

MS Diary & Case Notes Vol. II April - Dec. 1963

12.4.63

Island Plantation Swallet.

5768 5125. Owners - D. Thompson, Green Acres, Green Ore.

A cave dug by Jim Emerson and the Aschbridge Caving Group - Swallet and shaft dug to 20 feet - no showing but setting tripod over the shaft. Small stream runs the length of the plantation and sinks in the swallet. Dug in the late 1950's.

12.4.63

Thompson Swallet.

5742 5124 Owners - D. Thompson, Green Acres, Green Ore.

In swallet approx 20ft deep, Dug by a local farmer in 1958/a to a depth of 6ft. This has now been filled in but wooden tripod is still in place. From the situation of the swallet intermittent drainage is likely.

30.4.63

Compton Hill Spring.

5474 5675.

Water issues into road from overflow of brick storage tank and can be traced back to the foot of a bank of earth from which it issues.

Location. On Compton Martin Hill $\frac{1}{4}$ mile from top.

Overflow from the tank runs into drain gird at side of the road.

30.4.63.

Gibbets Brown Dig.

5424 5511 Mr. Bennett, Lamb Bottom Farm.

An shallow, oval depression on opposite side of road to LL quarry. Probably quarried or mined. Dug to a depth of 6-8 ft by HWRC in 1959/60 after geodetic survey by L.S. Palmer.

Lamb Bottom Dig.

5450 5495. An collapsed gully in L. Bottom on RHS going towards trough. Notice in small hole BCSCC cave Dig. In conglomerate - dug to a depth of 3 ft. Alfie & Jill found it to be a cave/whys in Feb 1961 - collapse since then.

The Rift (Lamb Bottom).

Opposite above - a lead rift approx NW-SE about 20 ft deep and 40 ft long open at surface but covered with brambles.

Hywel's Hole.

5451 5495. Hywel Munnell recently told me that Hywel's Hole had been refound. It was easily located and was covered with a large stone slab.

located 10th August 1934 by Hywel Munnell. 20 ft shaft with water worn sides. 4.7.35 entrance covered after trouble with local farmers and cave location lost. Re-located in April 1963.

30.4.63.

Garrowpipe Spring.

5483 5487. B.W.W.?

Small spring rises from boulder mass at foot of bluff near the trough in h. Bottom. supply trough.

In conglomerate. B.W. inspection cover leads into small passage between boulders. Balch mentions it.

1947. Balch - Mendip - Its Swallet Caves etc

pp 42, 44, 49, 140.

Upper Garrow Cave.

5484 5486.

In conglomerate 40 ft above and to the right of the above. Opening is a rift 5 ft high and 18" wide covered with stones and wire mesh, at foot of highest bluff above valley floor. Tight rift passage approx 20 ft long.

Lower Garrow Cave.

5484 5486.

In conglomerate 10 ft below above. Small opening covered with wire mesh at foot of first bluff. Tight passage about 15 ft long.

2nd MayFairman's Folly.

5507 5246. Earl Waldegrave, Chewton Mendips.

A large, round, shallow depression, covered by a metal cone. Was taking a small stream from the SE.

A personal dig by Miss D. Fairman and A. Rich in March 1956. Excavated 30ft shaft to natural rift which was not entered - has since collapsed.

Biblio. BEC Cor Rep (6) 25 (Oct 1961) See Smaller Caves I.

WSG Lm Cor 3, 4 (July 1956) brief ref.

Upper Fairman.

5506 5278. Earl Waldegrave.

A large depression dug by Miss D. Fairman & A. Rich in January 1956 abandoned in favour of above. Stream sinks into small boulders at bottom and in centre of wallet - water from E side.

Lower Fairman.

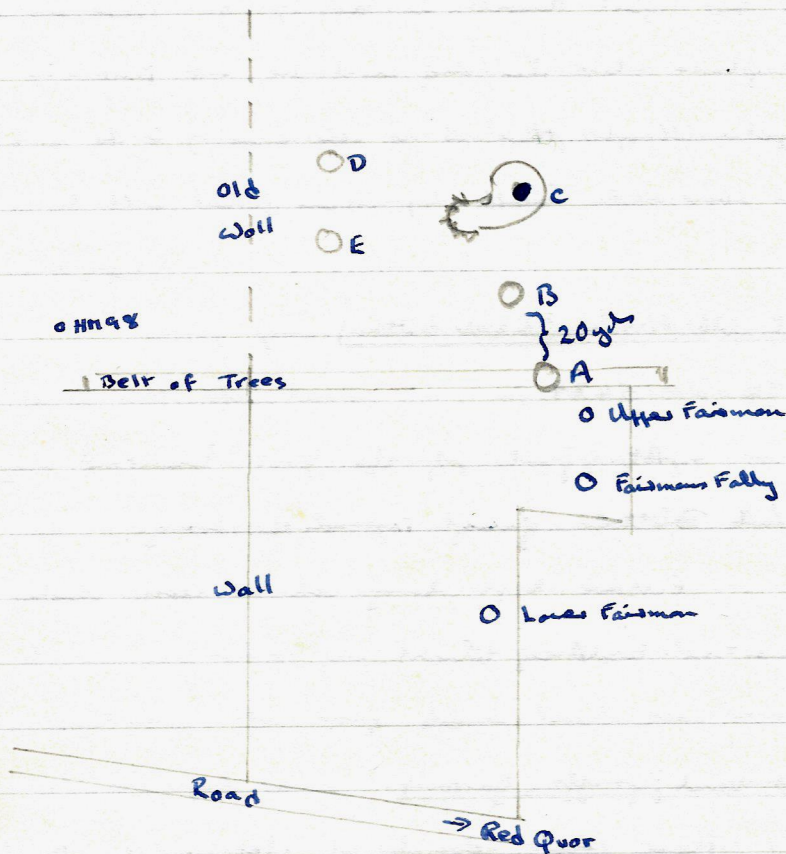
5507 5286. Earl Waldegrave.

Recent shothole with draught of air rising from it.

45ft deep. approx 100ft across. sides at approx 45°.

On NW side is an exposure of ironstone/dolomitic conglomerate.

2nd May

Swallows in field NW of Fairman.

Brief note. To be looked at for MCR at a later date: -

- A. Dry wooded swallow. (large)
- B. Another large dry.
- C. Double, pond & bank of earth.
- D. Upper dry.
- E. Lower damp.

2nd May

Hywel Dig No 98. (MCR 4098)

5466 5268. Earl Waldegrave.

For location see sketch overleaf. Now filled in.

Dug by Hywel Russell in the 1930's. There are several likely places where this dig could be but Russell has marked the map and although there is no site exactly to the mark the nearest is this above NGR. Small depression filled with large boulders.

12th May

Impenetrable Fissure (Lamb Bottom)

5463 5489.

At foot of the East limestone bluff on RHS in Lamb Bottom going towards the trough.

Fissure 8 ft long can be seen under projection of limestone bedding blocks.

Disused Lead Gouffs (Garrow)

There are several of these gouffs at the top of the big gouffy above (to the NE) of Lamb Head and also in the field to the N. These vary in size but the most striking is about 40 ft long, 8 ft wide and 12-20 ft deep.

Many piles of stones around the gouffs - small amounts of lead, zinc - some Bristol Diamonds.

12th May

Sinks above Garrow Caves

In the grassy field above the trough in L. Bottom, opposite Smitham Hill. Water is collected in a very shallow marshy depression and the linkage from this is on the Right into a small depression under a bush. This site has been visited by Kay & myself several times and has been taking water on each occasion.

19th May

hamb heat.

Party from Wellsway School, Saltford (Hegginham). This was the last day of a week of outdoor school which consisted of geology & geography, physical and economic. The centre for this is at the old school house, Charlshorne, which has been done up quite reasonably for the idea promoted by the Somerset County Council & Education Committee. The trip down hamb heat was much appreciated and enjoyed being the first time for most of the people who attended. To top of shaft - East Passage & back to surface.

27th May

St. Vincent's Cave.

A brick wall built into the cliff face just below the Observatory. This was built off when the downs were being tidied up some years back.

Ref. The Downs. 1961. (as per P.F. Bird).

8th MayMichel Siffre. lecture.

Cave of Sarcoson in range near Nice near border. An massive
 4 km, are devoid of trees. Camp set up at edge of very ancient glacier
 100 metres below surface - long tent, bed, table, chair - 4 volt battery lighting
 record player etc, books. 3 meals supply food & water. Descent without a watch,
 telephone link working, after work, before going to bed. Surface team always on duty
 never told time or given any indication of it. At end of stay he thought that
 he had just started his 2nd month.

Unpleasant. not enough time to work, no cheese (of which he is very fond), full of
 rock at edge of glacier. Condensation very bad; freezing feet all the time.

Psychological. loss of memory. e.g. could play the same record several
 times (10 recorded) without realizing it. A. 3 min 78 RPM seemed to last as
 long as a LP 33 RPM and vice versa. Fall of rock very upsetting - effect
 on the eyes caused a sideways reaction and seemed to be out of focus.
 Effect of the memory still oriented now with names etc.

Work Carried Out. full explanation of the glacier - movement etc - finds of
 pollen & spores of fungi - sample seems to be very odd - more samples
 will give greater proof. This may be a very old even fossil glacier.
 Floor with on ice resultant from decomposing layers in glacier.

NB Siffre rationed his food as he was not sure if the months would be
 longer or shorter. loss of weight only 2 kilos.

See. EDCG Carving pp 9-11 (Spring 1963)

Brit. Cav 38, 97-101 (Autumn 1963).

2nd June

HM 115. MCR 4115.

5734 5290. Trespassers will be prosecuted.

Blocked at surface by tree roots.

Visited by T. Aldham in April 1963.

Visited by EDCG & MNRC. 85 yds up fire break - shaft is 2 yds from track on W. side.

Shafts 4115 - 4120 all in Buddles Wood.

MCR 4116.

4736 5295.

located by T. Aldham in April 1963. Visited by EDCG & MNRC. 160 yds up fire break - shaft 10 yds from track on W side. 35ft shaft leads to tight natural rift 60ft long running approx NE-SW. loose boulders near in flow may be evidence that shaft was once deeper.

MCR 4117.

4738 5289.

Visited Hywel Munnell 27.7.36. 77ft deep +.

Visited SMCC 17.9.55 Blocked at 50ft.

When visited by me it was blocked at surface.

Bellis. MS Diary HM 3, 44.

SMCC Hut Log (1), 24.

2nd June

MCR 4118.

5736 5291. Visited by Murrell 27.7.1936 & Ellis & Thompson 24.2.63. 50ft deep. shaft mainly natural with cavities filled with debris. 30ft below surface natural passage running approx SW and sloping upwards at 30° for approx 25ft.

MCR 4119.

5740 5296.

Approx 160yds up fire break, 25yds from track on E side. EDCG/MNRC descended to 50ft but way on is straight down through very loose boulders now in floor.

Murrell 27.7.36 gives it as 65ft deep although not bottomed.

MCR 4120.

5733 5292.

Located by Hywel Murrell 27.7.36

Covered by immovable slab.

MS Diary HM 3, 52.

MCR 4121.

5729 5292.

Shaft is on W side of fire break 50yds from track.

40ft shaft leads to natural rift 50ft long - many bones in the floor probably recent origin. Small nest of cave pearls in off shoot at far end of rift 12ft above floor level.

a). Old Trial Shaft at Boddalls Grove NGR.

If open was to be (4114) but as it was completely filled to surface & no record exists of it being open the site was not recorded for NGR. Large debris pile around top of shaft.

b). Recent collapse at Boddalls Grove NGR.

This is a recent collapse at the bottom of a small mined depression. h/tone beds with a dip of approx 75° and a 4 inch bedding plane. Recent. NB. Look again.

c). Old Trial Shaft NGR.

If open was to be (4113) but was filled in and was applicable to a) above. Marked on 6" O.S. map.

d). 4122. 4734 5306. H.E. Speed, Grove Farm. Chawton.

Murrell 1938. 40' deep. photos RPS 1938. When visited above date filled to surface.

4123. 4740 5310 to above.

Murrell 1936 unexplored. When visited above date filled to surface.

e). 4124.

5669 5284. Tenmt. H. Bishop, Echar Hill Farm.

found by Murrell 1936. Reported to supply water to Echar Hill Farm. On above date found to be covered by two large slabs. Saw H. Bishop and required permission to open top of shaft and explore.

12th JuneMCR 4077.

5249 5430. Ownes, T.A. Tenant. Haydon Grange Farm

Once a large wallet containing mine workings probably with a main shaft or adit (shaft is more likely. Now filled to the surface.

MCR 4068.

5231 5440. Ownes, Univ Bristol. Tenant. Parrott, Ubley Warren Farm.

for full notes see Mendips Cave Register Sheet.

At above date shaft filled to surface.

Lower Wignmore Swallet.

5579 5243. Waldegrave & Chertton Farms Ltd.,

Depression 20 ft deep and 40 ft wide with very flat marshy bottom. Corrugated dunn in centre of wallet may have some connection with an unrecorded cave dug of many years ago.

Open Collapse (Wignmore).

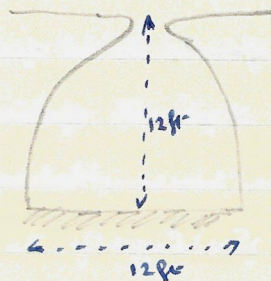
5583 5244. As above.

Recent collapse (1961)

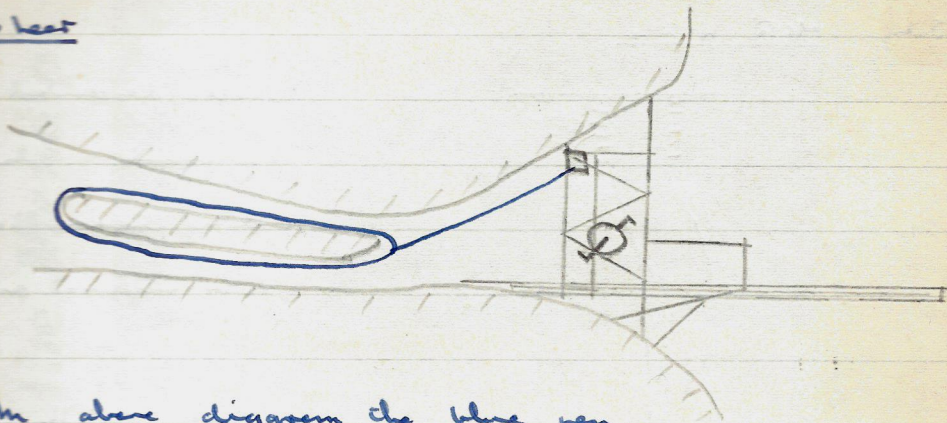
In conglomerate. Bell-shaped

12 ft deep & 12 ft wide at base.

3 ft wide at surface.



15th June hand beat



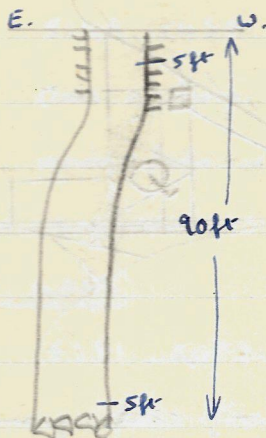
In above diagram the blue pen lines represent the old runway cable around the false (aragonite) floor and to a large block (section 9"x9") at top of the winch scaffold.

The object of Phil, Naga Self was to remove these cables as they looked very dangerous as they had frayed badly and could cause a lot of damage if someone caught them. Oddly enough the joint runners could be loosened by hand after nearly 30 years in the damp atmosphere. The bulldog clips etc were removed easily with a spanner. Two of the four cables were taken out.

16th June Phil went over to Cuthberts. Mike Thompson & Olly Lloyd gave me a hand and the other two rotted cables were hauled to the surface.

Naga & then visited the site opposite Smitham Hill (See page 7).

14th July

MCR 4124


Shaft descended by Phil, Roy D,
Roy with a John Read, 90ft to
boulder stream flow. No continuation.
Slabs replaced on top after descent.

See page 11.

21st July

Balds Cove.

Usual type of MNRC trip to end of cave and out.
Some photos taken in gallery leading to small downward pitch.
Went over to Whiteslip for a dip afterwards.

16th August

MNRC Jul Vol. 1. No. 2.

Bound up all the journals 110 for sale.

Contents. Box Mines, Wells. Mendips Geo Registry.

Risk of Asphyxiation due to Carbonic Gases,

Cave Formation on Mendips.

17th Aug.

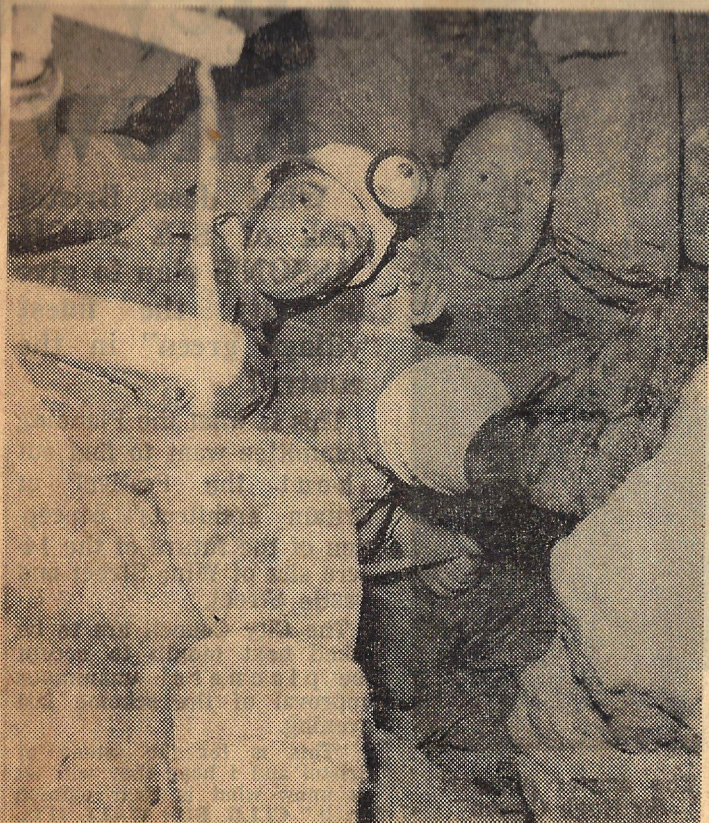
Dallinmores Cove.

Went up to Hillgrove & searched Warren journals for area to
ref. Fred & Bob were digging at the end of Dallinmores.

Elbow Gorge In afternoon looked at a few of the shelters in Elbow
gorge, after there was an abseiling practice above the Narrows.

DEEP-DOWN DRAMA

**—dangers real enough
for TV film cast
under the Mendips**



Caving expert Jim Lovelock (right) gives advice as actor Robin Hawden tries a rock climb in Wookey Hole cave before the filming.

The Mendip caves were once more a setting for drama and peril yesterday.

In the depths of Wookey Hole B.B.C. cameramen took shots for a future programme in the B.B.C. "Suspense" series.

Although the story was fictitious the danger was real enough. as the actors looked at a high, narrow crag up which they had to climb. Bristol-born producer Bill Duncalf, said: "They've never done this in their life before. Anything can happen."

Four of them, at least, have to make it look good because in the story they are experienced potholers.

Three others play Teddy boys who follow the other party into the pothole because they think two girls in the party are worth more attention.

ROCK FALL

The Teddy boys take a vicious type of firework down with them and when they let it off the explosion causes a serious rock fall. This cuts off the other party. To add to their troubles gas from unused cylinders left over from the last war fills the air of their tomb.

The answer to this gripping situation will be on television screens one Monday during the next three months.

Among the technical advisers for the filming was veteran caver Jim Lovelock, who last August was with the team of 40 speleologists in the 4,000ft.-deep Gouffre Berger, near Grenoble, France.

Playing the part of the official rescue team in the play were members of the Mendip Rescue Association, headed by Mr. Luke Devenish of Wells, who took part in last Sunday's rescue of two Bristol students.



Wearing a boiler suit and pit helmet television actress Sandra Caron is made up by Anne Donnelly, for the filming in Wookey Hole Cave. The episode has been tentatively titled "Operation Mole."

Evening Post, March 21st

Three crawl to safety after five days in flooded cave

FIVE young potholers cut off in cave today by swelling of a torrent which runs past cave's entrance, says message from Vallon Pont d'Arc, South France.

E. Post.
3rd June.

Three young French potholers dragged themselves to safety today after being trapped for five days in a flooded cavern.

Weary, bearded and half-blinded by the sunlight, they fell into the arms of waiting rescuers and told of two companions they feared must be dead.

They went down the Goulde de la Fonsoubie pothole in the South of France, last Sunday morning, and were trapped by a torrent which swirled through

the cavern after 60 hours of near-monsoon rain.

The three survivors are Emile Cheilletz (24), Alain Besacier (24), and Jacques Delacourt (18). Bernard Rassy (27), was swept away in the darkness, and contact was lost with Jean Dupont (21). One unidentified body has been recovered.

E. Post.
8th June

TRAPPED MEN EAT A

BELT TO STAY ALIVE

BELT TO STAY ALIVE

THREE starving potholers crawled to safety yesterday after being trapped underground for five days.

They had eaten a leather belt to stay

alive after their two companions died.

The five men started exploring caves near Lyons, Central France, on Sunday.

When they were 315ft. down, floodwater turned a stream into a raging torrent. They were trapped.

Lying in hospital last night at Vallan Pont D'Arc, his torn and blistered hands in band-

by MARY MALONE

ages, Emile Cheilletz, 24, said:

When the waters rose we realised the danger and began to fight our way back to the cave entrance.

Three hours later we lost the first man, Bernard Rassy. He was tired and lagging behind. We got a rope to him, but he let go and was swept away.

Nothing

A few moments later Jean Dupont fell down a waterfall.

"We saw him whirling in the current. We followed his path by the light of his luminous helmet. There was nothing we could do for him.

