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**University**

**Speleological**



**Society**

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## EDITORIAL

You may not have noticed, but recently the devoted team who produce your SUSS Bulletin have been making a determined effort to keep it coming out monthly rather than every now and then. A regular schedule has been evolved, which runs as follows: during the month I collect all the articles YOU give me. Mark Twigg (Assistant Editor) types articles which aren't already typed. On the MONDAY before the SUSS meeting a group assembles in the Electron Microscope Unit to print and collate the Bull, which is then handed out at the Meeting, to those who turn up. After the meeting Ian Mann organises the wrapping and posting of the magazines, using labels printed by Paul Greenfield; they are sent off some time in the week after the meeting.

If you haven't participated in Bulletin production before, there are lots of ways YOU can help. If you can type, you can take some of the load off Mark. Even better, you can write an article yourself - we get plenty of trip reports, and they are very welcome, but we could do with more general articles - on caves, techniques, overseas trips, funny stories or anything you like so long as it is related to caving. Helpers are always needed with the printing, on the MONDAY before the first Thursday of the month, 5pm or later in the Electron Microscope Unit (basement of the Bank Building, opposite the Holme Building). Ian would also welcome assistance with wrapping and labelling - fix a date with him at the meeting. And, of course, if you want to make sure that you get your Bulletin on time, come to the SUSS Meeting !

IF BY CHANCE YOU HAVE GOT THIS BULLETIN AND STILL HAVEN'T PAID YOUR SUB YOU ARE VERY LUCKY ! DON'T CHANCE IT ANY LONGER, PAY UP. SUBS ARE:  
FULL & ASSOCIATE MEMBERS - \$3.00, PROSPECTIVE AND CORRESPONDING MEMBERS - \$4.50, FAMILY MEMBERS = \$10.00.

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THE CUSS DINNER GOES MEXICAN ON SEPTEMBER 26th \* \* \* \* \*

\* \* \* \* \* SEE FUTURE EVENTS AND THE ADVERT. ELSEWHERE

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## CAVE CONSERVATION LEGISLATION

Guy Cox

Recently the South African province of Transvaal enacted what must be the strictest cave conservation laws around (CROSA Bulletin, Dec. 1979). The actual regulations are reproduced on the next page; quite a few points are of interest. The Definitions include karstic and non-karstic caves, however small, and, it would appear, all cave walls and sediments as well as speleothems.

85 G (3) is clearly the important section. (a) appears to prohibit candles and carbide lamps, and would certainly not permit smoking or such horrific devices as Diprotodons or other magnesium flares. (b) seems reasonable enough at first glance - but what about fixed ropes and other aids, telephone wires and emergency caches? (c) was apparently intended to eliminate vandals who use spray-cans to write their names, slogans, etc. in caves (!), but appears to ban all dye tracing. (d) prevents vandalism to gates and other barriers to entry - apparently regardless of who put them there, and why. (e) clearly bans most common forms of vandalism, but given the wide definition of 'cave formation' would also stop most digs. And who amongst us hasn't broken a formation at some time or other, either by accident or because the passage beyond looked inviting? Both tagging and marking of survey stations would also be excluded. Overall, the regulations would also stop most mining in (and flooding of) cave areas, whether limestone or not.

Well, we all feel that caves need protecting, but do we need legislation like this? Could such legislation work outside a police state? My view is that NSW could do with a blanket cave-protection law, but it would have to be drafted in a much more restricted form, covering principally the breakage, removal and defacement of speleothems precipitated from solution, and the leaving (or better abandoning) of litter. What do other SUSS members think?

"CHAPTER IV B

TRADING IN AND PRESERVATION OF CAVE-FORMATIONS

Defini- 85F. For the purpose of this Chapter -

tions. 'cave' shall mean any natural, geologically formed void or cavity beneath the surface of the earth; and  
'cave-formation' shall mean any natural matter formed in a cave and shall include any wall, floor or ceiling of a cave, flow-stone, drapery, column, stalactite, stalagmite, helictite, anthodite, gypsum flower or needle, any other crystalline mineral formation, tufa jam, breccia, clay or mud formation or any concretion thereof.

