

BULLETIN OF THE SYDNEY UNIVERSITY
SPELEOLOGICAL SOCIETY



SUS

BUNGONIA

There are no articles on Bungonia in this issue, however there are reports on:

Jonolan
Cliefdon
Yarrangobilly

Oh well, better luck next time!

FOUNDED 1848

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

TRIP LIST

NOVEMBER:

22 - 23rd	<u>Jenolan</u> - M. Handel	73-2028
29 - 30th	<u>Jenolan</u> - B. Welch	99-1013
	<u>Canberra</u> - Yarrangobilly Research Group P. Wingless	83-9182

DECEMBER:

6 - 7 th	<u>Cliefden</u> - Survey of Taplow Maze. B. Welch	99-1013
13 - 14th	<u>Jenolan</u> - last trip to Brittle Bazaar M. Handel	73-2028
21 - 22nd	<u>Jenolan</u> - R. King.	969-4843
31st	<u>Sydney</u> - New Years Eve Party P. Campbell	

JANUARY:

16 - 18th	<u>Bondethra</u> - B. Cooper	
Long weekend	-- Liason Council and ASF Committee Meeting in Wollongong.	

May 1976

Tasmania Trip to be organised by R. King	969-4843
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CAVCONACT - 76

The 11th Biannual Conference of the Australian Speleological Federation.

Dates: Monday Dec. 27 through Thursday Dec. 30, 1976.

Place: The Australian National University, Canberra, Australia.

Host Clubs: Canberra Speleological Society & National University Cave Club.

PLAN AHEAD SO THAT YOU CAN BE THERE.

SUSS BULL 15(6):102

Principle Concepts

- a) valley bottoms are natural areas of concentration for water.
- b) even in a dry valley, moisture is most concentrated near the lowest point of the valley.
- c) stream caves develop by systematic movement upstream of the stream sink. This ensures a close parallel with the axis of the valley.

The reason why valleys are important suppliers of water is because they concentrate drainage into their lowest points, even if they are dry. Of course to understand the evolution and development of cave stream passages one must also include a phase of successive upstream migration of the feeder stream sink and take into account changes in the dominant climatic regime.

The common relationship between the axis of the dry valley and cave is genetically determined since the type of stream passage cave depends on its corresponding valley for development. It does not however follow from this that all caves must have such a common genetic connection with valleys. The mode of dependence of cave development upon its valley is of course through the valleys ability to supply the water which allows subsequent solution processes to engage. The ability of a valley to do this is determined by its catchment, discharge regime, floor gradients, the various lithologies that compose it, and the vegetation type that is contained in it.

The more youthful the cave passages are, the greater the tendency to closely parallel the axis of the valley. A corollary of this is that the associated stream passages tend to lie just below the surface of the corresponding valley floor with some lateral displacement.

The older the cave passages are, the greater the tendency to displacement away from the valley axis.

A vadose cave stream behaves in much the same way as a surface stream except that there tends to be greater modification of line due to rock structure because of the sole dominance of solution processes. Over time as the waters from the valley surface are pirated into the newly developed conduit, the cave stream and associated passage will increasingly develop out of synch with the former surface drainage line in the valley floor. Thus a new set of drainage lines is created and displaced dynamically away from the former surface stream line.

COMBINED UNIVERSITY SPELEOLOGICAL SOCIETIES

19th September 1975.

DINNER.

Cathy Austin.

The dinner was a tremendous success, much to my surprise. Somehow or other, I was dumped with the dubious honour of having to organise the dinner. After much 'umming and aahing' - and sheer astonishment it was decided that the event was to be held on the 19th September in the University Regiment Hall, that the members of the other University speleological groups be invited and that the catering be done by a part-time caterer.

However, there was much more to be done, ranging from inviting a guest speaker through supplying alcoholic beverages to making certain that the hall was ready on the night. As I and the representatives from the other societies were not on the university grounds it was difficult to organise much of this so it was delegated to members of the SUSS committee.

For the work and effort put into the dinner I would like to thank all those members of SUSS who organised the hall on the night, and those responsible for hiring the equipment. As well my thanks go to those who organised the wine and the catering. Bob Byrnes and his helpers deserve special mention here; as they had the task of feeding the starving spelecs which they did very well - and much to their credit. While I am saying thankyou it cannot be forgotten that we were honoured by the presence of the guest speaker - Professor Charlie Brown from the University of Alberta. Charlie is a friend of Professor Joe Jennings and Joe was kind enough to also be present at the dinner.

Professor Brown's talk was on the ice caves of Canada, giving us an insight into an area of caving that we know little about and have little chance to explore here in Australia.

Finally thanks to everyone who turned up, helping to make the night a success. Final breakdown of numbers shows that there were 30 people from UNSWSS; 10 from MUSIG and 36 from SUSS. Total proceeds being \$494; plus subsidies from the societies totalling \$100. Despite this financial loss I still believe the dinner was a success!

(Editors note: The wine for the evening was provided by SUSS, the idea being to meet the costs by a series of wine bottling evenings. The wine from the first such evening has been selling rather slowly so why don't all you juice-freaks see Bruce Welch and buy a dozen before it becomes a real Vintage collectors item.

The Nice Guy award for the Month must go to Phil Toomer who bought the excess wine left over from the dinner - a nice gesture.)

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AUSTRALIAN SPELEO ABSTRACTS 1973.

only \$2.50. A must for all real spelecs.

SUSS BULL, 15(6): 104

GEO-MORPHOLOGY AT JENOLAN.

