

BULLETIN OF THE SYDNEY UNIVERSITY  
SPELEOLOGICAL SOCIETY

*Lumen  
in  
Tenebris*

**SUSS**



FOUNDED 1948

Box 35, The Union,  
University of Sydney,  
N.S.W. 2006.

Registered in Australia for transmission  
by post as a periodical - Category B.

GENERAL MEETING  
Thursday March 7 at 7 pm

This meeting will be held in the  
Badham Room, Sydney University  
(Old Union Building). There will  
be slides and a welcoming talk  
and introduction to new members  
which you should not miss. You will  
also be able to examine the Societies  
equipment and other exhibits and  
of course meet the older members and  
arrange caving trips over the next  
few weeks that have been especially  
prepared for you.

SEE YOU THERE.

GO ON MORE TRIPS THIS YEAR

(BUT DON'T LET THE DRUG SQUAD KNOW)

Price 10 cents.....

## FORTHCOMING ACTIVITIES CALANDER

March 3 FIELD DAY at Wahroonga (see within page II7)

March 9-10 BUNGONIA For Freshers. See Toni Austin at the meeting.

March 15-17 Wyanbene For Freshers. Rik Tunney, arrange at meeting.

March 22-23 Wee Jasper For Freshers. J Seabrook, arrange at meeting.

March 30-31 JENOLAN B. Welch (Bruce) 991013

April 6-7 WOMBEYAN D. Ward (Dennis) 9092400

April 10-15  
(EASTER) YARRANGOBILLY J Seabrook, arrange at meeting.

" WYANBENE T Austin, arrange at meeting.

April 20-21 JENOLAN Bruce Welch 991013

May 11-12 COLONG Bruce Welch 991013

May 18-19 WOMBEYAN Dennis Ward 9092400

May Sometime ? JENOLAN- Wyburds Lake Cave- Further exploration and surveying. J. Seabrook. Arrange at meeting before trip. (see next Bulletin).

June Long weekend, TIMOR Tony Austin, arrange at meeting,.

June Sometime ? JENOLAN, more Wyburds. Jim Seabrook, arrange at meeting.

Trip Leaders are requested to submit their trip itineraries as soon as possible for advertising in the Bulletin. Ed.

Members wishing to go on trips to Jenolan, Cliefden, Wombeyan and Yarrangobilly are reminded that regulations permit us to bring a maximum of 12 only (15 for Cliefden), so please contact the Trip Leader well in advance if you are interested.

If you want to go on a trip to an area not advertised, or on another date? Why not get up at the next meeting and ask-some qualified Trip Leader should be able to assist.

All Trip Leaders are reminded that their Trip Reports must be handed to the Records Officer for publication and the Societies archives. Ed ... All articles pertaining or relating to Speleology would be well recieved by the Editor for publication. Wanted and For Sale adds will also be taken.

Editor....

## INFORMATION FOR FRESHERS

SUSS is basicly designed to provide opportunities for graduates and undergraduates of Sydney University to go caving. Other persons are also welcome as Associate Members. The day to day running of the society is given over to the Committee - President, V. Pres, Secretary, Treasurer, Librarian, Safety Offr., Equipment Offr., plus some others.

General Meetings are held monthly in the Union. These provide an opportunity to disciss past and future trips, to watch slides and to generally socialise.

A newsletter is produced monthly. This contains reports of past trips, articles of interest and a list of future trips. There is always room for YOUR contributions.

The society reccives newsletters from all other caving societies in Australia. A comprehensive library is maintained and there are many books available for reference or borrowing. For further details contact the Librarian.

## TRIPS

Trips are advertised in the newsletter or are announced at General Meetings. The list of trips for March-April has been designed especially for new cavers.

## HOW TO GO ON TRIPS

Get in touch with the Trip Leader, either personally at General Meetings or by phone. The Trip Leader will tell you if there is a place available. Usually there is a place, but some trips have limited numbers or require special skills. If you have a car the TL will give you some passengers, or if you have no transport he will try to arrange some for you.

## THE TRIP - ON THE SURFACE

It is your responsibility to arrange your own tent, bedding, food and cooking. You may care to combine with someone else fot these.

## THE TRIP - UNDERGROUND

Caves are dark, muddy and hard wearing on clothes. You will

need the following-

1. Headgear - A safety helmet or alternatively some other head protection.
2. Clothing - A pair of overalls ("boiler suit") or strong clothes giving freedom of movement and skin protection.
3. Footwear - Boots or alternatively sandshoes.
4. Lights - The best is a helmet mounted miners light or carbide lamp, to keep the hands free. Alternatively a hand-held carbide lamp or torch. The torch should be sturdy, compact and bright. Use new batteries and bring a spare set. Always take at least one spare light source - torch or candle and matches.
5. Specialised equipment - On your first trips you will be loaned specialised equipment. This belongs both to the society and to individual members. As you become more interested and experienced in caving you will naturally buy your own.