Prohi- 85G (1) No person shall :

bited (a) Remove any cave-formation from a cave;  
acts in (b) By way of sale, exchange or donation dispose of any cave-formation;  
respect of a (c) or  
cave or (c) import into the Province or export or remove from the Province any  
cave- cave-formation,  
forma- unless he is the holder of a permit issued by the Administrator whereby  
tion he is authorised to do so.

(2) No person shall convey in the Province any cave-formation unless he is the holder of a permit issued by the Administrator whereby he is authorised to do so: Provided that a permit so to convey any cave-formation shall not be required by any person who -

(a) in respect of that cave-formation, is the holder of a permit issued in terms of subsection (1); or  
(b) has purchased, exchanged or received as a donation that cave-formation from any other person who is the holder of a permit issued in terms of subsection (1) whereby such person is authorised to sell, exchange or donate that cave-formation.

(3) No person shall -

(a) in any manner disturb or alter the natural atmosphere of a cave, including the burning therein of any matter which produces smoke or gas;  
(b) leave any container, string, clothing, battery, candle, wax, food or any other object in a cave;  
(c) take into a cave any aerosol container or other container in which there is paint, dye or any other colouring agent;  
(d) break open, break, tamper with or remove or in any other manner interfere with any obstruction or structure erected to prevent the unauthorised entrance to a cave.  
(e) break, break-off, crack or in any other manner destroy, damage, mutilate or spoil any cave-formation in a cave or engrave, paint or write or in any other manner make a mark thereon.

(4) Any person who contravenes or fails to comply with the provisions of subsection (1), (2) or (3) shall be guilty of an offence.

(5) Any person who is found in possession of a cave-formation in regard to which there is a reasonable suspicion that it was not acquired in accordance with the provisions of this Ordinance and who is unable to give a satisfactory account of such possession shall be guilty of an offence.

(6) Any person convicted of an offence in terms of subsection (4) or (5) shall be liable, where such person has not been previously convicted in terms of any of those subsections, to a fine not exceeding one thousand two hundred rand or to imprisonment for a period not exceeding eighteen months or to both such fine and such imprisonment and, where such person has been previously convicted in terms of any of those subsections, to a fine not exceeding one thousand six hundred rand or to imprisonment for a period not exceeding twenty-four months or to both such fine and such imprisonment".

Amend- 24. Section 98 of the principal Ordinance is hereby amended by the sub-  
ment of stitution for subsection (4) of the following subsection:

section 98 of (4) Any regulation made in terms of this section may provide for penal-  
Ordin- ties for a contravention thereof but no penalty shall exceed a fine of  
ance 17 four hundred rand or imprisonment for a period of six months or both  
of 1967 such fine and such imprisonment".

TRIP REPORT-COLONG - 31st MAY/1st JUNE 1980.

REASON- Exploration,

PRESENT- Ross Franklin, Ian Mann, Jeff Crass, Dave Waters, Helen Turton, Rick Tunney, Janine Mackinnon, Suzette Coates, Rob Partridge and Greg May.

SATURDAY:

We walked down from Bats Camp Saturday morning and set up camp in the arch near the entrance of Colong Caves. At 2.00 pm we entered the cave in two parties, one by the upper entrance and the other group by one of the lower entrances. Afterwards we met at Kings Cross and an hour was spent exploring the maze where there was a lot of graffiti on the walls and roof.

Later we split up into our separate parties and whilst one went to explore the lake section the other went on to Woof's Cavern, which was then explored. The upper rockpile was pushed in search of a possible exit which was rumoured to be there, however it was not found.

Then we dropped down to the lower level below Woof's and explored along the stream passage. Later we were joined by the other party, we had a chocolate stop and some decided to go back. The others continued on for a while until we came to a rockpile where the passage appeared to end. However off to the right we could hear noises of running water which we tried to get to by going down a few holes.

Down one hole we found the noise of the water very loud so Ian, Jeff and Ross landscaped for about two hours and managed to dig out a small 'S' squeeze. Beyond this squeeze was a chamber containing a 7' waterfall and a pool at least 12' deep. It appeared to be a completely new section of the cave.