- Inspection of 20/21 September -

R. King.

DR. Joe Jennings (ANU, Canberra), DR. Charles Brown (Univ. Edmonton, Canada), Bruce Welch, Guy Cox (Ph.D. Oxford), Randall King.

The Saturday morning following the ubiquitous Combined Universities Dinner saw the party at Mammoth Flat. Aims of the trip were to show Charlie Brown around the limestone at Jenolan and to have a look at some of its geomorphological aspects.

Hennings Cave (J76)

This was inspected and some points noted,

- 1) Heavy condensation near entrance seems to be at variance with the meteorological conditions. This is also apparent in Wiburds and Spider Cave.
- 2) Brachiopod *Concium bilocularis* fossils (King pers. comm.) are evident in the limestone before the squeeze, just past the argonite chamber, were noted. They are also apparent in the Roof Straw Chamber.
- 3) Sinking had occurred in the floor during recent floods and the sedimentary slumping is apparent in the Roof Straw Chamber.
- 4) Electron microscope photographs of algae specimens by Guy Cox from Hennings Cave reveal a possible new species. These appear to be unique to Jenolan, and can also be found on the walls living in near darkness inside Wiburds Lake Cave and Spider Cave.

J67 Doline at Base of J98 Bluff

The significance of this was discussed. Is the Woolly Rhinoceros further th the west along the dip, the abandoned lev els being indicated by the collapse doline?

Wiburds Lake Cave (J92)

The following points arose.

- 1) Small 4 cusec (guesstimated) stream was flowing from eastern side and sinking into gravel and sand deposits on northern end of Lake Chamber. The maximum capacity of this seems to be quite small (1 cusec?) before backing up and flooding occurs. This stream is unused in that normally the chamber is seen either dry or flooded, but not in between.
- 2) Lake Chamber, although fully flooded during Jun. (Welch, 1975) had only taken a few weeks to drain - presumably through river passage behind Lake Chamber towards Henry's Dig. This fluctuation of lake level needs to be explained.
- 3) 22 Passage to the Gulches is an example of well rounded pressure tube - Joe says it is perhaps the best he has seen and would appreciate a photo of it. The meanders are of interest in this section.

Geomorphology at Jonolan (cont)

- 4) Too little emphasis has been placed on the corrosive effects of gravel sediment, which has played a large part in recent development of the cave. Large amounts of sediment were seen.
- 5) There has been faulting across the dyke behind Lake Chamber, resulting in passage development along this plane. Shearing of the dyke has occurred, with movement of the dyke in Lake Chamber relative to that behind, being downwards. The dyke appears to be a low temperature igneous intrusion narrowing down towards Lake Chamber.
- 6) Glen Hunt in the NIBICON logbook, notes another dyke evident high in Noddy's Knock. The effects of these dykes on the morphology of Wiburd's requires investigation.
- 7) Wiburd's consists of a maximum of five 310 degree strike orientated passages sidestepping along the dip into the western side of Wiburds Bluff at successively lower levels. Note that the strike of the limestone belt seems to curve successively around, being N - S south of the DCH, 330 degrees T in Mammoth and 310 degrees T near Wiburds.

Wiburds and Serpentine Flats

These consist of Quaternary gravels and alluvium and act as water storage for the underground river systems. Shannon has this comment to make:-

"If say, the Bushrangers Flat (ie. Wiburds Flat) is taken as being 35 acres in area and 100 feet thick, this would be sufficient to supply 4 cusecs for one year, assuming constant delivery and 20% of this volume yielding water on draining. The volume of alluvium is of this order, however it is considered that the thick soils to the north and soils on the flanks of the valley actually supply most of the water."

Joe Jennings informed us of new ANU seismological equipment, which may contribute greatly towards ascertaining the depths of the sediments and the base level at which D'Arcy flow is occurring.

Saturday night was spent around the campfire with MSS and UNSWSS - a real picnic! Then, up bright and early and into Mammoth.

Mammoth

- 1) Southern Section was visited and Lower River was flowing at about 4 cusecs so it has apparently settled down again to resume its normal base flow. The floods have left much more sediment in the main passage.
- 2) It may still be possible to push the end of Smirnoff's. Welch suggests that the water filled passage (King, 1975a) may be under at the base, however, this is still controversial.
- 3) The scalloping near Cold Hole was examined, and the flow appears to be northerly ie. towards Horseshoe Cavern, although, as Dunkley suggests (1973) it is a very complex set. It is suggested that this flow is still compatible with previous hydrological theories, as this is probably a recent development.

Geomorphology of Jonolan (cont)

attributed to water from Sand Passage. Confusion may have been caused by turbulence or even one scalloping set being imposed on another. Comparison of scalloping at high and low levels should clear this problem to some extent.

4) Progressing through to the end of Railway Tunnel, the features of this area were noted. Quoting King (1975b),

"It is thought that a tortional flexure of the limestone situated at the northern end of the Railway Tunnel has played a primary role in the morphology of the whole of Mammoth, and has led to structural disturbances through out the cave. The consequences of this deformation have resulted in a near vertical dip and the premature collapse of the Entrance Cavern and Railway Tunnel rockpiles".

The jointing on the flat roofs was carefully inspected. In Charlie's opinion, the scalloping on the eastern wall is indicative of a southerly flow (i.e. towards Horseshoe Cavern).

Anastomoses are thickly threaded across the plane of the roof SE of the H&L Hole turnoff, but are not evident NW of this point.

Spider Cave.

