ii) body belay: ..... Yes / No  
(iii) mechanical belay: ..... Yes / No  
(iv) self belay: .....

(c) Single Rope Technique

- (i) rope protectors: ..... Yes / No  
(ii) crossing rope protectors and knots: ..... Yes / No  
(iii) rebelay and redirections: ..... Yes / No  
(iv) ascending/descending changeovers: ..... Yes / No  
(v) safety of S.R.T. systems: ..... Yes / No

(d) Rescue

- (i) abseiling down with an injured person: ..... Yes / No  
(ii) hauling system: ..... Yes / No

3. SELECTION

- (a) organised and attended a SUSS trip: ..... Yes / No

Statement of Accreditation

The Committee of the Sydney University Speleological Society is satisfied that

\_\_\_\_\_

has fulfilled all the requirements and assessments prescribed by the Committee and has therefore been admitted as a SUSS Trip Leader with all the privileges and responsibilities attached to the same.

Signature of President or Secretary: .....

Date Accredited by Committee: .....

# NEW DISCOVERIES — NEW RECORDS

## Niggly Cave Discovered

On Saturday, November 18, during a surface exploration, Nick Hume and Leigh Douglas of TCC discovered the entrance to Niggly Cave (JF 237), which at 371m has leapt straight into third place on the list of Australia's deepest caves, being only the fifth cave to pass the 300m mark and only 4m short of Ice Tube. The cave is located in the headwaters of Chrisp's Creek in the Florentine Valley at the base of a waterfall in the Wherrett's Lookout area, and contains pitches of 85 and 103 metres which lead eventually to a short streamway sumped at both ends, presumed to carry water from Growling Swallet's Dreamtime and Mainline passages, some 500m away. With some 1.7km of length, prospects for new leads (and maybe a connection to Growling?) seem excellent.

This news quite overwhelms the other alterations that have been made to the list of Tasmania's deepest, which include minor alterations to the lengths of Thun Junction and Little Grunt, and major extensions to Niagara Pot (from 149m to 222m) and Cauldron Pot, which maintains its 5th place by leaping from 244m to 305m. A list of Tasmania's 'Bottom 40' appears below.

### Source:

Speleo Spiel 260 (June 1990)

Speleo Spiel 261 (July 1990)

*Chris Norton*

## In the U.S.A. ....

Although not noted for its depth, Mammoth Cave in the USA has now been extended to 560km long! I wonder when the first cave ultra-marathon will be held? (info courtesy of Caves and Caving - BCRA).

M.S

## NEW ZEALAND'S DEEPEST

The list for New Zealand shows what a rush of recent successes there have been, especially at Mt. Arthur. The "SUSS-bottomed" Falcon Cave is incorrectly shown as -498m - I'm afraid it should read -497m. So never mind. Perhaps more importantly it should rank at No.5 as Gormenghast Cave is now part of Bulmer Cavern. This is if we don't allow for the new figure for Exhale Air as about -600 (?). The big time for New Zealand seems just around the corner.

M.S.

# JEAN BERNARD GETS DOWN AND THE FRENCH BOOGEY!

Of significance is that there is a new World's Deepest Cave. Although it seemed that the French were to lose this distinction (held by them since anyone can remember) to the Russians (and some still say it will be Mexico) the French have struck back to fend off all challengers. **Reseau Jean Bernard** which had already been the deepest at -1535m has been pushed to an incredible record depth of -1602m.

The last published list of the deepest caves in the world also came from **Caves and Caving** for Mar 1989 - a year ago. It was reprinted in **SUSS Bull.** 29(2).

A few comparisons are worth making.

In 1989 I titled the list as "Move Over Jean Bernard". At the time a Soviet cave had burst on the scene and was just a handful of metres behind **Reseau Jean Bernard**. It seemed certain that the timeless rule of the French was over. As the new list shows this was not to be and the French achieved the remarkable feat of cracking the -1600m mark! Unfortunately we do not as yet have any details on how and when this happened.

A year ago there were 31 caves deeper than 1000m and now there are 37. This is a big increase. Major new caves have occurred in most recognised deep cave areas - Mexico (Sistema Cuiceteca), Italy (Abisso Ulivifer), Soviet Union (Boj-Bulok). Of great interest is the final emergence of a -1000m+ cave (Veliko Sbrago) in Yugoslavia (the home of Karst)- at 1198m its a good start and may precipitate a few more. As yet there have been no major successes in Irian Jaya or Turkey or New Zealand.

Mark Staraj

\* In Spain the Speleo Club de la Seine (France) pushed an undescended 70m pitch at -1140m in the Sima del Trave. This eventually led to a streamway which disappeared into an impenetrable rockpile at -1440m. The previous lowest point of the cave was at -1380m. [1989]

\* In Mexico a predominantly American expedition added another 97m of depth to Sistema Cuicateco (Cueva Cheve) making it now 1340m deep. The present terminus is a large clear sump, the airflow having disappeared in breakdown 1 km back from the sump. A positive visual (fluorescein) dye trace was obtained to a large resurgence 17km away and at 2420m lower elevation. The dye took 8 days to come through and surpassed the previous record for the deepest hydrological trace of 2308m for the cave V.V.Iljukhina (U.S.S.R.). [1990]

\* In the Soviet Union a Polish expedition discovered and explored the cave Boj Bulok to a depth of 1330m. This cave has a total of 2 roped drops, the longest being 20m. It is, however, reputed to be tight, gnarly and generally horrible - such a description coming from the Poles who will usually put up with anything. [1989]

Compiled by Rolf Adams



# New Zealand's Deepest Caves

N.Z. Speleological Society Bulletin 8 (151) September, 1989

Rank	Cave	Location	Depth	Year	Structure	State of exploration	Reference
1	Nettlebed Cave	Mt Arthur	889m	1986	Multi-level horizontal complex with vertical inlet	Higher entrance possible	NZSB #139
2	Bulmer Cavern	Mt Owen	749m	1988	Multi-level vertical/horizontal complex	Many leads remaining	NZSB #144/5
3	HH Cave	Mt Arthur	623m	1984	Hyperbolic profile with stream	Sumped, some leads	NZSB #134
4	Tomo Thyme	Mt Arthur	590m	1989	Vertical/horizontal complex	Sumped many leads	
5	Gormenghast Cave	Mt Owen	579m	1989	Vertical inlet	Now part of Bulmer	
6	Falcon Cave	Mt Arthur	498m	1990	Vertical inlet with stream	Sumped	
7	Greenlink Cave	Takaka Hill	394m	1983	Vertical/horizontal stream cave	Still going	NZSB #146
8	Bohemia	Mt Owen	393m	1990	Rift/chamber complex with stream	Still going	
9	Windrift	Mt Arthur	362m	1985	Horizontal stream cave with vertical inlet	Sumped	NZSB #141
10	Harwood's Hole	Takaka Hill	357m	1959	Vertical shaft with resurgence cave	Through cave	NZSB #98
11	Gorgoroth	Mt Arthur	346m	1972	Vertical inlet	Sumped	NZSB #85
12	Exhale Air	Mt Arthur	340m	1990	Vertical/horizontal complex	Still going	
13	Blackbird Hole	Mt Arthur	315m	1972	Hyperbolic profile	Ends in rockfall	NZSB #85
14	Perseverance Cave	Takaka Hill	315m	1987	Vertical/horizontal stream complex	Sumped, good lead	
15	Laghu	Mt Arthur	307m	1980	Vertical inlet	Sumped	NZSB #112
16	Curtis Ghyll	Mt Owen	291m	1964	Vertical inlet	Sumped	NZSB #53
17	Middle Earth Cave	Takaka Hill	274m	1988	Stream cave	Sumped	NZSB #99
18	Aurora Cave	Lake Te Anau	267m	?	Horizontal stream cave	Through cave	see below
19	Eds's Cellar	Takaka Hill	259m	1961	Steep stream cave	Sumped	NZSB #40
20	Giant's Staircase	Mt Owen	259m	1963	Vertical inlet	Sumped	NZSB #44
21	Achernar Cave	Mt Owen	252m	1990	Rift cave with stream	Sumped	
22	Farrier's Cave	Mt Arthur	237m	1985	Vertical inlet	Too tight	NZSB #141
23	Trafalmore Cave	Mt Owen	224m	1977	Vertical cave	Ends at pitch	
24	Summit Tomo	Takaka Hill	221m	1966	Vertical inlet	Choked	NZSB #102
25	Turk's Torrent	Mt Owen	214m	1977	Steep stream cave	Sumped	

Aurora reference - "Te Ana-au Cave: a Survey and Interpretation of Scientific Resources".  
P.W. Williams (Ed.) Geography Department, University of Auckland, 1984.

Information Compiled: April 1990.

## WORLD'S DEEPEST CAVES: MARCH 1990

From information supplied by Steve Foster, Claude Chabert, Tony Waltham and Dick Willis.