Above the waterfall the stream passage went on for quite a way however there was not enough time to push it.

On the way back we were very tired and got lost twice in the maze of passages. We arrived back at camp at 10.00 pm after spending eight hours underground.

There were a few signs of life in the cave. In Woof's cavern a brown frog with black eyes was found, it showed no signs of adaption and so it is assumed that it arrived there accidentally. A skeleton of a small marsupial was found near the waterfall in the new extension, and on the way to Woof's cavern a live completely white spider was seen as were numerous bats in different sections of the cave.

Helen Turton.



Friday

After a late night arrival, Mik arose early and drove to the ranger office to get the keys to Cotterills and the caves. Most of us had arrived so we set off for East Deep Creek. Ian Mann had not yet arrived due to the collapse of a front wheel. Parking the cars by the side of the road we ploughed through knee deep snow to the entrance. Unfortunately there had been a mix-up with the keys and we could not get into the pretty section, so we proceeded to explore the downstream end. I soon found that I'd misplaced the flash extension lead so could not photograph the nematoceran fly adults and amphipods that were present. Further downstream a large stonefly nymph was found in a small pool. Generally there was less fauna found than I had seen in April.

We photographed the scenery in the streamway area then returned to the surface. Much of the snow at this low level had melted but back at the road there was more than enough snow for some of us to go skiing. Ian finally arrived. Back at Cotterills CSS had decided that there was not going to be enough room to accommodate both clubs and explained to us that we would have more fun camping in the snow. We were not quite convinced, especially since some of us didn't have tents, however in the interests of continuing good relations within the speleo world we accepted their offer and moved out into an old abandoned and battered shed on the other side of the road. Naturally an evening of wine and frivolity followed, punctuated by comments such as 'I can't believe the attitude of CSS- I thought relations between the two clubs were quite good.'

Saturday

While some went skiing, the more dedicated set off, again thru

knee deep snow to Eagles Nest. My initial intention was to see if any animals (invertebrates) had moved into the cave as shelter from the cold winter conditions. In the Eyrrie entrance, this did not appear to be the case as faunal densities were similar to that in April. Millipedes, common in April were not found, although a new long- legged variety was present (one individual). Mites, small hunting spiders and the Stiphidion facetum spiders were common. Collembola were present on the twigs and leaves washed in. Both flash guns would not work on my camera and so no bug photos were taken. I, with Janine and Geoff returned to go skiing while Jeff Crass, Helen and Ian did the through trip returning after dark. Ian however *drove* over a large rock on the the way back and broke a gear linkage on the van.

There was more wine and associated activities that night.

### Sunday

Ian, Paul, Dave and myself visited the rangers that morning, then fixed the gears such that it was possible to select 1st, 3rd and reverse while the others looked into Y8, Y9 and Y10. A brief visit to the MT Selwyn ski area was made before driving home.