Prospects for the dig here are the best at Jonolan for attaining the "Hairy Diprotodon", that section of Lower River south of its appearance in Mammoth. An air draft was blowing inwards through the heavily sedimented dig. Beside this dig is another small squeeze requiring enlargement, and heading in the same direction. Peter Campbell is currently arranging for track marking so as to isolate the bones and clean flowstone.

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1. PROGRAM FOR SURVEY REDUCTION ON THE HP21 CALCULATOR

R. King.

The Hewlett Packard range of calculators are renowned in the caving world as being the workhorse for reducing survey figures. However, the major drawback in the past has been the price. For example the HP45 retailed near \$250, putting it out of the range of the average student surveyor.

With the release of the powerful HP21 on the market this year, a new tool is at hand for survey reduction.

The Hp21 retails for \$119 (+ tax), and contains all the functions of the HP45 with the following exceptions:-

- a) 8 digit - not 12 digit display,
- b) 1 memory only (+ of course, 4 in stack!),
- c) No metric/ imperial functions,
- d) No statistical functions (mean and standard deviation).

It is however, smaller and significantly faster than the larger HP models. Some tests showed that this was about 40% faster in evaluating functions than the 45. This also represents the smallest scientific calculator on the market.

The ultimate perhaps for these purposes is the HP25. This is the programmable version of the 21, having additional programming functions. Selling for about \$180, this is a worthwhile investment. A HP25 owner may use this HP21 program as a basis for the survey reduction process.

This program has been divided into three types:

1) FULL PROGRAM

This reduces clinom, distances and bearings to the familiar northing, casting and vertical grid reference from any initial datum.

2) PLAN ONLY REQUIRED

Often the situation arises where a plan only is needed. This program adjusts for the differences due to clinometer angles in plan distances and computes northings and castings.

3) No CLINOMETER

When surveying a cave that only has a few survey legs for a grade 3 or 4 map, and the cave is fairly horizontal, no clinometer readings are taken. In this case the program computes northing and casting of the survey station from distances and bearings.

Each of these utilise "initialising steps" to enter the datum of a survey. The program then automatically computes progressive co-ordinates along a chain of survey legs. If one mispunches keys then the already computed co-ordinates of the branching station are simply entered as the initial datum for the side traverse. It is important that in reducing the survey, all the data is written and recorded in an organised form; it will be found that it is faster to transfer all the survey data onto a sheet, next to columns for grid references.

Although this program has been constructed to utilise the minimum number of steps possible, if anyone finds a shorter method, then I would be pleased to know.