1. Reseau Jean Bernard (1)	1602	France, Alps	19. Jubiläumsschacht	1173	Austria, Salzburg
2. Shakta V. Pantjukhina	1508	USSR, Caucasus	20. Sima 56	1169	Spain, Picos
3. Sistema de la Trave (2)	1441	Spain, Picos	21. Anou Ifllis	1159	Algeria, Djurdjura
4. Laminako Ateak (BU56)	1408	Spain, Pyrenees	22. Gouffre de la BT6 (6)	1159	France, Pyrenees
5. Sniezna-Mejonnogo	1370	USSR, Caucasus	23. Abisso Vive le Donne (7)	1156	Italy, Alps
6. Sistema Huautla	1353	Mexico	24. Sistema Badalona	1149	Spain, Pyrenees
7. Reseau de la Pierre St Martin	1342	France/Spain	25. Pozu del Xitu	1148	Spain, Picos
8. Boj-Bulok (3)	1315	USSR, Pamir	26. Akemati	1135	Mexico
9. Sistema Cuicateca (4)	1243	Mexico	27. Arabiksaka (8)	1110	USSR, Caucasus
10. Reseau Berger	1242	France, Vercors	28. Schneeloch	1101	Austria, Salzburg
11. V.V.Ilyukhina	1240	USSR, Caucasus	29. Sima GESM	1098	Spain, Malaga
12. Schwesystem	1219	Austria, Salzburg	30. Jaegerbrunntragsystem	1078	Austria, Salzburg
13. Gouffre Mirola	1211	France, Alps	31. Ocotempa	1064	Mexico
14. Abisso Ulivifer (5)	1210	Italy, Appennines	32. Pozu del Neve (9)	1050	Italy, Tuscany
15. Veliko Sbrego	1198	Yugoslavia, Mt Canin	33. Lamprechtsofen (10)	1050	Austria, Salzburg
16. Complesso Figheria Corchia	1190	Italy, Appennines	34. Meanderhoehle (11)	1028	Austria, Salzburg
17. Sistema Aranonera	1185	Spain, Huesca	35. Torca Uriello	1022	Spain, Picos
18. Dachsten Mammuthoehle	1180	Austria, Dachstein	36. Siebenhengste-Hohgant hoehlesystem	1020	Switzerland
			37. Reseau de la Coume d'Hyournade	1004	France, Pyrenees

CAVES + CAVING Vol. 48

TASMANIA'S DEEPEST CAVES

	DEEPEST LIST	DEPTH (m)	AREA*
1.	Ice Tube (Growling Swallet System)	375	JF
2.	Anne-A-Kananda	373	MA
3.	Niggly Cave	371	JF
4.	Khazad-dum	333	JF
5.	Cauldron Pot	305	JF
6.	Serendipity	278	JF
7.	Owl Pot	244	JF
8.	Tassy Pot	238	JF
9.	Arrakis	235	MW
10.	Niagara Pot	222	JF
11.	Mini Martin (Exit Cave System)	220	IB
12.	Milk Run	208	IB
13.	Sesame	207	JF
14.	Flick Mints Hole	204	JF
15.	Midnight Hole (Mystery Creek Cave)	203	IB
16.	Porcupine Pot	202	JF
17.	The Chairman	197	JF
18.	Threefortyone	193	JF
19.	Cyclops Pot	192	IB
20.	Big Tree Pot	189	IB
21.	Deep Thought	187	MA
22.	Peanut Brittle Pot	186	JF
23.	Udensala	181	JF
24.	Rift Cave	180	JF
25.	Lost Pot	175	JF
26.	Dribblespit Swallet	166	JF
27.	Splash Pot	160	JF
28.	Three Falls Cave	158	JF
29.	Kellar Cellar	155	MA
30.	Satans Lair	139	JF
31.	Thun Junction	132	IB
32.	Little Grunt	130	IB
33.	Victory 75	130	JF
34.	Warhol	130	JF
35.	Gormenghast	128	JF
36.	Chicken Bone Pot	125	IB
37.	Revelation Cave	125	IB
38.	Col-In-Cavern	119	MA
39.	Hobbit Hole	118	IB
40.	Herberts Pot	116	MC
41.	New Order (Bauhaus System)	113	PB
42.	Bone Pit	113	JF
43.	Yodellers Pot	110	IB
44.	Rescue Pot	107	JF
45.	Devils Pot	105	MC

\* JF: Junee Florentine, MA: Mount Anne, MW: Mount Weld, IB: Ida Bay, MC: Mole Creek.  
PB: Precipitous Bluff.

Source:

Speleo Spiel 261 (July 1990)

## **Wombeyan Caves on Election Day: Basin & Bullio Caves**

24th & 25th March 1990 (My first trip as Trip Leader)

Present: Jill Rowling (TL), Keir Vaughan-Taylor, Sue Willis, Chris Norton, Fiona McGrath, Marie-Clare Colyer, Christiaan Buecher, Andrew Jenkins.

During the committee meeting, Pat had warned us that, due to work commitments, he couldn't lead the freshers' trip to Bullio and Basin Caves. I knew Basin Cave well enough, and although I'd only been to Bullio once before (as a fresher about 2 years ago) I remembered well all the difficult spots. After some discussion, I was appointed Trip Leader. Although I'd worked out what equipment was needed, the rest of the week was spent in a mild panic about people, cars, logistics, who had the gear, and where to vote (yes, folks, this Saturday was Federal Election Day). Eventually transport was organised; Igor had kindly put the lights on charge; I picked up the gear on Friday, minus the ladders. Who had them? Alan Skea said Keir had them last. Keir and Sue had left for Wombeyan Caves on Friday night, but no-one knew whether they'd taken the ladders with them or not!

On Saturday morning, Fiona arrived at my place; we picked up Chris at Strathfield Station, voted at Caringbah, picked up Mike Lake's tent & things (he couldn't come) and we set off, my car bulging somewhat. It was 9:30 am, a glorious day.

I'd told everyone to meet outside the Guides' Office at midday. This should have given everyone time to vote! We arrived at 12:02, but there were no other SUSS people. So we had lunch, chatted to the Guides and looked at Victoria Arch. Steve Riley (one of the Guides) said he thought he'd seen SUSS vehicles and people earlier, so we drove around to the camping area. There was a grey Volvo... and a tent... SUSS hot pink climbing tape... a piece of paper with a rock on it. The note read: "Gone to Taralga to vote. Please wait for us." Aha! We didn't have to wait long. Keir, Sue and the others soon drove up.

I suggested we go see Fig Tree Cave (a self-guided Tourist cave), then go caving. But the others had already seen it, so I then suggested we look at Basin cave today, Bullio cave tomorrow.

We pitched our tents, gear was arranged and we set off for Basin cave (W4). At Mares Forest Creek, only one person managed to fall in (!). For once, I managed the stepping stones without incident.

Inside the cave entrance there were still ant lions in the dusty floor. The walk had taken about an hour. We cooled off a bit before climbing down the log at about 3:15 pm. Keir's light expired shortly after, so he used the spare FX2 we'd brought along.

I set up my short ladder at the first drop. For many, this was the first time they'd been down a wire rope ladder. The next delight was the Gour Chamber and Ballroom. We saw tent spiders and Cave Crickets. We also looked at the old tourist area, where there are signatures dating back to the last Century. One very old one, in Copperplate script, indicated that a certain Mr. Larkin had been there, which amused us all.

Back to Gour Chamber, we followed the large passage around. "I *LIKE* this cave!" exclaimed Keir, who'd not been here before.

At the base of the climb up to Basin Chamber, I was dismayed to find the rickety old ladder had gone. I looked around and saw something up on a wall. "Is that the old ladder?" I wondered. Keir climbed up. "No." While poor Keir had to downclimb the slippery slope, I contemplated freeclimbing the opposite wall (the way on). It was going to be a "hot" climb. But Captain Chaos (Keir) mercifully intervened. "No problem," he said, and gracefully scaled

the wall. A tape was thrown up; presently a ladder was in place, packs were hauled up and everyone was up safely. There were a lot of tent spiders here.

In the Basin Chamber, a few bats whirled around. I invited people to have a look at the basins (gours) "but take your boots off at the first basin, so as not to track mud and guano everywhere!"

Keir was up first. You don't notice the basins until you get on top of them. "Oh... Oh... Oh..." he kept saying. "Oh, Sue, could you please pass up my camera!"

The first (dirty) basin soon became a shoe repository, as everyone had to look. There was about 20cm water in the top basin, and the large one on the other side. Keir eventually ran out of film.

We climbed down and had a snack. We saw a couple of orb-weaving spiders, very tiny and pale. I started to rig the Pyramid pitch (from the natural anchors, not the bolt). With a bit of help, the long ladder was rigged, together with a belay rope. Captain Chaos descended and ascended the ladder unbelayed "to see if it reached". He was impressed by the rushing sound of all the bats.

Everyone climbed down on belay, except for Chris Norton and myself, who abseiled. At Keir's request, everyone stayed close together until the last person came down, then we turned to look at the wonderful sight of a large number of bats whirling around the Pyramid Chamber. It was getting close to bats' tea-time.

We looked at the Pyramids (flowstone and eroded gours), then explored the mud tunnels. Some people were intrigued by the helictites, which were generally small, white and rather like vermicelli. Chris Norton excelled himself in checking out low, crawly leads. He disappeared into one of them.... I looked at Keir and said, "And I never saw him again!" We did, however: it didn't go.

The little bat skeleton was still where I'd seen it last time, near the south-west extension of the "five ways". We continued up one of the tunnels, coming to a hole in the floor (got too tight) and the chamber with the high passage ("The Grotto"). I lit an incense stick and watched air currents move the thin smoke trail. Sometimes it went up the high passage; sometimes it went into the tunnels before us. This was too much for Captain Chaos. He easily scaled one wall, traversed across and headed off up the brown flowstone. I cautioned him about a peculiar pair of stalagmites which had grown together at the top, forming a human shape with legs. It was safe. "There's beautiful white flowstone here," remarked Keir. "Take your boots off," I cautioned. He did so, then disappeared from view, around a corner.

Meanwhile, Andrew had climbed part way up, but wasn't looking forward to the traverse. He decided that discretion was the better part of valour, and returned to the squelchy mud of the cavern floor (which threatens to devour ones boots!). Of interest were the brown, bonsai-shaped outgrowths on the wall. Presently, there were rummaging sounds and Keir returned. "There are two ways. One, which has been trogged before, just leads back down a tube to our ladders near the Pyramid pitch. The other goes high and narrow, but has a lot of flowstone. I didn't go up." After looking at a few more leads, we decided to head out. Keir and Chris startled each other when they went down two different holes which met in the middle! Keir climbed up another lead in the mud tunnels which emerges near the Pyramid on the (south?) wall of the Pyramid chamber.

By this time, all the bats had left for dinner. I briefly explored Pyramid Chamber, looking at the collapse blocks. Keir climbed up the ladder and belayed people up. We de-rigged and



headed out, down the next ladder. Keir went last, removed the ladder, then treated us to another rockclimbing spectacle. We exited the cave uneventfully at 9pm.