#### CONSERVATION

Every caver by his very presence causes some damage to the cave. SUSS has an enviable record for its attempts to minimise this damage. As a SUSS member you will be expected to maintain this standard both below and above the surface.

#### MEMBERSHIP

Prospective - When you first join SUSS you are a prospective member. This costs 80c for each six months. Remember that you must renew by September.

Full - After you do 30hrs caving with SUSS you apply and, at the discretion of the committee, become a full member. You continue to receive the SUSS Newsletter but also you receive a subscription to the Australian Speleological Society Newsletter. Additionally you are entitled to vote at meetings, hold committee positions and become a trip leader.

#### QUESTIONS

If you have any problems or questions, talk to the members at the Orientation Week stand or contact any committee member or trip leader.

-R. Tunney.

THE SUSS FIELD DAY AT  
WAHROONGA

Every year SUSS holds a field day to introduce new members to the techniques of vertical caving. This is done on the surface so that you can see what you are doing.

So this year the field day is on

Sunday 3 rd March 1974

at

WAHROONGA ROCKS  
from  
10 am

Park your car at the oval in Cliff Ave., Wahroonga East . Follow the dirt road around the left of the oval to the other side and into the bush. The rocks are 100 m ahead on the left.

For those without cars, transport will be provided from TURRAMURRA Railway Station. Contact Ludwig Rieder to arrange this transport.

BRING - A set of old clothes and sturdy footwear;  
Your lunch,

YOU WILL LEARN-

to climb ladders- there is a special way  
to abseil- a way of descending ropes  
to jumar- a way of safely ascending ropes  
to tie knots - only some knots are safe to use;  
anything you want to know about caving.

AFTERWARDS

BARBEQUE TEA  
at Ludwig RIEDER's  
20 Figtree Street., Lane Cove 428 2034

This is an opportunity to discuss caving and to get to know the older members of the Society.

BYOG - Bring your own grog

BYOF - Bring your own food



## The Oldham Type "T" Battery.

R. Tunney.

Most cavers are familiar with the Oldham Wheat types "W" and "M" batteries. The type "M" is the older model of the two and has a rated capacity of 12.5 Ampere Hours (AH). The type "W" is smaller and lighter but has a capacity of 11.5aH. Both these batteries are constructed from a black plastic-like material and are sealed at the top with pitch. The electrolyte is reached through a screw plug in the side. The wires to the head-piece are soldered into position.

These two batteries have proven themselves in caving use. They have, however, a few drawbacks - size, mass and the difficulty of checking and maintaining the electrolyte level.

Messrs. Oldham and Son. Ltd. have recently released a new model battery - the Type "T". This is a direct replacement for the types "W" and "M" which are now obsolete.

The "T" is physically the same size as the "W", approximately 18x15x5 cm but weighs  $\frac{1}{4}$  kg less. Capacity has been raised to 12.5 aH.

The battery is housed in an opaque red case made from impact-resistant plastic. Two loops for a belt are mounted on the back of the case. In the front of the case are two clear inserts with holes for adding electrolyte. A line is marked on both the windows and the case. The correct electrolyte level can be easily seen. The top of the battery is sealed with dark red transparent plastic.

Projecting from the top of the battery are the two terminals of the two cells. The cells are linked with a bolted-on strap. The remaining two terminals are threaded with nuts supplied. The positive terminal is clearly marked.

The two holes for adding electrolyte are unsealed and are used as vent-holes during charging. An ingenious twisting of the passage behind the hole prevents loss of electrolyte. Distilled water is added with a syringe, with the battery upright, until the electrolyte reaches the fill line.

The metal cap, lead and headlight from the types "W" and "M" are directly interchangeable with the "T". Instead of a soldered arrangement spade terminals are bolted to the battery terminal.

These units are available from Gilbert Gray & Sons.

Prices:	Battery alone	\$9.50 + tax
	Complete unit	\$19.50 + tax

## JAMBOREE CAVING

During the 10th Australian Jamboree, held at Woodhouse near Adelaide, South Australia, scouts and leaders went on overnight off-site venture camps. One of these was a caving trip to Curramulka. I was fortunate enough to go on this.

Curramulka is on the Yorke Peninsula, about 70km west of Adelaide, but 200km by road. The area is one of gently rolling wheat fields. About 80 scouts at a time were camped at the Curramulka oval. They were broken into groups of six with two leaders in charge of each group. These leaders were mostly Venture Scouts. Paul Tonkin, leader of Woodville West Venture Unit was in charge of the activity, assisted by Dick Pailthorpe of CEGSA, also a Venture Leader. The scouts were transported 5km to the cave in a cage on a car trailer.