For the next three days

we clambered through the darkness towards the cave entrance, sleeping where we could on narrow ledges. Once I slipped and fell 40ft., bouncing from rock to rock. But I climbed back.

Weak

Cold and weak from hunger, we passed my leather belt around and nibbled at it. It was all the food we had. Without it we would have died.

By Wednesday we had crawled about 150ft. from the entrance. Then our path was blocked by a waterfall.

Yesterday food canisters came floating by and we knew that help was coming.

This morning the waterfall was only a trickle and rescuers got to us.

Earlier in the day, rescuers were warned by doctors that the trapped men had only hours to live without food.

Firemen worked all day pumping water out of the cave. Dams built by the Army diverted more of it. Frogmen later recovered the body of one of the missing men.

see over

2. River
8th June.



Starving—but safe. Alain Besacier, 24, is helped out of the cave. Rescued with him were Emile Cheilletz, 24, and Jacques Delacour, 18.

UNDER THE

Evening Post
June 2nd

MENDIPS

The world of
beauty that
few ever see

When the Mendip Hills are mentioned the average person thinks immediately of Wells, Cheddar and Wookey.

When travelling through this particular part of Somerset he gives little thought to the fact that several hundred feet below his feet there may be people engaged in exploring the large network of water-hewn tunnels which go to make up some of the most beautiful natural caverns in Britain.

The show caves of Cheddar and Wookey Hole are world famous for their fine drip-stone formations, but these works of nature are surpassed in sheer beauty and intricacy by the caves which are inaccessible to the run-of-the-mill tripper.

STREAMS

The great swallets of Priddy, Charterhouse and Eastern Mendips engulf the greater part of the water which is deposited on the higher slopes and most of them have a stream rushing through them all the year round even in the driest part of summer.

The majority are profusely decorated due to this abundance of water, but because of the tenacity with which nature clings to that which she has fashioned they will never be a commercial proposition.

The cave systems which honeycomb the Mendip Hills hold a fascination for many. Here B. J. Iles, of Bristol, gives an introduction to some of the better-known caverns and pot-holes and explains the precautions taken by those who explore them.

Narrow, tortuous, mud encrusted passages, vertical pitches often with the underground stream cascading down them and the inevitable sumps which cannot be passed without the caver becoming totally immersed will only ever be visited by those willing to undergo physical hardship in carrying out their exploration.

It is impossible to single out one particular cave as the finest because each is unique and is notable for its own special characteristics.

G.B. Cavern at Charterhouse for example, has a huge main chamber over one hundred feet in height with stalactites up to



15 feet or more in length hanging from the roof.

When entering this vast hall the visitor is awe struck and it has been noted by many cavers that his voice usually drops as it would when entering a church.

LONGEST CAVES

Priddy can boast the two longest caves on Mendip; Swildon's Hole and St. Cuthbert's Swallet. Both have in the region of two miles of passages and both are over four hundred feet deep.

Swildon's is probably the most exacting of all with a series of crawls, ducks and sumps at its extremity which can only be negotiated by cave divers using specialised apparatus. For a full exploration of this system a large support team is necessary for laddering pitches, carrying equipment needed by the divers and for setting up relay stations throughout the cave.

An operation of this type would take 20 hours or more and would require each member of the team to be at the peak of physical fitness.

St. Cuthbert's Swallet is one of the best decorated caves on Mendip and is without doubt the most complex. It practically defies description. The Bristol Exploration Club, who control access to the cave for the land-owners, have been carrying out a systematic survey of the cave since its discovery in 1953 and have not yet completed half of it which is an indication of the problem confronting them.

Because of the fine formations, including cave pearls, and the complexity of the system the B.E.C. have adopted a leader system whereby only those members who know the cave well and fully appreciate its beauty can lead a party. No one is allowed in the cave without a recognised leader.

'SEWER'

Travelling across to the eastern half of Mendip the major cave in the area is Stoke Lane Slocker, or in caving circles the "Sewer." The stream in this cave is highly contaminated and any cuts or abrasions sustained however small should be treated as soon as possible with antiseptic.

Before any formations of note are apparent it is necessary to pass a sump the scum encrusted surface of which is "off-putting" to say the least. But, as in most cases, the physical discomfort is made up for on the other side. The whole character of the cave changes from small wet passages into a series of well decorated

chambers, in one of which remains of a hearth have been discovered suggesting a possible link with the outside at this point.

It is apparent that before any major swallet is tackled the beginner must have a certain amount of practice. Burrington Combe is ideal for this purpose. Here there are a number of small and medium sized caves within a small area requiring little or no special equipment other than the bare essentials: a change of clothes, a pair of stout boots, a helmet and an efficient light—usually an acetylene lamp fitted to the helmet.

THE FIRST

The first cave tackled by the beginner is usually Goatchurch Cavern which has a bit of everything, the outstanding feature of which is the celebrated "Drain-Pipe" at the end. This is a roughly circular tunnel 40 feet in length with a mean diameter of 18 inches. It is negotiated by crawling and wriggling at full length a forward motion



Diving in Wookey Hole.

being imparted by means of elbows and toes.

The feeling of relief expressed by the beginner after navigating this hazard successfully soon gives way to one of frustration when he learns that there is no other way out and he must pass through the pipe again. It must be stated that the remarks passed at this juncture are quite diverting to the leader who has retired to a safe distance until the storm blows over.

Unfortunately due to the hordes of cavers descending on Burrington Combe each week-end these caves have suffered a great deal. Nearly all the formations have been smashed and all bare patches of rock have been covered with inscriptions. Goatchurch and Rod's Pot have undergone the worst treatment, the destruction of two very fine stalagmite "curtains" below the main chamber of Rod's Pot being the greatest crime.

Perhaps it is fortunate that the vandals responsible for this sort of thing are nearly always "one-time" cavers and never reach the large swallets. Although even here their handiwork is evident as in the case of G.B. before it came under the control of Bristol University. A large number of helictites—erratic formations resembling grotesque plant forms—were removed as souvenirs.

SUFFERED

Longwood Swallet at Charterhouse in its lower August Hole series has also suffered with the destruction of many of its transparent straws. This perhaps is due primarily to another cause—fatigue. Anyone attempting this lower series becomes very wet in a short space of time because it is practically impossible to avoid crawling in the stream or to avoid being drenched by cascades of water showering from above.

On the return journey most parties are tired and intent only on regaining the surface, hence most of these "straws" which overhang the main passages are accidentally broken off by the caver who hardly notices that they are there.

In all, there are over 150 known caves and rock shelters on Mendip, some being extremely small but none-the-less important, because archae-

ologists have unearthed evidence of occupation in the past by prehistoric man and long extinct animals.

Besides archaeology there are a variety of interests prevalent among cavers, e.g. photography, survey work, diving, geology and hydrology in the study of cavern formation, the study of cave fauna and flora, besides many others.

Whatever the reason, the world of darkness and tumbling waters has a fascination all its own and that fascination is strong enough to lure a person back to the caves again and again.

D. Hinner

June 16th

Caveman in record bid

BEARDED potholer Geoff Workman (left) steps into the mouth of a cavern yesterday.

If all goes well, it will be 100 days before he sees daylight again.

That is the target Geoff has set himself to beat the world underground endurance record.

The record—sixty-two days—is held by Frenchman Marcel Siffre.

Thirty-four-year-old Geoff, of Peak Forest, Derbyshire, is making his record attempt 150ft. below ground at Stump Cross Cavern, near Pateley Bridge, Yorks.

See page 61.

18/3/1963

W-D-Press

Girl dies 40 feet down in Mendips

Western Daily Press Reporters

Seventeen - year - old Heather Muirhead died yesterday after going 250 feet down in a Mendip pot-hole.

She was on her way out of the cave when she collapsed at the bottom of a 40-foot vertical rock face.

This face is only a few yards from the entrance of the cave, Longwood Swallet, near Charterhouse.

Miss Muirhead, who was with students of Bristol College of Technology, was hauled to the top in a sheet.

But she was already dead.

Another member of the college caving society, 18-year-old Robin Gay, of Harmer Close, Henbury, Bristol, was taken to Weston-super-Mare hospital, suffering from exposure and shock.

But he was not detained. He and Miss Muirhead, who lived in Cranleigh Gardens, Stoke Bishop, Bristol, were among a party of 10 who went down the cave shortly after lunch.

The party split up into two groups. One group went to the bottom of the 350-ft. cave.

The other section, including Miss Muirhead and Mr. Gay, went down to 250-ft.

This group spent some time sitting in the cave in near zero temperatures waiting for their colleagues to return before they went down to the bottom.

When the first party came back the two groups decided to reform and return to the cave entrance together.

Stream

Miss Muirhead and Mr. Gay brought up the rear of the line and it was only when their friends reached the top that they realised something was wrong.

They alerted the Mendip rescue team at Wells and diverted a stream which was overflowing into the cave entrance and cascading down the vertical rock face after the heavy rain.

"The water was pouring down near the place where Miss Muirhead and her friend were lying," said Mr. Luke Devonish, a Mendip rescue team warden.

"If it had not been diverted it could have meant death for Mr. Gay, as icy water and exhaustion can easily have fatal effects."

He said Mr. Gay tried to struggle to the top but he had to be helped up with ropes.

"He was just about all in," said Mr. Devonish. "Sitting down in those caves can be highly fatiguing."

Then a caver went down the rock face and wrapped Miss Muirhead in a sheet.

D. H. M. 18/3/63

Rescuer finds girl dead in a cave

A GIRL student trapped in a pot-hole with a youth died last night as a doctor crawled to their rescue.

She was Heather Muirhead, 18, a twin, of Cranleigh-gardens, Stoke Bishop, Bristol.

The youth, student Robin Gay, 18, was brought out safely.

He was taken to hospital with shock and exhaustion.

Heather and Robin, from Bristol Technical College, were exploring underground caves known as Longwood Swallet, at Charterhouse, Somerset.

Rain

While they were in the caves heavy rain began. Soon flood waters were rising inside.

The Mendip Cave rescue organisation was called out. Firemen fought the flood waters with pumps. Then rescuers including Dr. Stanley Cannicott, of Wells, went in to search for the missing two.

Robin, of Harmer-close, Henbury, Bristol, was found first.

When Heather was found she was dead.

Last night a police officer said: "We understand she was not injured but was overcome by exhaustion and probably shock."

15/7/63
15/3/68

Evening Post

Bristol girl student dies in Mendip cave

A girl died yesterday during a Mendip caving expedition by ten students of Bristol College of Technology.



Heather Muirhead

Heather Muirhead (17), of Cranleigh Gardens, Stoke Bishop, was on the way out of Longwood Swallet, near Charterhouse, when she collapsed at the bottom of a 40ft. vertical rock face.

Four hours later her body was brought to the top in a sheet. Heather was one of four daughters of an executive of Charles Hill and Son, the Bristol shipowners.

One of the rescue party, Mr. Luke Devenish, said: "Her death is a mystery, for she was within 40ft. of safety."

VERTICAL ROCK

"She had to climb a vertical rock. Water was pouring down, and it seems likely that the climb was too much for her."

Mr. Robin Gay (18), another member of the caving party, who lives at 5, Harmer Close, Henbury, Bristol, suffered from shock.

It was after lunch when the party split into two groups. One group went to the bottom of the 350ft. cave. The other group, including Miss Muirhead and Mr. Gay, went down to 250ft.

The second group spent some time in the dank cave in near zero temperature waiting for their colleagues to return before they went down to the bottom.

REAR OF PARTY

But when the first section came back the two groups decided to

re-form and return to the cave entrance together.

Miss Muirhead and Mr. Gay brought up the rear of the party, and it was only when their friends reached the top that they realised something was amiss.

The Mendip Rescue Organisation was alerted, and a party from Wells, including Mr. Devenish, was soon in the cave.

Said Mr. Devenish: "The water was pouring down near the place where Miss Muirhead and Mr. Gay were lying."

"If the others had not diverted a stream which was overflowing into the cave entrance, it could easily have meant death for Mr. Gay as icy water and exhaustion often have fatal effects."

Until last July Miss Muirhead was a day girl at St. Ursula's High School, Brecon Road, Westbury-on-Trym.

ACTIVITIES

Sister Cecilia, headmistress of St. Ursula's High School, Brecon Road, Westbury-on-Trym, where Heather was a pupil for seven years, said today: "She was never a robust child but despite that, was very keen on all outdoor activities."

"When she was much younger, she spent quite a while in hospital, but with us she plunged into all kinds of sports including hockey, tennis and boating."

Heather's twin, Elspeth, and another sister, Julie (11), are also at St. Ursula's.

The eldest sister, Karen (20), is at the West of England College of Art, Queen's Road, Clifton.

29/3/1963

Evening Post? (^{between} 18-22 March 1963?)

Girl (17) died of shock, exhaustion **FATAL CAVE CLIMB** **WAS** **HER** **FIRST**

Seventeen - year - old Heather Muirhead, who died in a Mendip cave on Sunday, was making her first expedition underground, the North Somerset Coroner was told yesterday.

Heather, of 2 Cranleigh Gardens, Stoke Bishop, Bristol, who collapsed in Longwood Swallet near Charterhouse, died from acute heart failure, due to shock and exhaustion, Dr. D. H. Johnson, pathologist told the North Somerset Coroner at Weston - super - Mare, yesterday.

Heather's father, Mr. Alistair Gordon Muirhead, told the Coroner that Heather had joined the Bristol College of Technology caving group, with his permission, "only about a week ago."

Last Sunday was her first caving expedition underground.

"On Saturday she told me she was joining the group at Longwood Swallet with her boy friend. He is an experienced caver," he said.

Dr. Johnson told the coroner that he had found no evidence of contributory disease.

The inquest was adjourned until March 29.

Half an alp downwards for a record

THREE young women at camp in the heart of the French Alps near here spend their days idling in the sunshine and listening to the cowbells.

An idyllic holiday—except that their thoughts are for ever wandering 3,681ft. below ground where their men folk are playing with unknown dangers in trying to beat the world's potholing record.

For a week, 14 Englishmen, the pick of the country's potholers, have been crawling deeper and deeper through the dark icy underworld. Their goal is a hazard which so far has set the limit to the record.

It is a sump of inky water filling a cavern from floor to roof and blocking the way for them into the bowels of the mountain.

His oath

to return

Four of the English party, equipped with home-made diving suits, hope to get through this sump and reach water-free tunnels on the other side.

Leading the English attack is Kenneth Pearce, a 31-year-old metallurgist from Manchester. He came to the Berger Cave last year and got as far as the water barrier.

There he had to retreat but he threw a half-crown into the stream and swore

to come back to recover it. That is what he is doing.

He will lead the way into the unknown.

Pearce and his companions carry with them 60 kitbags of food and equipment. The bags, weighing 40 to 80 lbs. each have to be moved from one base camp to the next as the party presses on to the sump.

Sometimes the work of pushing forward goes on 20 hours a day.

Mrs. Ann Pearce, mother of an 18-month-old son who has been left with Grannie, sits it out on the mountain-side. She has complete confidence in her husband's skill to tackle this "Everest-in-reverse."

Having a

smashing time

"We are having a smashing time up here," she told me. And her eyes wandered to the snowy peak of Mont Blanc 60 miles away.

With her is Diana Graham, whose boy friend Geoffrey Lee, a commercial artist from Flixton, Cheshire, is

Berger Expedition 1963.5th Aug.

Diana Graham waits. Her boy friend is one of 14 English potholers battling with the unknown.

also down below. No pot-holer herself, Diana, an art teacher from Prestwich, near Manchester, told me:

"I have not seen Geoffrey since he waved goodbye before going down the hole. But one of the porters who helped them with supplies had a word with the party two days ago and they were all confident."

The man who knows best

Mrs. Maria Booth, whose husband Noel is down below, is the third of the women who wait. She shares the others confidence.

But one man is anxious, and he is the man who knows most about the "Gouffre," as the pothole is called in French.

Jo Berger, who established the potholing record and gave the hole its name, is worried because of storms in the last two days. He told me:

"I was stopped from going further by that sump down there at the bottom. It is very dangerous and I think very deep.

"It is foolhardy to go on and try to get through it. The pressure down there can be tremendous.

Pioneer has fears

"I am absolutely sure that these English potholers are risking their lives. There are so many dangers.

"There was a tremendous storm last night which means that sections of the pothole which serve as a natural drainage for the plateau turn into raging torrents and would drown anyone if suddenly caught up in them.

"I wish them luck but I am fearful."

But Mrs. Pearce is unshaken. The caverns, she says are immense down there and the boys will know when it is raining and will simply keep out of the way of the water.

So two wives and a girl friend sit in the sun on the Sornin Plateau 5,000 feet up in the Alps on holiday. Just waiting.



Leader of the expedition, Kenneth Pearce, His wife also waits on the mountainside.

Pothole record bid unsafe, says expert

D. Express
From AUBREY THOMAS, Grenoble, Monday
FRANCE'S top pot-holer, Jo Berger, today said he feared for the safety of the British team trying to break the world underground descent record.

At the entrance to the Gouffre Berger, the world's deepest known cavern, near here, he said: "But they seem determined to go on. I wish them luck."

The Britons have been in the cavern seven days. Among them are three frogmen who are trying to find exits from the lake which marked the previous record depth of 3,681ft.

The French authorities are worried because the

fourteen British potholers have no telephone contact with the surface.

And yesterday a storm turned some of the underground shafts into impassable waterfalls.

The Britons, led by Ken Pearce, of Chapel-en-le-Frith, Derbyshire, had hoped to find a way through to the Sassenage Caves—a series of grottoes 4,820ft. below the entrance to the Berger Cave.

Gendarmes today gave the local police station telephone number to the

wives who are camping near the cavern entrance.

Among the wives are Mrs. Ann Pearce and Mrs. Maria Booth, of Eccles, Lancs.

The party also includes Diana Graham, of Prestwich, Manchester, fiancée of potholer Geoffrey Lee.

D. Express 6/8/63

FRENCH FEAR THREAT TO CAVE BRITONS

Express Staff Reporter

GRENOBLE, Monday.

RESCUE teams are standing by at Grenoble tonight to search for the 20 British potholers in the Berger cave below the French Alps.

Nothing has been heard from the team since Saturday, five days after they descended in an attempt on the underground depth record.

SCOFF

Friends of the potholers who are at the base camp a mile from the cave entrance scoff at French fears that the expedition is in danger.

The team has reached a barrier lake at the record depth of 3,681ft., with the knowledge that there is an underwater passage leading on and down. Recently a French team experimented with dye, which filtered from the lake to caves a mile away.

The five frogmen in 25-year-old Bob Wright's team will try to chart a route for the others. The team's friends at base camp said today: "They are very experienced. We are sure they are not in danger."

D. Hunt

7th Aug.

Woman in hunt for 14 'lost' potholers

From AUBREY THOMAS
Grenoble, France, Tuesday.

A 28-YEAR-OLD
woman doctor last
night went down into
the world's deepest
cavern to trace fourteen
British potholers.

Dr Mary Lord and her

husband, Dr. Harold Lord,
of Sheffield, were searching
the huge limestone gal-
eries of the cavern near
Grenoble, in which the Bri-
tish team is trying to break
the world underground
descent record.

They have been eight
days—and there has been
no word from them.

Dr Lord and her hus-

band are friend of the
potholers.

Dr. Lord, her husband,
and a friend, Mike Swain-
son of Sheffield, climbed
down the team's aluminium
ladder which hangs on the
wall of the cavern's first
shaft.

Dr. Lord, who is a keen
mountaineer and potholer,
said: "There have been so
many fears and specula-
tions among French pot-
holers that we want to find
out the truth. We are going
down.

"We will travel light,
carrying only a day's food.
This way we will be able to
climb down quickly."

Vigil at cave

Word on the progress
of 13 British potholers
was awaited today at the
mouth of the Berger Cave
in the Alps.

The speleologists went down
on July 28 in an effort to pene-
trate deeper than explorers
have gone before.

Among the 13 are Mr. Steve
Wynne-Roberts, of Lawn Road,
Fishponds, Bristol, and Londoner
Mr. Mike Boon. Both are
members of the Shepton Mallet
Cave Club.

The cave was discovered in
1953 by a Frenchman, Jo Berger.
He explored it to a depth of
3,500 ft. where a syphon obstruc-
tion blocked the way.

Although French cave experts
have begun to express concern
about the Britons, no rescue
efforts have been organised.

E. Post.

A three-member surface team
which is awaiting the expected
return of the potholers this
week-end expressed no concern.

Berger himself set up a tent
near the cave entrance and
planned to go down in a day
or so if no word reached the
surface on the progress of the
Britons.

Berger said that if the pot-
holers attempted to pass through
the syphon "the risks would be
enormous," because of recent
rains.

The Britons went down with a
great deal of equipment but did
not set up a telephone line.

E. Post

CAVERS MAY BE UP SOON

Thirteen British pot-holers, who began exploring the Berger cave in the Alps on July 28, were expected to return to the surface today or tomorrow.

They include Mr. Steve

Wynne-Roberts, of Lawn Road, Fishponds, Bristol, and Londoner Mr. Mike Boon, both members of Shepton Mallet Cave Club.

There was no fresh word on their progress at the cave mouth

today, but no concern was expressed by a surface party left behind.

The speleologists are attempting to go beyond the depth of 3,500 feet reached by a Frenchman, Jo Berger, when he discovered the cave in 1953.

Aug 8th.

Pothole men are safe

From DENNIS EISENBERG

GRENOBLE, France, Thursday

THREE of the 13 British pot-holers, who have been in the Berger cave near here for the past 10 days, emerged from the cave entrance tonight.

They were 25-year-old Stephen Wynn-Roberts, from Bristol, 24-year-old Geoffrey Lee and Robert Toogood.

The three men said the other 10 members of the group would come up tomorrow.

They said the 10 were spending the night at a point about 150 yards from the exit because they were very tired.

All day long rescue workers had waited at the cavern entrance for news of the Britons who were trying to beat the world depth record for potholing.

Criticised

A police official told me: "We will give them until Saturday. Then we will throw a full rescue effort into operation."