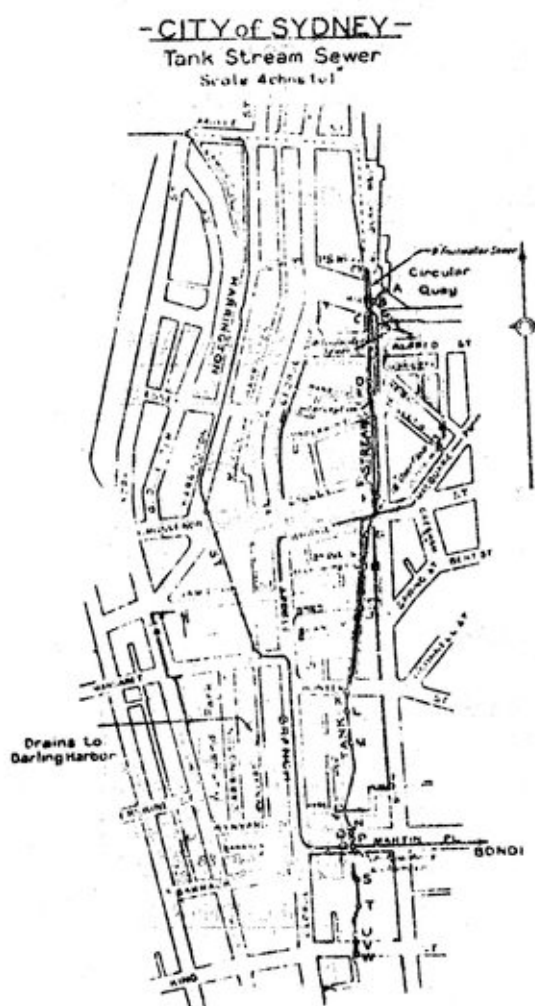
Graeme Smith



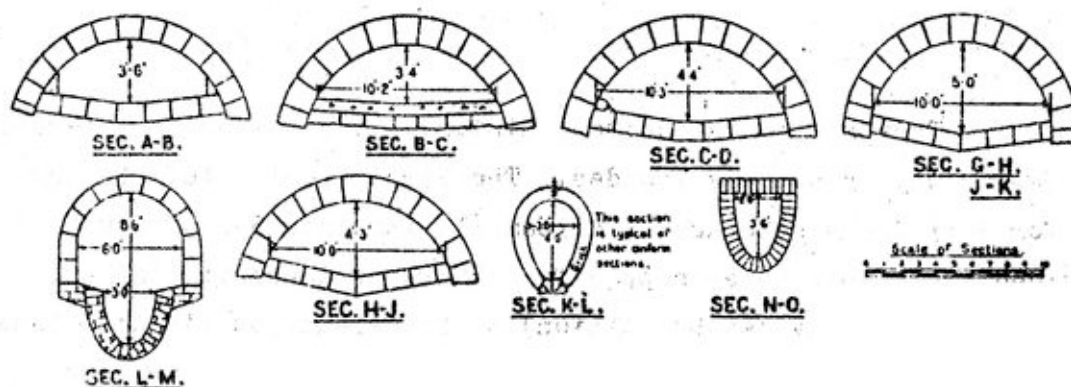


Guy Cox

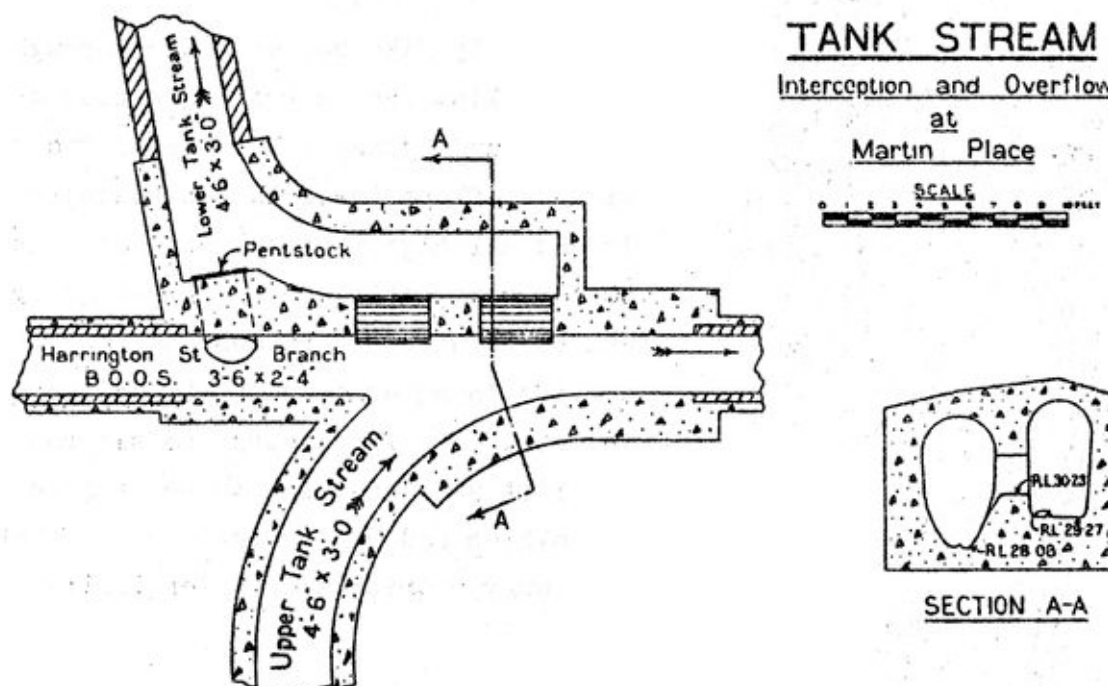
The Tank Stream has quite a history, as it is quite literally the reason why Sydney was founded. The First Fleet left Botany Bay for Port Jackson because a stream flowing into Sydney Cove provided a suitable water supply for their new township (called, incidentally, not Sydney but Albion). The stream got its name later when, to combat drought, tanks were cut into its sandstone banks to provide some storage capacity. It was never a large or long stream, rising in what today is Hyde Park. As the town spread, it became both inadequate and polluted. A new water supply for the city was provided from Centennial Park, via Busby's Bore, and the polluted Tank Stream was progressively covered over with stone or brick culverts, and became a sewer. The building of a modern sewerage system for Sydney has subsequently cleaned up the Tank Stream, and it now carries little more than storm water, though one or two old buildings still send their sewage into it.