HP 21

Survey Reduction Program
RANDALL KING

Initialising steps

(A) Punch In. R.L

(3) STO

(c) Punch Intl Casting

(0) ENTER

(E) Pench Int'l Northway

(F) ENTER

(1) Punch Inclination

(2) CENTER

(3) Punch Distance

(7) $\rightarrow K$

(E) 122リ

(-) M+

(2) 154

(2) Punch Bearing

(9) $[xzy]$

(10) $I \rightarrow R$

(11) $x \approx y$

(12) $\boxed{K \downarrow}$

(13) $\overline{[+]}$

(14) Record Cumulated Northing

(15) $IR \downarrow$

(16) $\sqrt{+}$

(17) Record Cumulated Easting

(18) RV

(19) $\overline{R \downarrow}$

(20) RCL

(21) Record R L

(22) $\boxed{R \downarrow}$

(23) $\boxed{R \downarrow}$

* Return to 1

* Return to 1

*
Return
to 1

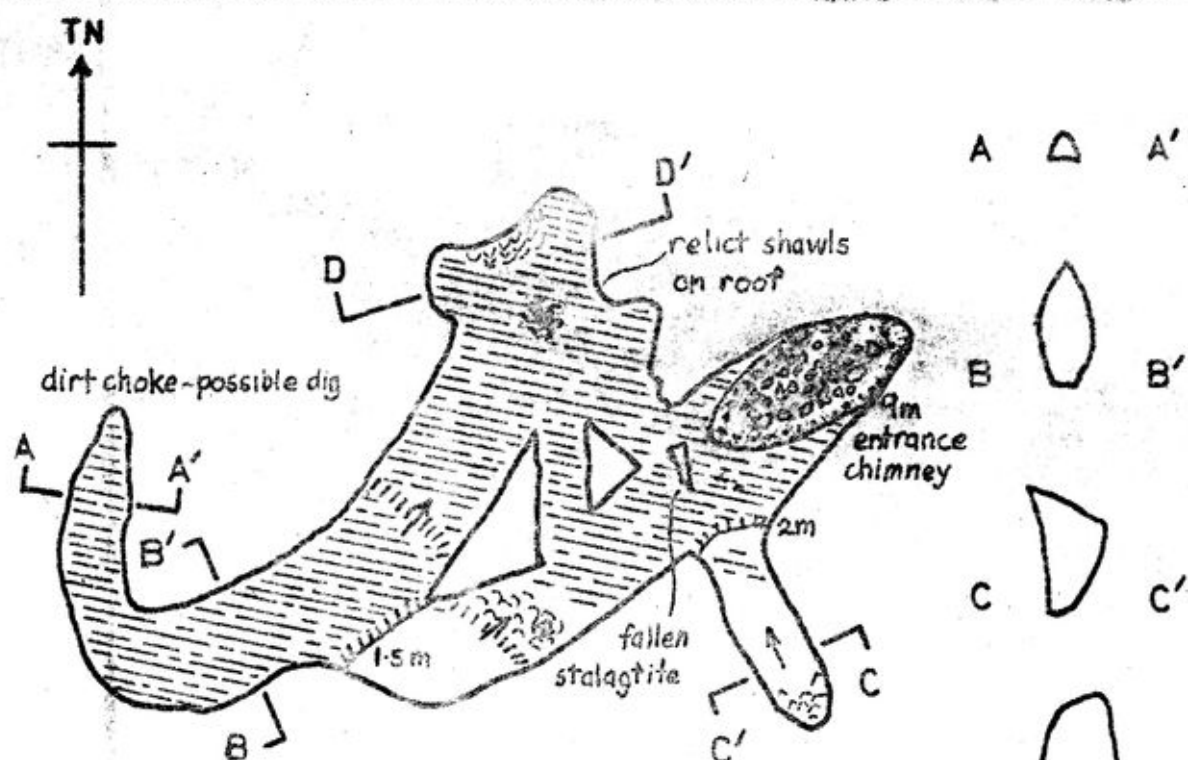
KELLY'S CAVE CL27

Ref. Map No. 2CL27.SUS1

Survey & HP 21 Adjusted and Reduced Data

SURVEY LEG	CLINO deg	DIST m	MN BEARING deg	STATION	NORTHING co-ord m	EASTING co-ord m	RELATIVE LEVEL m	STATION LOCATION & DETAILS
0-1	-60.0	0.00	Vertical	0	0.00	0.00	0.00	Entrance leg
1-2	-20.0	2.00	44.0	1	0.00	0.00	-1.00	Bottom of chimney
2-3	+31.0	4.60	142.5	2	-1.06	-1.15	-7.84	Top of fallen stalagmite, Tripod
2-4	+14.5	2.55	208.0	3	-4.19	1.25	-5.47	Endwell of side passage
2-5	+35.0	6.40	209.0	4	-0.01	-3.27	-7.00	Tip of stalagmite, 1.5m above floor
2-6	+14.0	2.00	208.5	5	-4.11	-2.90	-5.31	Against wall
7-5	+6.5	2.25	203.0	6	-3.53	-2.44	-7.14	Tip of 15cm stalagmite
7-4	-20.0	4.50	25.0	7	-3.88	-5.12	-3.55	Centre of floor. Tripod height 1.75m
7-8	-20.0	2.50	242.0	8	-5.04	-7.31	-3.90	Against wall

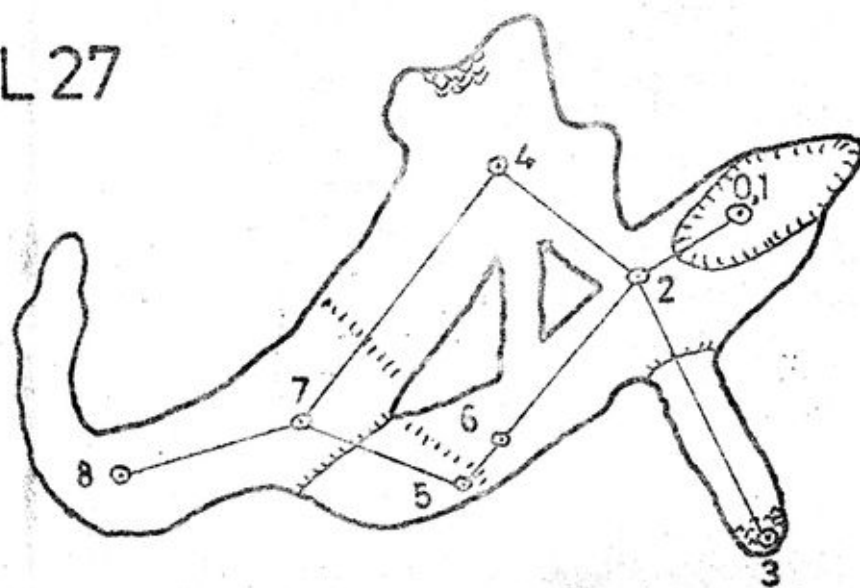
R.King 13/8/75



KELLY'S CAVE Gleasons Ck, Cliefden

CL 27

1:200



SURVEYED

R.King

P.Winglee

SUSS

G.Pattison

I.Wood

UNSWSS

DRAWN

R.King

13/8/75

2CL27.SUS1 14/6/75

ASFMA64

1:100

CLIFDEN INSPECTION

Being the report of a joint SUSS - UNSWSS - OSS trip, 7 - 9 Jun 1975

R. King.

Present: R. King, P. Winglee, (SUSS), G. Pattison, I. Wood, P. Radcliffe,
L. Wheatley, S. Wheatley et al (UNSWSS), others from OSS.

Upon reading of the definite dam proposals in the Bathurst-Orange Growth Centre plans, this weekend was hurriedly organised so as to inspect the damsite and the areas threatened, and to rejuvenate some SUSS interest in the area.

As part of the documentation of the area for the ASF Clifden submission, Ian Graham, Peter and myself found and surveyed Kelly's Cave (CL27), which is an interesting cave.

The caves at Clifden area are unique amongst Australian caves in that they show evidence of deep phreatic action in some of them. Taplow Maze is the outstanding example of this, whilst Kelly's Hole certainly shows evidence of this. Some interesting digs would be possible here, notably in the sediment past survey station (8).

Meanwhile some UNSWSS people searched for, but failed to find, CL19, The Eyrice.

Clifden's one major advantage, apart from the brilliant caves, is, of course, a house to stay in!!! This was made full advantage of (rats and all).

For the first time, we also partook in Ian Woods "Gluevine" mixture. At great personal risk of bodily injury to myself for publishing the secret recipe, here is the concoction:-

"GLUEVINE"

2 pints of red wine.
1 jar (small) honey,
 $\frac{1}{2}$ orange (sliced),
 $\frac{1}{2}$ lemon (sliced),
 $\frac{1}{4}$ cup sugar,
Woods secret herbs and spices.