The cave visited was Corrells Cave V1, more recently known as Corra-lynn Cave, after the property. The owner of the cave, Mr Correll, insists that the former is correct. The cave is more than 5.6km long, all squeezed into an area 450m by 150m. This is managed by building the cave on three levels, making the passages uniformly tiny and by intersecting them wherever possible. The map of the cave uses only single lines for passages and still looks like a rat's nest.

Negotiating the cave consists of walking down a flight of steps into a doline on the top of a hill, passing through a gate which would do the Reserve Bank proud and then getting down and crawling. This is not easy as the limestone is of Cambrian age and appears to be formed from angular pieces of limestone up to 5cm diameter, cemented together again. They are so well cemented that they cannot be broken out. The walls and much of the floors are very rough as these pieces stick out.

It is very grovelly and a worse maze than Taplow Flat. No wonder the length of the cave was basically unknown - no-one ever goes there twice. However this is certainly a "different" cave. An enjoyable two days.

-R.Tunney.



## REMOTE AND INACCESSIBLE PLACES SUBCOMMITTEE REPORT.

## SUSS at Large

from Norman Poulter,  
Perth representative of the SUSS Remote  
and Inaccessible Places Subcommittee.

Once again I must thank the members of SUSS for electing me to this exclusive position for a second term and would like to congratulate SUSS as a whole on achieving the equally exclusive 25th anniversary of cave groping. May the Union buns keep flying over another 25 SUSS Annual Dinners.

Perth is still sweltering through winter although the natives (almost extinct due to overwhelming imports) tell me it is wetter and colder than last year. Despite the fact that there was ice on the windscreen of my Landrover one morning I have so far managed to endure the days in shorts and do not look forward to summer when the great hordes of flies return.

Main news from the west is the formation of a new speleo group known as the Speleological Research Group Western Australia. The members of which, for some strange reason, elected me to the position of Safety Officer. The group has a strong body of workers generally referred to as The Crystal Construction Company. This Company has been working throughout the year, along the lines of recommendations suggested last year (Poulter 1972) to restore the famed Christmas Extension of Crystal Cave (Witchcliffe 62) from the effects of cavers indifference (Poulter 1973). On completion of this project a paper shall be published dealing with the reasons behind the constructions undertaken and the logistical problems encountered. At the request of the Augusta-Margaret River Tourist Bureau SRGWA undertook the construction of the new Easter Cave Gate. Easter Cave lies with Mullahmullang as the most famous cave in WA and was in urgent need of a replacement gate. Unfortunately this gate generated tremendous amounts of animosity from the Western Australian Speleological Group (Coffyn 1973), most of which is unfounded.

On the photographic front I have just created a new Diprotodon (Diprotodons can only be created) to replace my Poulterised Diprotodon Hill. that I was using in Tasmania last January. I shall be writing a paper on this shortly. Unlike all other Diprotodons my versions use LP gas as propellant and pre-ignition.

With a bit of luck I should be graduating from the sand of southern WA into the dust of northern WA over the Christmas period, and if the rains hold off may even get a chance to visit Ayer's Rock before returning to Perth and that despicable of all things - work.

If you want a cave away from the rest - come and rest in the West, it's not that inaccessible - or remote for that matter.

Best wishes to all my friends in SUSS - and UNSWSS - SSS -HCG - TCC and others.



FROM CARNARVON, W.A.

I have received a copy of the SUSS Bulletin for August 1973. However, upon my perusal of same, I came across a list of trip leaders on page 46. Now I have been (to my knowledge) an authorised trip leader since 1968. As a member of the Remote and Inaccessible Places Subcommittee, engaged in a (very extended) caving trip at this point in time, I was upset at my omission from this list. I must protest at this small error (which I presume it is - although I must admit that I haven't run any trips for some time) and hope that it will be rectified in the future. I am certain that, keeping in mind the contingencies that may occur, and exercising circumspection over the entire situation, we may expect small anomalies such as this to occur from time to time, and being thus used to the occurrence of these small difficulties, may yet overcome them and proceed to a conclusion that may possibly be satisfactory to all parties thus concerned.

Thanking you,

Ron Murray.  
(The Phantom Waffler)

(P.S. Don't take this letter too seriously.)

It has been recently observed that Jim Seabrook is rapidly losing weight - this has caused much discussion within the inner circles of this Society - as no satisfactory explanation is forthcoming it has been decided to call upon the vast experience of the members to offer a possible explanation."

All entries should be addressed to Box 35 and all correspondents will be entered into.

Trip Report - Yarrangobilly 9 - 11 NOV 73

R. Tunney (TL) Allan Harding (N.U.C.C.) Ian Saunders, John Saunders, David Wynn (P) Pat Atkinson, Cris Greet, Gordon Taylor, Andrew Collins, Richard Flanagan, Michael Flanagan (V).