Naturally, the draining fraternity has always had designs on the Tank Stream, but none of our plans materialised until Sunday July 6th, when Bruce, Paula and I were invited on an official M.W.S.&D. Board inspection of the Stream. This was arranged by Mike Walker (SSS) through a journalist who is writing a book on Underground Sydney. We entered the stream at Angel Place (near Martin Place). It was all highly organized - at least 50 tourists, split into several groups, and burly Water Board men who insisted on lifelining us down the 2m entrance 'pitch'. Our first surprise was how small it was - a brick tunnel around 1.3 m high and 0.9 m wide (about 3'-1") with only a trickle of water in it.



We only went downstream; immediately upstream a weir diverts the low-water flow into the Bondi Sewer, so little pollution reached us. Our guide told us that the Stream can be followed above the weir to around King Street before becoming rather small. All manholes above the stream had been removed, to ensure good ventilation, and I suspect the culvert had also been flushed with fresh water. Downstream, the passage soon changed to a spacious semicircular stone tunnel (section L-M), evidently one of the older parts. The two types alternated, with occasional sections of modern concrete, until we reached a weir which serves to stop the tide flowing up the drain. Here the flow is again diverted to the Bondi Sewer, so that the Tank Stream now only flows into the Harbour in flood.



We emerged from a manhole just off Pitt Street, and strolled down to the Quay to investigate the resurgence. This is now hidden by a modern concrete curtain wall, but a large crack in the wall provided a route for climbing down (to the amazement of the tourists) and a glimpse through the wall to a large green lake between it and the true, old sea-wall. The curtain wall goes only just below low tide level, so the sump should be free-divable (the wall is only 300 mm thick) if anyone wants to do a trip up from the resurgence.

Our thanks to M.W.S. & D. Board for inviting us on the inspection. Plans and sections are from a paper on the Tank Stream, by J.F. Mc Ilwraith, in the Sydney Water Board Journal, Vol. 2 No 3, 1952.



## TRIP REPORT

### ELECTROMAGNETIC LOCATION IN SPIDER CAVE:

Jenolan 24/25 May 1980

Present: Bruce Welch (trip leader); Paula Gard;  
Paul Greenfield; Anne Grey; Mike Lake.

### RDF SURFACE REPORT

- Bruce Welch

The surface party with the receiver ( and trailing behind them the party with the intercom) started off from the entrance to Spider Cave and climbed up the hill. The party rested on the lower entrance to Frenchman's Cave to await the underground party's signal that they were ready to do an RDF fix.

In a surprisingly short time the surface party was informed over the intercom that the underground party was at the "Bus Stop" and while they transmitted the RDF signal the receiver was moved around on the surface. A fix was obtained fairly easily except that the signal was very weak, presumably because of the thickness of limestone. The actual spot was some distance west of Frenchmans but along the same line as the fault. This position would also line up with the terminal rockpile in Frenchmans Cave although a survey will have to be done to check this.

