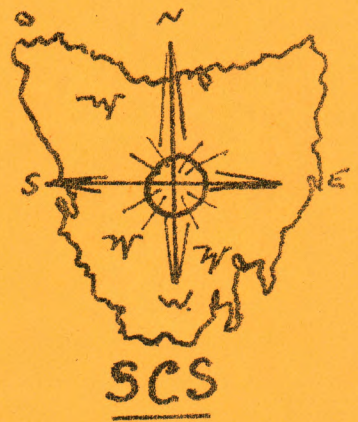
SOUTHERN CAVER



SCS

Volume 2 Number 1.

Price 25 cents.

SOUTHERN CAVER 31st MARCH, 1970

Published quarterly by the
Southern Caving Society,
4 Syme Street, South Hobart.

Our "new look" magazine for 1970 and we hope it will be a great year for the magazine and caving.

May we take this opportunity to apologise for our absence over the past two years, but we all know the difficulty in compiling such material and with so much caving and discovering taking place, little time is left for a magazine.

We, the Magazine Committee, hope to publish issues regularly and bring you "up to date" on the Club's activities both past and present.

Happy caving to all

Dave Elliott, Ron Mann, Kevin Kiernan,
John McCormack.
Magazine Committee.

ITEMS OF INTEREST IN THIS ISSUE :

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E D I T O R I A L

Many of you are aware of the recent "Vandalism" which has taken place in KUBLA KHAN the finest decorated cave in Tasmania.

Do the people responsible stop to think that careless or deliberate disfigurement of this cave, permanently mars its beauty and is not repairable.

Does anyone have the right to destroy or disfigure and so deprive future generations of the things which we enjoy.

NO THEY DO NOT yet some irresponsible person, by removal of formation and dumping of spent carbide within this beautiful cave seems to think so.

May every caver strive to preserve this and all caves in their natural state and not permit such acts to take place.

This is an opportune time for members to again read the Club's conservation code which is printed on the inside back cover.

The photograph (opposite) was taken in the new section off Kubla Kham (Mole Creek) by J. Morley.

PLEASE NOTE

Clubs new meeting place.....

LENAH VALLEY R. S. L. HALL

188 Lenah Valley Road,

Lenah Valley.

Each Wednesday fortnight at 8pm next meeting
15th April 70

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========= NOTICE =========

ANNUAL GENERAL MEETING

A.G.M. A.G.M. A.G.M. A.G.M. A.G.M. A.G.M. A.G.M. A.G.M.

Of Southern Caving Society at the above address

Lenah Valley R.S.L hall on Wednesday

22nd April 1970 Time 8pm

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THE BIGGEST AND DEEPEST?

There appears to be a perpetual argument on the subject of the world depth record, with some crediting it to the Gouffre Berger,(France) and others to the Gouffre de Pierre St. Martin (Spain).

According to the latest information available Pierre St. Martin is the deepest at 3,779 ft. The 1967 expedition to Berger dived two sumps and measured the total depth as 3,786 ft, but the following year more accurate methods arrived at the figure of 3,755 ft. More recently still, a far more accurate survey on the surface found that it could be no deeper than 3,700 ft. However, a new cave on the Sornin Plateau, (the same region as Berger), the Gouffre d'Engins, looks like being deeper.

The third deepest cave in the world is the Grotta di Eolo in Italy, which reaches a depth of 3,000ft. A new cave in Mexico has been explored to a depth of 2,000 ft., where the party was stopped by a waterfall pitch. Expectations are good when this is passed, as the resurgence of the stream is a further 4,000 ft. below the point reached.

Some more passage has been found in the two longest caves in the world. Flint Ridge System (U.S.A.) now has 63.18 miles of passage, and the Holloch (Switzerland) has 61.1 miles.

The longest single shaft in the world is in Proventia Pot (Greece) and is 1,298 ft. long. Pierre St. Martin is next with 1,091ft, then Sotano De Les Gondrolinos (1,070 ft.) and Sima de la Pena Blanca in Spain (991 ft.). It is interesting that the longest pitch in Berger is only 180 ft. - Hurricane Shaft.

A new cave in Canada has become that country's longest with 12 miles of passage. Nakimu cave is their deepest at - 850 ft.