Put into a saucepan and heat until steaming (don't boil!!).
Drink hot for a devilishly toxicating experience!!!!!!

On Sunday, the activity centred around Noonameena and Main Clifden. Noonameena Cave was discovered by UNSWSS only last year and is still original. A connection had been dug at the bottom to connect with the far pretty extensions of Main Clifden, and the purpose of the trip was to gate this to prevent entry to both caves and their subsequent deterioration.

Noonameena has one of the tightest entrance squeezes possible. It is a vertical rift squeeze which necessitates non micro-covers to remove trogluits! There is currently a gate at this point.

Cliefden (cont)

Inside, there is a profuse amount of decoration, which is mainly dry but extremely pretty. Other spelcologists should weigh the advantages of entering this cave with the threat to its beautiful decoration.

The connection was successfully gated and yours truly exited through Main Cliefden.

Following this exertion, a trogging of the hillside immediately to the east of Noonameena hill, above Transmission Flat, in the vicinity of CL75, proved most profitable. This area is sure to yield a cave in the future with some digging. Some notoriety was gained by creating the "longest" dig in Cliefden - digging in a rift, 12 foot was dug out to find the best spot to concentrate efforts. The enthusiasm was such that digging continued to well after sunset. Malcolm Handel is to be warned off the area as his presence will jinx any prospects!!

On Monday, the dig was continued until this particular dig became less attractive. (the advantage of this area is that there are too many different places at which to start from.)

Peter Winglee wished to photograph Main Cliefden so a trip was organised.

DAMSITE INSPECTION.

From the hill overlooking the Belubula River, 2km upstream from Transmission Flat, the damsite and the area to be unadorned may both be viewed. The effect of a dam here can only be described in one word - devastating. Because of the low relief topography, even a small dam would completely drown ALL THE MAJOR CAVES AND GEOLOGICAL FEATURES. From this vantage point, all this is discernible in a glance.

One obvious feature which would affect the "Needles" damsite is the geological fault on one side. This would effectively limit the size of the dam (to little avail) and casts doubts as to the viability of building it at this position.

One item of interest here is the thermal spring at the base of the eastern side of the hill and near the river. A chemical analysis on these waters would be helpful, however no suitable container was handy.

During the weekend, some 30 -40 geological specimens were collected and identified, and it is intended to mount the better of these in a case at the house. Cliefden presents a wealth of material geologically as the region consists of sedimentary rocks which have had late igneous activity. The result is a rich scattering of many different rock types throughout the area.

Cliefden is to my mind one of the best caving areas in the State. The formation here rivals that at the Jonolan Caves, and helictites do not grow in more profusion anywhere. The area is certainly deserving of concerted SUSS activity, and all efforts should be taken to preserve the caves for future generations.

MOLES AT CLIEFDEN

15 - 18 August, 1975.

R. King.

The cast: S. Larson, D. Creed, Max. Trevor, Seawood, 2 others, R. King, T & C Austin, D Rothery, C. Merchant.

The digs on the hill above Transmission Flat provided the inspiration to return to Cliefden. Some arrived late Friday night, whilst Dave drove in at 5am having worked a shift until midnight.

Up bright and early, and out caving by midday, we searched for CL19, the Eyrie, which UNSWSs had had trouble relocating. It is east of Trapdoor Cave at the top of the lower half of the bluff face, on about the same level as Trapdoor, perhaps 50m away.

This cave is well hidden and is 5m long. Keith Oliver (~~UNSW~~) asserts that extensions off the eastern side of Trapdoor lie under this cave, however, the vertical separation would make digging prospects dubious. The cave was successfully surveyed to Grade 6.

A trip into Main Cliefden followed, with some humorous side events. Yours truly had not been in through the upper entrance before, and misorientated the map 180 degrees, and Dave (who had surveyed the cave) lost the route!! By this time, when we had found the correct path, the visitors of the party were running short of light and had to retreat. Dave, Cathy, and myself proceeded through the Boot Room to the Helictite Wall extensions.

Cathy M., had not seen the decoration before so proceeded on while we stayed put to minimise the damage to the area. It is strongly recommended that responsible spelcologists who have seen the decoration refrain from re-entering the area without good reason. A white flowstone wall at the end of the extension near the Trapdoor connection has been needlessly muddled to a pitiable state.

Having already been sufficiently embarrassed for the day, it was decided that Cathy should lead the way out. Imagine her surprise at finding that she had done a full circuit, returning to the Boot Room without realising it.

The outcome of this effort was that we saw, unintentionally, all the passages of Main Cliefden in one afternoon.

On Sunday, Trapdoor was entered. At the sump the water was covered with calcite rafts. The reason for the high saturation of the water, so that the surface was virtually covered with calcite is speculative, but worthy of investigation. This sump has the remarkable rise and fall during floods, evidenced by the high water marks 7m above the normal level. During this process calcite rafts have been deposited on the roof and floor giving a filmy appearance to parts of the chamber.

One idea from this vis-it was to hold concerts in the acoustic passage at the bottom. This passage presents unrivalled acoustics and the ease of entry would make it possible to bring instruments down.

Cliefden (cont)

The remainder of the day was spent at the digs on CL75 hill above the Transmission Flat. So far, no caves have been found here, and even CL75 was dug by UNSUSS. The huge mass of limestone makes cave development likely.