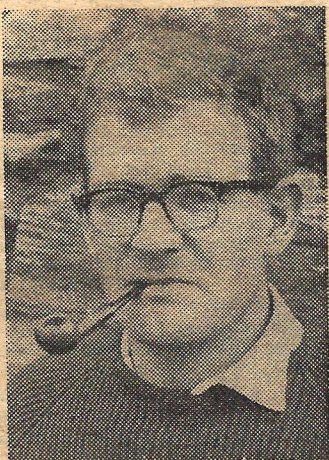
And he criticised the British team for not taking walkie-talkie radio with them into the cavern.

Mrs. Ann Pearce, wife of the expedition leader, said: "I am sure everything's all right. My husband promised that he would come up on Friday and I am sure he will."

Aug 9th.

9th Aug

E. Post

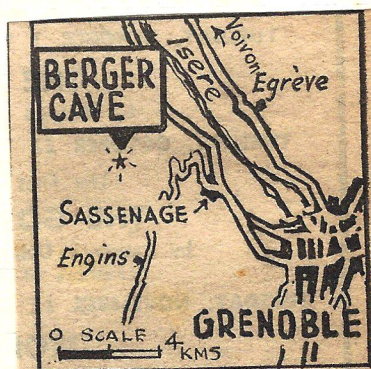


Mr. S. Wynne-Roberts

CAVERS CLAIM DEPTH RECORD

Two members of the British cave exploring expedition reached a new depth record in the Berger Cave, in the Alps, according to unofficial reports today.

Three members of the 13-man potholers group came to the surface last night after being down since July 28. They were reluc-



tant to talk with reporters until their 10 companions came up, perhaps later today.

However, fragmentary reports said two frogmen with the group, Ken Pearce (31), Manchester, and Steve Wynne-Roberts (25), of Bristol, last Monday went through a siphon blocking the cave and thus extended the depth record from 1,122 metres (3,681 feet) to 1,135 metres (3,723 feet), or 42 feet farther than the record.

2d Aug

D. Hunter

POTHOLE BRITONS ARE SAFE AND WELL

From AUBREY THOMAS

Grenoble, Thursday

THE fourteen British potholers who tried to beat the world's underground descent record are safe.

Three of the party which entered the world's deepest cave near here ten days ago walked out tonight.

They said the eleven others were spending the night 150 yards from the exit because they were tired—but would surface tomorrow.

Record

The three would not say whether the record bid was successful or not.

They are Stephen Wynn-Roberts, 25, of Bristol; 24-year-old Geoffrey Lee and Robert Toogood.

They showed up as French potholers got gear together for a rescue attempt.

The Britons planned to beat the 3,681ft. descent by Frenchman Jo Berger. The Britons angered French experts because they had no phone link with the surface.

E. Post

BRISTOL MAN TELLS OF 'JULES VERNE' CAVE

Members of the British expedition which set up a new depth record in the Bergen Cave near Grenoble, France, were preparing to leave for home today.

The Bristol member of the team, Stephen Wynn-Roberts, a 25-year-old support diver, said the cave was one of the finest he had ever seen.

"In parts it is really beautiful and grotesque, there are stalactites which look like poached eggs on top because of the various mineral deposits. In one part it is real Jules Verne."

The man who actually achieved the record depth, Ken Pearce, climbed out of the cave early today. His first request was "Any food?" He beat the previous record of 3,681 feet by about 40ft.

10th Aug

D. H. H. H.

10th Aug

THE HERO—3,500 ft DOWN

FROGMAN Ken Pearce, 31, was the hero of the fourteen-man British pothole team which has beaten the international descent record in France, it was revealed yesterday. For Ken, of Chapel-en-le-Frith, Derbyshire, paved the way for the victory by breaking through a narrow passage more than 3,500ft. underground. . . .

Beat

It was a passage which pothole expeditions have been trying to break through since 1956 when the previous descent record of 3,681ft. was set up.

The British team beat the

record by 40ft. during a ten-day descent at the world's deepest cavern, the Gouffre Berger, near Grenoble.

Three of them surfaced with the news on Thursday.

Yesterday they spoke of Ken's successful assault on the underground passage which led to the discovery of a lake.

The record was broken by diving into the lake.

Later yesterday the three men descended again into the Gouffre Berger to help the other eleven bring up the team's equipment.

Potholers up

GRENOBLE, Friday. — British potholers tonight staggered to the surface after a record-breaking descent into the world's deepest known cave, 20 miles west of Grenoble. They had been 11 days underground. — Express News Service.

11th Aug

Times

Potholer says I'll return

From our Correspondent

PARIS, August 10.—The 13 British potholers who set a new world underground depth record of 3,721 feet in the Berger Cave near Grenoble, returned to the surface today.

The leader of the £1,000 expedition, Mr. Kenneth Pearce, 31-year-old lecturer in metallurgy at the Manchester College of Science and Technology, said he would return with a larger, better-equipped party to continue exploring the cave.

Bearded pot-holer home in Bristol

Pot-holer Stephen Wynne-Roberts walked into work in Bristol today with a two-week growth of beard gained on his record-breaking trip in the Berger Cave, near Grenoble.

His eyes were slightly shadowed through lack of sleep and his hands were scratched and cut—the scars of strenuous caving without any contact with the outside world that awaited anxiously for news.

But 25-year-old Mr. Wynne-Roberts, who is a works study officer with A.E.I., was not the least bit enthusiastic about the new 3,720-foot world caving record he and his party set up.

"We have done very little technically in the climbing sense," he said over a lunch-time beer in the Royal Table, at Barton Hill.

"Mind you that one trip was worth many years of caving experience," he added.

DEEPER

Mr. Wynne-Roberts, of Edenhurst, Lawn Road, Fishponds, thought that a future party could go still further down. "I think there is a big chance of getting a lot further. They could possibly find more caverns with airspace above the water and I think there may even be more dry chambers.

The party leader Kenneth Pearce, he said, had gone

deeper than anyone else. "Below the sump he found another passage and then another sump."

As second diver Mr. Wynne-Roberts dived the first sump but had to return because of a blockage in his ears.

The trip down, he said, was strenuous and tough, travelling over boulders heavily laden with equipment.

One of the most magnificent sites was the cave known as "The Hall of 13" at Campe One.

BROKEN

Before the party went into the cave they were told that the in- were broken and they would have no outside contact.

Inside they worked 28-hour shifts, losing all idea of time and day. They slept in damp sleeping bags and had the heavy equipment and supplies at the way to the bottom.

"But it was worth it," he said. "I would do it any day but it would have to be organised in a different way.

"We have learnt a lot and seen a lot but I feel we have missed a lot as well—just like arriving in a big city for the first time and not being allowed off the coach."



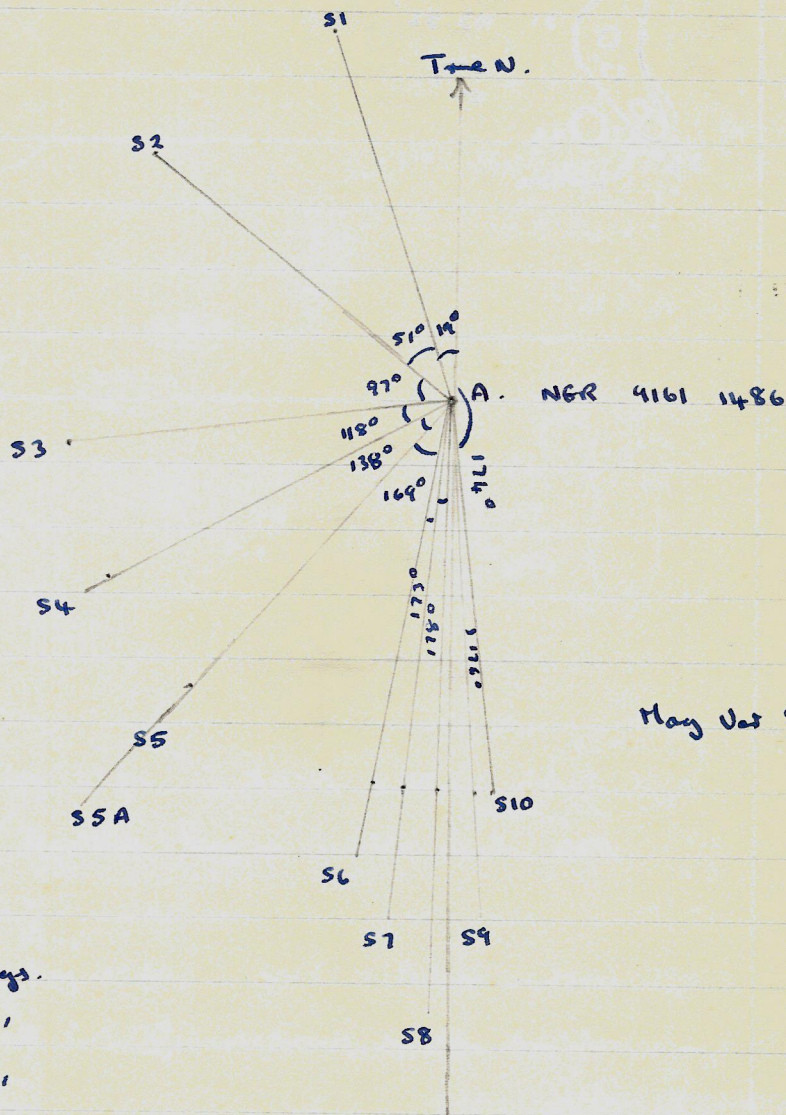
Mr. Wynne Roberts pictured at his "local," the Royal Table, Barton Hill, Bristol, today.

Potholers meet

More than 150 potholers attended in Sheffield yesterday the first conference of the British Speleological Association since the war.

Annual Holiday.South Wales.

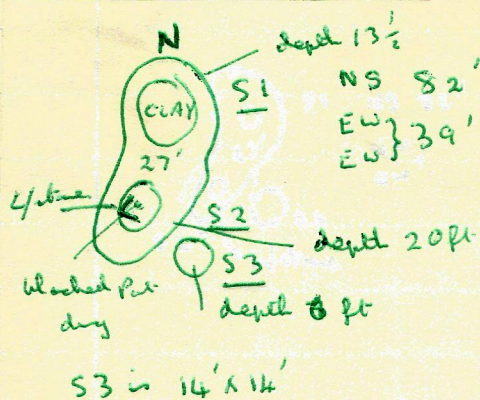
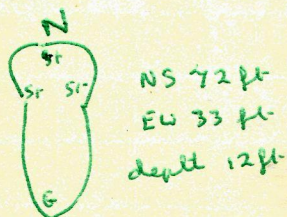
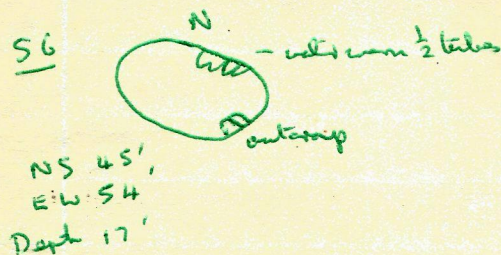
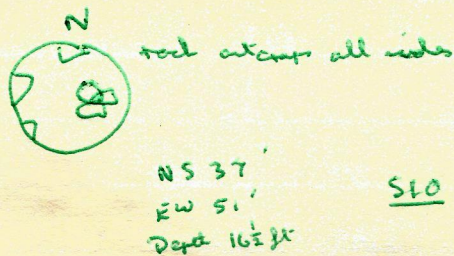
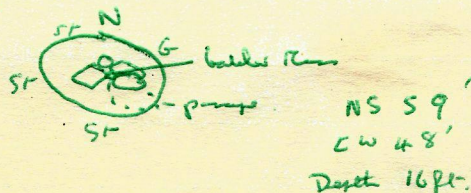
- Aug 24th Journey up.
- 25th Sinks on de Hepste.
- 26th Mutton Pot & Scallets behind Tins old Cottage.
- 27th Caves at Gwynnion - scallets above top of 2nd map.
- 28th Set point A. finding of Theoretical Pot & cave on ridge.
- 29th Entry into Theoretical pot.
- 30th Survey set point B C D E F
- 31st Pull Down.
- Sept 1st Corn Durr and Whites Cave.
- 2nd Sam Helen and Maen Madoc.
- 3rd Set Point G.
- 4th Set Point H. Einans Hde. Fluorescein test.
- 5th Set Points I. J. K. New caves above YHA. Dig at end of Torn Drain.
- 6th Torn Drain, Cave above white hoody, Pick up charcoal, Will Hole.
- 7th Journey Home.

28th Aug.Set Point A.

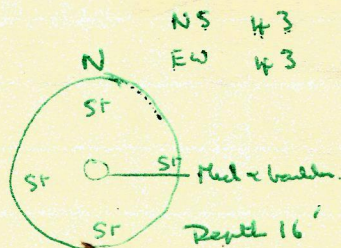
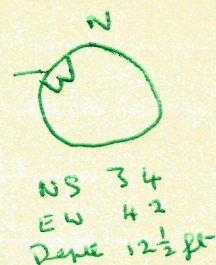
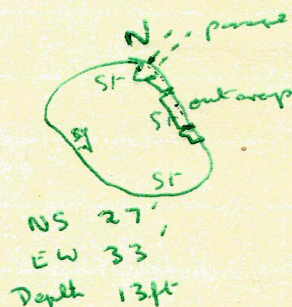
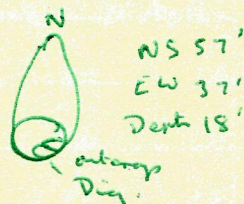
Length of legs.

S1	62'		
S2	47'		
S3	13'		
S4	123'		
S5	75'	SSA	125'
S6	156'		
		S7	189'
		S8	244'
		S9	331'
		S10	381'

Plans of S1 - S10.

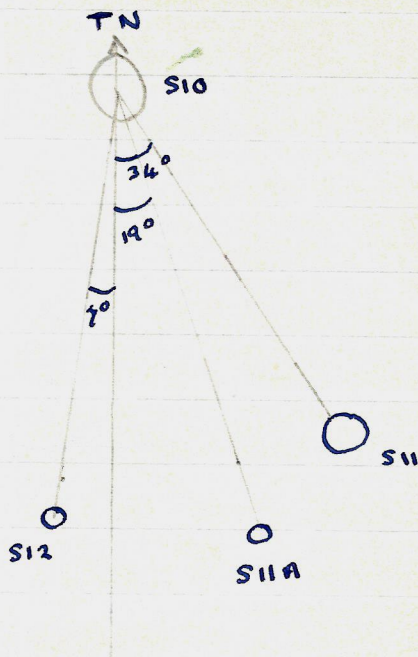
S5S6S8S10

28.8.63

S4S5Aoutcrop
holeS7S9

30th Aug.

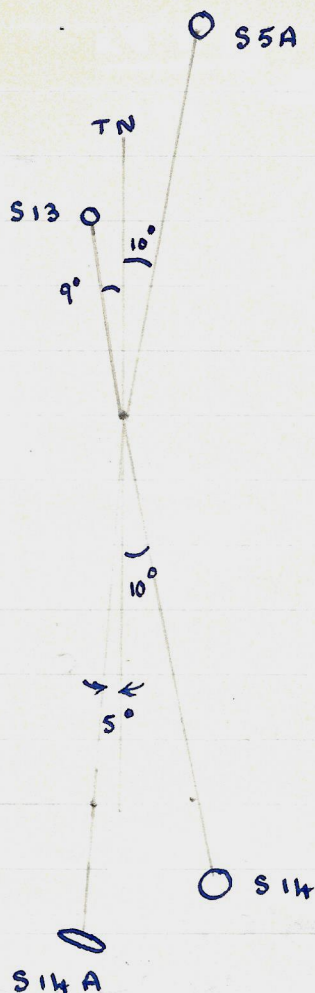
Set Point B.



S 11. leg 51 ft 20NS x 25EW depth 15 ft
Boulders clay & pebble chole ORS.

S 11 A. leg 65 ft 6NS x 8EW depth 7 ft
Vert lat h/stone very small. boulders clay & ORS infill.

S 12. leg 166 ft 20 x 20 depth 12 ft.
Small h/stone boulders.

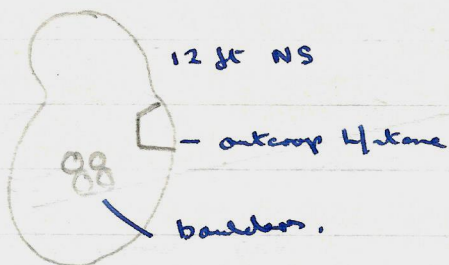
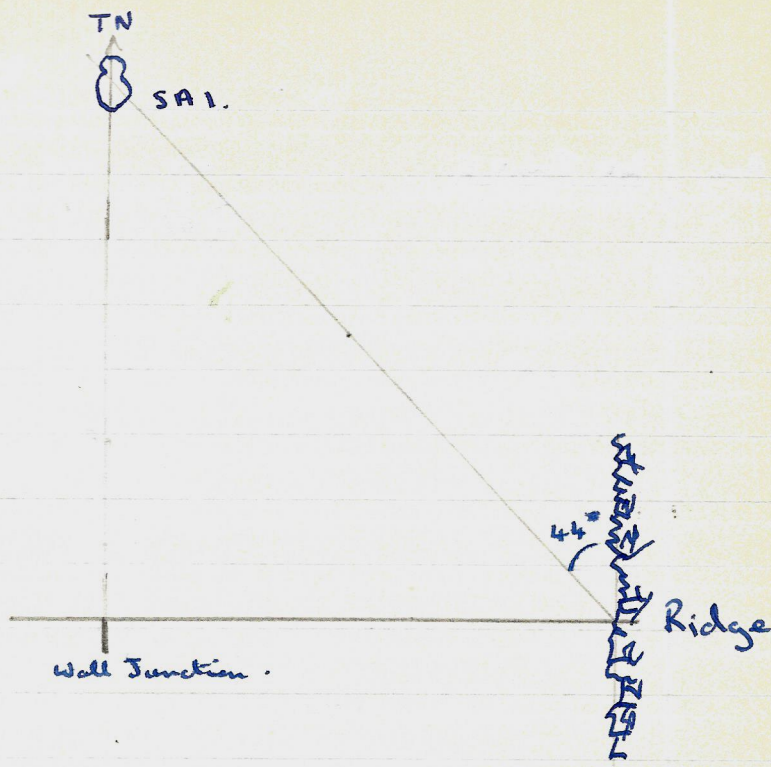
30th Aug.Set Point C.

S 13. key 64 ft. 20 x 20 depth 10 ft. No visible L/tone - complete clay infill.

S 14. key 62 ft. 20 x 20 shallow. L/tone outcrop N.

S 14 A. key 51 ft. 3 NS x 10 EW shallow. L/tone ridges and boulders. B/clay & ORS infill.

30° Ang

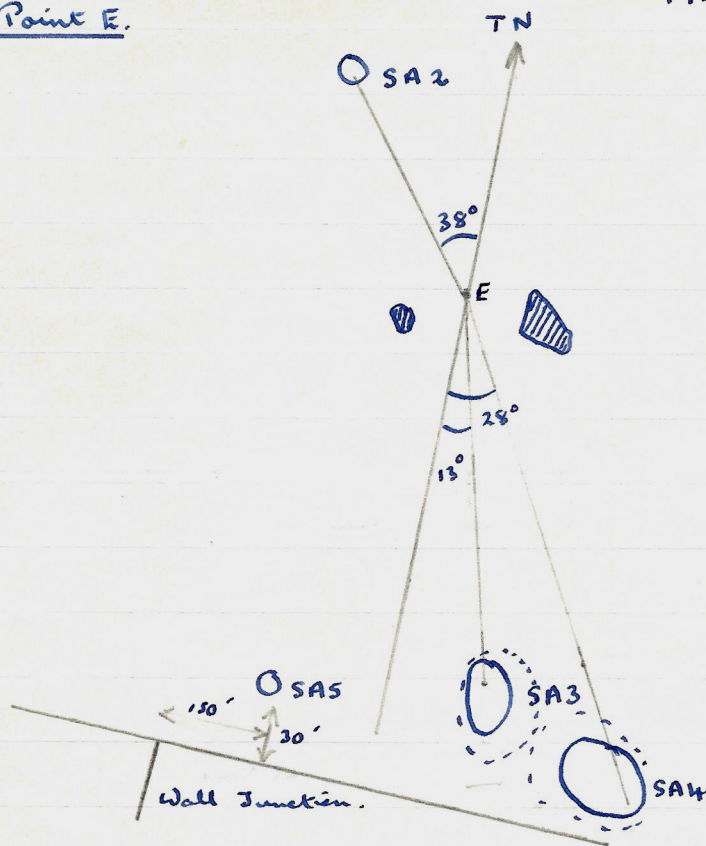
Set Point D.

SAI. 3 1/2 ft NS x 4 1/4 ft EW. depth 14 ft.

Isolated scallier at top of field above the two boulders along ponds.

30th AugSet Point E.

PAVE'



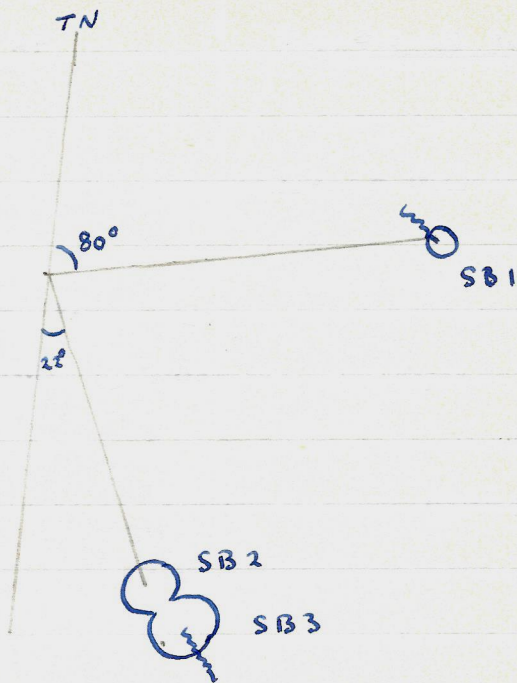
SA 2. leg 65ft. 20NS x 25EW. Depth 11ft Clay infill.