A new British depth record was set in Ogof Ffynnon Ddu with the discovery of several thousand feet of new passage. Its depth is now 870 ft. The giants Hole - Oxlow Cavern link gives a depth of - 620 ft. Third is Gingling Hole (580 ft.). Britain's longest remains Agen Allwedd (12 miles). Gaping Gill is now 6½ miles long, following the discovery of

9,000 ft. of new passage, which takes the cave to within 100 yds of Ingleborough Cave where the stream re-appears. Gaping Gill's 360 ft. entrance shaft remains the longest in Britain.

Ref: Encyclopedia Brittanica and year books 1966 - 69

****** HERBERT'S POT
Mole Creek(Wet Caves) System, Mole Creek.

Notes on Upstream exploration.....

Herbert's Pot is renouned among Club members for its challenging size,degree of difficulty and general speleological interest. It is one of the caves higher upstream in the Wet Caves system and thought to carry the waters of a stream sinking into Kelly Pot further up the Western Tiers.

The cave was first visited by the Tasmanian Caverneering Club in the late 1950's,but the dry three hour negotiation to a large stream passage was finally found by a Southern Caving Society Party in 1964. To date a number of S.C.S. parties have explored both upstream and downstream sections both of which are "still going".

The next trip into Herbert's Pot at Christmas 1965 was after the official formation of the S.C.S. This particular party reported that a"large water passage was followed for approximatly ¼ mile upstream and STILL GOING". This expedition was the first to venture upstream and their further progress at the time was probably discouraged by the many deep pools which must be negotiated rather delicately.

On the 5th of February 1966 a large party from the Club "explored upstream for approximately ½ mile to end at a vertical face with a waterfall coming from 25 feet up the wall". To elucidate on this, the party had followed the stream to a roughly circular chamber whose sheer walls fell into a deep pool on the opposite side of which was the waterfall. Directly above all this it was noted what looked like an upper level (about 70ft above),but this was not to be attempted until April 1967.

Cont/-

HERBERTS POT (Continued)

Two months after the discovery of the waterfall, flouroscien was dumped in the stream in Kelly Pot. Although a 13½ hour watch (begining 3 hours after release of the dye) was held in Herbert's Pot no flouroscien was sighted however water taken from the syphon in Georgies Hall (lower in the system) revealed signs of flouroscien after testing.

On the last weekend in April 1967 an expedition "proceeded upstream" exploring some of the upper levels some sections of which proved to be very pretty with all types of formation in abundance. When the party reached the waterfall, several attempts were made to negotiate side walls but none were very successful; so upper levels in this area were then explored. A loose talus block was nealy the downfall of two members but as luck had it only a minor injury occurred(this section of the cave is now known as "Tombstone Traverse").

In May 1967 a party of 8 comprised an exploration team into the upstream section of Herbert's Pot. The party split, one group exploring the upper levels of the stream passage (nothing of great interest was discovered) the second group explored above the waterfall area and made a breakthrough via Tombstone Traverse and some talus. The creek was again picked up above the waterfall and was followed through to the end of a very long chamber which entailed some interesting climbing, good displays of formation were also noted. The creek then divides.

The next trip was last January when both forks of the stream were followed; the fork to the right carrying the more water and being followed along a large passage which continued beyond a sizeable roof collapse; this was followed for several hundred yards and in one place becomes very low but extremely wide. The passage opens out once again into a chamber and progress along the stream at that stage was impeded by a sump or a very low duck. There appeared tobe no obvious route beyond this chamber. The left fork was rather interesting. It consisted of pools of water with the roof being very low and ending in a sump. Running parallel with this branch was a dry passage begining at the last chamber and continuing to a talus heap. In this vicinity were a few low crawls and a 50 foot aven which opens at the top into a passage. Neither the crawls nor the aven have yet been explored. Exploration so far ends at this point but more trips are being planned and a breakthrough we hope will be made before the end of the year.....

STEPHEN HARRIS.

FADS

May be it is a fad - this caving bit, I mean. There was I, a normal bloke perfectly satisfied with my week-end activites of boozing, dating, fishing. Suddenly on Saturdays and Sundays I find myself underground, my clothing torn, hands scratched, half immersed in freezing water or clinging by my eyebrows on a rocky wall. So, maybe it is only a fad, maybe it will pass.