The scenario is one of fractured and broken limestone, being controlled by 330 degree strike joints, a number of which are running parallel at different levels on the hill. Through these cracks and joints any rainfall would immediately sink into the hill in mammoth proportions, giving rise to intense phreatic action.

CL75 is an example of the holes being dug in this area. It is 5 - 7m deep in a joint rift, at the base of which is a cross joint. This is too small to be negotiable, however it may be soon to open out a little further on giving hope for and conjecture for digging prospects.

Perhaps the worst quandary here is not in hypothesizing about cave underneath - this is almost certain., but in deciding where to dig. The possibilities are almost endless!!

Dave R. and myself took shifts in digging CL75, the others being warded off by the unstable nature of the shaft. Virtually everybody was working on their own pet digging spot!! Dave C. picked the most unlikely position higher on the hill, which no one else would even have thought of, and, typically, even this "joke" dig began to widen out! However, even with these prospects, after digging by battery lights after sunset in the cold the call of the house became too much.

All left with the exception of Dave C. and myself. Monday saw us back at the digs, Dave to push his "joke" dig further and has now become the best prospect of all, and myself to survey the positions of all the digs which had now become expedient in view of the fact that we were digging in seven different places!!

Then departure to Mandurama with less than a gallon of petrol in the tank, limping in with only two pints left. The next week was spent at Jenolan.

Cross-cultural Activities at

Jenolan.

Tony Austin.

Just in case any of our esteemed readers are interested in the more gentlemanly pursuit of Amateur Radio, let it be recorded in these pages that there exists a site very close to our much loved Jenolan Caves a mountain (for it must be more than a mere hill!) known, I believe, by the rather undignified name of 'The Porcupine'. This is no ordinary mountain as it affords the deserving Ham a rare opportunity to work undreamed of amounts of the choicest DX (long distance communications) on the 2 meter band. More details will be released in the future.

Trip Report JENOLAN 17-24 August 1975

On Sunday the crowd gathered with the expectation of abseiling the deepest underground pitch on the Australian mainland. Permission was obtained from Mr. John Culley and, at about 9.30 p.m. Brian Hawke was first to abseil from the large daylight hole in the roof of the Devils Coachouse. Bruce Welch, Peter Campbell and I followed. Bruce in his great enthusiasm did it twice and I managed to get my hair caught in a whale tail. This was photographed by Les, Bruce and Peter but I have not yet seen the results. We measured the pitch at 85m, most of which is free drop.

The next day (Monday) Les, Brian, Peter, Prue and I went to Brittle Bazaar in Mammoth where I climbed the aven, reaching an estimated 60 ft. above the floor of the B.B. The aven has two ways up, the higher of which appears much too difficult to climb, the lower ends in a rock choke containing some non limestone pebbles. A tape was left a few metres below the highest point reached (the tape was used for abseiling). A total of about 11hrs was spent in this cave. Also on this day Greame Smith continued his survey of Hennings Cave.

On Tuesday Ros, Bronwen, Tony, Randall, Graeme, Gordon and Malcolm Harper entered the Southern section of Mammoth which was a new experience for most of them. Prue, Peter, Brian, Les and myself paid a visit to the guides, showing Les and Brian the more prominent surface features of Jenolan along the way. On the way back we entered Spider Cave where we looked at the bone deposits. That night Prue, Peter, Gordon and I had dinner at Caves House (properly attired of course). We were later joined by Tony, Ros and Bronwen for an inspection of Imperial Cave.

Dr. Alan Ritchie, Lyn Dawson and Bob (I've forgotten his surname) from the Australian Museum came on Wednesday. They were interested in the bone deposits in Spider Cave so I took them there in the morning. Although they found them interesting the bones were too recent to warrant a further study. They identified the bones of a wombat, dingo, several rock wallabies and other small marsupials. In the afternoon we went to re-locate the Midden Cave in the Southern limestone. Dr. Ritchie and co. had been in the cave 5 years previously and had seen the jawbone of a thylacine(?) (extinct Tasmanian wolf) amongst the other bones present. They have a permit to study this cave but neither they nor the guides had been able to find it earlier this year. After searching for a couple of hours we gave up looking. On the way back to the car Bob almost fell into the lost cave. After getting lights we made a quick trip into the cave which confirmed that it was Midden Cave. The bones were found undisturbed in a mud matrix. Lyn intends to make a study of the cave for her M.Sc.

JENOLAN cont.

While I spent the day looking for bones, Kathy, Dave, Paul, Randall, Max, Gordon and Ian kept themselves occupied with a trip to the Brittle Bazaar. Max became the first person to travel up through the Neverpass, which is an extremely tight and muddy squeeze in the rock pile between Can't Get Lost and the B.B. Randall finished the floor detail of his map and swore he would never return to the Brittle Bazaar again. It has been decided to remove the rope which provides the only easy access to the area. The group reached the bottom of the entrance pitch at about 11.30p.m. and were pleased and shocked to find that Peter and I were waiting with a well set up soup kitchen- Portagas stove, lantern, sandwiches, chairs, billies, soup and warm clothing had all been lowered to the bottom of the pitch in readiness for the tired cavers. Randall of course deplored the act but was all too willing to accept a cup of hot soup.

Thursday was a rest day for most of us. We chatted with the guides for some of the morning and later went on a public inspection of Chifley Cave.