SA 3. leg 37ft. 100NS x 82EW. Depth 25ft

Dig in ORS small boulders and B/clay.

SA 4. leg 130ft. 66NS x 71EW. Depth 20ft. Tree in lower part - no visible boulders, clay infill.

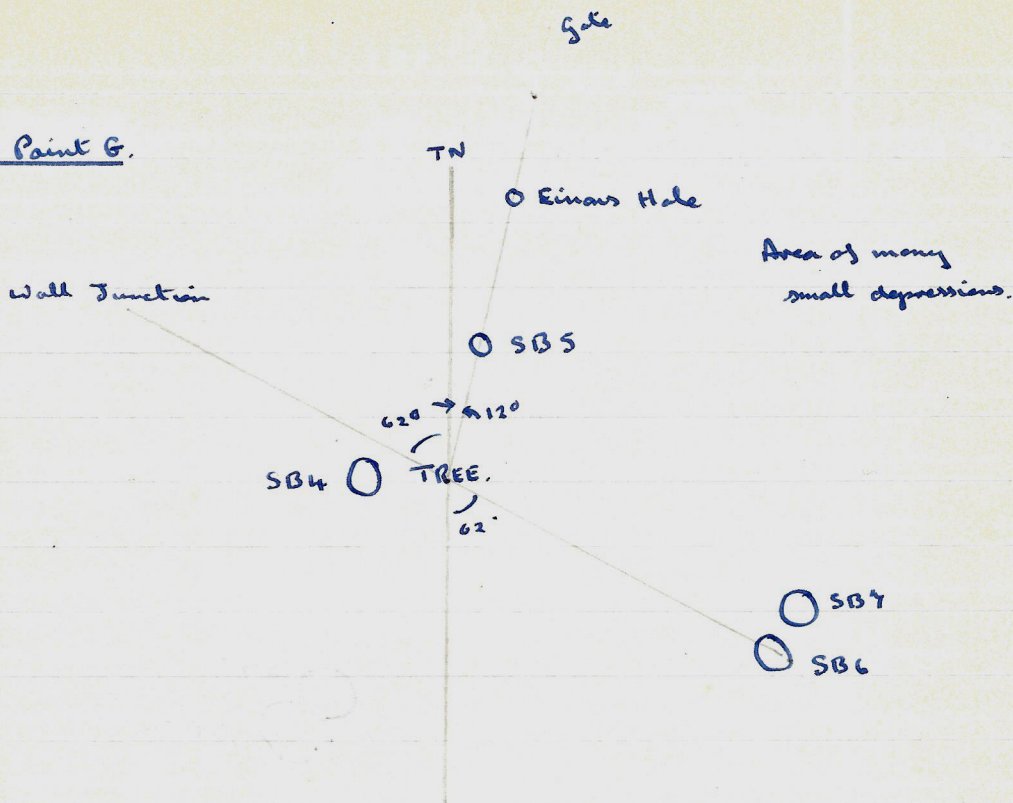
SA 5. Small - no trace boulders, clay infill.

30th AugSet Point F.

SB 1. leg 90 ft. 35 ft EW. depth 13 ft. intermittent stream from marshy ground. ORS = B/day.

SB 2. leg 27 ft. 38 NS x 50 EW. depth 15 ft wet & marshy

SB 3. 45 ft NS x 70 EW. depth 25 ft. intermittent stream to B/day.

3rd Sept.Set Point G.

SB 4. leg 6 ft. 34 NS x 46 EW depth 10 ft. Clay infill.

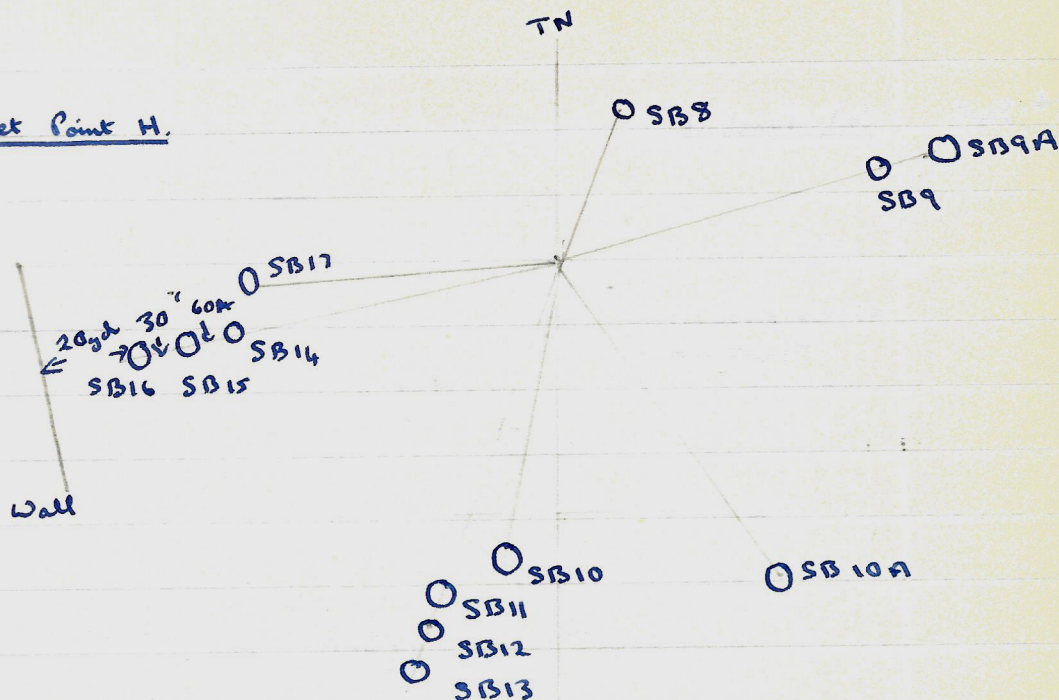
SB 5. leg 45 ft. 40 NS x 50 EW depth 10 ft. Clay infill.

SB 6. Shallow M/grit, ORS and B/clay. leg 165 ft

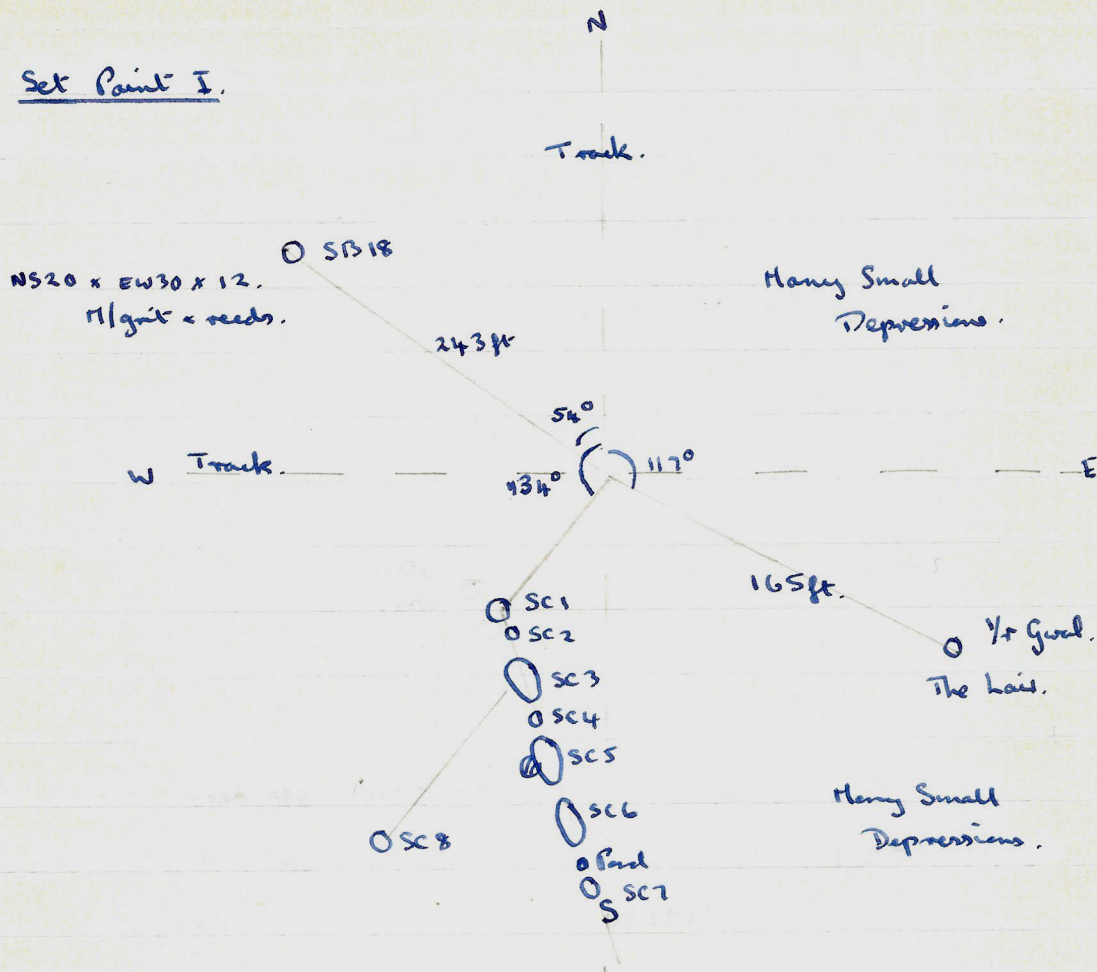
SB 7. 50 ft NE of above. Shallow B/clay.

4th Sept

Set Point H.



SB8	leg 27 ft	12WS x 12EW	6ft deep water on H/grit.
SB9	132 ft	30 x 40 x 6	fractured H/tone - dig by H. Knee.
SB9A	172 ft		Shallow H/tone & B/day.
SB10	41 ft	30 x 30 x 20.	Collapse in H/grit dip 15° NW
SB10A	54 ft		Shallow B/day.
SB11	210 ft	30 x 20 x 10	H/grit and B/day
SB12	230 ft		Small B/day.
SB13	250 ft		Small B/day.
SB14	190 ft		Shallow B/day
SB15	250 ft		Shallow damp needs.
SB16	290 ft		Shallow damp needs.
SB17	210 ft		Double, shallow B/day.

5th SeptSet Point I.

SC1 40 x 40 x 15 H/quit and B/clay. 141 ft leg.

SC2 H/quit outcrop.

SC3 20 x 30 x 12.

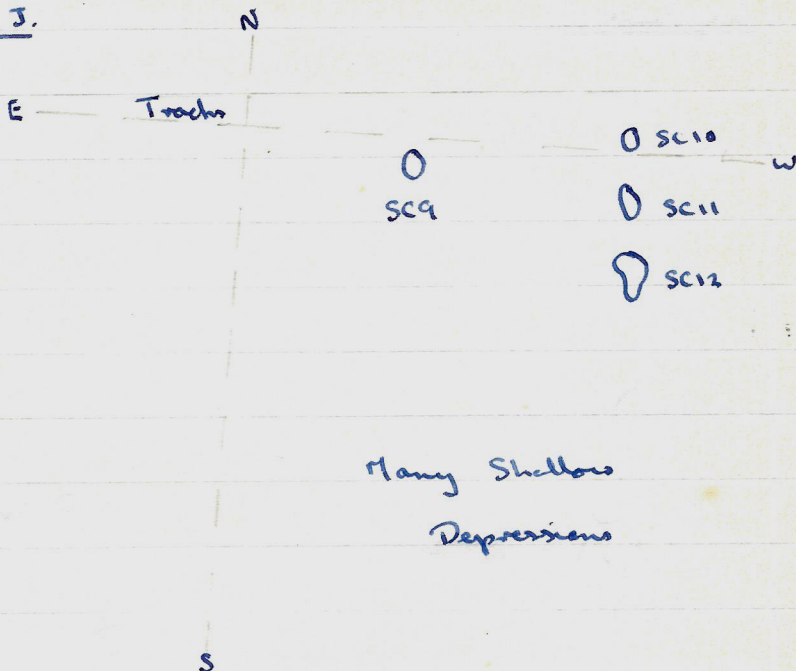
SC4 Small | reeds.

SC5 40 x 15. Shallow.

SC6 100 x 20 water inlets in bottom L/ stone blocks.

SC7 20 x 30 x 8 H/quit, water inlets under quit boulders on S. leg 492 ft.

SC8 20 x 20. H/quit & slight B/clay. leg SC3 - SC8 is 180 ft.

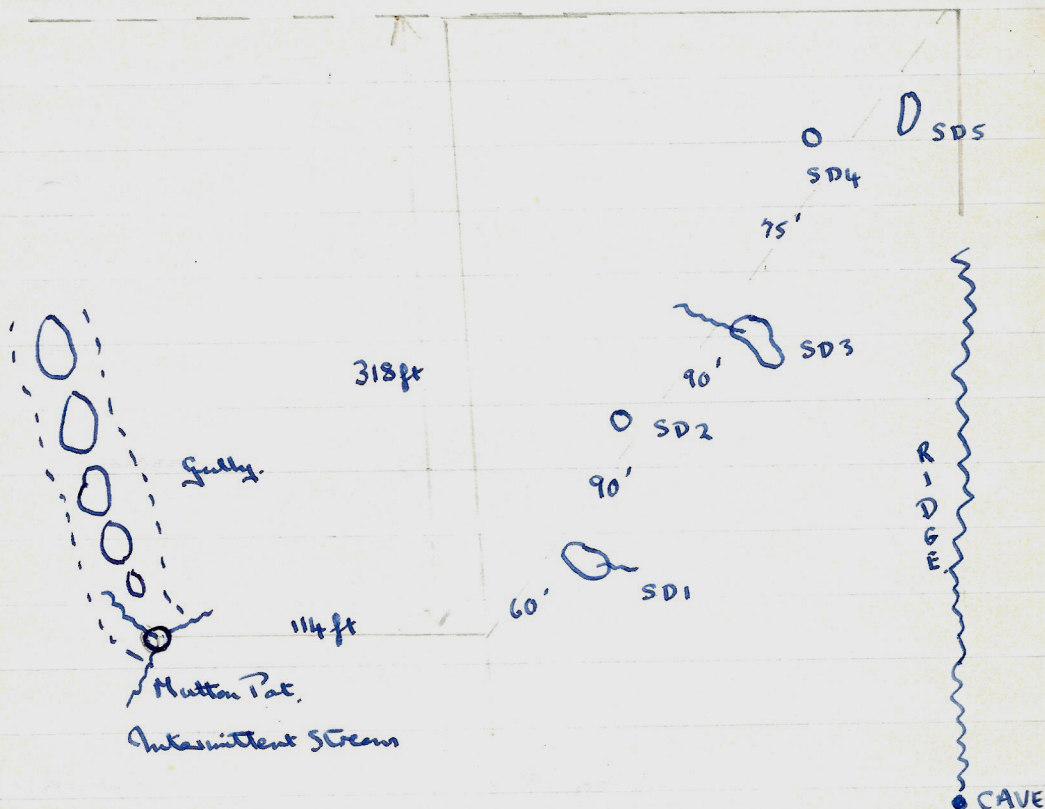
5th Sept.Set Point J.

SC9. Leg 180 ft 30NS x 20EW. depth 15 ft. Intermittent
isnk under H/grit exposure.

SC10. Leg 249 ft. Shallow H/grit boulders.

SC11 S side 63 ft from track. Wet - shallow - reeds.

SC12 18 ft from SC11. Double. Top is shallow bottom is a
riff in B/clay.

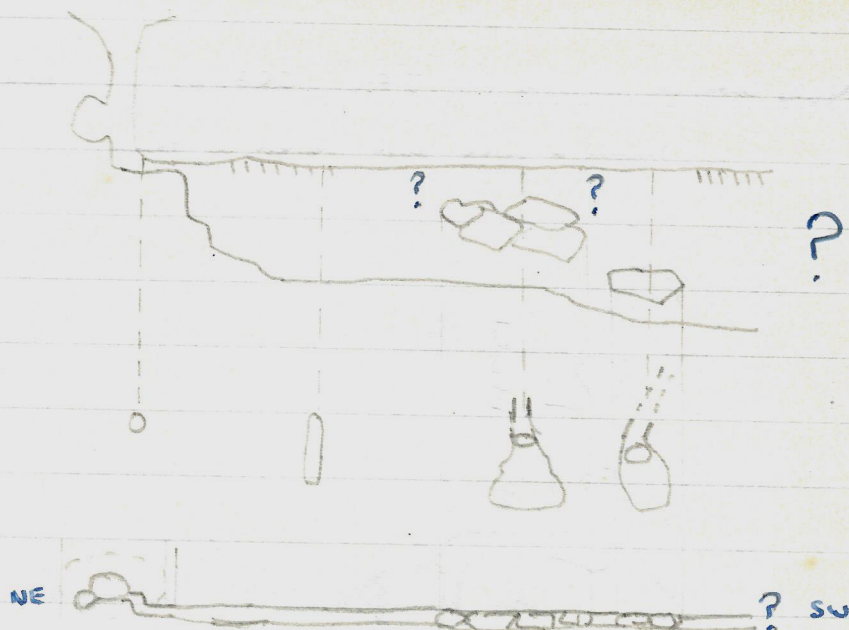
5th Sept.Set Point K.

SD 3 }
 SD 1 } Intermittent Stream.

SD 4 }
 SD 2 } limestone outcrop SD5. Dry

NGR Mutton Pat 9209 1351.

NGR Cave or Ridge 9224 1345.

26th Aug.

Mutton Pat. 9209 1351. CRG. Grade 2. RM, BC, JF.

Scale 1:180.

Intermittent water from top of float - Scallopings vertical in entrance shaft, half tubes, fluting. Float of inverted B/ clay and ORS boulders. Some M/ quartz also.

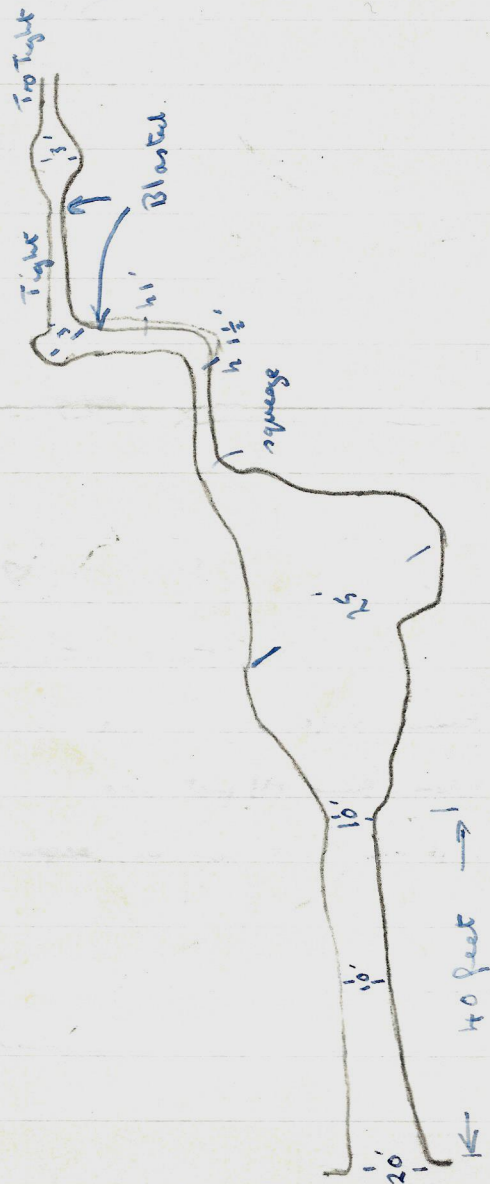
Pre-glacial but new in comparison to the caves in the river valleys.

NIS Continuation could be seen but is very tight. system very tight and blasting required.

27th Aug.Upper Cave at Gungahian. J.F. CRG. 2.

NCR 9211 1461

Known to SWCC and blasted by them.

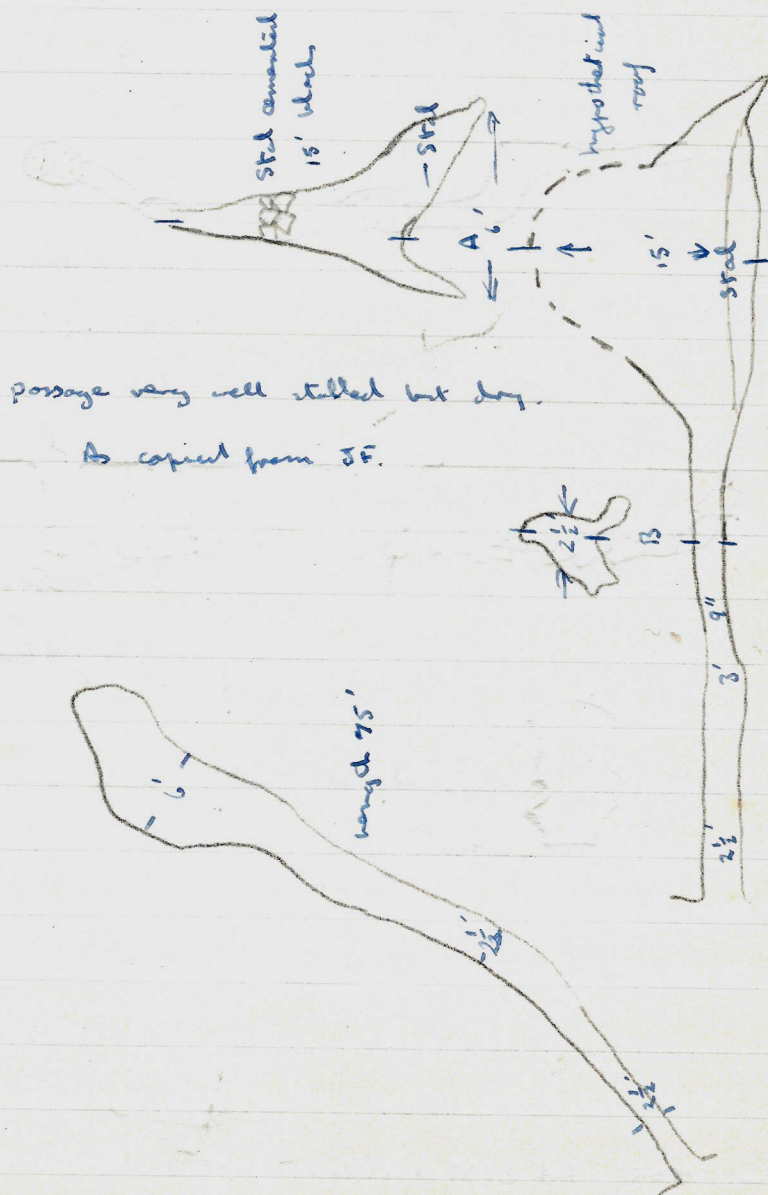


As copied from J.F.