We are all susceptible to fads, crazes, or what ever you want to call them. The S.C.S. bunch really takes to them. For instance there is the"three foot six" answer. That one is still going strong though its origin is obscure. I remember my first meeting with it. I asked one S.C.S. bod. how long we would be underground. The reply was of course "three foot six". The same response serves for almost any query, e.g. how deep is the cave, what is the time, how many members are going on this trip? Naturally I adopted this fad and had the great pleasure of explaining it to a young member. I was asked - what is this "three foot six" and after deliberating for an impressive period I elucidated to the eager seeker of knowledge - "three foot six is forty-two inches".

In the same category is the response "yes". Do we turn left or right, are you going to Hastings or Mole Creek this week-end, will you carry a ladder or a rope? All there questions are satisfactorily dismissed with the unambiguous "yes".

Nicknames are actually fads also. And those we have plenty. There is "Titch" and "Four-stroke" and "Sugra" which of course, is Argus spelled backwards, "White-wings" and Reak-wists" are not as yet fully in use. Other nick names are more derogatory but we bear them without stress.

There are further fads which have worn thin but new ones are always cropping up and taken to heart to be used ad nauseum. Our lastest is the "McCulloch ". There is a T.V. advertisement for a chain saw. The man lifts two fingers, there is abruptly a saw in his hand - I believe he is demonstrating its lightness and compactness. It's not the chain-saw, it's the

gesture and the song which we seize for our use. When the chap next to you offends you, when the Treasurer asks for a trip fee, we lift an imaginary chain-saw with two fingers breaking into the song, "McCuloch to you, McCulloch to you, there is another McCullo for you", rythmically enacting the arm movement the while.

So, caving itself might be a fad. Since it appears that we cavers are more susceptible than other people to fads, ipso facto we are cavers. We shall be happy to crawl through tunnels of semi-solid mud, squeeze through narrow, jagged, rock crevices, descend on thin, wire-ladder and rope for hundreds of feet underground. We are not thrill-seeking, death-defying adventurers nor frustrated escapists. We are school-boys and professional men, bank clerks, post-office employees and mechanics bound by a common love for caving. If this is a fad, may it last for long. And if you do not like it, go and buy a chain-saw.

ALEKS TERAUDS

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WANTED WANTED

1. CAVE PHOTOS (Black & White) prints or previously printed pictures suitable for re-production in our magazine.

2. ARTICLES about almost anything which will be of interest to cavers. Here is your chance to see a story printed with your name on it.

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TASMANIAN CAVE GLOW WORMS

We are looking for a feature for inclusion in our next issue
Would someone please oblige.

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LAVA CAVES AT MOLE CREEK

Exposed in a cutting on the Gowrie Park Rd., three miles beyond the Mersey bridge near Croesus Cave, are a number of tiny basalt lava caves. The basalt flow is quite extensive and overlies the limestone. It is of Tertiary age and has amygdales filled with a zeolite/mineral The latter factor has resulted in the growth of some interesting formation in some of the caves.

The caves are all very small, the largest extending only thirty feet into the bank. Much of this cave is a tight squeeze, but it ends in a small chamber. The floor is covered with crystals and there is a ten inch long helectite in one corner. The caves are very wet.

As these are possibly the first lava caves found in Tasmania, they are worthy of note. Tasmanian cavers have been kept too busy in limestone country to be able to spend any time investigating basalt areas.

Some basalt caves on the mainland are of considerable size. One at Mt.Hamilton in Victoria has 4,000 ft. of passage an is reputed to be one of the most complex in the world.

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FUTURE TRIPS ? ? ? ? ? ? ?

Some of the areas and Caves that we URGENTLY require to be further explored and surveyed are :-

1. HERBERTS POT, Mole Creek (See special report)
2. Kellys Pot, Mole Creek (Survey only)
3. JANE RIVER
4. Jukes DARWIN
5. HASTINGS
6. LORINNA.

Members please try to include some of them in your future programs.

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LIGHTING IN CAVES

Part I

Carbide Lamps

Carbide lamps commonly used by cavers are varied in design but all of them operate on the same principle. Basically they consist of two parts:- a gas - tight tank containing calcium carbide (Ca C2), and a water tank mounted above the carbide container. Water is allowed to drip through by gravity to the carbide via a variable needle valve where acetylene gas is evolved according to the equation:-

Ca C2	+	$2H_2O$		$Ca(OH)2$	+	C_2H_2
Carbide		water		lime		acetylene

The gas is led through a pipe where it is burnt at a suitably constructed jet. Acetylene normally burns with an exceedingly smoky flame but providing sufficient air is present a brilliant and smoke-free flame is obtained. Most acetylene burners have two small holes arranged at 90° facing each other so that the gas spreads out into a flat sheet of flame exposing a large surface to the air.