Friday found us in a more active state. Most people went and looked at Wiburds Lake Cave, Hennings Cave and serpentine cave. Gordon, Prue and I went to survey a cave which was given the tags J156 & J157 on the next day. This cave is located off the Carlotta Arch track and is probably one of the oldest at Jenolan. There is a strong draft coming from the upper entrance and warrants further study. The cave is over 20m. deep and has one large chamber and a number of passages through rock piles. A signature on the wall reads "Harry West 12/3/87"

Ben Nurse and Bruce Welch arrived at some time on Friday night in order to do tagging on the weekend. Many caves near the Devils Coachhouse were tagged on the Saturday. That night Prue, Dave and I finished the J156 survey and Bruce and Randall did more of the Devils Coachhouse survey. On Sunday many more caves were tagged making it 49 for the weekend and bringing to 200 the total for all Jenolan.

MALCOLM HANDEL.

National Venture 1975 - Bungonia.

The Scout Association is organising a National caving venture in late December. The Venture will take place at Bungonia where the Scouts in attendance will be instructed in the correct methods of caving as they relate to the Scout movement. Needless to say a lot of organising has gone into this activity and the assistance of as many competent cavers as possible is required.

If any member of SUSS is interested in helping in any way or would like some more information on the Venture then contact Brian Cooper on 560-4171.

SUSS BULL 15(6): 117

TRIP REPORT. Yarrangobilly 24-28 Aug '75

Present; P. Wingless, J. Morand, K. Murray (S.U.S.S.)
Alan, Len, Nigel and John (U.N.S.W.S.S.)

Before leaving Sydney, I had told Marilyn and Vince that we would be short on space. My gear and the equipment loosely filled the boot. Vince showed up with everything in one small rucksack; except his helmet light and himself.

After spending Sunday driving, the night was spent welcoming other arrivals and Keith and Damon who were seasonals at the tourist caves.

On Monday UNSWSS ventured off first while we checked in with the Rangers, so we were left to go trogging off in the Tombs area as I hadn't seen it. The huge grikes(?), the gorge and looking for the UNSWSS mob amused us for quite a while. We were looking for Y19 and Y18 as cave descriptions noted the presence of small pitches and, if they could be pushed being on the plateau would have plenty of depth, even if they were fairly old. However I failed to find Y19 but found a seemingly untagged pot with an initial pitch in the vicinity of the Y18 doline as marked on a surface map (which I dropped down but was not equipped to retrieve). Vince found another one garden tagged 1050 but it looked too dirty to enter.

Being interested in further familiarisation we trekked off to Leak in the Creek (Y112). I had expected to see an impressive sink with a great cascade of water chundering down into a cave. Apparently the 3 cusec (approx.) of water flowing down in was enough to fill it so that it just appeared as a small unimpressive hole.

Not having been underground that day we set off for Y10. Water was pouring in at 2-3 cusecs and its crashing on the rocks made things rather deafening. We were going to check out some joints in the cliff which we thought may be deep but looking carefully at the roof of Y10 they would have been just daylight holes.

When Alan, Len, Nigel and John returned that night they were disappointed with Y19 but had succeeded in connecting Y4 and Y5, which on a rough calculation put it as approaching B24 in depth.

Feeling guilty at such a slack day Marilyn, Vince and myself joined Keith at Yarrangobilly for a hard days night caving (tourist) doing all four of them. I had hoped that Yagby would provide a break from the continual Jenolan weather that usually plagues extended trips there, but while it was fine at Jenolan it rained continually from Monday night, but at least there was a house.

After collecting a heard of seasonals, we set out to give them a return tour of Coppermine (Y12). This cave is the efflux for Y45, Y8, Y9, and Y10 and it also receives some water from Leak in the Creek. Basically it is a stream passage with a higher level with a river of very cold water flowing through. It has profuse formation and a gate. Climbing up over a sump, one of the seasonals, Andrew, noticed a patch

Yarrangobilly cont.

of damaged formation, blatant enough to look deliberate. There was a lot of black colouring on some of the formation which is also present in the tourist caves. Tests have shown that it contains carbon and not manganese dioxide, the official story to the tourists is that it is some sort of soot. It nevertheless warrants further investigation. Towards the end was through a low muddy crawl, the type Alan seems to thrive on, however after stopping to take some photos the SUSS party couldn't find the way on. Coming out we walked straight through the water and emerged soaked to the hips and walked up the hill in the rain to make it complete. My car got bogged but Vince was able to push me out, Marilyn just dived under the tarp of Nigel's ute as he sped off. Huddling around the fireplace and dangling overalls everywhere was the order of the day back at the house. The advantage of multiple trog suits.

Getting up at the usual time on Wednesday we entered the Eagles Nest system via the Eyrie (Y3) at about midday and were glad to be out of the rain. From earlier conversations the descriptions led me to believe that it was a fairly simple walk through dry cave, and from the May trip, not as cold as Pavey's description. Except that it was generally walk-through, I was wrong on all other counts. The freezing rock of the West branch and the ice cold water running down ones sleeve was quite an experience. Hands numbed with cold and mind clouded with the mist on ones glasses we pushed on undaunted.

The stream canyons were quite fantastic, rising up out of sight and after meeting others, crossing without a visible floor. In this area there are many side passages that raise question marks on Pavey's map and Shannon's Dig which is part of a straight stream passage which looks promising, the other side being dug out to connect with the east. The inscription "Fuck it's Cold" amply explains the lack of exploration in this area.

I had been using the UNSWSS 8 key charger for my battery and engaging in Speleo-Roulette, 2 keys don't work and they didn't know which ones. By the Junction I had realised I had lost. Fortunately I had put alkaline cells in my penlight torch (originally meant for my flash) and Marilyn and Vince proved quite competent at finding the way out through the rockpiles of Flatbed Cavern and Railway Tunnel. We emerged at 6.30 p.m. and walked back to the road in the rain and dark.