I managed to successfully lead the group all the way from the cave, across the creek to the tourist track, then promptly lost the path when we got to the karrenfield. We were in thick scrub. How embarrassing! From my compass direction, we headed to the Eastern ridge. Keir reminded us that if we could see many lights, we were North of Victoria Arch. There were no lights, so we continued North. We stumbled across an untagged cave with a very tight entrance. Eventually we found the wire and the track again. I looked back: our little group walked single file, head lamps on, like some scene from a movie.

As we crossed the camping ground, we were spotlighted by kids, so we "zapped" them with the lights on high beam! The entire walk had taken no longer than had we kept to the track, but it just seemed longer! Most people cleaned up and had dinner; others just went to bed. (I had a fairly sleepless night, which was not improved by the 7am ghetto blaster from another group)

### Sunday

After breakfast, we packed up camp and chatted to one of the Guides who was driving around, doing his morning camp inspection. It was another glorious day, so we played a vigorous ball game while the others got ready. We had a permit for Bullio or Glass, but because of one thing or another, Glass was "out" and Bullio was "in". Besides, I'd promised people we'd see Bullio Cave, so warm clothes were packed, gear sorted, and off we headed.

The track was well defined, all the way to the ridge where it drops steeply to Balcony Cave. I searched through the scrub for Bullio cave, found it and returned to the others. At the entrance, we got our caving gear on and headed in, down the ancient steel ladder. It was 12:30pm. When we got to the pit where you climb up, the wooden ladder was missing (see comment by Steve Riley, Wombeyan Guide, this issue). There were just the two sides, no rungs. A search revealed material for half rungs. Keir hammered these home with a rock and climbed up. This was an interesting balancing exercise for everyone! Along one passage, we came across a cave cricket which tried to "bail us up" (or set up a beach head).

I was pleased when we arrived at the top of the steel ladders: my memory had not failed me from two years ago! While the others looked at the dry chamber nearby with its blind shaft, Keir and I checked the ladders and began to rig a belay line for the pitch. I wasn't sure whether 20 metres of rope would suffice. Keir went part way down the ladders to see! At the junction of the two ladders, he looked down, and these memorable words came back: "I think I want to be tied on!" He started to tie a bowline around his waist. And the equally memorable reply from me: "I suppose you'd like this end tied on, too!"

I bent the rope into an Italian Hitch. The belay was taken from one of the old steel posts, driven into the rock. The end of the rope was tied onto another ladder. Presently, Keir reached the bottom. I only had two metres of rope spare! Chris Norton was next, abseiling down. "Who's next?" I asked, pulling up the rope. Each person was belayed down. Some commented on how pretty the walls were, all glittering. Then it was my turn. I removed the hitch, clipped on and leaned back to abseil. The old ladder moved! It was tied off to a steel cable, attached to a large iron bolt, but I found it so unnerving that I re-rigged the rope from both anchors! The pitch is beautiful, with calcite facets glittering on walls.

When I reached the bottom, I remembered I'd left my pack up there. "But it's got Fiona's and my warm things in it!" Keir offered to go back up, but I said I would - it's not far. I started to climb back up, self belayed. "Oh," said Keir, "you've got an ascender..." And to



think he was going to free climb! I returned shortly with the pack and removed the vertical gear, leaving it nearby. Keir led the group off down towards the river. As they were moving fairly slowly, (the slippery slopes were a novelty for some), I took the opportunity to investigate the well-decorated chamber I'd seen last time, marked by a broken stalagmite. I was pleased to see that someone had repaired it. The job was so well done that I only noticed it after carefully looking! Christiaan and Marie-Clare also viewed the start of this chamber, but none of us continued into the slot for fear of muddying things.

We rejoined the others, who had by this time reached the river. We admired the downstream gours. Upstream, the pool was covered with calcite rafts and looked deceptively shallow. By the powerful light of the "possum spotter", I guessed it would have been up to one's armpits! I put on chlorofibres and encouraged everyone to get their warm things on. I then crawled into a higher passage to put a handline down a drop I'd remembered as being tricky. This bypasses the deeper pool. I climbed down to a small dam: the edge of a gour that separates the two pools. With some deliberation, I sat down and put both legs into the water. The cold was not greatly noticeable at first, but a steady stream of bubbles from my boots forewarned of the shock that followed! I gradually lowered myself in. The water was about waist-deep, a beautiful aqua colour with a white sandy / silted floor, dotted here and there with little bat droppings. I think it was about 13°C.

"Oh! Ah! Ooo! Come on in, the water's fine!" I chortled to the others. "This is fantastic! What a buzz!" Some started down. I headed upstream, feeling very bouyant. I chimneyed to avoid stirring the sediment so that the others could see the colour... never mind, they stirred it anyway! On my left I passed the Snowbank, a white flowstone bank which I'd remembered from last time. Then came the climb up. I'd forgotten how difficult it looked... but, see, there's a hand hold, there's a foot hold, now wedge yourself... and I was up in no time. Chris was next. I showed him the dry crystal pool on the left at the top before you climb down the other side. He assisted the others from the saddle point. Meanwhile, Captain Chaos had been desperately trying not to get his feet wet. He'd followed a high chimney part ("Francis Chee tried that last time and still got wet") and was appearing feet-first out of a hole in the wall. He looked very funny, extruding himself inevitably towards the pool.

Presently, the first few of us were sloshing our way up the beautiful streamway, past decorated sections until it got deeper. I figured that this was the end of the upstream section for us: the upstream sump was not much further, but I didn't feel like swimming. Others were arriving, so our first group headed back downstream to where I remembered a high section started, and climbed up out of the river.

Everything appeared as I remembered, except that a particular rocking boulder was no longer there: it seemed to have fallen from its perch (just as well). I climbed higher and higher, getting into a very muddy breakdown section where I waited for the others. A few bats whirled around; I nearly ate one! High in front of me was a pretty orange and white decorated wall. Far to my left, over a drop to the river, were lovely stalagmites and columns. Keir scrambled up past me to examine an even higher section on my left which he said required some climbing aid. He picked his way carefully between the stalagmites, while we all watched. Eventually, Keir decided to "come back and push it another time" as it was getting late. The mud was particularly sticky, and one sank into it, only to have it cake up on the other foot.

We returned to the river, scraping most of the mud off before getting back in. Brrr! The downclimb into the pool was a bit of a "hot" one, so I waited and guided each person down. One person fell in at the last moment, making a good "kerplunk" sound. Keir said, "that's why it's called spelunking!" Fortunately not everyone heard him. The climb back out of the river was almost as exciting. Everyone had a slightly different way of attacking the chimney,

weighted down as they were with wet cotton overalls (thank goodness for endurosuits).

Back at the natural bridge (which delineates the upstream and downstream parts), water was wrung from socks and chocolates were shared. Marie-Clare said that she felt "kind of numb all over". "Jill, I think it's time we left," observed Keir. "Sounds like a good idea," I agreed. "Would you mind leading the group out, and I'll take up the rear," I continued, stuffing a sodden foot back into a boot. Many people found the muddy slopes tricky, so Keir gave some of them a "power lift". When I got to the bottom of the ladders, I just caught a glimpse of Keir (with my ascender!) disappearing up the ladder. I warned people to keep away from the ladder, and take shelter from falling debris. Keir belayed each person up. I tied on with my cows tail and went up last, a somewhat lonely feeling, to leave the beautiful chamber to its quiet darkness.

We de-rigged and packed the gear away. The old ladders are in good condition, but some of the tie-offs will eventually need to be replaced. Perhaps an exercise one weekend? Another good thing about the fixed ladders is they protect the flowstone from damage, as the main drop is away from the wall and the upper section helps prevent erosion of loose material from the top. On the way out, I went for an unintentional Zip! down a short slope! Keir noticed another chamber where there was a smell. In it, he found a dog skeleton. Its head was mummified, but the rest of it was picked clean. It appeared to be in a resting position, but its forelimbs were in disarray somewhat. "Poor dog," said Keir, quietly. "I like dogs. I wonder how it died?" Nearby was a log, propped up. Is this the way out? asked Keir. "I don't know," I replied. Could be an alternative entrance." "Looks like a dicey climb," he said.

No-one else wanted to see the dog, or the hole, so we headed out to the top of the pit in which we had re-constructed the impromptu ladder. This was descended without incident and we exited the cave at about 6pm, just on sunset. The walk back to camp was straightforward this time. I was surprised at the number of people still camping there.

After cleaning up, we had a nice, hot tomato/veg soup courtesy of Keir and Sue. We agreed to meet at the favourite restaurant at Mittagong, so I set off with Fiona and Chris, avoiding foxes, rabbits, wombats and echidnas on the way! Unfortunately, the restaurant was closed when we arrived (9pm). Andrew's group in the Volvo decided to drive to Sydney. I went to the diner further down the road. Although it said "closed", Keir and Sue were inside, so we went in. I told the manager that "we've just come back from a six hour caving trip and we're really very hungry. Is there any chance of getting something to eat before driving back to Sydney?" We ended up enjoying double servings of raisin toast, coffee and cakes!

Oh, and the same mob got re-elected.

Jill Rowling, May 1990.

# WOMBEYAN CAVES

NO PAGES FOLLOWING.

S.U.S.S.

ATTENTION Jill Rowling.

P.O. Box 18

TARALGA, NSW. 2580

Telephone: (048) 43-5976

FAX 048435976

29-3-90.

Dear Jill. Thankyou for your trip report.

Regarding comments in your report.