Carbide lamps are preferred by many cavers because of their robust construction, simplicity and cheapness of operation and the fact that they give a much wider beam of light than do most electric lamps. The inherent disadvantages of carbide lamps may be summarised as follows:-

1. Acetylene gas is toxic and can have an adverse effect on cavers and cave fauna if allowed to escape unburnt in large quantities.
2. When compressed to about two atmospheres acetylene gas is liable to explode spontaneously. This can happen for example if a lamp should accidentally be turned upside down and the water inlet and gas outlet passages become blocked with carbide residues.
3. Mixtures of acetylene gas and air in certain proportions are highly explosive. Although the characteristic smell of acetylene is usually sufficient to give ample warning of its presence, lamps should not be allowed to discharge large quantities of unburnt gas in a confined space.

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A variety of carbide lamps are manufactured but only two are used to any extent in caving. These are the "Pinnacle" and "Ericsson". The "Ericsson" which formerly enjoyed wide popularity with cavers is now no longer manufactured and is becoming obsolete. It is of brass construction and consists of cylindrical upper and lower containers, the lower being open at the top and clamped to the upper by a "U" bracket and clamp screw. The two containers are held separate by a rubber "O" sealing ring. The upper container is fitted with a needle valve controlled by a screw. The burner, mounted vertically, is screwed into an "L" shaped pipe fitted to the side of the carbide container.

"Pinnacle" lamps are similiar to the "Ericsson" except that construction is of cast aluminium and the two halves are screwed together instead of clamped.

To operate a carbide lamp the following procedure is recommended:-

1. Ensure that the two halves are clean and free from dirt and carbide waste, particularly the needle valve and the gas outlet to the burner. The jet holes in the burner are extremely fine and can easily become blocked by carbide waste.

2. Examine the rubber sealing ring and ensure that the metal faces against it are dirt free. If the ring shows signs of wear or perishing it should be replaced.

3. Fill the carbide container no more than $\frac{1}{2} - \frac{2}{3}$ full with carbide preferably broken into fragments approximately"blue metal" size. The residues left after the carbide is exhausted swell up and occupy a far larger volume than the original carbide. Should the lamp be overfilled there is a danger that the water inlet and/or gas outlet passages will become blocked due to swelling. When filling "Pinnacle" lamps ensure that the perforated tube and funnel in the carbide tank are in position before screwing together.

4. When exposed to air calcium carbide absorbs moisture and forms a white powdery dust over the surface. This white powder is useless as lamp fuel and should be removed before the carbide is used. This can be done by placing the carbide in a tin can

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perforated with nail holes and shaking. This is also useful for recovering unused carbide from lamp waste.

5. After filling with carbide the water tank should be filled completely and the filler plug screwed in securely.

6. Open the needle valve four or five turns until gas is felt issueing freely from the burner. This can be detected by holding close to the back of the hand or cheek. Allow to stand for a minute or two before lighting to ensure that all the air is expelled from the tank.

Once alight, the needle valve can be closed off slightly. The best position is found by trial and error and varies from lamp to lamp. Too little water gives a small, smoky flame while excess water gives a large hissing flame and surplus gas will be heard bubbling up through the water tank via the needle valve. This is an important safety feature and at no time should the needle valve be closed off completely while the lamp is operating. The reaction of water and carbide is accompanied by the evolution of heat and water droplets frequently condense on the bottom of the water tank and run down the sides, causing a sudden increase in gas pressure. Should the needle valve be closed completely, the gas pressure can rise to a critical level with the risk of explosion.

If too much water is being admitted simply close the needle valve a turn or two and allow the gas to dissipate normally.

7. Should the lamp be accidentally turned upside down, i.e. by dropping etc. there is a chance that the openings to the carbide tank will become fouled with residue. Should this occur, IMMEDIATELY slacken off the carbide container and check the needle valve and burner tube before screwing together.

8. After use the carbide waste should be washed out completely and any remaining water drained out. Carbide waste products are somewhat corrosive, particularly if damp, and damage can result if lamps are left uncleaned for too long.