See NCR 1461 (3) 14. (1964)

27 Aug

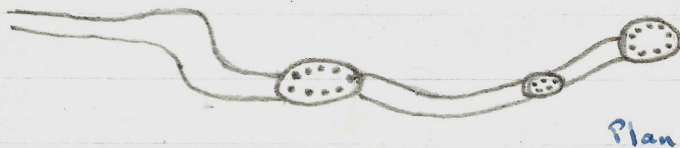
Lower Cove at Gungahlin. JF. CRG. Grade 2. NGR 9209 1458.
 known to SWCC.



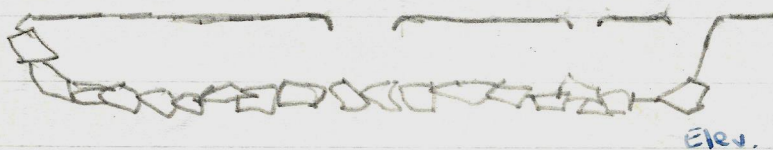
See MNRC File 3(3)14. (1964)

28th Aug.Cave at NGR 9172 1486. CHG grade 2. H.K.

Known to Geoff Roberts.



Plan



Elev.



Section

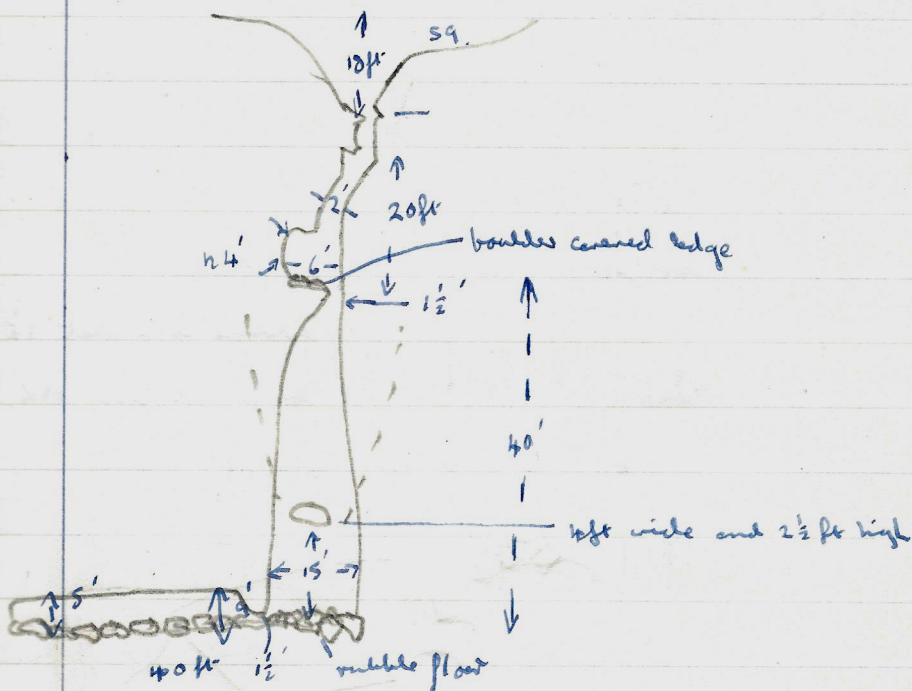
Scale 8' = 1"

As copied from H.K.

See MNRC Feb 1(3) 18 (1964)

CRG - Grade 2

JF- RM.

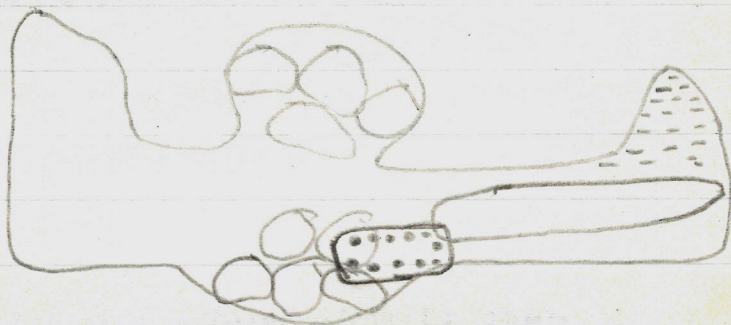
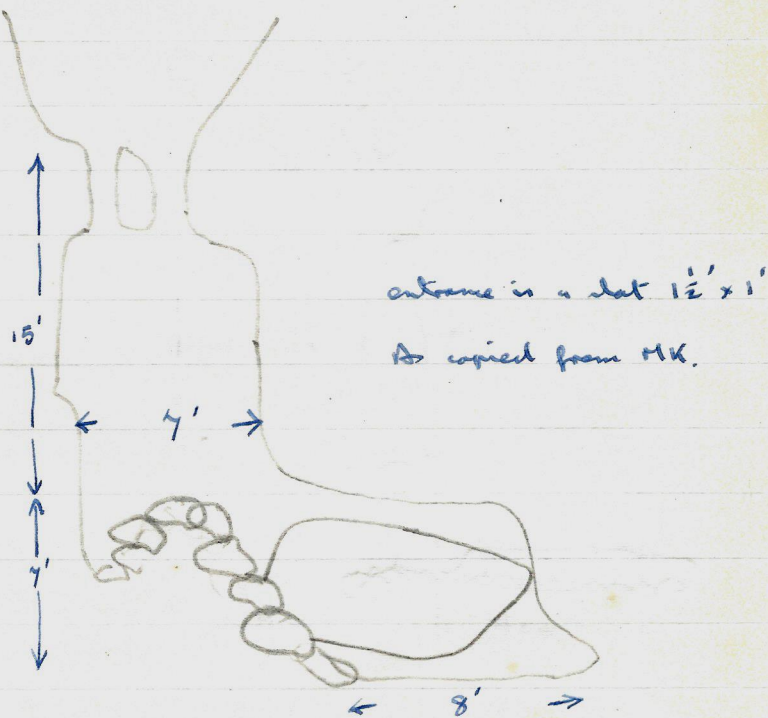


Bedding near horizontal - similarity to $\frac{1}{2}$ size pots.
large boulders removed, entrance chipped up to allow
entry - only JF & RM (too tight for others). Filled in
after descent and marked VNRC Done 22/8/63.

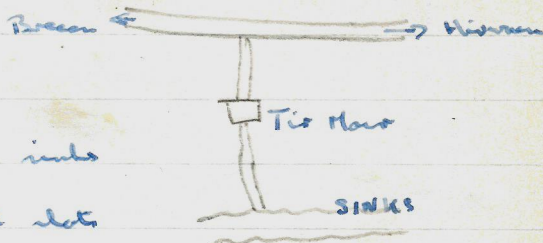
See MNRC Vol 1(3)16(1964)

4th SeptEimons Hole NGR 9196 1424. CRG Gate 2. M.K.

See MNRC Int 1(3) 18 (1964).



25th Aug. Sinks on the Hepate.



large amount of water into
in two places. Vertical slots
6-8" across and to a probed depth to 1-2 feet. These depths
are not accurate due to clay, rubble & boulder fill.



Fainting of 4 ft. down to show difference as in
diagram. Not enough water for the larger
slots below to be seen in action.

Other Cans found in 2 gulping Holes and
Rhododendron Hole by MK & JF.

Party consisted of B. Craig, J. Fortnum, Mike Kneel,
Phil Bamford & Self. Bay Derry 30th - Sept 1st.
Geoff Roberts Sept 2nd to 7th.

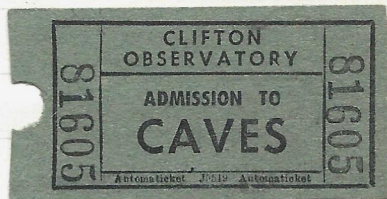
See pages 74-83 in this diary for notes on lecture in
the above.

See report also in MNRC Int 1, (3), 9/24 (Jan 1964).



12th Sept. Visited Hilliers Cave with a party from Keynesham Youth Club - most of them had quite a good trip although only half went to the end of suicide. the others to Cambridge Grotto. 20/2/52

14th Sept. Observatory Cave.



to see attached rough

survey made by self on above date.

Cave Moths.

HERALD.

White - feelers and legs.

Orange - spots on wings.

TRIPHOZA. Tissue Moth.



Appears in several places.

Flashes golden with light

passing over it in certain directions.

29th Sept.

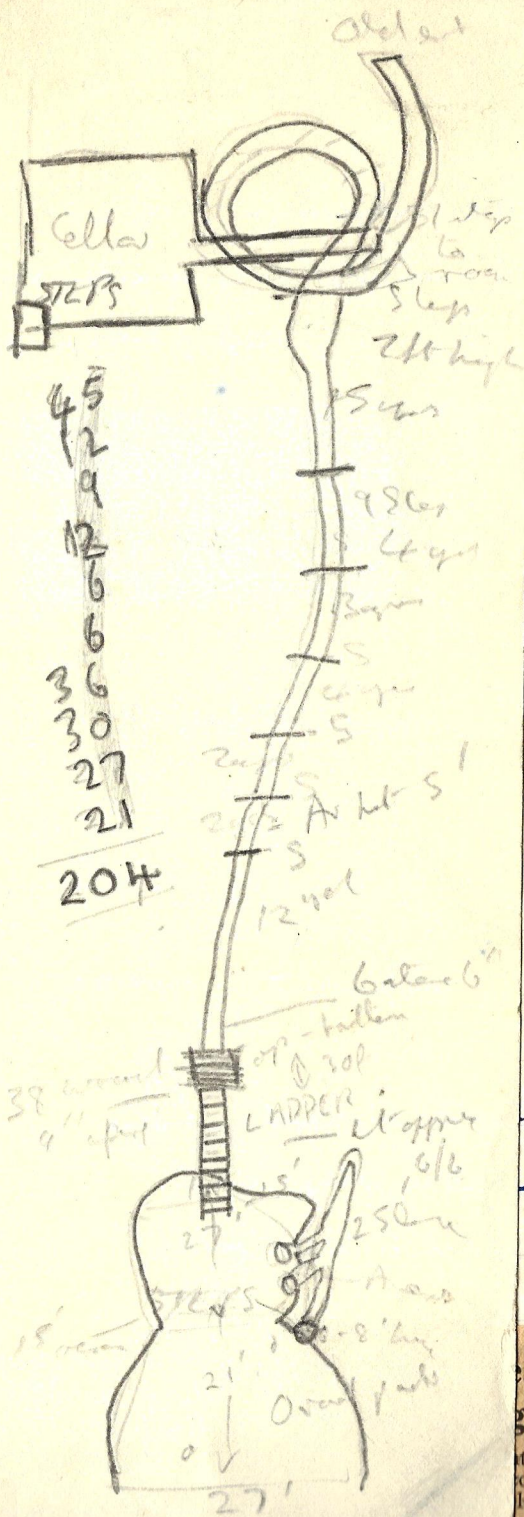
Cave dwellers of the Old Stone Age

Sound, colour, 17 minutes (Encyclopaedia Britannica Films; hire from Rank Film Library, Aintree Road, Perivale, Greenford, Middlesex).

Some excellent reconstruction scenes trace the life of Neanderthal and Cro-Magnon men, showing the gradual development of techniques for hunting, the making of clothing, and the preparation of tools and equipment. The film hints at the growth of cave paintings and the development of social life. Very useful.

Inquiry on Lascaux cave paintings

The French Government has appointed a scientific study commission to save the 25,000-year-old cave wall paintings at Lascaux in south-west France, which are threatened by a green fungus growth.



Sept.

D. Tel.

27/5/63

CHEDDAR CAVES DOUBLED IN VALUATION

RATES BURDEN AT LONGLEAT

By **JOHN ARMSTRONG**,
Daily Telegraph Estates Correspondent

VISCOUNT WEYMOUTH, son and heir of the Marquess of Bath, who lives at Longleat, Wilts, one of the largest historic mansions in England, has an extra rating problem on his hands which will take months to resolve. This is over the re-assessment of his Cheddar Caves in Somerset.

Their valuation has been more than doubled at a total of £20,870.

At this figure and with future poundage rate increases the public could eventually have to face higher admission charges to this great subterranean attraction.

Lord Weymouth's advisers are considering an appeal against this revaluation. The caves and all the family land except the park at Longleat were transferred to Lord Weymouth by his father a few years ago.

CAVE'S VALUATION £9,500 increase

The Cheddar enterprise consists of two main caves, Gough's and Cox's, both famous for their stalactites and stalagmites. Gough's, by far the larger, has had its valuation raised from £7,550 to £17,000 and Cox's from £2,800 to £3,870.

The question of how to value caves is one of the oddest in the rating field. The method of assessing the rateable value of houses is how much rent they would fetch under present day conditions.

The Cheddar caves are uninhabitable, yet they must have a rental value as a form of entertainment. Their rates were last fixed about 1954. Since then there has been no alteration in use. Their restaurant is nothing new. It was there before the war.

POSSIBLE APPEALS House and Cottages

Cheddar's staff quarters, two cottages and a manager's house, are each rated separately and their revaluation is at about the national average of 2.6 per cent. higher than the old figure.

The family estate is not being frivolous in its appeals over rating. Of about 200 cottages on the Wiltshire estate only about 20 have been earmarked for possible appeals.

Longleat House, which is owned by Lord Bath, is almost certain to be subject to an appeal. Its rating revaluation has gone up from £426 net to £1,222. It is not the sort of property that anyone would want to rent because of its size.

Its condition has not changed since the last rating valuation. Lord Weymouth lived there in 1956.

His apartments have been redecorated since then but that does not necessarily add to the letting value of such a place especially with the thousands of public visitors trooping through the state rooms most of the year.

'Bull' makes him potholing champ

WORLD champion caveman Geoffrey Workman saw daylight yesterday for the first time in 105 days.

And he revealed what

By **ALLAN STANIFORTH**

kept him going since June 16 in constant darkness beneath the Yorkshire Moors.

The secret was... "BULL."

Geoffrey, 34-year-old

father of two, used the "bull" and discipline he learned in the RAF to keep him working, washing, note-taking and having a regular hot meal.

But even RAF discipline did not persuade him to

take a bath in the icy waters of Stump Cross Caverns, a two-mile network of caves near Pateley Bridge.

"That's the first thing I really want—a hot bath," he told me as he faced the cheers of hundreds of potholers and visitors.

The wind howled and rain poured down on the bleak moors as Geoffrey emerged.

"I took one look and very nearly went down again!" he said.

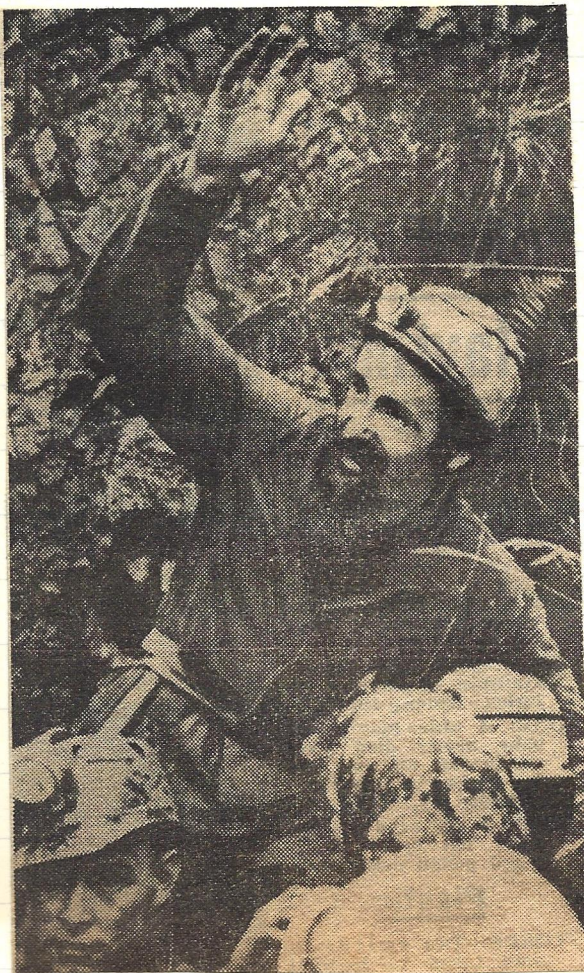
Record

How did he feel? "Fitter than when I went down," he said.

Was he bored?—"Never. I'm convinced I could stay down a year if necessary."

The previous underground endurance record—sixty-two days—was held by a Frenchman.

LAST WORD from Geoffrey's wife, Jessie, 32: "I'm a bit sick of the fuss. All I really want is to have him home again."



HE'S OUT! Friends "chair" caveman Geoff as he comes up.

Sept 30th

D. Morris

22nd Sept.4525.

5052 5569.

B.W.W.

As per Charles House Mining Committee.

An adit 3 ft wide and 1 ft high. Unexplored due to stream.

4549.

5099 5531.

Covered by concrete slabs.

Found to be 35 ft deep as described Russell 3, 28 (1935).4580.

5099 5526.

Filled to surface. See Russell 3.4581.

5101 5522

Filled to surface. See Russell 3, 28.4582

5117 5513.

Filled to surface. See Russell 3, 28.4583

5065 5526

Filled to surface. See Russell 3.4584

5069 5538.

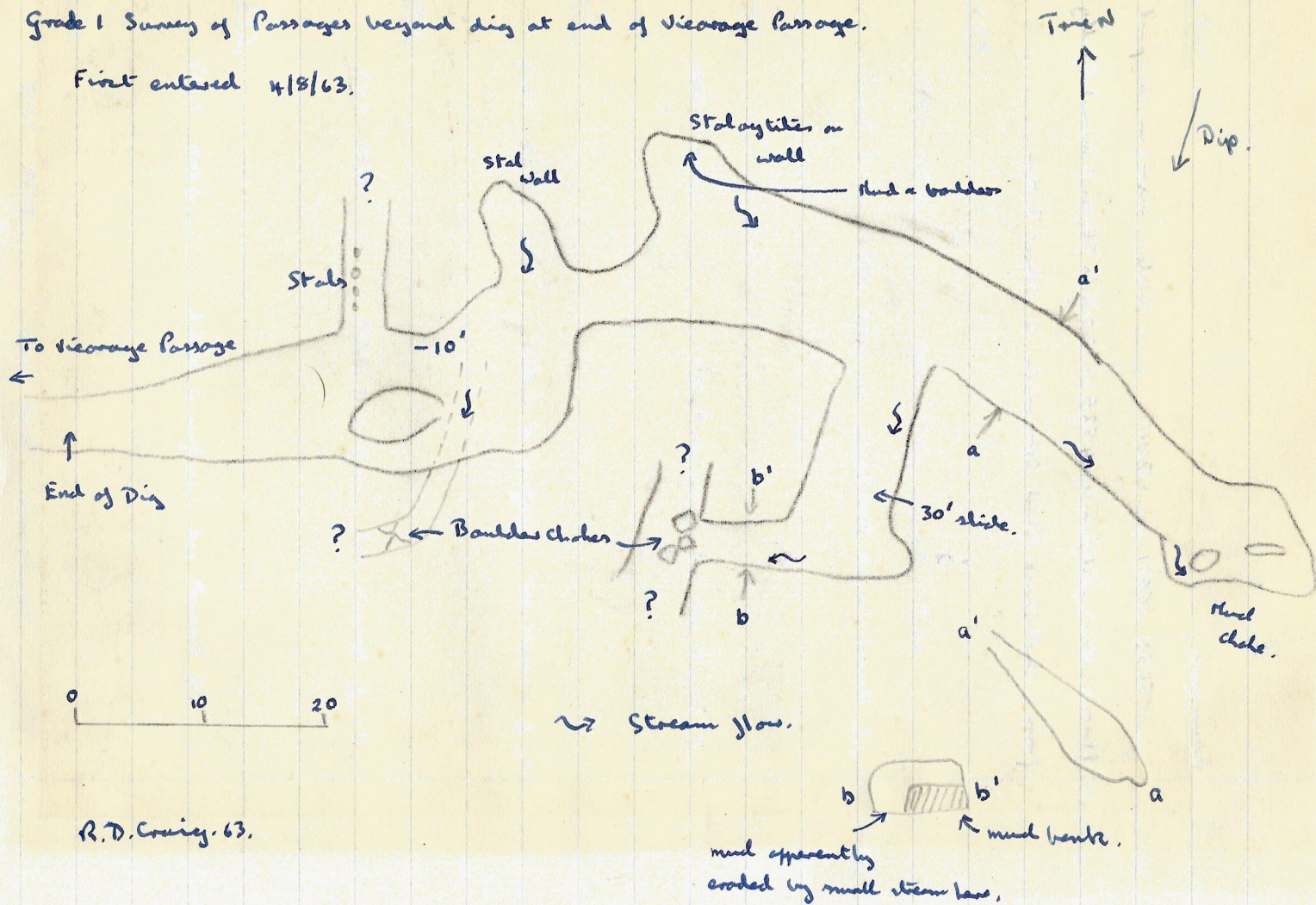
Open Adit - unexplored.