Friday night was spent in Canberra and in the morning the party moved on to Yagby. Fortunately Allan had brought a land-rover so the cars were left at the top of the hill and all the gear was piled into the LR. After making camp the party all set off for Eagles Nest.

The aim of the trip was to upgrade the survey of West Eagles Nest. However on setting up the forestry compass it was found that it could not be securely attached to the tripod and was thus useless. So much for surveying.

The rest of the day was taken up by a trip from The Eyrie to East Eagles Nest. We were most impressed by the extent of the cave and the beauty of some of the sections.

On Sunday the lower level of East Deep Creek was visited. There was strong evidence of silting in this area. This has occurred in the last 18 months, since the work on the new highway started. A slight shower caused a minor panic as we were worried about getting the LR back up the hill. Camp was quickly packed up and the trip ended with a swim in the Thermal Pool.

-R. Tunney

#### JENOLAN GATE

During the Australia Day week-end a group of people camped on the Playing Fields at Jenolan. Damage was caused to the grass by campfires.

To stop this happening again John Norris, the Department of Tourism Ranger, has decided to keep the gate at the top of the hill locked.

The location of the key will be made known to responsible persons.

## MAMMOTH

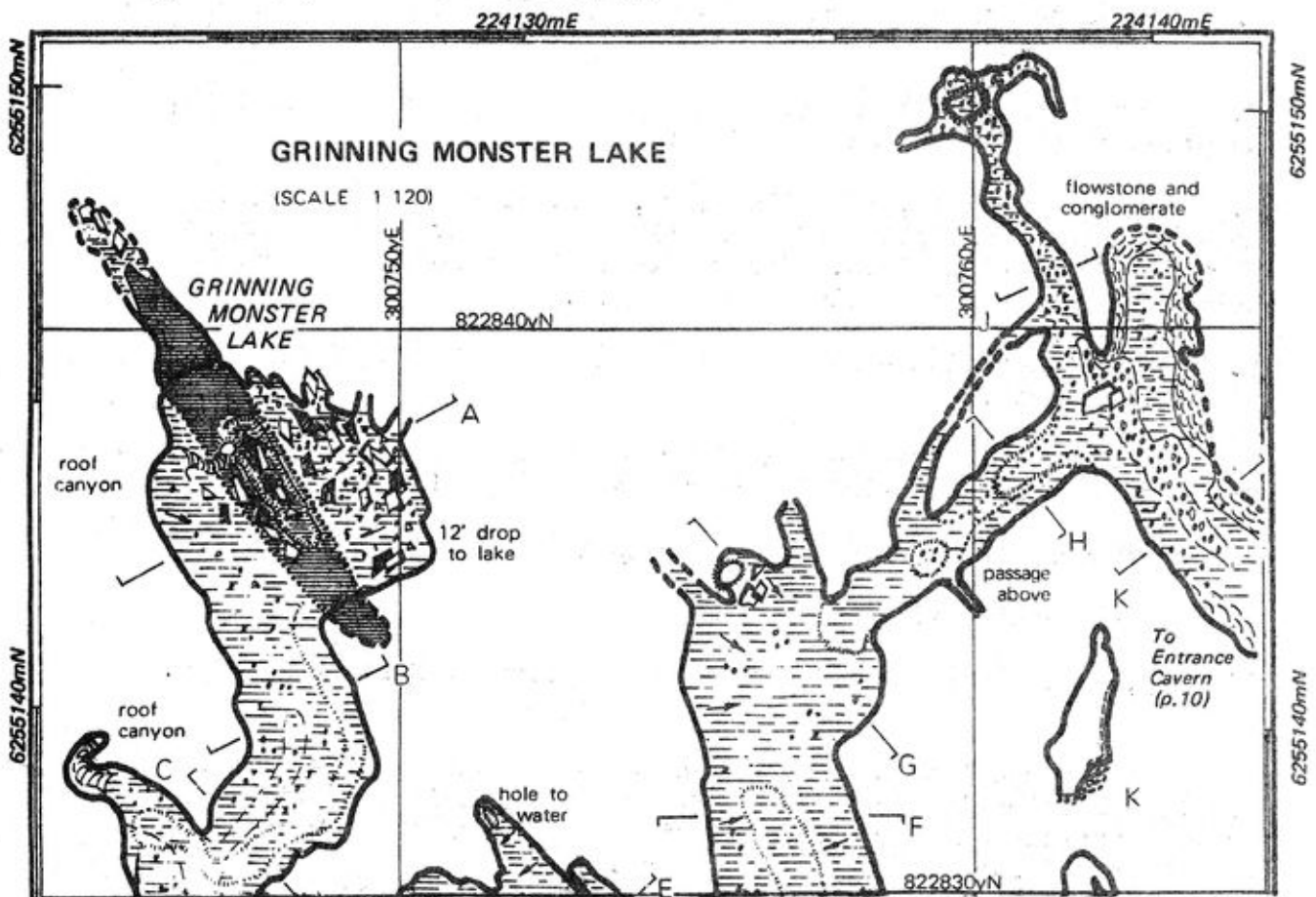
Jenolan 11-12 Aug. 1973

R. Tunney (M) R. Ellis (V)

Both members of this mini-trip were working on both Saturday and Sunday so we had 16 hours to travel from Wollongong to Jenolan, cave and then return to Wollongong. We reached Jenolan at 7.00 pm on Saturday, having picked up a ladder that John Dunkley had left at Hampton. In typical Dunkles style this ladder was only 30 feet long, too short for Mammoth. S.S.S. were camped at Mammoth Flat and they were kind enough to lend us some of their ladders.

Mammoth was entered and after a short detour to Central River, the passages around Grinning Monster Lake and Lower River were examined for new leads. We had hoped to try exploring near the surface of GM Lake but this was not possible as the water level was high.

We were out of the cave by 1.30 am and then followed a quick trip back to Wollongong.



Book ReviewThe Mysterious World of Caves

Ernst Bauer.

(Collins - International Library) 1971 129 pages.

reviewed by Ian (Spike) Milligan.

I consider this book to be an excellent introduction to the many aspects of caving and speleology. The author - a German scientist - has succeeded in conveying a considerable amount of information that the complete beginner can understand yet has many intriguing examples to hold the interest of the more experienced. Production is very good with a myriad of full colour prints.

To give some idea of the diversity of the material covered I have attempted to give a brief chapter by chapter summary below.

1. An introduction to caving techniques and equipment, although written for European conditions, has an excellent discussion on laddering procedure and equipment (lighting, ropes, clothing etc.); also shorter notes on horizontal techniques, single rope techniques, cave diving, surveying and photography.