It was decided that the next fix would be just downstream of "Pike Lake", however this presented some problems for the surface party. Moving north, they encountered the Wallaby enclosure fence. After visiting the Ranger's house ( no one there had a key to the enclosure ) it was decided that the fence would have to be climbed - yes the fence is electrified as Paul and Bruce can testify !

The terrain here became rough, steep and scrubby and when the transmitter was turned on underground no signal at all could be picked up. After bashing all round the hillside for about one hour a directional "fix" was obtained about 20 m. south of the entrance to Henrys Hole and the estimated (?) position falling within 10 metres of this spot.

### SATURDAY - UNDERGROUND REPORT

Mike Lake

While Bruce, Paula and Paul with some M.S.S. members played detectives on the surface the underground group, comprising Anne, five M.S.S. members and myself, worked the transmitter. Worked is an understatement ! I am at a loss for words to describe how we managed to unwind a reel of wire all the way to PIKE LAKE! Starting from the top of the bluff where Bruce et al was, the accursed wire proceeded down the hill, along the tourist path, into Spider Cave, through the squeezes - even Pirates Delight! - in amongst the rockpile to Glophole Gallery, thence along the streamway connection to the Hairy Diprotodon and up to the edge of Pike Lake. This established our intercommunication channel without which the surface crew would never have been able to differentiate our signal from other electronic noise.



Transmissions were made at the Bus Stop, Glophole Gallery and Pike Lake. The Glophole Gallery was not detected due to the larger signal of rock which attenuated the signal; however the other transmissions were successful.

Finally we had to wind up what seemed to be many kilometres of wire accompanied by innumerable tangles.

#### CONCLUSION

Bruce Welch

1) The use of an intercom was essential; without it the whole trip would probably have been abortive, although how the

2) The fix near Frenchmans Cave was predictable - the negotiable connection between Frenchmans and Spider Cave may still be found.

Underground party managed to get the wires through the cave, I don't know.

3) The fix near Ferrys Hole was a surprise. It now appears that the rockpile upstream of the sump must be the same one as in Ferrys Hole and further exploration in this latter cave may be rewarding. Perhaps Playing Fields Cave may also have further passages.

4) I wish to thank those members of the Metropolitan Speleological Society who brought their RFF equipment and who carried out the work described above. The results were very important.

#### SUNDAY

Mike Lake

As everybody knows, or says, numerous prospects in the Southern Limestone exist, but the lure of the north draws cavers into Mammoth, Spider, Wiburds and the like and the South is little visited.

To remedy this situation, Bruce, Paula, Paul, Anne and myself scoured some bluffs in the Southern Limestone searching for likely future digs. Bruce showed us the location of Block Cave and the Bottomless Pit whose entrance is an enticing 140 foot pitch into blackness. One possible prospect for a future dig has an entrance too tight to allow entry but it can be seen to drop down for some 15 feet, and then ends in a dirt floor and leads into the cliff.

A suitable dig point is slightly lower than the too-small entrance and should break into visible passage. Bruce looked in vain for a blowing hole he knew of, as well as his father's dig so we commenced a dig at the corner of one of the bluffs where the valley splits in two.

The Southern Limestone requires more cavers to dig into it and this can only be accomplished by trip leaders generating interest in the region by running more trips.

MICHAEL LAKE

FIFTH DAY AT KELLYS FALLS  
Saturday 5th July

PRESENT : Mike Lake (trip leader), Richard McNeall, Judy Clarke  
Bruce Downes, Ross Newbury, Paul Mattes, Mark Hunter, Philip Cole  
and friend, David Collins.

Ropes were set up on a 5 metre cliff and a 25 metre overhang.  
A ladder and belay rope were also rigged on the overhang as there  
was easy access from the ground up again.

The major purpose of the field day was to acquaint the newer  
members of SUSS with the use and operation of as much S&T equip-  
ment as possible.

Experience of an introductory nature was gained with ladders,  
belaying, Parboons, Whaletails, pitons and carabiners and with  
Jurars in both ropewalk and sit - stand methods of ascent.