Resurgence.

6053 5521. BW. Water rises in a pool 3ft deep and flows into adit/mine 4525 - 20 yds SE in mined gully on LHS of road from Chertashurst School Cross roads to Velvet Bottom.

Grade I Survey of Passages beyond dig at end of Vicarage Passage.

First entered 4/8/63.



R.D. Conroy, 63.

Oct 16d

SEVEN-INCH SQUEEZE



Reporter John White and photographer George Edwards rest on the gorge face.

TO CAVE OF MYSTERY

Two Bristol teenagers have discovered a new cave system in the Avon Gorge.

Already it has been explored to a depth of 100ft., and is to be opened up still further.

The system is a continuation of the already known Hadies Cave. Its entrance is 150ft. above Portway.

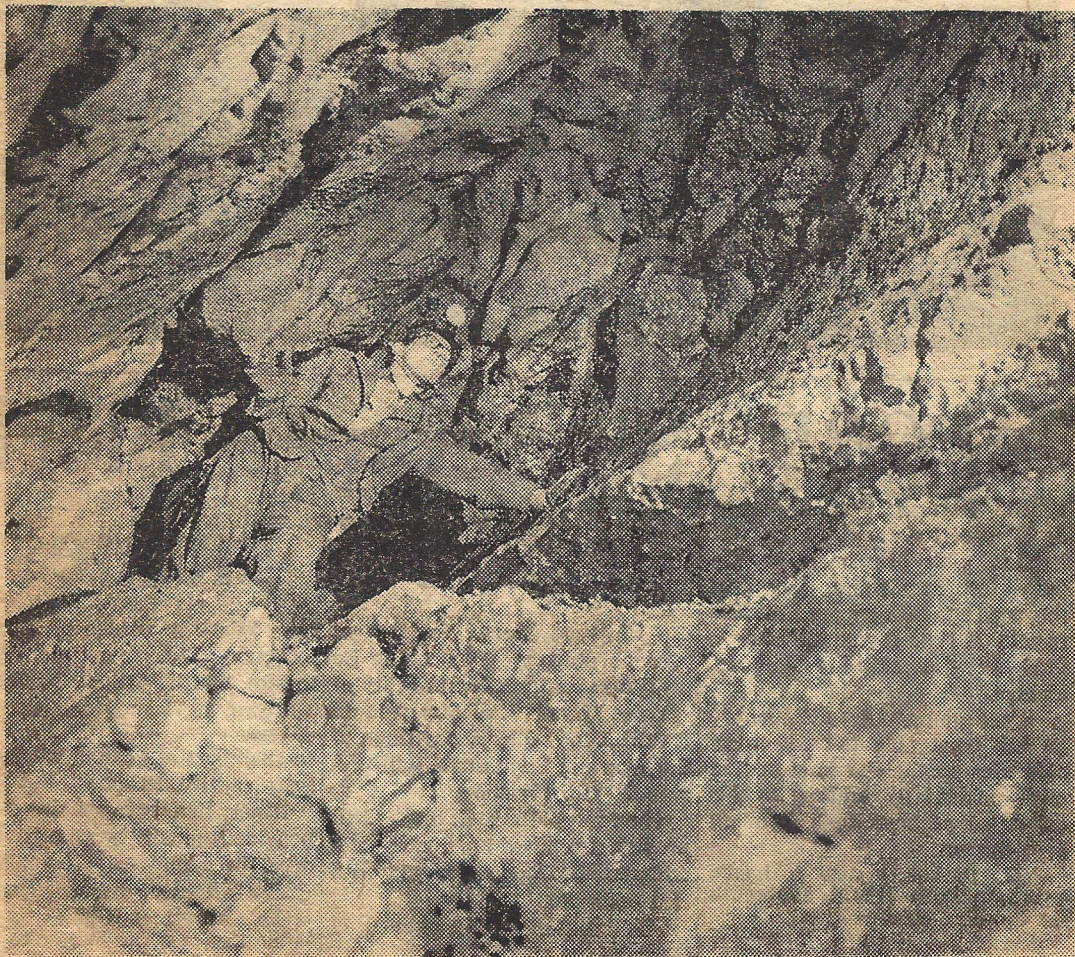
First into the unexplored network were Ian Kelly (15), a grammar school boy and Paul Allen (18), a clerk.

They made the breakthrough at the weekend, after a year spent by cavers in clearing away mud and debris.

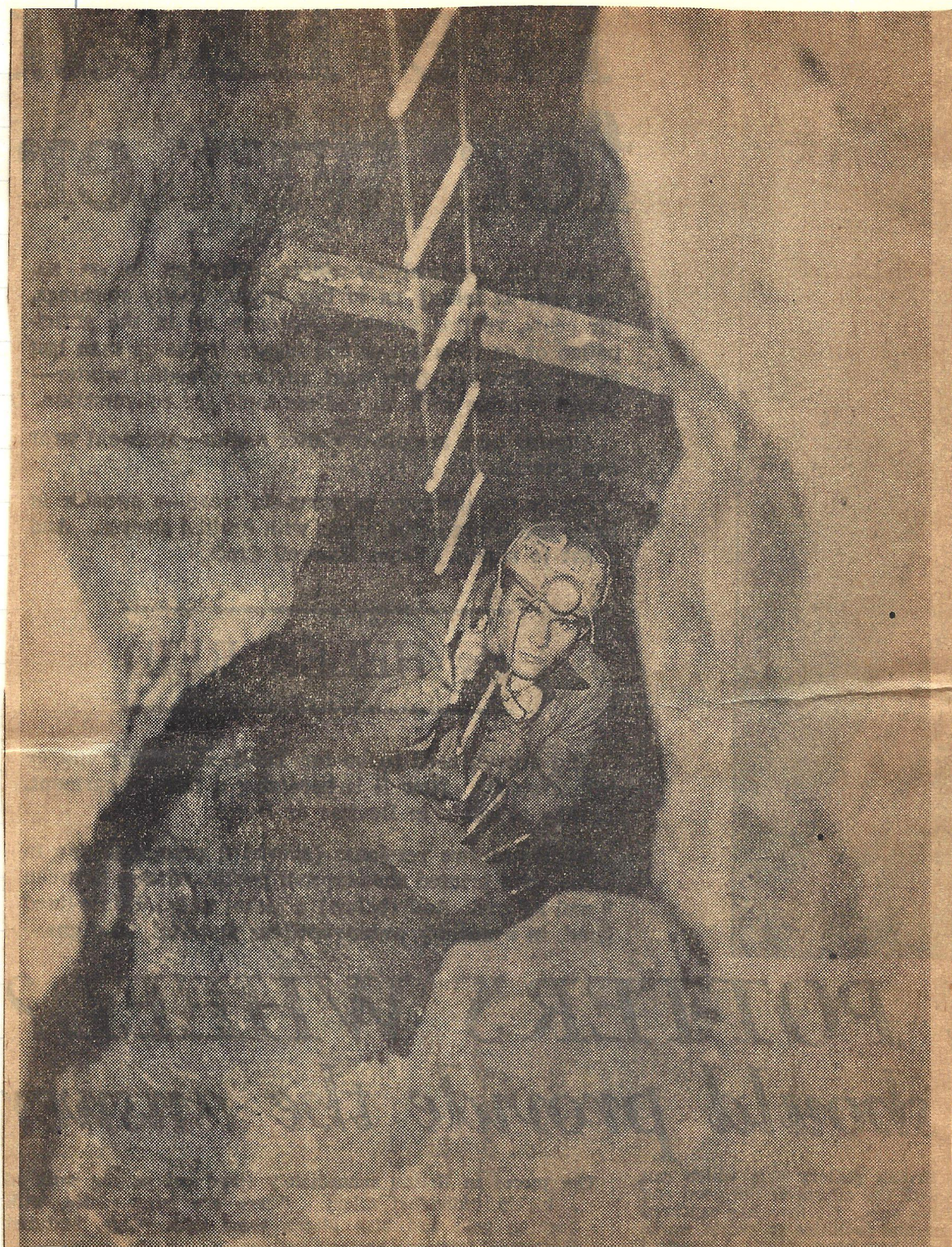
The initial exploration, made after a muddy squeeze of seven inches, has revealed a narrow passage high enough in places for men to walk upright and ending in a master cave.

From here, 260ft. inside the cliff, radiate two more passages.

Where they go no one knows but cavers are now planning an assault on their secrets. Many tons of earth and boulders will have to be moved first.



Tony Oldham, a member of the Severn Valley Caving Club, explores the cave.



Reporter John White climbs
down into Hadies cave

A lost world—in Bristol

Cave team breaks the silence of million years

By John White

I stood last night in a cave where no man had set foot for more than a million years—less than two miles from the bustle of the centre of Bristol.

Only six people have entered this cavern, which is part of Hadies Cave, believed to have the longest and biggest network of passages in the Avon Gorge.

The breakthrough into the new passage was made only three days ago by two members of the Severn Valley Caving Club—15-year-old grammar school boy Ian Kelly, and 18-year-old clerk Paul Allen.

Last night, with photographer George Edwards, I scaled a sheer 150 foot cliff face above Bristol's Portway to reach the cave entrance.

Our companions, cavers Brian Roach and Tony Oldham, helped us up with cameras, tripods and flash guns.

Tony said that Hadies Cave was first discovered about 100 years ago. But the breakthrough to the new passage was the biggest event in Bristol caving for years.

Tight squeeze

"We have been digging in mud and debris for the past year to try to find a new passage," he said. "Now we have eventually got through we hope to explore even further into the passage."

After clambering through a tricky overhang at the cave entrance we walked a few yards and then came up against a tight squeeze, only a few inches wide.

With my caving helmet bumping on the low roof I struggled through inch-deep mud and water.

Then we had a fairly easy stretch through a narrow passage which is about 40 feet high in places.

A short climb over mud and boulders brought us to a sheer 40 ft. shaft. We used a caving ladder to get down part of it.

Then came the big squeeze through a small hole just seven inches high.

We were now in passages which have probably never been seen since the beginning of time.

Focal point

A short crawl and we were in a chamber about 15 ft. wide. The limestone walls glistened with water as we peered at red stalactites.

Another narrow passage, and we arrived at the master cave. This appears to be the focal point of the cave system with three passages running off it.

"We have got to explore the other two passages" said Tony. "This will mean shifting tons of earth and boulders." We were then nearly 300 feet inside the cave.

Back at the cave entrance it was almost odd to see the traffic on the Portway again. We had been into a world that few have ever seen.

And the silence which had reigned in Hadies Cave for million of years settled back as though man had never intruded.

16th Nov.Pool Cave.

Situated in the Aven Gorge above the Tennis Courts. Access is by following the foot of the gorge until you are to the left of the entrance. Follow path until a ledge at an angle of $70-80^\circ$ is met. Traversing this ledge brings you into Pool Cave entrance. Cave is in part a shelter. size of Avelines narrowing down into a squeeze into chamber with a pool. Rift $4\frac{1}{2}$ " wide goes on.

20th Nov.Diving at Pridely Pool.

Roy Perry, Bob Craig & Phil Rufford having a bit of practice under John Cornwell (see page 123). Diving on air - demand valve. John breathing is very slow and exact whilst the others are spasmodic - not well paced and I would imagine that demand valves.

21st NovBanges Expedition 1962.

A very well attended lecture at the UBSS geography lecture theatre by Dave Allsop. Not many slides but the ones shown gave a good idea of the cave.

Steve Wynn Roberts talked briefly about 1963 Expedition.

Oct 28th

D. Hunter

CAVE-TRAP CADET MAY FACE CO

SEA cadet John Rashbrook, who nearly died in a cave 300ft. below ground, may be "put on the carpet" by his Royal Navy commanding officer.

John, 15, had disobeyed an order by going into a dangerous part of the cave at Buckfastleigh, Devon, during an "adventure" expedition at the week-end.

So had two boys with him—Kenneth Seymour, from Yorkshire, and 15-year-old John McClear, from Glasgow.

Trapped

Yesterday, their commanding officer at Gosport, Hants, was considering disciplinary action against all three.

The boys were among seventeen from Gosport on a five-day adventure trip to Devon.

John, of Shrewsbury-road, Carshalton, Surrey, fell off a rope in Bakers Pit Cave.

He hurt his back—and lay trapped in the dark for five hours.

Then a doctor arrived.

The rescue began. The doctor—33-year-old John Dunwoody, prospective Parliamentary Labour candidate for a Plymouth division—had never been in a cave before.

But he put on caving kit and crawled through mud to the injured boy.

Dr. Dunwoody—son-in-law of the late Mr. Morgan Phillips, former Labour Party secretary—gave John a pain-killing injection.

Then the boy was put on a stretcher and hauled to safety... up a 70ft.-long, 18in.-high tunnel.

The man in charge of the boys' cave expedition, Petty Officer Samuel Bowden, said later: "The boys went off in groups of three. We told them not to go near the area where John Rashbrook fell."

Oct 31st

E. Post

RESCUE TEAM

BATTLE

THROUGH

WATERFALLS

Roland Fox went on his first potholing expedition in the Mendip Hills last night — and spent three hours helpless with cramp beneath a waterfall 150 feet below ground.

A full turn-out of the Mendip Rescue Organisation, from Bristol and Wells, went to Swildon's Hole, near Priddy.

Mr. Fox was brought exhausted to the surface after a 75-minute battle through two waterfalls.

DEEPEST

Mr. Fox, an 18-year-old botany student at Southampton University, whose home is at Leytonstone, near London, was revived with glucose before he was brought to the surface.

He was one of a party of 12 Southampton students who went to Priddy for a day's potholing.

They entered Swildon's Hole — one of the deepest and most treacherous of the Mendip caves — at 4 p.m. Mr. Fox was seized with cramp two-and-a-half hours later at the bottom of a 20ft. waterfall.

He said afterwards: "We were making our way back up the caves when it happened, and I couldn't go any further."

Two members of the party stayed with him, while the others clambered through narrow passages, and over another 40-foot waterfall, to give the alarm.

MUSTERED

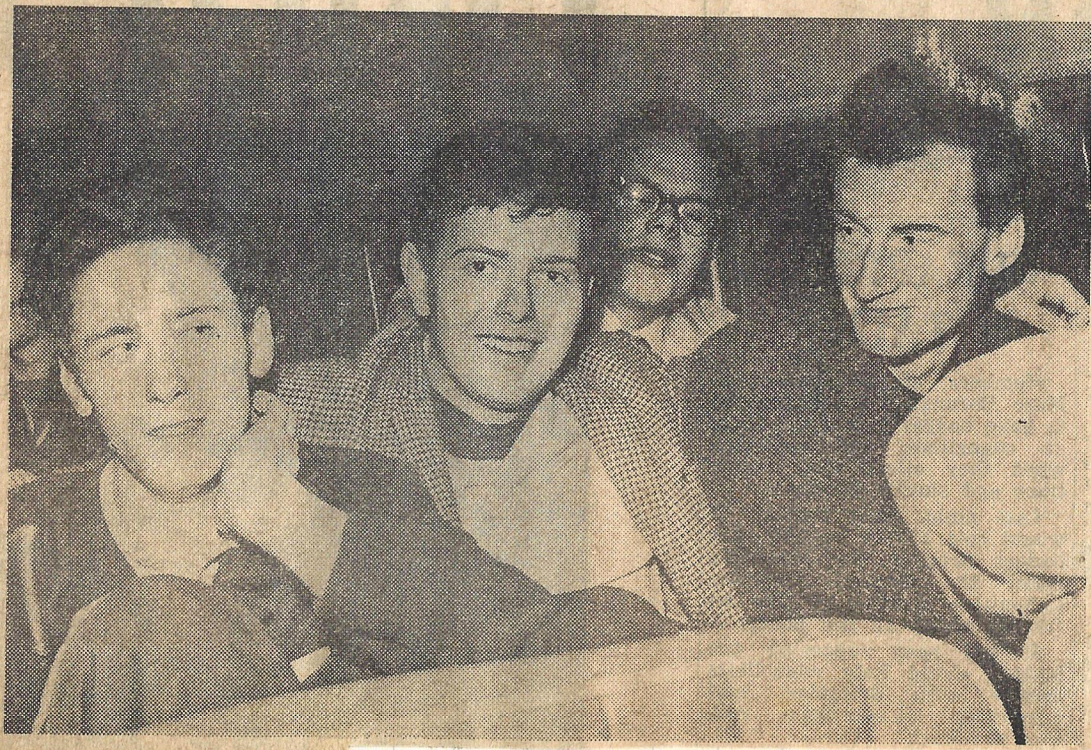
Police were told and Mr. Luke Devenish mustered fellow-members of the Mendip Rescue Organisation at Wells.

Dr. Oliver Lloyd, of Bristol, secretary of the rescue service, was also told.

He said: "I was kept informed of the situation, and I got in touch with other members of the service in Bristol in case their help was needed."

Dr. S. Cannicott, of The Gables, Cheddar, waited at the surface to give treatment to the young potholer. Then, at midnight, the party headed back to Southampton.

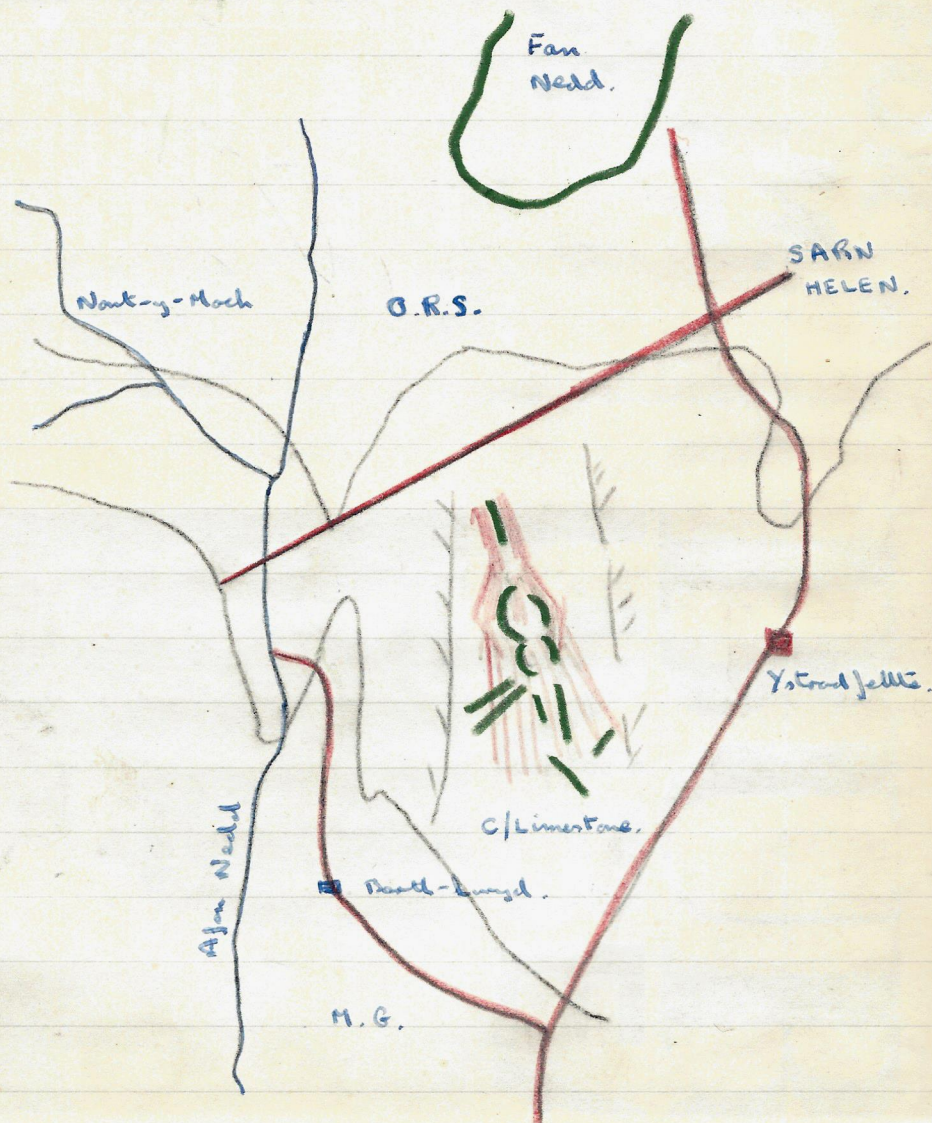
Potholer trapped by cramp 150 ft. down



Roland Fox (centre) is all smiles after his rescue from a Mendip pothole late last night.

2nd Nov.

lecture to MNRC at Wells Museum.

Caving and Surveying in Brecknockshire.

Permian	320m	Deposition of ORS.
Carboniferous	Coal mine Millly grit Coal Mass	280m > Deposition of C/hine. Age of Coal Forests.
Permian	220m	Non depositional in this area
Triassic	190m	but ages of extensive denudation of previously formed rocks especially those of the Carboniferous.
Jurassic	150m	Marine conditions - effect only extreme S. Wales
Cretaceous	120m	Submerged - chalk deposited.
Eocene	70m	Uplift, land conditions developed, present river system initiated - river finds its way into the older rocks, the chalk having been completely denudated.
Oligocene	50m	
Miocene	35m	
Pliocene	15m	Subsidence followed by uplift resulting in rejuvenation and river capture.
Pleistocene	1m	Ice Age - glacial action in this area
Holocene	25,000	minor features of modern scenery

3rd year in this area (See MS Diary Vol 1 pps)

Area one of great interest to MNHC not only for its known caves but because of great scope for geology and geomorphology; although this is very complex it is far more fascinating geologically than Rendip.

1961 Survey of Afon Nedd Ffychen & 2 new caves

1962 Exploration of Hoor Tap - numerous swallets etc

1963 Geo & Geomorph surface survey & 6 new caves.

Areas of ORS, h/tone & r/qit. Obviously the lines are not perfect - not all the h/tone off the ORS and not all the r/qit off the h/tone etc. Explanation of the h/tone ridges - where r/qit is found and the deposition of Boulder Clay.