2. A chapter on cave dwellers - prehistoric and present -, cave art and the psychological effects of a prolonged underground expedition.
3. Cave biology with examples of extinct and present cave life, adaption to cave life and the effect of man.
4. Cave formations, including lava, sea, wind and ice caves. A more detailed description of Karst (limestone) caves including some formed in travertine dams. However there is no mention of caves formed in calcareous aeolianite as in W.A.
5. Cave decoration - its formation and uses in determining past climatic changes.
6. Underground rivers - some intriguing examples of river capture, tracing and pollution (tracing by tagged eels yet!)
7. Submarine caves and freshwater springs from the sea floor.
8. World distribution of caves.

Finally, a glossary of caving terms and a list of further reading.

One aspect that has been neglected is the conservation issue, although mention is made of the effect of artificial lighting and tourist traffic and possible pollution of underground streams. Maybe mining is not such a problem in Europe.

On the whole a good book that fulfills its purpose.

## Trip Report - Jenolan Caves 12 - 14OCT73

## "WATER"

Rik Tunney (TL) John Saunders, Ian Saunders, David Wynn, Shane Broomfield (Prospectives) David Christian (P.S.G.) + 3 others.

This trip was to familiarise some new prospectives with a few of the caves at Jenolan. Mammoth Cave was entered on Sat. The intention was to visit Slug Lake and Oolite Cavern. On reaching the rockpile the thunder of falling water was heard. A large stream (10 cusecs) was rushing out of the bottom of the rockpile, near the bottom of the Forty Foot. From there it continued down the passage towards Home Sweet Home. The normal route on was filled with fast flowing water and was impassable but there is a tight squeeze which starts next to the bottom of the cleft which leads up to Mammoth Squeeze. It was here that we encountered a party from U.N.S.W.S.S. coming down from the Squeeze.

The passage on from Home Sweet Home contained fast flowing water. Some of the keener members had a look down the passage. Although it was obviously negotiable, lack of inclination prevented us from going any further.

On returning to Entrance Chamber it was decided to visit Central Lake. On passing Sand Passage flowing water was heard. This was investigated and 25m up the passage a pool was encountered. Some water could be seen flowing into this.

The trip to Central Lake was straight forward. Central Lake was flooded, as was Ice Pick Lake. A small stream (2 cusec) was flowing into Ice Pick Lake from a passage on the right. This stream was followed through the rockpile for 10m.

Back on the surface Bow Cave was visited. There were 7 cusec flowing into it. 3 cusec were flowing down the creek but this was sinking before the Mammoth entrance.

On Sunday Wybirds Lake Cave was visited. The flow of the creek increased as we moved upstream. It was apparently sinking progressively between Hennings and Mammoth.

The Western Passage of WLC was visited. A 1 cusec stream was flowing through the non-existent Lake.