Further field days will certainly be organised as valuable  
experience and enjoyment was gained by all who participated.

Mike Lake

AND NOW = ONCE AGAIN

SUSS IS ORGANIZING THE CUSS (Combined Universities Speleological  
Societies) DINNER. THIS YEAR IT IS GOING MEXICAN - THE  
RESTAURANT FRONT IS EVEN MADE TO LOOK LIKE A CAVE !

Three course dinner, with wine and coffee, for £8.50.

SPEEDY GONZALES RESTAURANT, 501 Elizabeth Street,

6.30 for 7,

FRIDAY 26th SEPTEMBER

Book early - numbers are limited. Tickets from Ian Mann -  
postal booking through the mailbox.



COMMITTEE MEMBERS 1980-81

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Randall King, 36 Marian St., Enmore. 519 5296 (h); 439 2566 x35 (w)

### SUSS T-SHIRTS

YOU supply the T-shirt & we will print the SUSS emblem on it for only \$1.00. OR - tell us your size and we will supply the T-shirt & print it for \$5.00.

### CARRY MATS

We have arranged a discount deal on closed-cell foam mats

cost: 50 x 150 cm - \$6.00

50 x 175 cm - \$7.00

Contact Bryan Cleaver on 522 7190

### SUSS BADGES

Car Stickers - \$1.00

Enamel lapel badge - \$1.00

Cloth badge - .50c

Contact: Bruce Welch 569 9928

### SPELEOSPORTS

Don't forget this great day's fun - pseudocaving in a light-hearted but competitive atmosphere.

We still need people for the SUSS teams - see Ian Mann at meetings or write to him at Box 35, Holme. (Entry form was in last month's issue, but it doesn't matter if you've lost it !)

MACQUARIE UNIVERSITY, AUGUST 23rd and 24th

## FUTURE EVENTS

### AUGUST

August 23rd & 24th. SPELEOSPORTS, Macquarie University.

Entry form in last issue. Contact Ian Mann 631 4321

Last Week of August. BUCHAN, Victoria. Contact Mike Lake,

524 5229 AS SOON AS POSSIBLE

### SEPTEMBER

September 6th & 7th. JENOLAN Cave Rescue Practice.

Contact Guy Cox 818 1896

September 12th to 14th. Skiing in the Snowies. Contact

Ian Mann 631 4321

Friday September 26th. CUSS DINNER. The social event of  
the year! Speedy Gonzales Restaurant. NO BUNS.

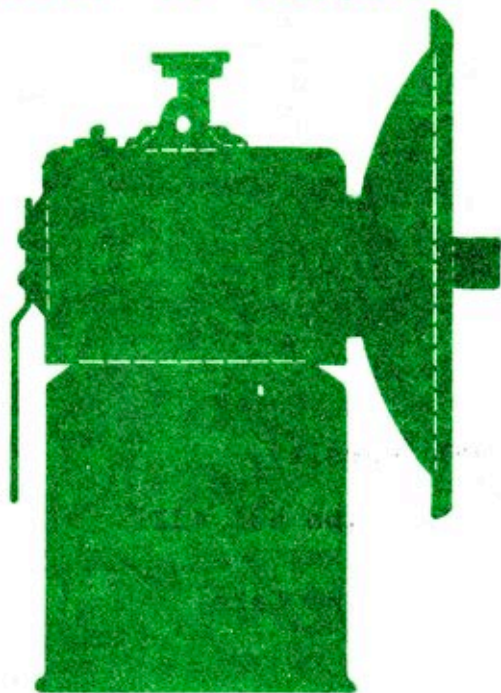
6.30 for 7 pm. Contact: Ian Mann 631 4321

### OCTOBER

October 4th, 5th & 6th. Jenolan. Contact : Mike Lake,

524 5229.

DON'T FORGET THAT TRIP FEES ARE NOW 50c.



# SUSS

BULLETIN  
of the  
SYDNEY UNIVERSITY  
SPELEOLOGICAL SOCIETY

BOX 35, HOLME BUILDING,  
UNIVERSITY OF SYDNEY,  
N.S.W. 2006

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