Valley was probably that of River Neath at the end of the Carboniferous going on into Permian / Trias.

The first part is a type of an experiment - an attempt to show a surface survey of an extensive area (1 mile long x $\frac{1}{4}$ mile wide) - onto a set of photo slides.

Thanks to all in the holiday (See page 51).

Slide 1.

River Neath (Afon Nedd) near its source - in the torrent track - steep gradient - rejuvenated river cutting its U shaped valley - glacial action. Stream bed is of washed down boulders of ORS, M/gnt. Although the river meanders the bends are not formed from slow moving water in the plain track (Jordan Valley) but from recent deposition - Ice age etc - rejuvenation of torrent track.

2. Tributary of the Afon Nedd (the Nant-y-moeth) Steep V valley cutting down from top of Pant Haul to river Neath level - largest tributary of the Nedd - M/gnt boulders.
3. Nant-y-moeth - geological feature of the torrent track - waterfall - hanging valley feature - trees by the water not only on top of the moor.
4. General view of the Afon Nedd - this is the part of the river surveyed in 1961 - middle of the river is an area of slow sinkage.
5. Main sink - water sinks in a large bog by under the cliff below the entrance of Bridge Cave, water does in fact join the stream in the cave.
6. Final sink (1961) between boulders
7. Dry valley below Pwl-y-Rhydd.

8. General view of the west top looking up toward and including Fan Field - taken from ridge at the bottom of the valley above the one at NGR 9224 1345.
9. Moving up valley - view of the first hill in the survey and the edge of the main valley of the survey.
10. Following the valley - the small depression areas.
11. Following up again - valley - depressions - few trees.
12. Tail end of the S3 series of mallets below the ridge - nos S34 - S317.
13. Between S34 and S31 - S33 is a ridge of boulders day held in place by a block of millstone grit which cuts the valley floor. Shows continuation up into the S4 series.
14. View of the series S4 and S31 - 3 showing features of the containing Millstone ridges and the contained boulders.
15. Starting at the top of the valley - more involved - first series of mallets S1 - S14A taken from first joined point of survey.
16. Second part of the S1 - S14A series showing the length of smaller area. Size variations are:-
 North - South 82 ft to 24 ft.
 East - West 54 ft to 33 ft. Depth 20 ft to 7 ft.

17. Dig in swallet S2, top of excavation showed vertical pat or even formation, dug for 5-6 hours then abandoned.
18. S10. h/stone bluff shows vertical pat development. Fred knee jumped into float of depression and hand tines fall into a shaft.
19. S10. Excavation and description of shaft - Theoretical Pat. (See MNRG Int (3).) and see page 55 of this diary.
20. Looking up the valley at the whole line of 5 series of swallets - one long line bounded by h/stone.
21. The ridge below Gwynnien - very frost shattered. The ice masses have been forced by the bounding h/stone ridges to follow the valley floors and thus here the deposition of boulder clay is extensive.
22. Opposite ridge not quite so high and effect is due to quarrying - valley can still be followed and single swallet is SA1 - second set of survey swallets.
23. The effects of glaciation - pools of water contained in shallow pockets of the boulder clay. Valley floor is grass and heath, also heath (*Erica tetralix*). This shows the special intensity of boulder clay. Dig in the swallet SA3 (100 ft NS x 37 ft EW x 25 ft deep). Water from ponds drained off into depression - took the lot - dig in clay and ORS glacial blocks.

24. From the top of the ridge - valley truncated by the large mass of boulder clay on the back of the millstone grit blocks. Up valley side is by far the thickest in boulder clay (measured at 80 ft deep) and very thin on down valley side although grit here is very evident - best place for a cave dig.
25. Moving on down - valley not so steeply marked and is broadening but still showing lines of swallets - these are the lower level of SB series and are not so full of or blocked with boulder clay as the upper level.
26. Dig at the other side of the millstone grit and boulder clay mass - following line of h/tone in SB9 - perhaps a fault. Reeds show surface drainage - interesting that on exposure of h/tone, much frost shattered and joints full of compressed clay.
27. limestone - bedding in this area is near horizontal - cracked and shattered due to frost action since exposure after the Ice Age.
28. limestone grains, gorges pore it at as in Yorkshire, run to a depth of 4 ft and a width of 1 ft usually on ridges in this area.
29. view to goggle ridges and its relationship to the

main valley floor.

30. View as above but down valley to the lower limit of the survey (viz Mutton Pat).
31. Pathole in h/tone (Mutton Pat) - at the lowest part of the valley below a deep series of swallets - takes intermittent stream (see P. 51).
32. Millstone Grit - the cave above Mutton Pat showing the formation at the junction of grit and h/tone; this feature can also be seen at Ogaf-y-defyd-Mont.
33. Inside this cave - another view of this junction.
34. Caption Slide. 'Why is Millstone Grit so called' - a slide of an old millstone made of millstone grit.
35. Caption Slide. 'The Demon' - boulders clay - glacial deposit - in swallet SB 10.

CAVES.

- Slide 1. Survey of Ogaf Ffynnon Ddu - most extensive network cave in this country - as big and as fine as Swildons & Cuthbert.
2. Fault Series - there are several examples of stals on mud.
3. The main stream passage.
4. Fine geological example in the stream passage where passage has been undercut by stream.

5. Main streamway at Alpha ledge.
6. Main passage formations near Column Passage.
7. As above.
8. Roof forms in limestone - anastomosing - Column Passage.
9. Fine gout pool at the entrance to Column Chamber.
10. Pillar - The Column.
11. The resurgence of the cave.
12. Pant Haul Pat. chambers between 2nd choke and Trib Passage.
13. In the chamber just after Tributary Passage.
14. The fine formations in the chamber between 1st & 2nd chokes.
15. Roof formations in the above chamber.
16. Large areas of straws in the same chamber.
17. Gout pools just after the first Boulder Choke.
18. Large cave entrance - similar to Archins at Penwlyt.
19. Entrance to new cave Cwm Dwr - dug into by SWCC.
20. Roof formations in Whisker Cave, also known as Ogof Thoutch, Penwlyt Quarry Cave, Ogof Pen Pant.
21. The Whisker (See Cullingford).
22. Unusual Spar on walls of this cave.
23. Geoff Roberts on the up-stream lip of Pull-y-Rhydd.
24. The bottom of the pat.
25. Interior shot beside the underground river / lakes.
26. Dry valley below Pull-y-Rhydd - almost a cave.

27. Entrance to White Lady Cave (See British Caves Vol. 39.).
28. The Exit of Pull-y-Rhydd.
29. The formation, the White Lady.
30. Abseiling above the exit Pull-y-Rhydd (White Lady).
31. As above.
32. Entrance (upstream) to Porth-yt-Ogof.
33. Entrance (downstream) to Porth-yt-Ogof.
34. Dinas Rocks (See photo at back of Diary). p. 90.
35. Causeway to the Silica Mine.
36. Large rock shelter on river bank above Wills Hole.
37. Entrance in ivy cluff to Wills Hole.
38. Entrance Pitch.
39. Long shot of the dig at end of cave.
40. Close up of above prior to digging.
41. Palette in the main passage.
42. Main passage upstream from the junction.
43. Scallop in the roof downstream end.

A few slides of the camp at Barthellungd.

4th Nov.Lecture to Bristol Groundwater Association.Part 1.

Caves in this country are found usually in the Devonian and Carboniferous limestones but most frequently in the latter. This does not mean that caves do not form in other types of rocks - only that these caves are a small minority group. Limestones are sedimentary rocks with bedding and joint planes (Diagram) and are not too hard so as to be impermeable neither are they too soft. When rocks are too hard - cavern formation does not take place and if too soft - caves are easily formed but they easily collapse - a good example of this was the Kirkdale Cavern in Yorkshire. The caves of this country may be defined into areas:-

a). N.W. Yorkshire. (The Craven District).

This area has the largest and the deepest caves (or patholes). definition of CAVE:- horizontal length. POTS:- vertical depth. The caves of this area are plentiful and have also the largest chambers:- viz. Gaping Ghyll.

b). The Peak District. (NE Staffs & High & Low Derbyshire Peaks).

The reputation of this area is over 300 yrs old but caves are fewer and not as large as Yorkshire but they make up in scientific interest

that which they lack in size. Well known caves in this area are:- Blue John Cavern & Peak Cavern.

c). The Mendips.

Extent from Weston-S-Mare to Frome. Area has many fine caves (see following pages).

d). South Wales.

A semi-circular ridge of limestone containing all of the caves in this area (see following pages).

e). South Devon.

Caves formed in Devonian limestone. The main areas of caves are at Buckfastleigh (see page) and at Chudleigh Rocks - recent developments in the area at Plymouth.

f). North Wales.

A recent carving area where most of the caves are small (Denbysshire and Flintshire). The caves are of archaeological interest.

The above is the list of carving areas but isolated caves and groups of caves occur elsewhere.

Part 2.

A few notes on how caves are formed - any formations will be pointed out as and when they

occur in the slides.

1. Caves formed by stream action in massive bedded limestones.

- a) Before the major stream action has cut through the shales.
- b) The stream has cut a valley into the limestones draining the rock beneath its tributary which disappears into a pot hole development along joints and bedding planes.
- c) After the main stream has ceased to cut down, it widens its valley and the underground stream modifies its course.
- d) The main stream is rejuvenated, deepening its valley and redeveloping the lower passages of the original pathhole. The tributary has eroded more of the shales and has begun to lose water to a new pot hole which will eventually take all of the flow.

2. Typical Cave Sections.

- a) longitudinal section of a cave (very typical of Mendips) showing the marked influence of almost horizontal beds and vertical joints with modifications wrought by stream action, especially above pitches or verticals.

- b) a bedding plane cave with a later phase of stream cutting viz. Eastwater Cavern - the Primrose Path.
- c) solutional openings along a master joint - these may join up to form a larger (higher) passage.
- d) a chamber strongly affected by roof fall - Mendip - Lamb Leet and Eastwater Cavern.
- e) a cave largely developed by downward cutting of the stream - viz. Stream passage - Ogof Ffynnon Ddu.

3. Cave Development by flowing streams.

- a) at an early stage, the passages bear a very close relationship to the original bedding planes and joints.
- b) later the streams adjust their courses, cutting down most strongly above the falls including the entrance; in places, pools (pat-holes) form below the falls.
- c) solutional opening of an alternative path has led to the abandonment of certain sections and further adjustments.

4. Three stages in the formation of ovens.

6. Formations in a Cave.

- a) A very important formation is the indication of water flow on walls and in the stream bed of a cave. Scallops or (Flutes american). These are found in many caves and are flow indicators - the water being turbulent and thus irregular in motion and dependent upon velocity and the roughness of a channel. These scallops have an asymmetrical cross section on their main axis (being steeper upstream).
- b) Rimstone Pools or Gours. a) small flat pools and b) large stepped pools. Caused by water slowly seeping over the edge of a pool depositing a precipitate on the lips, which gradually builds up raising the water level of the pool.
- c) Stalactites et al.
- a) fast growing form stroms
 - b) slow growing form stalactites
- Explain Stalagmite and Pillar also helactite :- many theories but far too complex for a simple explanation.

In these above the following diagrams were used:-

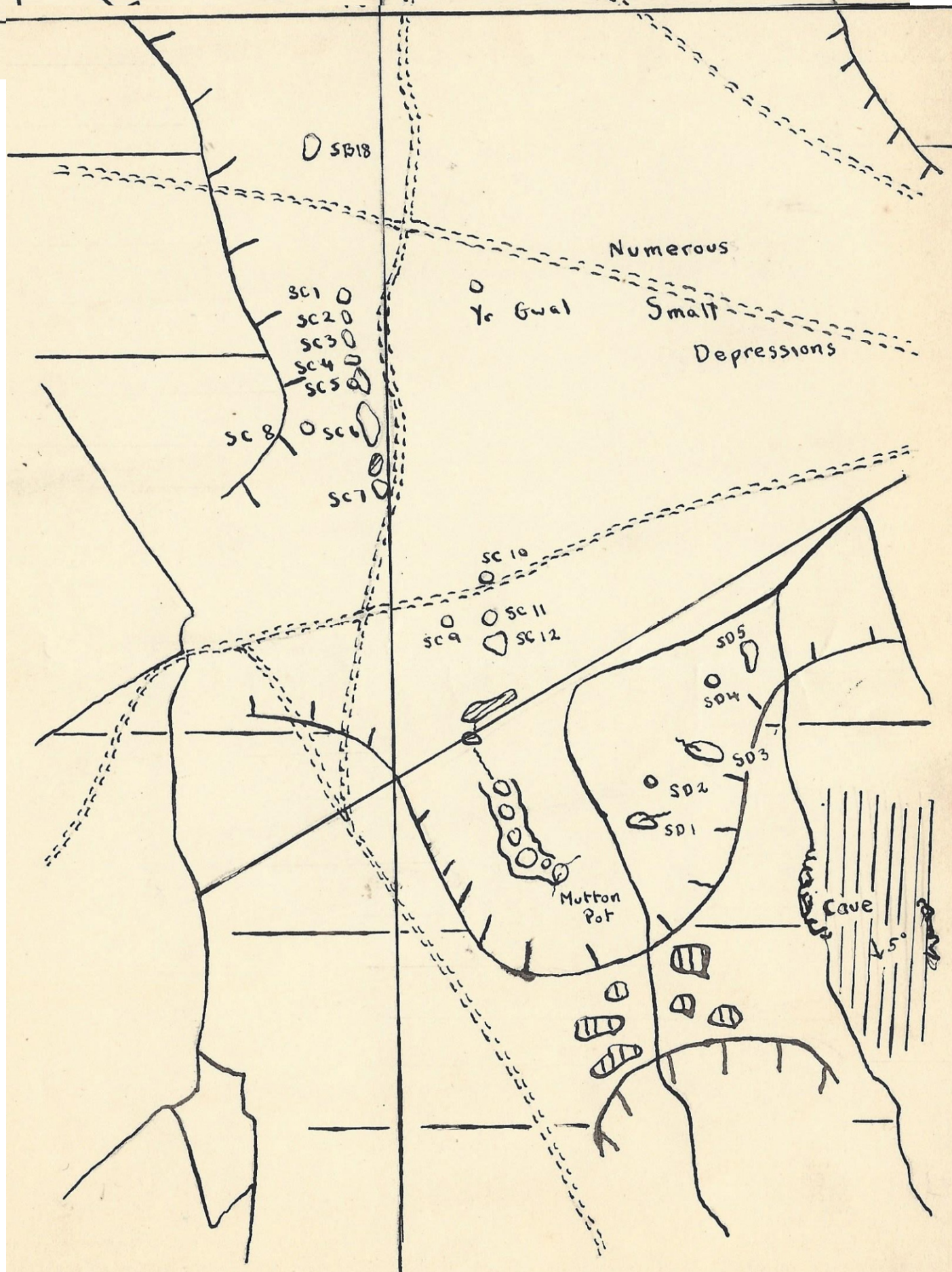
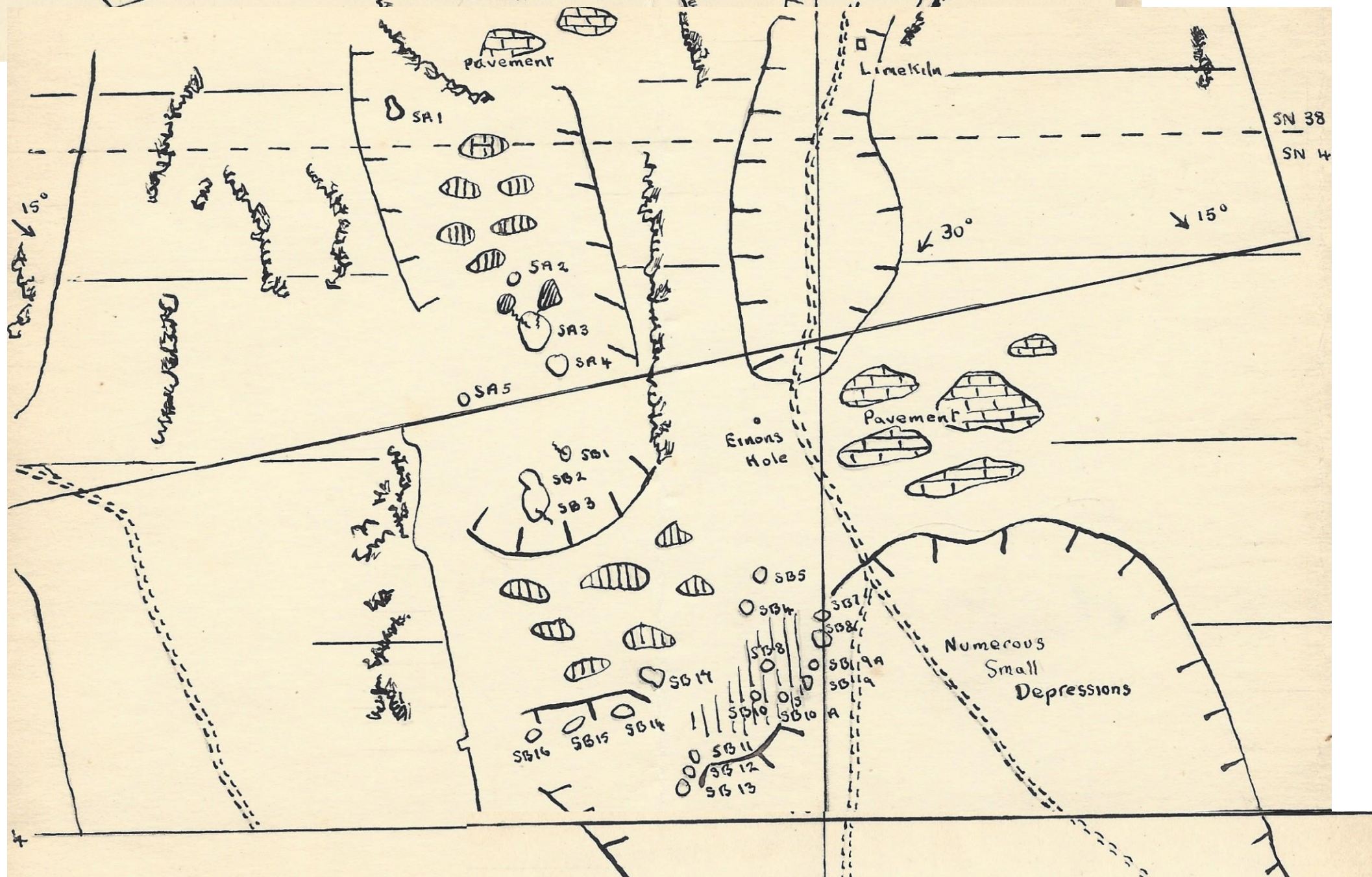
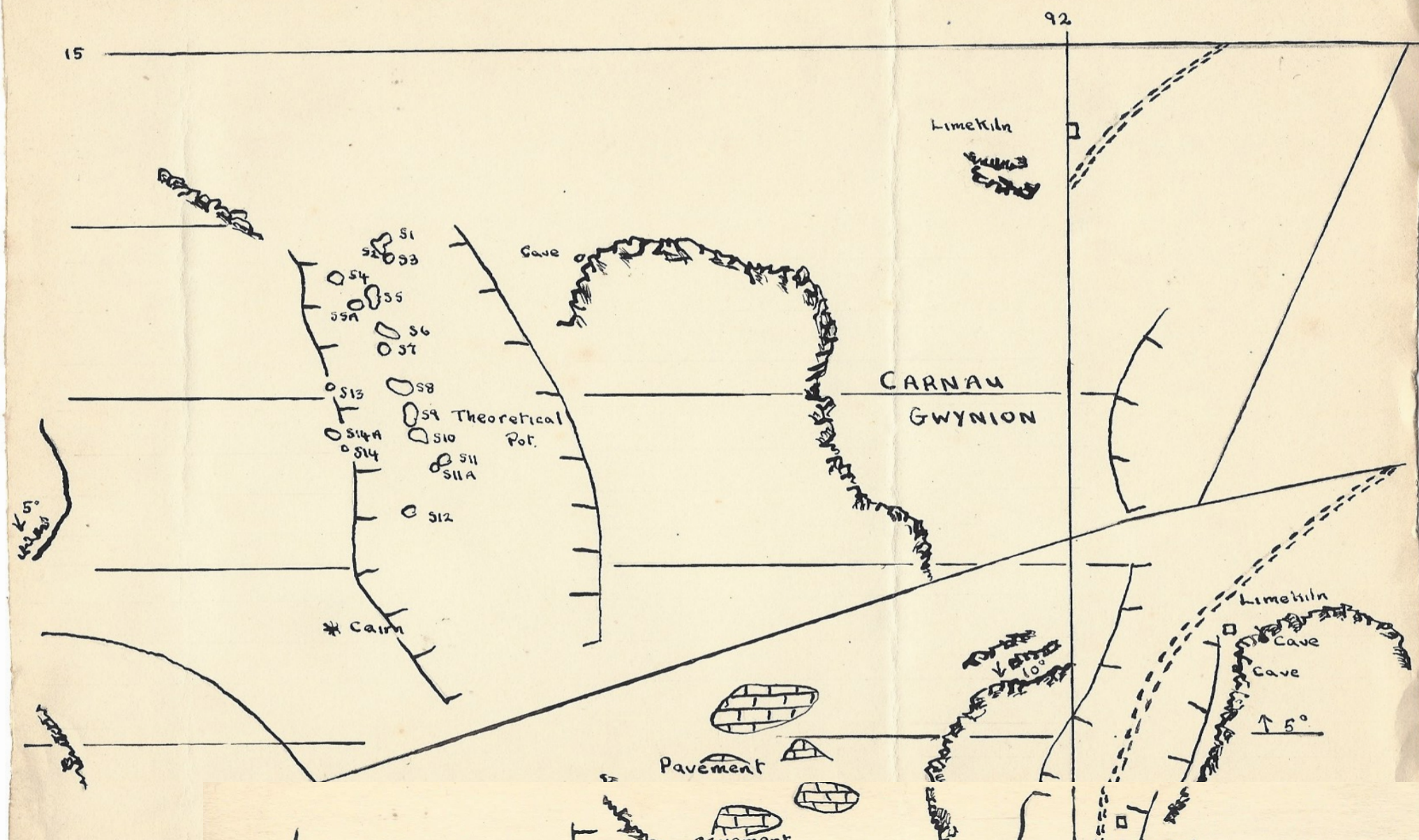
1. page 56. British Caving - as illus.
2. page 24. British Caving - as illus.
3. Based on page 57. British Caving by RWT.
4. page 60. British Caving - as illus.
5. Based on diagrams by Nat. Spel. Soc. by RWT.
6. pages 69, 86, 93 British Caving - as illus. Others by RWT.