- The two missing ladders one in Bullio & one in Basin. They were removed by us because of illegal cave entry by curious tourists mainly. But also bushwalking groups etc have been reported to have 'been through' Bullio. Our aim is to turn away people in Basin with the 2 pitches to the Basins, that must be climbed.
- With Bullio access is by the upper shaft entrance. The entire wooden ladder is to be removed.
- The collapse area upstream in Bullio has been talked about before. There are 2 entrance on the surface above this area that breath well. (pushing alot of air out) One is tagged (Contact hole) Both entrances require digging. A map of Bullio indicates there is possibly alot of older high level passage awaiting discovery
- The dog Skeleton. Its an Alsation? Tourists lost this pet about 4 years ago. They came back a number of times looking for their pet. SSS found the Skeleton a couple years ago and Steve Babka took some graphic detailed photos of this mummified dog. Its a good story to tell visitors who don't keep their dog on a lead. If I can find the address, I will. send some pictures of the dog to its owners with a letter saying we found your pet

A division of the Jenolan Caves Reserve Trust, Jenolan Caves, NSW. 2790

SUSS Bull 30(2):25 Regards Stephen Keilly

# FOUR NEW TAGS AT TUGLOW

Tuesday 10/7/1990 To Friday 13/7/1990

Rolf Adams, Ian Cooper, Allison Fenton, Dierdre Hargreaves, Nick Hawkes, Martin Scott, Rasmus Torkel, Leslie, Donna, Elvis, Keir Vaughan-Taylor, Sue Willis

This midwinter, midweek trip to Tuglow was intended to tie up a few loose ends and bring the Tuglow book one step closer. The organisers, (Keir and Martin), were amazed to get twelve takers for what turned out to be a productive but laidback trip. The numbers were even more suprising since Oberon had been isolated by metres of snow in the previous week.

With some trepidation about the condition of the roads we met in Oberon so that Martin could lead us by devious back ways to Tuglow. Snow was piled in 1.5m drifts along the road, this was too much of a temptation and a healthy snowfight ensued. From Oberon we travelled south through Shooters Hill and along Banshea Road to Tuglow. This route has several advantages over the Boss Peak - Kowmung River approach. The road is in good condition and should be passable by cars in dry weather. This time however we left the cars at the top of the first steep hill and walked 3 km. to the Horse Gully campsite while Kier's 4WD ferried the gear to camp, (it's a smart car).

After setting up camp we went exploring near the Horse Gully Sink. The rest of the afternoon was spent rigging hauling systems and removing a large boulder from the base of a promising doline. Just on sunset Donna and Elvis arrived in their 4WD with harrowing tales of crossing the 1.2 metre deep Kowmung River.

Next day Martin and I went into survey mode. Just around the corner from the doline dig is a previously surveyed but unnamed cave, (Muezenreider, 1970), that we intended to tag, push and resurvey. The cave was tagged T20 and named the "Cave Around The Corner", (see map). All leads were explored by a number of people, the only remaining chance of extension appears to be in a dig at the deepest point of the cave. A notable feature of this cave is the extensive bone deposits in the lower parts of the cave. Everything from fine (?)bird bones to 0.3 metre long leg bones are present.

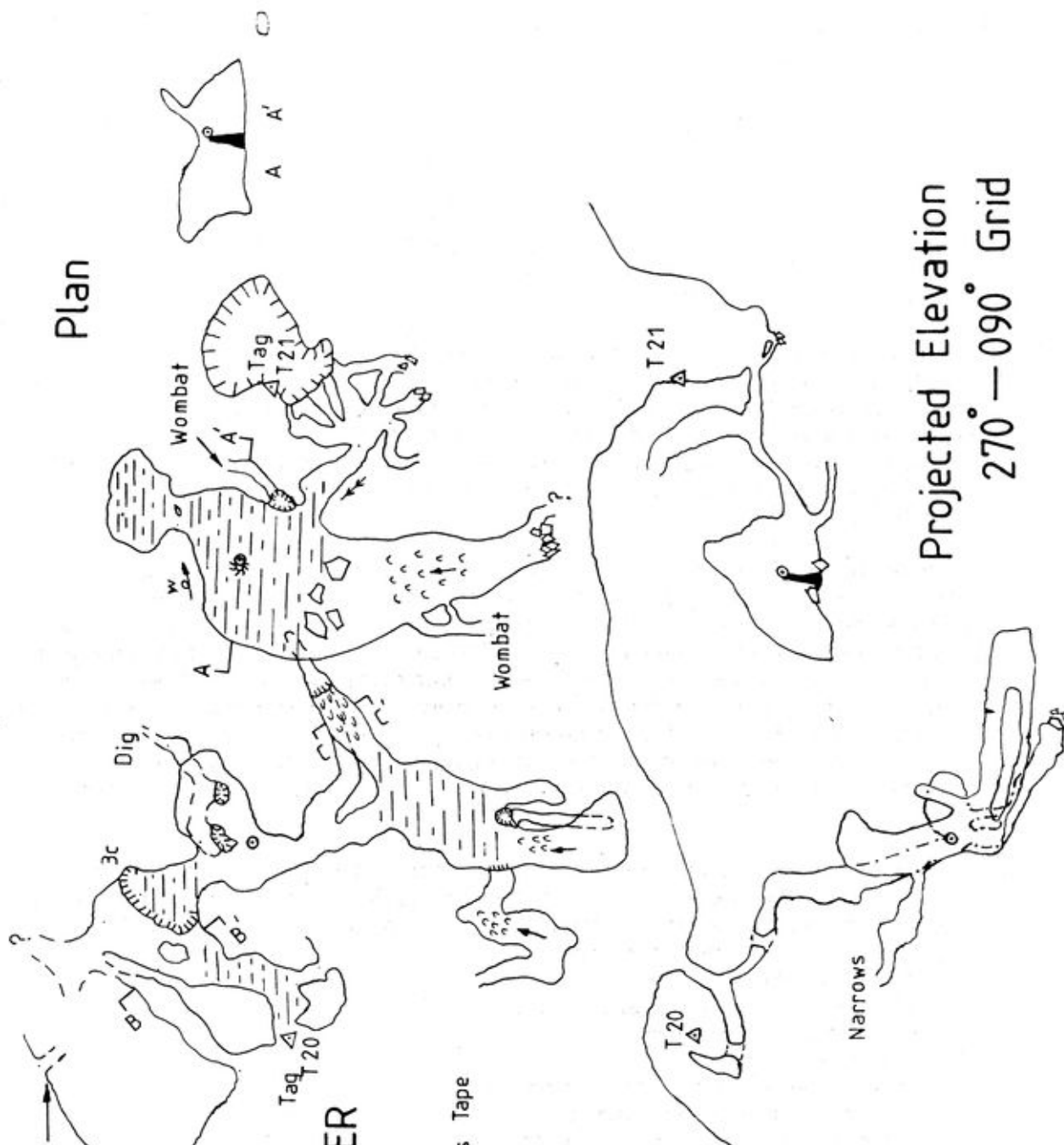
While most of us were grotting about in "Cave Around The Corner", Keir, Nick, Rolf, and Dierdre had broken through with the dig into a 6 x 3 x 16 metre pneatic chamber inhabited by at least two wombats. The cave was tagged T21, surveyed and named "Temple Of Wom", (see map). The presence of this cave and the numerous dolines in the area suggest that there is more cave to be found.

After lunch Rolf, Keir, Ras, Donna, and Elvis went off into Tuglow Cave, (T1). The plan was to climb a high rift, upstream of the waterfalls, and hopefully find an upper level. The climb proved difficult due mainly to poor quality rock, some unsuccessful leads were checked but a few scaling pole leads remain. Currently the best lead in Main Cave appears to be the small tube mentioned by Scott, (1990).

Thursday we decided to concentrate on another doline dig in Horse Gully. This doline, (tagged T22), is immediately down the hill from T20 and has obviously been a stream intake in the past. There are two promising digs in this doline:

- 1) from the lowest point in the doline there is a 4 metre climb down amongst boulders to two separate chokes. This dig is in a very prospective location but requires a great deal of work.





Plan

# TUGLOW

## T20 CAVE AROUND THE CORNER T21 TEMPLE OF WOM

Surveyed 11/7/1990 ASF 54A Suuntos & Fibreglass Tape  
I. Cooper, M. Scott

Projected Elevation  
270°—090° Grid

GN MN

13.6°

0 5 10m

2 T20 SUS2; 2 T21, SUS1 I. Cooper 30/7/1990



ii) at the base of a 5 metre cliff is a near horizontal tunnel, (disused wombat hole), that has been dug out for 6 metres and still continues. This tunnel has copious amounts of scolloping on both the walls and roof.

In the afternoon Keir, Rolf, Allison, Nick, and Leslie went back into Tuglow Cave while Martin, Ras, Dierdre, and myself went resurgence hunting in the blackberries. After a good deal of searching a tag could not be found at the Main Cave entrance. So a tag T1 was placed on a prominent rock near the entrance coinciding with a major surface survey station. On the way down to the river we managed to find cave T6 - T7 - T8. This cave is basically a climb in and amongst a large boulder pile and was not considered worth surveying.

With all the recent snow the Tuglow stream was very high so there was no problem in locating the resurgences. However the problem comes in trying to penetrate the blackberries to reach an entrance. Forewarned of this we were armed with protective clothing and a machete. A sterling effort by Ras saw a 1 x 2 x 15 metre tunnel hacked into two gushing resurgences with no tags visible. Both caves are small and have boulder constrictions preventing progress. Martin managed to find another resurgence further up the hill that is tagged T9. The Tuglow resurgences are between 10 metres and 20 metres above the Kowmung River and there are at least 4 separate resurgence caves. If National Parks would remove the noxious weeds, (blackberries), life would be much easier in this area.

Friday was spent searching for some of the other tagged caves, (T3 to T19), with no success. After lunch we packed up and headed back to Oberon and either Sydney or Jenolan. Included as Table 1 is a list of caves at Tuglow as supplied by Martin Scott. Finally here is a list of tasks for future Tuglow trips:-

- i) Scaling pole leads in T1.
- ii) A study of the bone deposits in T20.
- iii) Locate and survey caves T3 to T19.
- iv) Continue the dig in T22.
- v) Machete out and explore the resurgences.
- vi) Survey in the upper entrance to T2.
- vii) Survey between T1 and the resurgences.
- viii) An accurate overland survey from T1 to Horse Gully sink.

Ian Cooper.