Thursday was the climax of the trip when we were wakened at 7.30 by shouts and screams that snow had fallen. The more passive ones (me) made small snow men while the aggressive ones threw snow balls and snow men.

Although no real speleological work was carried out by the SUSS group the trip provided me with a more complete understanding of this vast area. I feel exploration in the colder areas is best left till warmer weather but am keen to find out more about the black deposits. I find soot very hard to believe, particularly in single entrance caves.

P. WINGLEE

WIBURDS BLUFF INVESTIGATION.

24 - 25 May, 1975.

R. King.

Present: M. McGreevy, P. Winglee, B. Welch, R. King et al (SUSS). B. Richards and 4 others from BMSC.

This joint trip with BMSC had as its primary aim a systematic trogging of Wiburds Bluff in search of new caves. BMSC had previously done some work on Wiburds Bluff and so they were invited to clarify this further.

Saturday and Sunday were spent on Wiburds Bluff, although a trip into Mammoth was also organised. Barry Richards confirmed that "BMSC Cave" (located south of and slightly above J92) was the one in which they had concentrated digging efforts in 1972 failing to find the connection with Wiburds Lake Cave, later found by SUSS.

Something of a record was set in that 25 new caves were documented, 12 of them mapped to Grade 4 and an area map produced. One cave which we discovered of particular note was One O'Clock Cave - above J100 joint rift. Bruce and myself came across this at lunchtime, the reason for the name. Features of the cave are the large and roomy (17m long) horizontal cave that overlooks Wiburds Flat, yet is well hidden by the Bluff face. It is often suggested that this is another "Bushrangers Cave", this being an ideal hiding place close to water and with enough room for McKewen to keep his horses!!

Wards Mistake Cave was also searched for without success.

Following the trip, a party proceeded on for a 2 day trip at Jaunter with St.G.A.C.T.. The farmer, on whose property the limestone is, is understandably wary of cavers, having Tuglow nearby as an example so does not wish to have work published. So apart from mentioning that the temperature dropped to -6 degrees (even froze the jelly!), there is little to say about this interesting area.

Returning to Sydney, Bruce, Malcolm and myself stopped at Kings Cave, at the end of Glossop Rd., Linden (in the Blue Mountains). This is an impressive sandstone overhang at least 15m. wide and 4m high, overlooking a scenic bushland valley. Some interesting historical signatures, dating back to almost the first crossing of the Blue Mountains, were noted on the wall at the back. Next time you have a half hour to spare enroute on returning from a trip, it would definitely be worth your while to drop in here.

NAKED LADIES AT JENOLAN.

Jenolan 9 - 10 Aug., '75.

R. King.

Present: B. Welch, C. Handel, P. Greenfield, R. King, B. Cleaver, J. Dunkley (E), D. Creed, B. & C. Szpak, P. Winglee, D. Rothery & other MUSIG's.

The ambitious aims of this joint trip were - surveying in the Brittle Bazaar and Great North Cavern. However, due to exams and the annual JCHAPS meeting these were postponed to the following week.

Jenolan (cont).

During Saturday, Mammoth was entered to the '61 Easter Campsite to check for signs of the recent floods, which we suspected were strong enough to possibly have changed the characteristics of parts of the cave. However, the only noticeable effect was the repositioning of the sediments in Horseshoe Cavern. The Middle Bit avens - currently unexplored, were also briefly inspected. These are certainly deserving of attention with sealing poles.

Grotty cavers were quickly transformed into respectable JCHAPS for the annual meeting. The society has now amassed a large number of prints of historical photos, which are of high quality. In the office bearer elections, Ben Nurse was re-elected President and John Dunkley, Vice President with Bruce Welch Minutes Secretary. One problem that has arisen is that all the JCHAPS meetings are held right in the middle of University exams throughout the year, meaning that large numbers of interested people are unable to attend. This is a matter that could be corrected by scheduling later than current.

Some months previously John Bonwick (SSS), had informed us of the existence of a cave in the East Gorge which had a carving of a naked lady in it. Having no knowledge of this, we took advantage of John's presence at Jenolan to search for it. The problem was that this cave was remembered from 20 years ago, so after bashing the Eastern Hill near Devils Coachhouse for most of Sunday morning it was belatedly revealed to be J103 - halfway up the gorge! The carving is about 50 cm high on the southern side of the entrance. It is even thought to be a surveying point used during the mapping of the cave without seeing it. Of course the name of J103 is now Naked Lady Cave.

However, this effort did result in the systematic search of the hill near DCH. A number of small and not so small caves were located, J146 as well as untagged caves surveyed.

Bryan Cleaver deserves mention for his efforts in helping the SSS meteorologists in Mammoth on Saturday night after caving all day. We certainly hope for more joint trips.

ODDS AND ENDS.

1. Don't forget the New Year's eve party at Peter Campbell's place - not many details to hand at this stage but we will keep you up to date with information as it arrives.

2. The Gibb's ascenders have finally arrived! Needless to say the Post Office sat on them until exam time so that no-one would have a chance to organise a quick trip to either Jenolan or Bungonia to give them a good try out. The only report to hand so far is from Malcolm Handel who has tried his out climbing a tree. (If you know Malcolm that almost makes sense!). He says that they do not work real well when using the normal Jumar frog system but that the system that Gibb's recommend is very good in deed, being about 'twice as fast as the frog system with Jumar's'. So there you have it folks - if you want to go climb a tree then take along your Gibb's.

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