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9. The jets used in carbide lamps are extremely small and prone to becoming blocked with soot and carbide waste. Accidental blockages will also occur should the lamp be dropped face down in mud. For this reason a spare burner or two should always be carried underground. Burners can be changed at any time by blowing out the flame, replacing the burner and relighting. With a little practise this operation can be performed in total darkness. Replaced burners can be cleaned later with a primus pricker or similiar instrument.

For "Pinnacle" lamps the normal full charge is approximately ½lb. of carbide and $\frac{1}{3}$ pint water.

If operated correctly this will give a clear usable light for anything up to four hours. When longer trips are planned, spare water and carbide should be carried, preferably in polythene containers. These should also be used for conveying carbide waste to the surface for disposal. N.B. Carbide wastes should not be left in caves. The use of underground water is not recommended as it may contain particles of grit and mud which can easily block the needle valve.

The foregoing may be briefly summarised as follows:-

DO ensure the lamp is thoroughly clean before and after use.
DO carry at least one spare jet and an alternative source of light.
DO ensure the lamp is operating efficiently before going underground.
DO carry extra fuel if required.
DON'T dump carbide waste underground.
DON'T use carbide lamps like hand torches which can be held in all positions.
DON'T blaze your trail in caves with soot from carbide lamps.
DON'T turn caves into acetylene gas chambers by allowing unburnt gas to escape underground.

(compiled from various sources)

A.P. ANDREWS.

JANUARY 1970.

1st.....MAYDENA - Welcome Stranger- (See next issue for article on this cave and exploration to date.) Party - S.Harris,M.Cole,J.Sloane,N.Janes, D.Bollwell,K.Kiernan & J.Taylor(V.S.A.)

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4th.....Maydena. Party - R.Mann(L),K.Kiernan & J.Taylor(V.S.A.)

The party originally intended to explore the holes behind Bone Pit found on 12/10/69 but found they were all previously known,one being Voltera. Bad weather then set in and so John Taylor was shown Pigmy and Junee Caves. The party then returned to Hobart.

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11th.....HASTINGS - Newdegate Cave -
Party - S.Harris(L),M.Cole,N.James & K.Kiernan

The trip was conducted to investigate the possibility of linking Newdegate and Erebus. Passage leading off Mystery Chamber were investigated but found to be all choked.

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IIth.....MAYDENA Party - R.Cockerill,G.Wilson,J.Taylor(V.S.A.),Brian Collins (T.C.C.),Allan Keller(T.C.C.),P.Taylor & Lesley ?.

A combined trip with the Tasmanian Caverneering Club to explore new holes that the T.C.C. had discovered behind Junee and numbered 2,3,& 4 Party travelled in Gray Wilson's Kombi van. Holes 2,3,& 4 explored.

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13th & 14th.....LORINNA -
Party - D.Elliott(L),C.Williams & K.Kiernan.

The Showground and Limestone Creek areas were 'scrub bashed' but the only find was the efflux of a fair sized stream into Limestone Creek,the entrance to which is unfortunately to tight to negotiate.On the way back some basalt caves were explored near Liena.

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24th & 25th.....MOLE CREEK - Herberts Pot.
Party - S.Harris(L),S.Vince,J.Morley,K.Kiernan J.Taylor (V.S.A.) & S.Street. Sunday only M.Cole & N.James.

The party entered the cave at 10am and had reached the upstream waterfall, by 1pm. But what was thought to be the siphon upstream,two streams were found to converge to form the main stream.One of these tributaries was followed for approx.$\frac{1}{4}$ mile before low lights drove the party back. The other tributary was followed past a duck (previously thought to be a siphon) to a large old dry stream passage. This soon split into a

TRIP REPORTS (Continued)

LAbyrinth of smaller passages, most of which are unexplored. Scotts Cave was visited on Sun.

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28th.....HASTINGS.....Party - M. Cole(L), N. James, S. Vince, K. Kiernan

An "after work" search for Erebus was unsuccessful.

FEBRUARY

Ist.....Maydena.....Welcome Stranger (see next issue) PARTY.....

R. Mann (L) S. Vince, R. Chappell (V.S.A.), A. Clarke (V.S.A.), K. Kiernan

A small swallet hole found off Westfield Rd. by Don Francombe was explored to a depth of 40ft.

8th.....Ida Bay.....Mystery Creek Cave.....Party.....J. Morley, S. Harris, R. Mann, D. Elliot, S. Street, K. Kiernan.