TABLE 1

## The Caves at Tuglow

<u>No.</u>	<u>Name / "description by this author"</u>	<u>Reference</u>
T1	Tuglow Cave	Matthews(1985)
T2	Window Cave	Scott(1988)
T3	Pleistocene Cave	Pavey(1971)
T4	Moonmilk Cave	Bogg(1988)
T5	"entrance dig approximately above the Diamond Mine in T1"	Thomas(1971)
T6,T7,T8	"cave formed between large boulders"	Pavey(1972)
T9	"small cave at the main resurgence"	Pavey(1972)
T10 - T15	"presumably not allocated as there is no mention of them in the literature"	
T16, T17, T18	Wombat Cave	Bogg(1988)
T19	Waterfall Cave	Bogg(1988)
T20	Cave Around The Corner	This Paper
T21	Temple Of Wom	This Paper
T22	"dig in Horse Gully Sinks"	This Paper

Martin Scott

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## JOURNAL JOTTINGS

*Recently received by S.O.S.S.*

- FUSSI** Vol.2, No.2 (June 1990)  
**Journal of the SSS** Vol.34, No.7 (July 1990)  
**Nargun** Vol.23, No.1 (July 1990)  
**Trog** Vol.25, Nos.9-11 (April-June 1990)

Chris Norton

# LUCKING OUT AT JENOLAN

PRESENT: Mark Staraj (T.L.), Danielle Gemenis, Ian Cooper.  
DATE: 3rd-5th April.

## 1. GLASS CAVE

After an interesting evening that included Danielle losing us in northern Sydney and an overnight stay in the nurses' quarters at Concorde Hospital we arrived at Jenolan to meet Ian there.

Following Pat Larkin and Simon McCartney's report on **Far Country** (1990) and my own reading of Eric Osborne's letter sometime earlier, a visit to **Glass Cave** was on the cards. It was also because we were in a slack mood. The object was to find the "river" reported in the letter that appeared it might be the stream in **Far Country** and hence eventually another connection to the **Jenolan Show Cave System**.

In common with a number of other prominent Jenolan caves, **Glass Cave** has a relatively constricted entrance followed by a large chamber. We busied ourselves for about 3 hours. It soon became apparent that every little nook and cranny had to be examined. A combination of phreatic development and formation lead to a couple of devious passages in this vein (small holes in odd places leading on to further chambers). One of these was unmapped but had been forced with a hammer by an earlier visitor. One involved the unlikely exploration technique of Danielle standing on Ian's shoulders with myself running around from side to side to prop this human scaling pole. It lead from a small hole 3m up a wall to a stand-up chamber but no further. Finally we found ourselves all gathered around the top of an 8m pitch with no way to get down (8m is the depth shown on the map).

Although we were unsuccessful it was felt that Eric's claims could not yet be dismissed out of hand, **Glass Cave** was the sort of cave where the right insignificant hole could go all the way - in the same fashion as the Perculator squeeze of **Dwyers Cave**. The 8m pitch was descended by other SUSS members on the Easter trip with no success.

## 2. THE CROOKED NOOK (or GETTING SLABBED)

The next day was time to revisit a lead in **Mammoth Cave** off **Naked Lady Chamber** that had been partially explored on a previous trip (Staraj, 1990). This time we had with us a geology pick. I had high hopes for this passage. It had not been previously pushed, it had a good breeze, lots of scalloping (due to water flow), a false floor (also caused by water flow), it headed downwards and was in the vicinity of **Ice Pick Lake** (a place with lots of water). What more could I reasonably ask for? Well, caves have an inscrutable way of answering cavers' hopes and dreams. These are the familiar sagas of any caving club. Mine was to be the more common version although we we did coin a new expression.

After reaching the tight s-bend where I gave up kicking down the false floor (they do consist of rock after all), I set about attacking it with the pick. Progress was good and after 20 minutes I had cleared it away from the corner despite the awkward and restricted swings. Still this had to be followed by 10 minutes of digging the floor. At last I succeeded although it was a tight fit. My head and chest still had to come around but this only required moving further into the next

passage and they would follow. Some instinct warned me to take a look before pushing on. So after taking my helmet off so I could squeeze my head in position to see, I saw why I should backout and in a hurry at that. My enthusiastic hammering had caused a 1 foot square slab of 1 inch thick false floor to break away from further around the corner and it had slipped and was caught by a small projection a foot above my kneecaps. There was no time to lose but reversing my moves was far more tricky and the clock ran out. With a gritty groan it fell and I was slabbed! By good fortune my knees were up so it did not fall far, hit them and rolled down over boots. I think its someone else's turn!

Ian replaced me and attacked the floor further along. Sure enough another dull thud and Ian was slabbed! However falling rocks dont phase mining engineers and Ian began widening a further constriction. He took a rest and then Danielle squeezed through (it was too small for Ian and I) and reached the corner I had seen last trip. Through a hole it opened up! And then died.

So what of the breeze? Well it seems we caused a breeze to flow by supplying heat that was pushed out past us by cooler air descending a chimney about half way in. While Danielle pushed the squeeze I found a short passage connecting to the top of this chimney and felt the breeze descending into it. However it also means the effective difference in height for the chimney was only 4m which seemed far too little! Perhaps someone can explain all this? As for the where the passage went - I guess it has dissappeared into the sediment and digging would probably break through - but with such a tortuous passage as The Crooked Nook with its small squeeze at the end it unlikely to be pushed further for a long time.

Worth mentioning is the presence of a peculiar formation in the top passage. It involves a drip causing splash-mud cup to form and what may look like the beginnings of something in the cup - perhaps the beginnings of another Palantear (a unique formation in Spider Cave).

On the way out from here we were given an interesting and important geology lessons when Ian identified a previously unreported igneous intrusion in the chamber now known as Abusive Intrusive (Cooper, 1990). This also included a detour to identify another intrusion in Sand Passage (Cooper, 1990). All in all a valuable trip.

### 3.A NEW CAVE

Not content to give up so easily, on the way back to the cottage from Mammoth Cave I got sidetracked and began exploring in the vicinity of the gully separating Mammoth Bluff and South Mammoth Bluff. Eventually I had some success when I cleared away some nettles from a small gap at the base of a rock face on the Mammoth Bluff side of the gully. Excitement followed when I crawled in and was able to stand up! But that was where it ended. It was a 4m high chamber shaped like a rift. A small daylight hole could be seen. A search of the entrances and the literature at least confirmed it was a new find.

### 4.PLAYING FIELDS CAVE

Although Ian had gone home, Danielle and I weren't finished yet. We decided to spend the day combing the bluff formerly out of bounds inside the wallaby enclosure. We managed find almost every cave listed in the Jenolan Book including tagged cave of which I knew nothing. It

was interesting in that it domed upwards and down again in an inverted U shape. This seemed to please a bat that was roosting inside and a large huntsman type spider.

Finally we ended up at the entrance to **Playing Fields Cave**. Once in the entrance I was impressed by the rectangular walking passage boring straight into the hillside. After calling Danielle to join me we reached a collapse after 30m. I expected this and a continuation beyond. Danielle reached a small chamber with two ways on. From where I was it looked as the left was the goer but Danielle said not so and reluctantly pushed through a squeeze to the right that wasn't as bad as it looked. For me it was and I did some digging first. The other side lead over some collapse to a too tight slot that was gusting warm air. Good stuff! But there was no way on? Retreating back Danielle went left and it did go after all, what should I say? Well this is how cavers discover things.

Danielle was through but again I had to some farming. But by the time I was ready she had finished exploring and we left to go home. As a prospect **Playing Fields Cave** has excellent potential and is now another SUSS lead at Jenolan. Its position and development indicate that it was a former swallowt feeding overflow along the strike in the direction of the upper levels of **Spider Cave** and **Imperial Cave**. Barring blockage by collapse or decoration significant cave and a connection are a good possibility. Less certain is its ability to bypass the **Upstairs/Downstairs Rockpile** complex that has halted northward exploration in **Spider Cave**.

In all it was a great little trip even though we were thwarted at every turn. We will be back - to this threat Jenolan has only one effective answer - rain and flood - but we have caver's pure bloody-mindedness and for this Jenolan nor anyone has the answer (cure) (aside from slabs I suppose!).

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- 3) Ian Cooper (1990): "Intrusive Control Of Speleogenesis, Mammoth Cave, Jenolan", SUSS Bull. 30(1).

Mark Staraj.

\* \* \* S T O P P R E S S \* \* \*

Mark's new cave has now been tagged by SSS and is numbered J310.



# Girls, teacher swept to death in cave flood

By ANDREW DARBY

HOBART: Two teenage girls and a young woman teacher found dead in a cave in southern Tasmania yesterday were trying to cross a flooded underground river in a human chain when they were swept away, police said.

The tragedy in Mystery Creek Cave, in rainforest 100 kilometres south of Hobart on Monday, occurred when one of the girls in a school party lost her footing in the darkness, another girl fell in and the teacher, who tried to grab them, was also swept away.

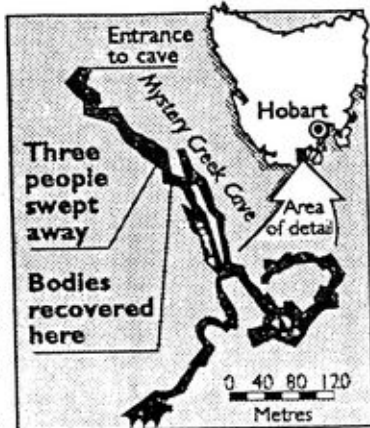
The bodies of the Anita Knoop and Francis Jane O'Neill, both aged 14, and the 23-year-old teacher, Miss Joanne Cuthbert, were recovered near where the chain parted over a narrow point of the stream, about 200 metres from the cave entrance.

The three died despite the efforts of another teacher, Mr Mark Healy, who dived into the fast-flowing water to look for them, then fought his way back up the stream to instruct the group — split on each bank — not to move.

A student teacher, six other children and then Mr Healy were rescued in a difficult police operation.

Police said that rain had been falling since 10 o'clock the previous night without an appreciable rise in the water level by the time the party from Taroona High School's adventure camp went in at 1 pm on Monday.

Then the water was running up to shin deep, Senior Sergeant Steve Williams of Hobart search and rescue said. But he said after successfully reaching the cave's furthest extent, they found it



about one metre high and rising on the way out.