In the afternoon a tourist trip was made to Lucas Cave with Noel as guide.

-R.Tunney.



"More Water (Too Much?)"

Trip Report - Jenolan Caves 25 - 28JAN74

R.Tunney (TL) Bruce Welch, Phil Toomer (M) Wayne Pitts, Greg Foy (P.S.G.) Kevin Swan (V).

This trip was a follow on to a trip made in Oct 1973. On that occasion large quantities of water had been observed in Mammoth Cave. That trip had followed one week's heavy rain.

This trip was remarkable in that there was at least twice as much water in Mammoth. This followed four weeks heavy rain in which most of the eastern third of Australia had been extensively flooded. Much rain had been received in the Jenolan area. The creek had been flowing at the Playing Fields for two weeks. Water had flowed through Devils Coach House for two days. The lake in Imperial Cave had almost reached its highest recorded level.

It is believed that we saw more water in Mammoth this time than has ever been seen. We got wet in places which are usually dry and the roar of falling water at times made it almost impossible to hear each other speak.

SATURDAY 26JAN74

After a typical late start this time caused by our waiting for a group from Canberra to arrive. (They didn't) we paid our compliments to the guides. Waiting for us was a telegram from Canbra (as they call it) saying "We can't come".

On fording Jenolan River (Geographical Names Board incorrect name) more correctly known as McKeown's Creek we noticed a large group of illegal campers. (They were subsequently ejected by the Department of Tourism Ranger.)

The area around Bow Cave was investigated. The creek upstream was flowing at 24 cusec. Rather voluminous. At Bow Cave the water bifurcated, 7 cusec continued downstream and 17 cusec went into Bow Cave towards Mammoth.

On entering Mammoth the sound of a strong stream could be heard. Water was flowing from the direction of Cold Hole and thundering down the Forty Foot and Rockpile. Both these were non-negotiable because of the pressure of water.

It was decided to try Mammoth Squeeze. Even though none of us had been through it was surprisingly easy to find and negotiate. Rik, Phil and Bruce negotiated the squeeze while the others stayed behind. The cleft was then climbed down to the bottom of the Forty Foot.

Here again the stream was encountered. A cylinder of water 0.3m diameter was pouring down the Forty Foot and more water was gushing out of the Rockpile. There was spray everywhere and the roar of the water made communication difficult. The normal way on was blocked but the alternate higher level squeeze to Home Sweet Home was taken.

At Home Sweet Home the stream was met again as it gushed out of a 1m hole in the wall. There was also a small tributary of  $\frac{1}{2}$  cusec which flowed out of the rockpile on the northern end of Home Sweet Home. The passage onwards was filled to 0.6m with fast flowing water at 22 cusec. After 10m there was a small waterfall, after which the passage became narrower, the water deeper and the roof lower. And so the Six Foot Drop was reached. The water was shooting out in a 1m diameter cylinder to the wall on the other side of the passage. From there it rebounded off down the passage towards Lower River.

A handline was set up to avoid this rush of water and the drop was negotiated. A visit was made to Grinning Monster Lake which was high, needing only a 0.3m rise to overflow down the passage to Lower River. Water was trickling into the lake from the rockpile which forms the roof.

Near the Six Foot Drop there is an aven in a branch of the main passage. This aven is more northerly than G.M.Lake. A small stream  $\frac{1}{4}$  cusec was flowing down the aven and into a small passage to the east where it was sumping.

The group then returned to Mammoth Squeeze where the rest of the party had been passing the time going to and fro through the squeeze. From there the whole party moved on to the Cold Hole. It was necessary to crawl through the water to reach this.

Much water was coming out of Sand Passage and all of it was flowing through Cold Hole, down the Forty Foot and Rockpile to the Southern Section. It was decided to build a dam and divert water down towards Horseshoe Cavern. After some exertion half the flow was running down towards the Cavern. The flood front was followed down to the Cavern. Initially the water ran into a hole against the wall near the auger pit but as the flow increased the cavern began to fill with water.

Owing to the lateness of the hour it was necessary to leave the cave. Rik and Phil and Greg walked down the valley to Devils Coach House. The creek was sinking into gravel just downstream of Alladin Cave.

SUNDAY 27JAN74

Mammoth Cave was entered and the party moved directly to Sand Passage. While Phil and Bruce tried some time exposure photography using the green light from a Cyalume the rest of the party improved the dam. Gravel was brought from the blind aven between Sand Passage and Railway Tunnel. The amount of water going to Southern Section was substantially reduced.

The stream was then followed down to Horseshoe Cavern where a large muddy lake had formed. The lake was now overflowing through a channel in the sediment banks on the far side of the cavern. As the lake was muddy the alternate northerly route to Railway Tunnel was taken. The stream flowed north along Railway Tunnel. In the area of the mud sink a small lake had formed but this was over-

flowing and the stream continued on for a further 15m to the rockpile which forms the floor of Railway Tunnel. Here the stream disappeared through a hole in the floor and down the passage which forms an unsurveyed connection between Railway Tunnel and the start of Snakes Gut.