The party spent 4 hours having its first look at this cave.

I0th.....Hastings.....Waterloo Swallet.....Party.....S. Harris(L) M. Cole, K. Kiernan, J. Taylor (V.S.A.),

Previous exploration attempts having been thwarted, (mainly by excessive water) this trip met with more success. The entrance pitch was found to be I20ft. to a steeply sloping talus passage. This ended in a 30ft. chimney into a mud-chamber with interesting acoustic affects, and a I5ft. high mud dam at one end. Beyond this a short length of passage choked off at approx. 200ft. There are some broken stalagmites in the mud but that is all the decoration that is present in the cave.

I4th. & I5th. Mole Creek.....April Fools.....Party.....M. Cole (L) J. Taylor (V.S.A), F. Koolhof, R, Filbee, K. Kiernan.

The party spent I0hrs. in the cave for sightseeing and photographic purposes, during which time F. Koolhof was unfortunate enough to drop his camera in one of the deep gour pools. Fortunately it was soon recovered, when the party left the cave at midnight some trouble was experienced in

TRIP REPORTS (continued)

finding the road, as the track is very overgrown.

28/2 - 2/3 .....Mole Creek.....party.....R. Mann, R. Cockerill, G. Blake, S. Street, K. Kiernan, S. Harris, S, Vince, J. Taylor(V.S.A.) A. Cockerill, D. Elliot, M. Cole.

When the party arrived at Mole Creek, early in the a.m. of the 28TH. the members immediately left for two hours in Pyramid Cave. Later that day a party of four surveyed Kellys Pot to the point where the two creeks join. 950ft. of passage was covered and 29 points were required. Four members explored some side passages in Shiskabarb and found a hole in the floor, approx. 90ft. deep, which appeared to have running water at the bottom. This was not explored due to lack of gear. The next day a party of 6 did a quick trip into Kubla Khan, taking in Xanadu and the Pleasure Dome. The members found that there had been a great deal of vandalism in this cave (see editorial). Another party spent a few hours in Maracoopa I, which was visited again on the following days.

8th.....Hastings.....Party.....S. Vince, K. Kiernan.

The Trafalgar Pot track was surveyed and found to be $\frac{1}{2}$ mile long. The cave entrances included in the survey were Lyons Den, Beattie, Flag Locker, Waterloo Swallet and Trafalgar Pot. The Wolfhole Track was also surveyed.

I4.....Mole Creek.....Shiskabarb.....Party.....J. Morley(L) S. Harris, G. Blake, S. Street, K. Kiernan.

The new hole found in Shishkabarb om 28.2.70 was rigged with 90ft. of ladder. This hung right over the centre of a big, deep pond, which syphoned at both ends. The walls plunged vertically into it and offered no handholds. This pool is similar to the pool that is the previously known stream passage in the cave, and is just upstream of it.

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- CAVE TERMINOLOGY -

AVEN — A vertical shaft rising from a cave passage or other part of a cave system but not reaching the surface though it may meet an upper passage.

BACON — A thin sheet of dripstone hanging from a roof or wall of a cave is translucent and with alternating bands of reddish and creamy colour.

BED — A layer in sedimentary rocks.

BEDDING PLANE — A surface separating two beds of rock.

BLANKET — A thicker-type of dripstone curtain, NOT translucent.

CALCITE — The commonest mineral form of calcium carbonate and the main constituent of limestone.
Has different crystal forms.

CAVE PEARL — Smooth, polished and rounded concretion of calcium carbonate found in and around shallow hollows in floors of caves.

CANYON — A chasm which has been formed by a cave stream.

CHAMBER — The largest order of cavity in a cave or cave system, it will have considerable length and breadth but not necessarily great height.

CHASM — A deep, wide but elongated gap in the floors of a cave.

CHIMNEY — A vertical or near-vertical opening in a cave, narrow enough to be climbed by means of opposed pressure holds.

OUR CONSERVATION CODE

The Southern Caving Society believes that all caves are worthy of protection from damage, intentional or otherwise. Accordingly, every member shall endeavour, within the limitations of necessary and carefully planned speleological research and exploration, to leave each cave entered as first found.

Caves will not be littered with waste of any kind. Markings will not be made unless essential for survey purposes. No part of a cave will be broken or removed unless careful consideration indicates this to be necessary for speleological purposes. No specimens shall be collected except for specific scientific research