A national parks service warning outside the entrance says: "Visitors are reminded ... to take caution in wet weather as the cave is liable to flood."

It took about seven hours after the accident for searchers to reach the party. At that time the stream was flowing too strongly for police to try to cross where the accident happened, or even make themselves heard above its roar.

They retrieved four children from the closer bank at 2 am, and then took in a ladder to bridge the stream so they could reach the student teacher and another two children who came out at 4 am. Mr Healy came out at 6 am.

The Minister for Education, Mr Patmore, said pre-planning for the trip had been followed to the letter, and the teachers' qualifications for the trip were "totally appropriate". However, he suspended all caving for students until a review of the guidelines for such trips.



One of the bodies is brought out of the cave.

## MAJOR CAVE SYSTEMS IN NSW



By PAUL BAILEY  
Environment Writer

It was virtually impossible for a caving accident similar to this week's triple fatality in Tasmania to be repeated in NSW, according to the National Parks and Wildlife Services' caves investigation officer, Mr Andy Spate.

There were no caves in NSW that would be subject to the same sort of quick flooding as the Mystery Creek cave, said Mr Spate, a caves expert with 25 years' experience.

Mr Spate returned recently from a six-week hydrological study of the Mystery Creek cave, where the two Tasmanian schoolgirls and their teacher were found dead on Tuesday.

One of the girls in the school party lost her footing while crossing a rain-swollen stream, another girl fell in, and the teacher, who tried to

grab them, was also swept away.

The bodies of Anita Knoop and Francis Jane O'Neill, both aged 14, and the 23-year-old teacher, Miss Joanne Cuthbert, were recovered about 20 hours after they and the rest of their party failed to ford the raging creek about 200 metres from the cave entrance.

The cave is in a steep rocky catchment close to the coast, and vulnerable to rainstorms.

Before the accident there were few recorded caving fatalities in Australia.

The only death in NSW occurred in the late 1960s, when an experienced caver fell while trying to climb out at Bungonia Caves near Goulburn.

Mr Ben Nurse, the president of the Sydney Speleological Society and chairman of the Bungonia State Recreation Area Trust, said

caving was tightly controlled in NSW and permits were often required before people could enter unguided areas.

At Jenolan, which is managed by the NSW Department of Lands, there are eight tourist caves and some 300 "wild caves". Permits are required before people can enter any of the wild caves.

Permits are also required for the wild caves which are part of the Wombeyan system near Mittagong and for most other wild caves, such as the Colong Caves within Kanangra Boyd National Park or the caves in Deua National Park, south of Braidwood.

Tasmania's Education Minister, Mr Patmore, has suspended school caving excursions and field trips pending an inquiry into the accident and a review of departmental guidelines.

## **Bungonia: Carbon dioxide, dizzying depths . . . and we loved it!**

Trip report April 7-8 1990.

Present: Mike Lake (TL), Jill Rowling, Robert Dancer, John Gittoes, Phil Maynard, Allison Fenton, Chris Norton, Julian Dryden, Kevin Moore.

By Thursday night, the usual transport hassles presented themselves: people who had no transport. But Chris was keen to go. Being a resourceful fellow, he caught the train: all-stops to Marulan, a three hour trip. Mike and I picked him up where he had camped near the Dead Centre just out of town on the Bungonia turnoff. Mike's car was really loaded then: three peoples' gear plus all the SUSS vertical gear we could muster. The weather was improving, but still a bit "iffy" when we arrived at the communal kitchen at 10am. We made coffee and waited. First to arrive were the Chemists (Robert, John and Phil) who had spent the night there. A packet of iced "volvos" was passed around while other people arrived. We told outrageous stories until everyone was present, then headed off to the 17m cliffs above Hogans Hole (the B4-5 doline).

Joe Sydney had kindly lent us a collection of harnesses, krabs and pitons which were put to good use.

Two ropes were rigged initially: one for me to abseil on, the other for the person being taught. For those who had never abseiled before, I also rigged a rope in a tree, well away from the pitch where people could go through all the motions of abseiling without worrying about heights as well. After a couple of goes on the tree, we went to the cliff. This method worked well. A bottom belay was made available.

Allison's first abseil was on the SUSS 11mm rope, used singly with two pitons and krabs arranged in a double brake bar rig. The SUSS rope was so stiff, she had to feed the rope to go down! Robert found similar problems. I found I only needed three bars on the rack, spread a little.

On their second attempt, using only a single piton brake, we demonstrated the effectiveness of a bottom belay. John tried to prevent me from descending by hauling on the rope; I was just as determined to beat him, twisting the rope around my legs and pulling myself down slowly. I think they were trying to get me to land on the nettles. Another thought occurred to me ... "Maybe you shouldn't pull so hard - It can't be that good for the rope anchor!" This ended the game (but I think the anchor would have been good enough for 800 kg or so).

During one of Allison's abseils, Kevin noticed that her hair had caught in her descender, so he pulled hard on belay to stop her. I locked off, spun her around and carefully pulled the offending hair out of her device, leaving a small lock which slowly rotated as she continued her descent.

Meanwhile, Mike had been busy rigging a multiple rebelay route down the face using 9mm rope, and was providing us all with much entertainment. The Chemists had a fourth rope (10mm, doubled) rigged to run down a slot.

It was time for lunch, so we walked back to the cars. When we returned, we set up the SUSS ladders to teach people how to ladder and belay. I tried it out first, caving-style: abseil down, untangling the ladder, then self belay back up again. I walked back down the track. Kevin, Allison and Robert all had a go at belaying people while I watched at the bottom. Later, Kevin and John kept us entertained by attempting a prusik "fight".

Allison had a go at prusiking using Julian's gear. Unfortunately, the cords were all the wrong length, so when she tried to down-prusik, she was all "fingers and thumbs". She was also hampered by the Petzl Croll "biting anything within reach" of its teeth, causing a little surface damage to Mike's rope.

It was getting late. Unfortunately, not everyone had had a go at prusiking and some people were wanting to go caving. We had a brief discussion: we would have dinner first, then go caving. So we packed everything away and went back to the campsite while it was still light so we could pitch our tents.

Dinner was held in the communal kitchen. The tables wobbled; the drinks spilt. A bit of paper under one leg fixed that. The Chemists were telling outrageous stories about vile chemicals, explosions and stinks. Mike "out-grossed" them by telling them about the chemicals he uses at work in the manufacture of silicon chips.

After dinner we went to Grill Cave (B44), to see what the rockpile looked like. For once, there was no-one else in the cave ("You can't go caving at night, you can't see where you're going"). Mike and I pointed out features of interest along the way. We did not cross the horizontal ladder; instead, I tried to remember the way through the old Crystal Palace section. We played "I spy" for a little while in the total darkness. Further down, after passing through a constriction, we found straws, helictites, small gour pools and photographed "the dope bears" (?!). I felt a little unfit clambering around and put it down to a bit of CO<sub>2</sub>. I should have brought my camera for this section, though. After we'd all had a giggle at the "bears", Mike re-iterated that it is not SUSS policy to allow the creation of statues of any kind in a cave.

We continued into the cave, heading downwards. Kevin sang melodiously about the exploits of the Royal Marines. After crossing a ladder at about 45 degrees, we climbed down into a chamber which smelled strongly of bat guano. I said that I thought the CO<sub>2</sub> concentration here was higher. Mike didn't notice. A hole under some rocks at the far end led to a slightly larger chamber, via a set of floor canyons. I was moving fairly slowly at this stage. Chris and John (I think) had moved on ahead and were already into the next chamber. I called them back. Mike suggested we did not proceed further as some members were finding it becoming more difficult to breathe. A look at the rockpile would have to wait for another time. Kevin, Julian and I amused the others by reciting Monty Python sketches.

My butane cigarette lighter would not light here, nor would it light in the previous chamber (the one with the bat guano). It burned brightly, however in the chamber on the other side of the constriction (ie the junction of the top of the Mudslide, the Crystal Palace route and the "way on"). There, we all felt a lot better. I asked people whether they would prefer the Mudslide, or back through the Crystal Palace. Those who had been down the Mudslide before preferred the Crystal Palace route, so we went back that way. Near the Daylight Hole (even obvious at night because of the logs and other organic debris on the floor), I invited Robert to show us the way out. This kept us all amused for at least a minute or two.

The whole trip had taken only 1-3/4 hours. Back outside, we decided to have a quick look at the Drum cave entrance. This was found fairly easily in the moonlight. Chris went an interesting way around to the North of the doline - until I called up to him saying, "You'll love the overhang climb. The first drop's about 150 feet!"

We entered the cave and Mike and I had a look at the bolts which had been removed. There is still an angle iron bracket above the first short pitch, but the initial tie-off would have to be made further up the passage (ie you would need more than 50m rope). I showed people the stalactite which gave the cave its name. We also saw a few bats flying above the



pitch. We returned to the cars and drove back to enjoy hot showers and a good night's sleep.

The next day, Sunday, we woke to the sound of "Left, Left, Left, Right, Left" - boy soldiers. The lone Ranger was also busy driving around collecting camping fees. At breakfast, we studied the Bungonia book and decided we had enough gear to do the B16 entrance of Blowfly Cave, so off we set. At the carpark, another group was returning to their cars. They said there was already a large mob in Blowfly. Choice number two: do the B4-5 through trip and maybe have a look at Powell Pot as well. So off we drove.

According to the book, Powell Pot has a 75 foot pitch. We had a 30 foot and a 60 foot ladder which we would tie together with krabs (the 60 foot was minus its C clips), plus we had the Chemists' 10mm rope and an assortment of tapes, krabs and personal gear.

We entered Fossil Cave (B4) at about 11:45 am, down the iron ladder and the mildly scary chimney (where I caused entertainment, having short legs) to the large chamber. The next obstacle was the climb up the wall (under the entrance pitch) to get to Powell Pot. A couple of people tried, and with some difficulty managed to get to the slot. A length of 2" tape was thrown up which Mike tied to a "mud jughandle. Try not to put your full weight on it!". The packs were hauled up.