The party continued on and had a look at the end of Railway Tunnel and the top of the Ninety Foot. The mud was exceptionally muddy. On returning the Skull and Crossbones was taken. After crossing the top of the rocks of the S&XB rockpile a waterfall caused by the water falling from Railway Tunnel was looked at. Phil and Bruce had a quick shower as they felt that the cave had been too dry and hot.

A small stream  $\frac{1}{4}$  cusec enters the rockpile chamber from its southern end. This was followed up over flowstone to a tiny grotto where it came out of a hole in the roof. This water probably came from Railway Tunnel.

The climb down through the rockpile was continued to Snakes Gut. Ice Pick Lake was up, coming back as far as the junction of the unsurveyed connection. The stream could be seen entering. Central Lake was visited and this too was flooded, filling right up to the top of the key-hole shaped tube. The level of Central Lake was the same as that of Ice Pick Lake.

The party then left the cave, destroying the dam on the way out.

In the evening a Smoke Concert in the Grand Arch was attended.  
MONDAY 28JAN74

A sub-trip report is being prepared by Phil Toomer.

#### GENERAL COMMENTS

Mammoth Cave had been entered under similar conditions in OCT 1973. However the water flow in OCT was about half that on this trip.

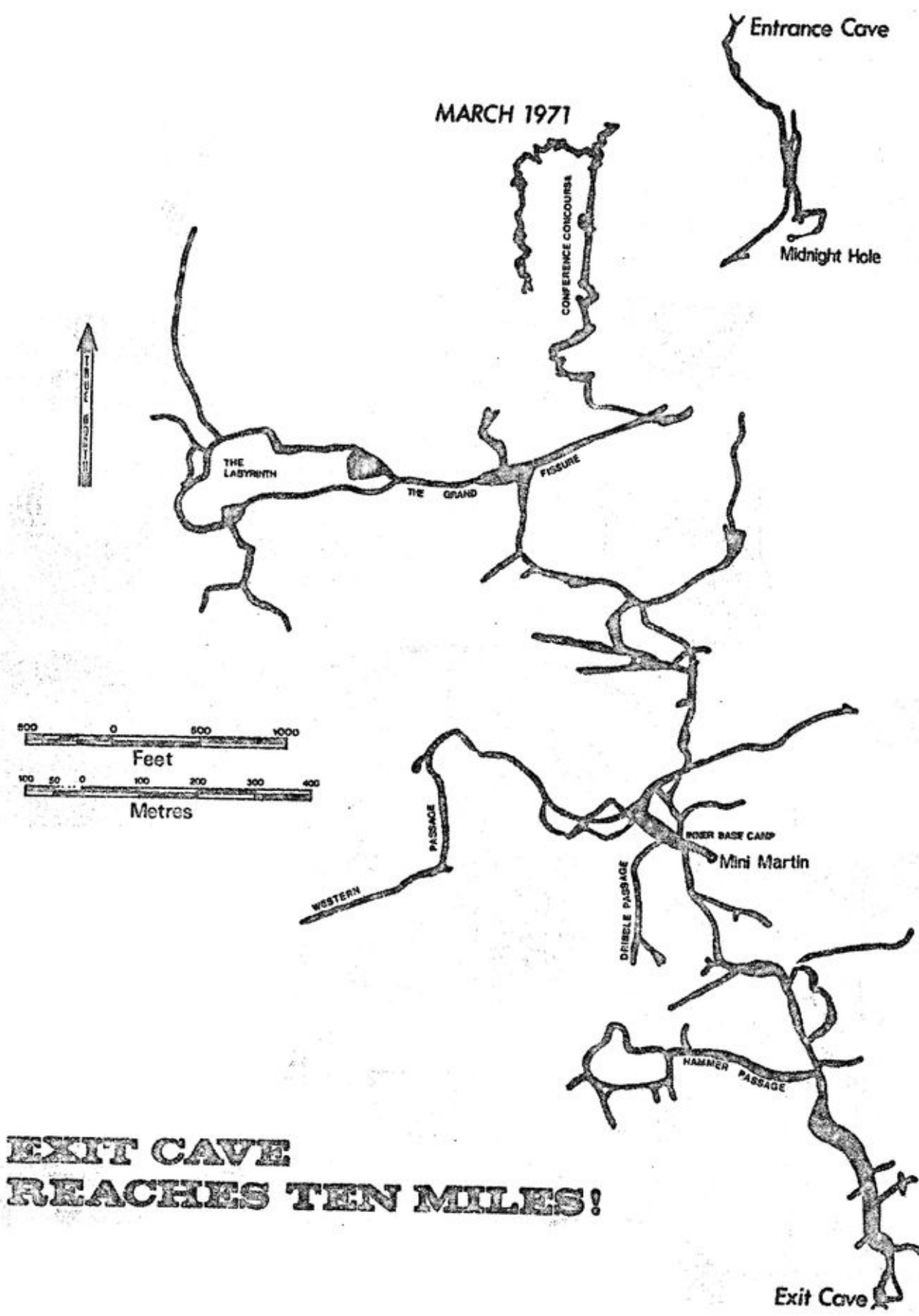
In OCT no water was flowing out of Sand Passage. Water was leaving Sand Passage by an unobserved passage and this water was presumably flowing out the bottom of the Rockpile. In JAN Sand Passage was flooding down Cold Hole to the Rockpile.

In both OCT and JAN Central Lake and Ice Pick Lake were high. A stream flowed into Ice Pick Lake. In JAN this stream was fed by water from Railway Tunnel. In OCT there was no water coming from Railway Tunnel.

A passage either from Sand Passage or from the surface is postulated to account for the stream observed in OCT.

The stream flowing into Ice Pick Lake in JAN was about 6 cusec. Was the lake rising? If not where does the water go? Is there a flood passage leading from the lake or does it leave via Central Lake and Central River?

-R.Tunney.



**EXIT CAVE  
REACHES TEN MILES!**





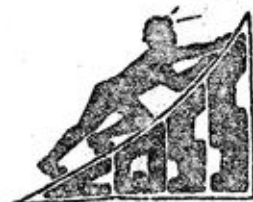
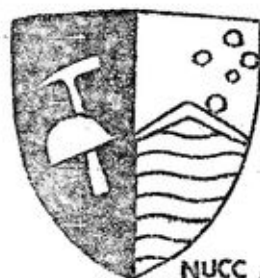
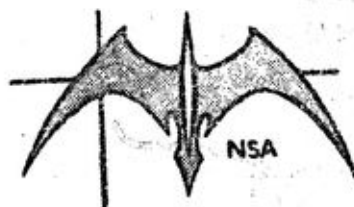
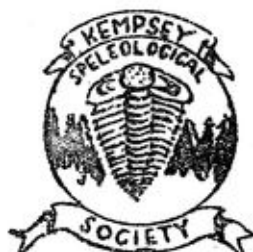
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VSA



UQSS



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Dear Editor,

As some of our members may know, the N.S.W. Liaison Council has decided to number all non-limestone caves in N.S.W. arbitrarily. This is in spite of submissions made by both S.S.S. (Middleton 1973, Ellis 1973) and P.S.G. (Toomer & Welsh 1973). The N.S.W. Committee on Cave Numbering and Nomenclature were mixed up in this somewhere also.

It seems typical of the Liaison Council to act stupidly. The concept of this Council is a good idea, but ever since it was formed it has been faction ridden and useless. Decisions like this actually hinder the development of systematic speleology in this State.

I am enclosing with this letter a short article on King's Caves, Raymond Terrace. To circumvent the decision of the Council I have not included maps so the caves cannot be numbered under this stupid system.

Surely the Council could see that even the submissions of S.S.S. are better than nothing.

References:

- Ellis, R. 1973 "A Cave Numbering System for New South Wales - Non-Limestone Caves." JSSS 1973, 17(5) : 130  
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Yours faithfully,

Rik Tunney.

If you are wondering what all that was on the previous two pages, don't ask me. But it looks pretty doesn't it?

By stealing an infra-red stencil maker we can now do things like this, so send in your maps and diagrams.

..Ed.

KING'S CAVES - RAYMOND TERRACE, N.S.W.

R. Tunney.

References: Newcastle 1:250000 479955  
Paterson 1:63360 Q13b99

(Sorry, my map is 1923 and has a funny grid)

King's Caves are located in a low (100 metre) range of hills which rises out of the flood plains of the Williams and Hunter Rivers, about 6 km north-east of Raymond Terrace. They lie between the Raymond Terrace to Seaham Road and the Pacific Highway.

A low saddle (50m) running N-S joins two hills (100m). On the northern part of this saddle is a large conglomerate outcrop overlying shales. The caves are developed on the western side of this outcrop at the junction between the conglomerate shales. One, however, is developed in conglomerate alone.

There are 3 caves of the overhang type, running along the bottom of a 10 metre high cliff. The largest is 10m wide and 7m deep and up to 3m high. The other two caves are smaller, the smallest being only 3m wide.

The fourth cave is similar in size to the largest of the other three, but is 4m higher up the cliff, being developed in conglomerate alone.

These caves appear to have been formed by wind action. They are on the western side of the hill and the locals inform me that the prevailing winds came from the west and the south-west.