I climbed up last. The first bit was easy, up the wall, plenty of good holds. Then, a bit of a traverse to the right where the footholds are wet, muddy and sloping outwards. The hand holds have you with your arms in a 120 degree position, which is impossible to put any weight on ... so I "smeared" up. With a 4m drop behind me and no belay, that's a "hot" climb! I wasn't looking forward to the return. Mike's "mud jughandle" looked substantial.

The next delight was a series of two squeezes, dug out by MUCG, which kept me occupied for about ten minutes. I emerged into a smallish chamber in which the others were sitting. The pitch started as a series of drops in the far side of the chamber.

Mike had been rigging the rope and ladders from a good projection at head height. Behind me, Julian and Kevin were attempting the squeezes, keeping us all entertained by their combined singing of Tom Lehrer renditions. As I got some vertical gear on, Julian tried a few Pink Floyd songs.

Mike invited me to go down first, to disentangle the rope and ladders, and to check the air. The rope and ladders were in a mess only 3m down. I abseiled down, locked off, tested the air with the cigarette lighter (OK), gathered up the rope, threw it down to the next ledge, threw down the ladders and disentangled them.

The next pitch was only about 2m, beginning as a silly overhang. The passage was curving around to the left. Again the air was OK and I repeated the above performance with the rope and ladders. There didn't appear to be any suitable tie-offs for alpine style rigging. The third pitch was another short one, about 4m. At its edge I tested the air: OK. Another short 4m pitch onto a narrow ledge overlooked a frightening, yawning pit of about 18 - 20m. Again, the air was OK. Far below, the cave seemed to curve around, enticingly, leading on ...

I threw the rope down, then the ladder, hearing a satisfying "clink": it appeared to reach, or so it seemed from my vantage point. The floor was so far away, I could not tell whether the ladder had landed on the floor or a steep slope. About 4m down the ladder had a tangle: this would be an ideal spot to again check the air.

I abseiled to the tangle, locked off and sorted the ladder out. I felt a tad apprehensive, the place was giving me the creeps, but it wasn't *that* scary ... so why was I panting? I had a

bad feeling about something. Reach for the lighter: *flick – flick – flick!* Nothing! Time to get out! I clipped my cowstail to the ladder wire.

"How's things going?" called Mike.

"*Carbondioxide!*" I shouted, then gasped for air. This was getting serious.

"What?"

"CARBONDIOXIDE!"

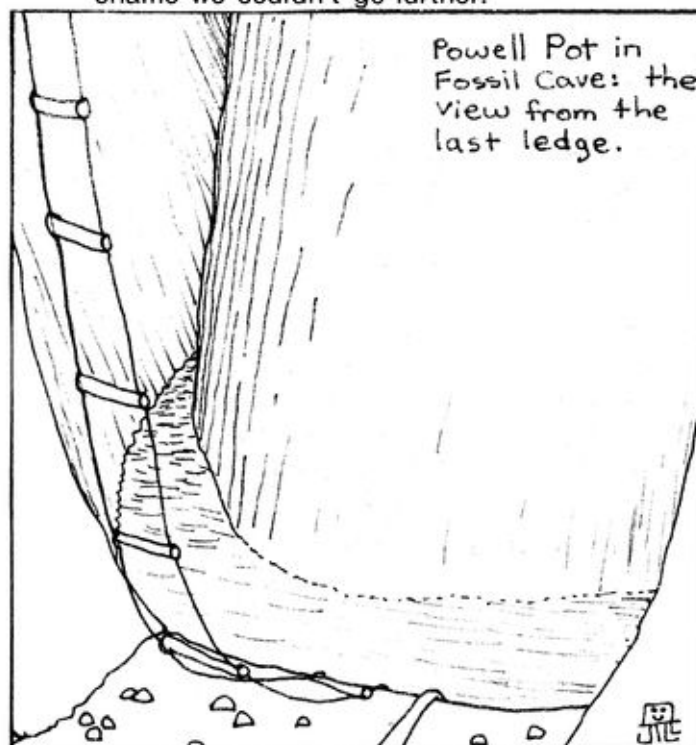
I had climbed the ladder to the limit of my short cowstail but the spring in the rope prevented me from getting my chest ascender on above the rack. As Murphy's Law would have it, the krab from my long cowstail had been lent to Mike for connecting the two ladders together and I'd forgotten that I had a spare.

I thought of possibilities: I didn't think I had enough time to undo the rack (running out of air) so I just disconnected the cowstail and re-positioned it higher. This gave me the loop I needed to connect the ascender, disconnect the cowstail and climb. I got to the ledge and rested, panting, standing (hanging on the rope).

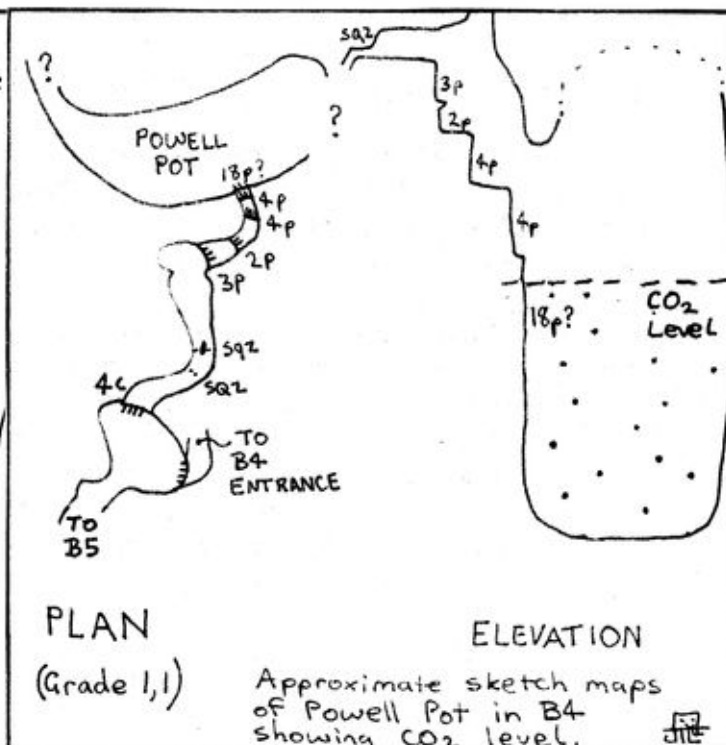
"Are you alright?" Mike inquired.

"Yes, I think so. That was a fright. But the view is worth it!"

I drew the ladder up in a ball, tied it to itself and put a knot in the rope at the ledge ("the tour stops here"). Time to climb up. I was already feeling a lot better and made canary-whistling noises at the top, after someone mentioned miners' canaries. A kind soul offered around a polycarbonate wine glass full of orange juice. I invited the others to "go have a Bo Peep: it's a great view". A few did: John, Chris (borrowing Mike's gear) and Julian. They each in turn provided us with entertainment on the little overhang and declared that it was a shame we couldn't go further.



Powell Pot in Fossil Cave: the view from the last ledge.



PLAN

(Grade 1,1)

ELEVATION

Approximate sketch maps of Powell Pot in B4 showing CO<sub>2</sub> level.



So we packed up the gear and headed out. The down climb was a lot easier using the tape. Mike was last, but was having difficulty without the handline. Apparently it could not be used double & pulled through because it would jam. Eventually Chris climbed back up, re-positioned the tape, Mike climbed down the tape, Chris removed the tape and rather skilfully downclimbed with no aid.

At this stage, Kevin decided he'd had sufficient caving for the day so he and Robert took the excess gear back to the cars. The rest (John, Phil, Allison, Chris, Julian, Mike and I) then tackled the next obstacle: a 4m dry waterfall downclimb with an overhanging start. I put a long tape around the boulder at the top, looped around if anyone wanted it (no-one did). The start to the climb was a big "yuk" as I could not see where my feet were. Once past the overhang, it was actually quite fun (but requires a little arm strength – something which not all beginners have).

Then it was down the passage, across the rift and down the hole into the Signature chamber. We rigged a tape for this. As I hand – over– handed the last bit in free space someone remarked, "Indiana Jones rides again!" Julian threw the tape down, then free climbed, jumping the last bit and landing with a big *THUD!*

Mike remembered that the obvious way on was not the way to go: we go up into the wall again.

"Everyone has to do this climb a different way," he said. Certainly, no-one imitated his way, in which he chimneyed almost upside down with his feet on the roof! I face climbed it.

After the crawl, we were in the confusing Kings Cross area. Mike was unsure of the direction to go; I'd been there once before, over 2 years ago as a fresher, with a non-SUSS group, from the Hogans Hole side.

"I'll scout ahead, to see if I can remember the way on," I said, leaving my pack with Mike. He waited for the others, who were still in the crawlway.

Things looked familiar: a coarsely-bedded bank, a triangular rock... up a passage... no, not that one – try the other one... a false floor... climb up. I was looking for a jughandle: there's a chockstone, that's probably it... another crawlway with polished rocks. Looks like a dead end but doesn't *sound* like one. I was looking for a T-intersection. From the echoes of my movements, I could tell there was a large chamber beyond. I emerged above a T intersection. To the right would be the B4-5 Extension; to the left should be the bottom of the Hairy Traverse. I returned and called Mike to bring the others through.

Air was flowing periodically back and forth along the crawlway. When it flowed from the chamber beyond, it was fresh and cool. When it came from behind, oh, who had the smelly socks? (If Mark Staraj had been there, I would have blamed his SuperGlug boots, but he wasn't, so I couldn't!)

We climbed down to the rift passage. I had a brief look at the Extension route and headed the other way. We stopped for a rest at the foot of the Hairy Traverse. While I waited for everyone to arrive, I explored more of the passage until it got squeezezy. (I've since found out that it pops out overlooking the Hogans Hole 40 foot pitch – maybe not such a good idea!) I returned to the others for a snack. For fun, we turned out all our lights and noticed someone had a luminous watch. "Could one follow the cave wall out, if one had no light?" asked a voice. Another replied, "A bit hard, given that the cave is a bit like a fractal surface."

"It's all those fiddly bits," I added.

We climbed up to the Hairy Traverse. It's been bolted and has a chain running down its entire length! One person thought this was silly; I disagreed: Considering the thousands of people who visit this cave, the polished state of the rocks and the lack of natural remaining handholds on the Traverse, I think it's a good idea to leave it permanently rigged.

I was boiling hot after the climb/crawl up the Traverse, so cooled off for a while at the top. Next, we crawled through "The Cement Bag" (low and dusty) and past a higher passage. I warned people to keep to the right (high side) of the next crawly bit as the drop off to the left was the Hogans Hole pitch.

Chris climbed down into the low B5 entrance chamber, then assisted me with the initial overhang / underhand manoeuvres. We gave helpful suggestions to the others. I thought Allison was going to fall! Julian made a spectacle of himself by pretending he couldn't climb and dithered all over the place. I nearly wet myself laughing.

"Is this the way?" he asked, pirouetting over a ten foot drop.

"No, that's the stupid way," I replied. "Go to the left." His subsequent antics should have been filmed.

We then climbed up the logs and out of the cave at the base of the cliff on which we'd been abseiling yesterday. It was dusk and sprinkling lightly: about 6pm.

Back at the cars, we sorted out gear and collected camp fees from those who hadn't paid. We arranged to meet at the favourite restaurant in Mittagong. But hot showers first! Mike and I signed our group out at the Ranger's Office (future trip leaders, please note). On the road out, we nearly ran over a platoon of boy soldiers. We also missed a wombat who had his rump to us.

In Mittagong, it was pouring. The dinner was wonderful, though, and our merriment was only heightened by the waitress who was unwittingly doing Fawlty Towers impersonations. Definitely another good trip.

Jill Rowling, April 1990.

## LOST

One caving spoon (B)

Holes in handle

Sentimental attachment

Lost seen Jendolan, June long weekend

Reward B5 / pint of ale

Call BRENDAN HYDE

498 3520

## Caving as a Tantric Meditation

Danielle Geminis

"There are moments in life when a startling but marvelous experience leaps into mind as though coming forth from another world. The magic that calls it is often so fleeting as to be lost in the joy of the experience. That the experience is not a passing fantasy but an intimation of something profound is recognised in a flash, but the understanding of its significance does not always follow."<sup>1</sup>

A bushwalker once said to me "A Zen buddhist would not need to go caving." That worried me for many years and now I have found the reply. "No not a Tibetan buddhist would!". So if you have ever wondered why you go caving - perhaps this is why. Despite many explanations for why people cave, for what they get out of it, we can only say - you cave because you cave - we cannot know more.

Yet caving leads to a spiritual satisfaction which is also found in meditation. As the bushwalker hinted, Zen buddism "is a direct means of piercing the veils of illusion, negating the ego and encouraging the flux of intuitive wisdom. It is an almost perpendicular path leading up to a lofty peak, and the adept have to dispense with climbing aids."<sup>1</sup> However, tantric meditation uses a wealth of techniques to assist ones enlightenment. It uses good and evil, welcoming both dark and light to provide momentum in the spiritual quest.

For me, and perhaps you, caving is but a tantric method. Consider the origins of Tibetan (tantric) buddism. An austere environment, a setting where "organic life is reduced to a minimum and does not play any role in the formation and appearance of the landscape or interfere with its plastic purity, but the landscape itself appears like the organic expression of primeval forces."<sup>2</sup> A harsh unforgiving environment in which developed a complex spiritual system which helped to defy logical odds against survival.

The parallels with a cave are many. The harsh force of a cave (darkness being the most potent force in tantric nuptism); the environment being bare, austere (rocks/water), harsh and unforgiving. Such sensory potency pierces the psyche at a very basic level. The adoption of a dark environment, the acceptance of harshness as beauty, the fear of height and exposure, and the inevitability of painful coldness are all part of the acceptance of the "dark" forces of the world as something to be relished not

avoided. This caver is a masochist.

The sport of caving is a tantric method to divert the mind from intellectual activity. How often have you fallen into mindless rhythm when prussicking or moving along well trodden paths in a cave, receptive to a barrage of stimulation at a subconscious level, so that afterwards you feel a deep and special satisfaction. The act of pushing a stubborn cave pack through a squeeze requires you to negate longing and desire, and just persevere. Think of the humiliating positions that require you to negate your ego - to loose yourself in the force of the cave. The unknown territory that you find at the limit of exploration is a metaphor for the danger of piercing the layers towards enlightenment. Whereas rock climbing is controlled and predictable, caving presents the unknown to challenge you within.

So what really happens when you go caving? You go into darkness, get cold, wet, miserable, tired and scared at times, and yet you come back for more. The craving for this elemental experience is but a tool to pierce the layers of the mind to be receptive to a mystical experience .....

(some people cave for depth records!)

#### References

- 1 The Tantric Mysticism of Tibet. John Blofield. Shambalia Publications. 1970.
- 2 Way of the White Clouds. Lama Gouinda. Shambalia Publications. 1966.



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## Want to Really Do Something Helpful ?

Bungonia Mine is growing and has developed into the predicted eyesore. The 3 kilometer long open cut mine cascades debris into the gorge and is now creating new scree slopes on the western end of the canyon known as the Slot.

In addition to this Southern Blue Circle Cement is actively dumping mine tailing and processing waste into Bungonia Creek coating the river bed in yellow material that visibly extends to the Shoalhaven River. This dumping is in part achieved by dumping waste into a cave swallet near the top of the ravine. This waste pours out of the resurgences at the bottom and into Bungonia Creek.

The protest regarding Bungonia requires your support and the attention of Government Ministers must be continually drawn towards the operations of Southern Blue Circle Cement.

The most potent action that you can take to protect the environment is to write. Please complain of the mining procedures by Southern Blue Circle cement and send your thoughts to

The Hon T.J. Moore  
Minister of the Environment  
Level 9  
Legal & General House  
8 - 18 Bent Street  
Sydney NSW 2000

or alternatively

The Hon N.E. Pickard  
Minister for Minerals and Energy  
38 th Level  
Hyde Park Tower  
Cnr Park & Elizabeth Street  
Sydney NSW 2000



## **Benders Quarry - a threat to caves at Ida Bay**

**The limestone karst at Ida Bay is one the most significant in Tasmania and Australia.** There are many caves at Ida Bay including Exit Cave which contains a large streamway and several tributaries which drain the karst area. Exit Cave is the longest cave in Australia. Numerous vertical caves including Mini Martin, Milk Run, Midnight Hole-Mystery Creek Cave, Skyhook Pot, Cyclops Pot, Old Ditch Road and Big Tree Pot occur at Ida Bay and are frequently visited by cavers from Tasmania and mainland Australia, including those from SUSS. **The caves at Ida Bay are of high recreational value.**

Benders Quarry is a limestone quarry at Ida Bay in southeastern Tasmania. This quarry has been operating for some time, but there are plans to extend it further into the limestone.

**The plan to extend Benders Quarry will remove a known 130m deep vertical cave and numerous other caves. Extension of the quarry is also likely to have a detrimental impact on the waters that flow through Exit Cave, the main hydrological system in the Ida Bay karst. There are many other limestone resources elsewhere in Tasmania which could be mined without destroying caves and degrading karst waters.**

The decision whether to let the quarry expand its operations, or remain in its present position and eventually close down due to a lack of economic limestone, is about to be made in a few weeks time in late August 1990 by the Tasmanian Labor Ministers. The Tasmanian Parks, Wildlife and Heritage are opposed to the extension of Benders Quarry, and the Tasmanian Resources and Energy support the application. The Ministers will decide the fate of the Benders Quarry and the caves at Ida Bay in Cabinet soon.

SUSS and its members recently recieved a letter and a phone call from a Tasmania caver to send letters to the following people. SUSS has sent a letters to the following people. Your letters are needed, and will influence the Ministers and the final decision. Send your letters **now**, possibly including the highlighted sentences above.

Mr Mike Pemberton  
Parks, Wildlife and Heritage  
GPO Box 44a  
Hobart 7001.

Judy Jackson  
Parks, Wildlife and Heritage Minister  
State Offices Building  
10 Murray St.  
Hobart 7000.

Michael Weldon  
Resources and Energy Minister  
State Offices Building  
10 Murray St.  
Hobart 7000.

Michael Field  
Premier  
State Offices Building  
10 Murray St.  
Hobart 7000.

# OTC CC AT WOMBEYAN

The OTC Caving and Canyoning Club is examining and developing the use of three dimensional photography techniques at Wombeyan caves. the work is divided into three main areas as follows:

## 1. Recording Cave Features

Techniques are now fully developed to permit the recording and subsequent presentation of stereo photographs of cave features. The presentations take the form of slides (or prints) viewed or projected.

## 2. Surveying

The theory has been developed that supports our premise that survey data could be obtained on a quick photographic trip and potentially a map could then be prepared at leisure. Features as well as cave geography could be determined.

This is yet to be tested.

The proposed work for the Club involves a trial mapping and photographing trip with a comparison of the time and effort to record and present data for each method being compared. Also compared would be the accuracy and detail obtained by each method.

To undertake this work properly requires considerable planning.

## 3. Monitoring Change

Potentially the most important application and certainly the most challenging is in monitoring the changes that occur in caves. Such changes can occur from human activity, geological sources and from normal growth of formations. The Club believes that a simple to use, non-invasive technique can be developed to provide another management tool directly able to quantify change.

By its very nature, this work will require an on-going commitment from the Club with probably two trips per year to the areas being monitored.

The work in these three areas is new. We are in regular contact with stereo photographic groups around the world and their work indicates that we are alone in these fields. To date we have not published any papers on these topics. Publishing acceptable stereo photographs is still a technological problem for industry. However, consideration will be given to the task of producing information papers towards the end of this year when stage one of our work schedule is finished.

Jeff Hinwood, Secretary OTCCC, July 1990

## 3D UPDATE

Two trips to Wombeyan have now taken place and one at Jenolan. A programme of work to document cave features is now well underway. Photographs and measurements have been taken and a methodology is currently being developed for accurate survey work.