Part 3. Rough sketch map showing the location of limestone and larger caves in the S. Wales area.

- slide 1. limestone Scenery - showing 1963 with Fan Nedd and the valley below Ples-y-gors (slide no. 8 p 78).
2. General view of the river Neath - how an active stream cuts into the limestone.
 3. Moorland - high and flat - covered by boulders clay.
 4. Dry cave shelter above Don-yf-Ogaf.
 5. Winter Scenery - snows of winter 1962/3 at Hlangatock.
 6. Entrance to Aggy - via Ogaf Gorn - iced up.
 7. Solution tube in Aggy main entrance - keyhole shape shows trench.

8 - 50. As per MNRC Lecture. Cave Slides Nos 1 - 42

(See pps. 81-83).



Part 4.

Sketch map of the Mendips showing the caves.

Section (usual) across Mendips.

- Slide 51. Limestone Scenery - gorge - usual in this area - Elbert gorge.
52. Scenery affected by man - lead mining - Lamb Bottom.
53. As above - also an aid to caves - Fairy Cave Quarry.
54. Cave Entrance - At foot of a very shattered cliff - Rocks Cavern.
55. As above - Cave opened primarily as a show cave - Goutchuck.
56. Man made entrance - Shaft 124 Lake Hill.
57. Caving dig by M.C.G. Dig in mined gully Blackmoor.
58. Entrance in large depression Pinetree Pat.
59. Looking over the pitch in Pinetree Pat.
60. Moonlight Grotto - poor formations but best in cave.
61. Lamb Leat. The Beehive - largest dolomite boss.
62. h.h. View of the 70 ft pitch.
63. h.h. looking down into dig at foot of the ladder.
64. G.B. }
 65. G.B. } The Ladder Dig - 3 views of formations.
 66. G.B. } Pillar and helictites.
67. Farnhill Cave - bedding plane - entrance rift.
68. As above - the curtains - fine red colouring.

71. Putting up the tent and setting the gear in the cave.
72. Xmas dinner in the Throne Room.
- 73-78. Formations in the Throne Room.
- 79-81. Formations in Princess Gratto.
82. The Bone chambers.

Time taken on this lecture 2 hrs. - followed by most excellent discussion for about $\frac{1}{2}$ hour on general caring - question and answer - personal preference is for me to talk to people like the groundsmen as they show a far greater interest than a club like the MNRC.

Next lecture is for March 1964.

A fee of 2 gns was given to Phil & myself for this lecture - sent on to M.R.O.

- 1). Afton Rift Cave. E.C. 838. 631. L. 120. Tatnes.
- 2). Ash Hole. E.C. 937. 567. L. 90. Brischam.
- 3). Bakers Pit Cave. D.C. 741. 665. L. 4000. Buckfastleigh.
- 4). Bench Cavern - Brischam - destroyed.
- 5). Bunham Hole. E.C. 735. 647. L. 10. Buckfastleigh.
- 6). Castle Cave. EC. 83. 62. L. 30. Tatnes.
- 7). Dart River Cave. MC. 743. 668. L. 200. Buckfastleigh.
- 8). Disappointment Cave. EC. 743. 665. L. 170. Buckfastleigh.
- 9). Fairies Hall Cave. EC. 743. 666. ? Buckfastleigh.
- 10). Joint Mitnor Cave. EC. 743. 664. L. 150. Buckfastleigh.
- 11). Little Pridhamleigh Cave. EC. 750. 678. L. 300. Pridhamleigh.
- 12). Pastit Cave. EC. 743. 665. L. 80. Buckfastleigh.
- 13). Pridhamleigh Cave. DC. 750. 678. L. 3000. Pridhamleigh.
- 14). Reeds Cave. DC. 743. 665. L. 2200. Buckfastleigh.
- 15). Rift Cave. EC. 743. 665. L. 250. Buckfastleigh.
- 16). Rock House Cave. EC. 74. 66. L. 450. Buckfastleigh.
- 17). Roosters Cave. EC. 74. 66. L. 150. Buckfastleigh.
- 18). Smugglers Cave. EC. 74. 66. ? Buckfastleigh.
- 19). Spiders Hole. EC. 743. 664. L. 110. Buckfastleigh.
- 20). Tudor Orchard Cave. EC. 741. 667. L. 120. Buckfastleigh.
- 21). Ware Cave. EC. 74. 66. ? Buckfastleigh.

Bristol Naturalists Society.

Notes on Series 4. Vol. 8. part 2. for 1936.

- a). Walton Bone Cave - Clarendon, Somerset.
- b). Fingals Cave - Isle of Staffa - Dorset.
- c). Drakes Cave - Plymouth Hoe - Sea Cave.
- d). Kiskadee Cave - E. Yorkshire (Jurassic) Grotto - destroyed.
- e). Mammoth Cave - Kentucky USA.
- f). Parnassus Cave - Greece.
- g). Cave of the Holy Sepulchre - Jerusalem.
- h). Cave of Hachelab - Mount Hebron - Palestine.
- i). Tilly Whin - N. S. S. S. (Portland Stone Quarries).
- j). Robin Hood Caves - Nottingham.
- k). Ellora Caves
- l). Ajanta Caves
- m). Elephanta Caves
- n). Karli Caves
- o). Nasik Caves
- p). Seven Pagoda Caves - (Granite Works) Madras, India.
- q). Cappadocian Caves - at 50-300 ft over by ladders - some natural, others enlarged from 2000 BC →.

7.30

ADVENTURE

Gautries Hole

A group of Derbyshire cavers search for a vast system of underground passages and meet, a few miles from home, all the excitement and challenge that the great explorers have found at the ends of the earth.

Described by **Harold Lord**

Filmed by
Harold Lord and Ken Hurst
with the help of members of the
British Speleological Association

Sound mixer, Bob Saunders

Film editor, Larry Toft

Presented by Harry Hastings

Series edited by BRIAN BRANSTON

See facing page

Adventure—Caving in Derbyshire



7.30

THE limestone areas of Yorkshire and Derbyshire abound in caves and potholes, ranging from the easy ones a caving novice may enter to others which only an experienced potholer can explore. Caving enthusiasts from many walks of life meet together at weekends with one common interest—to go underground. Some are inspired only by the sporting aspect of climbing ladders and traversing dark caverns and are content to explore for themselves the already-known caves. But a small minority prefer to spend their time either on the surface seeking entrances to undiscovered caves or trying to break through into new passages from ones which have already been explored.

Every weekend a small group of Derbyshire cavers have been meeting at the same cave to spend the day underground, attempting to gain access to further extensions of the cave. Tonight's *Adventure* film 'Gautries Hole' shows a small part of this project, which began over three years ago. The film deals with a situation where by using water a connection has been proved between two caves four miles apart, but where attempts to break into the connecting passages have failed. **HAROLD LORD**

107
97

SEP 2 25.2.57.

SURVEY TO BE MADE OF EVERY MENDIP CAVE

EVERY cave, every swallet hole and every mine-shaft in the whole of the Mendip plateau is to be surveyed and recorded by members of caving groups in the next few years.

The Mendip Cave Registry as the survey will be called, will contain information of value to cavers and to scientists of many subjects.

Mr. Howard Kenney, chairman of the committee organising the registry, says: "Interest in caving in the Mendip area has been steadily growing over the last 50 years. Apart from the many happy hours of sport enjoyed by an increasing num-

arty outings
BRIAN BRANSTON
ye

Derbyshire

of Yorkshire and Derbyshire abound in going from the easy ones a caving novice which only an experienced potholer can assistants from many walks of life meet with one common interest—to go under-ly by the sporting aspect of climbing rns and are content to explore for them-

But a small minority prefer to spend seeking entrances to undiscovered caves o new passages from ones which have

of Derbyshire cavers have been meeting day underground, attempting to gain the cave. Tonight's *Adventure* film part of this project, which began over with a situation where by using water a ten two caves four miles apart, but where ing passages have failed. HAROLD LORD

ber of enthusiasts, much has been learned about the geological features of caves and the water drainage of the Mendips. "Other more specialised aspects of caving, such as biology, have been investigated and there are always keen cavers prepared to survey and photograph the scenic intricacies of the under-world.

"Over this period many caves have been discovered and much research has been carried out. But the information gained is in the hands of many individual clubs and cavers and much of it is being lost through death or just because the people concerned turn to other interests.

Never complete...

"Several excellent books have been published and much good material has been included in club circulars, but no effort has so far been made to put all this information together." Representatives of several groups

met a few months ago and decided to compile the registry. Groups in the scheme include the Wells Natural History and Archaeological Society, Bristol Exploration Club, Wessex Cave Club, Axbridge Cave Club, Shepton Mallet Museum Club,

will be kept by the registry, one by the County Library at Wells and one by Bristol Reference Library.

Access to the register by any interested person will be free. Mr. Kenney says: "Water undertakings may even discover a

by Arthur Smith

the Royal Military Academy, Sandhurst, the Cave Research Group of Great Britain and the Cave Diving Group.

The register will never be complete. Additions and amendments will constantly be made as new caves are discovered and new facts about existing ones are revealed. Three copies of the register will be made. They will be loose-leafed, to make additions easy, and one copy

great deal of useful information in the register, for the hydrology of the region will also be studied."

Unfortunately, one of the classic methods of following the courses of underground streams—the use of a bright-coloured dye which reveals the exit of the stream which dips underground—is denied to Mendip cavers.

"On the south of the Mendips."

explains Mr. Kenney, "there are only three exits for the water. If we were to put some of the green dye into a swallet hole on the top of the Mendips, it would either dye the waters of Cheddar Reservoir, or the paper mill at Wookey Hole, or St. Andrew's Spring in Wells." But a great deal of useful work can be done in tracing the courses of underground streams and Bristol Waterworks Company is to be asked to support the registry, which depends on voluntary contributions.

At Wookey Hole

One of the biggest tasks confronting the amateur enthusiasts who explore Mendip caves every week-end is to complete the survey of the Wookey Hole system.

The system, of which the public sees only a small fraction, extends back into the Mendip escarpment for many hundreds of yards. Through the caves flows the River Axe, which in many cases completely fills the tunnels which connect the caves.

The system can only be explored by men equipped with diving apparatus, and this task is being undertaken by the Cave Diving Group. Amateur frogmen from all over the country travel to Wookey on most week-ends to explore the damp, murky caverns which lie behind the pleasant village.

The caves, most of them almost filled with water, may yield important archaeological discoveries. Human bones have already been found on the river bed and can be traced back to the time when the caves were occupied.

Cave: Ten-Hour Rescue

A gruelling 10-hour fight to save a Bristol youth who lay injured at the end of a rabbit warren of tunnels 200 feet below the Mendips, ended just before 4 a.m. today.

An exhausted line of rescuers, who had inched him back through the narrow passages of the East-water Cavern, Priddy, near Wells, followed the unconscious youth up into the open air.

The youth—Roger Forse, of 13 St. Peter's-rise, Bedminster Down—was still strapped in the ambulance sheet in which he had been hauled up by relays of cavers.

He had been below ground for nearly 16 hours.

The call for rescue teams went out after he had fallen 40 feet down an underground cliff at the far end of the twisting caves.

Forse, an 18-year-old assistant Scout-master, had entered East-water Cavern with five comrades just before noon.

Three hours later he slipped off a rope ladder, crashed to the rocks below and lay unconscious. Immediately two of the party—Pip Williams and Peter Marsh—

wriggled back to give the alarm. It was answered by police, ambulancemen and 40 experienced cavers, many of them members of the Mendip Rescue Organisation.

With them came three doctors. Two of them, in rescue gear, crawled into pitch darkness of the limestone tunnels.

Above ground, at the yard-square grille marking the cave entrance, rescue work was directed by Professor E. K. Tratman, President of Bristol University Speleological Society, and Mr. Luke Devenish, a prominent Mendip caver.

First volunteers to go down included two women.

They were Mrs. Brenda Willis, whose husband, David, went with her, and Miss Pat Tangey, of Bristol University.

Rescue Relays

A wooden hut on the edge of a nearby gully became the headquarters of the struggle. From it, relays of rescuers with carbide lamps twinkling through the lashing rain, filed down through the cavern opening.

By midnight there were 34 potholers forming a chain below ground.

At 1 a.m. they had dragged the injured youth around a tricky S-bend. An hour later they had manoeuvred him up a 30-feet, steeply-sloping "slide."

The cavers had to bring Roger Forse 300 yards along the tunnels. Five of them who were on the far side of him could not be relieved all through the exhausting struggle.

But, 90 minutes later, after negotiating a long narrow boulder chamber a cry went up from the cavern mouth: "He's out."

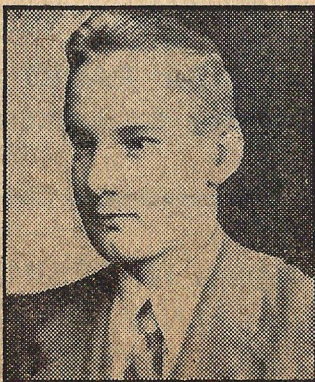
One of the first to dash to the side of the rescued youth was his father, Mr. Arthur George Forse, who had been called from night duty at Bristol Telephone Exchange and stood in silent vigil near the cave entrance all night.

At Bristol Royal Infirmary his son was found to have a head injury and to be suffering from exposure.

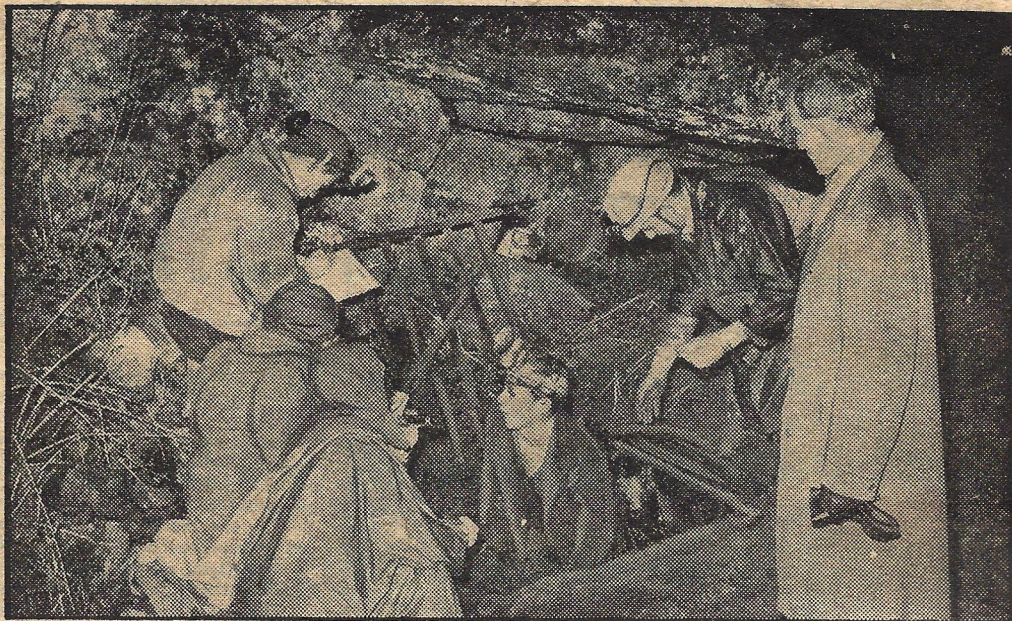
This morning he was still only semi-conscious, and his condition was "fair."



Mr. Arthur Forse, the boy's father



ROGER FORSE



SCOUT FALLS IN MENDIP CAVE.—A member of the Mendip Rescue Organisation descends into Eastwater Cavern to assist in bringing the injured Scout, 18-year-old Roger Forse, to the surface.



END OF THE STRUGGLE.—Roger Forse is carried on a stretcher to the ambulance after his underground ordeal.

BEP 18.3.1957

BRISTOL SCOUT BROUGHT TO SURFACE AFTER 40-ft. FALL IN CAVERN

MEMBERS of the Mendip caving rescue organisation struggled for hours during the night to bring an unconscious Bristol Scout to the surface after he had fallen over a precipice at Eastwater Cavern, near Priddy.



ROGER FORSE.

They finally carried the canvas sling, to which the Scout was strapped, to the entrance to the cavern at 4 a.m. The Scout, Roger Forse (19), of 13, St. Peter's Rise, Headley Park, was taken to the B.R.I., still unconscious.

With other members of the St. Oswald's Troop, Bedminster Down, Roger left early yesterday morning to explore the cave. It was his fifth caving trip and he went despite the pleading of his mother.

Mrs. Forse said today: "I didn't want him to go and I pleaded with him to stay at home. He is not the adventurous type and I hope he won't want to go again after this."

WENT FOR HELP

Later yesterday afternoon, Roger's companions, Peter Marsh (17), of 51, St. Peter's Rise, Ray Haskins, of Whitchurch, Arthur Ottrey, of Brislington, and Philip Williams, of Bedminster, came to the surface and told experienced cavers who were nearby that he had fallen.

He had fallen at least 40 feet, said a member of the Mendip rescue organisation. "He was moving from a ledge in a deep pit to a ladder when he fell."

A lifeline to which Roger was attached did not prevent him from striking his head. When the members of the rescue organisation, called from Bristol, Wells and other places, reached him he was still unconscious.

They found him after an extensive search of the cave. They put into action the agreed drill for such accidents, strapping Roger to the canvas sling which replaces a stretcher in narrow passages.

They first had to raise him from the pit. Then they carried him, inch by inch, towards the cave entrance. The passage which leads to the surface is in places a narrow, tortuous tunnel, and it was with great difficulty that some sections were passed.

Several hours elapsed between the time the rescuers reached the

boy and the time he was carried to a waiting ambulance.

Mr. and Mrs. Forse, who first heard of the accident at 9 o'clock last night, were called out of bed at five this morning to see their son at the B.R.I.

"He was still unconscious when we left at 7.30," said Mrs. Forse, "and it was decided not to X-ray him until he had recovered consciousness."

The rescue organisation was formed by caving clubs and societies some time ago because of the number of incidents involving cavers in the Mendips.

Dr. B. A. Crook, of Timsbury, was called in to attend to the boy and was one of the first rescuers to reach him.

The B.R.I. stated later that Roger's condition is satisfactory. He has a fractured collar bone and cuts and bruises.



● Over in New York.

MEMO TO THE PRODUCER OF TV'S "WHAT'S MY LINE?": "Do you know you have let an attractive and charming West-Country woman, who stopped the American version of your show in New York recently, slip through your net of unusual jobs?"

She is Mrs. Olive Hodgkinson, an elegant bundle of energy, who runs Wookey Hole Caves, owned by her husband, Wing-Comdr. G. W. Hodgkinson. She is back from a five-week tour of the U.S. and Canada, attending the International Hoteliers' Congress in Washington as a representative of the West-Country and a member of the British Travel and Holidays Association.

It was before the congress started that Mrs. Hodgkinson leapt to fame as a contestant on the American "What's My Line?"—as a self-employed guide.

Not only did she stump the panel, which contained such personalities as Bennett Cerf, the humorist, and William Bendix, the actor, and win herself 50 dollars, but for the rest of the tour she was recognised wherever she went.

"What's My Line?" is even more popular in America than it

is over here, says Mrs. Hodgkinson. It attracts 35 million viewers.

People kept stopping her in the street to talk about the show, and even in Toronto people came up and said: "Didn't we see you on TV the other night?"

"It was great fun and I did not miss the chance of plugging Wookey Hole and other places of interest in the West," she told me as we sat in the panelled lounge of her 600-year-old home, Babwith, right next to the caves at Wookey.

Since the show, and as a result of newspaper articles about her, Mrs. Hodgkinson has had over 60 fan letters, and they are still arriving.

One came only this week, addressed to "Mrs. G. W. Hodgkinson, c/o Wookey Cave,

She 'sells' Wookey to the Americans

... and STUMPS THEIR TV PANEL!



● Back at Wookey.

near Stonehenge and Bath, South-West England."

She has also had letters from people with the surname Wookey, asking if they might possibly be related, or whether she could trace their family history. In fact, Wookey is just an old English name for Hole.

Mrs. Hodgkinson also appeared in four other television shows, including one in Washington and

by **DAVID SOLOMONS**

one in Toronto, and did several broadcasts on sound radio.

On one of these she appeared with Vincent Lopez, one of the most popular dance band leaders in the U.S. She thought at first it was to be a studio broadcast,

but it was relayed "live" on a "coast to coast hook-up" from the Taft Hotel.

Afterwards Mr. Lopez presented her with a pair of maraccas and a diamante-studded fountain-pen containing scented ink!

A 'GIMMICK'

Apart from the fun of broadcasting, Mrs. Hodgkinson also did valuable work for the British Travel Association in continually publicising Wookey Hole and other famous spots in the area, like Wells Glastonbury, Cheddar and Stonehenge.

"The idea is to get the American tourist down to this part of the world," she said. "So often they go to Stratford, then on to Scotland and off to the Continent."

To help her in this task she took with her a "gimmick"—Archibald, a 2,000-year-old skull discovered at Wookey. He created quite a stir, especially on board the Queen Mary, where a special place was laid at table for him.

"I got away this time from the tag '20th Century Cave-woman' that they pinned on me four years ago," she said, "but I am sure some of them had the idea that I lived in a hole in the ground!"

She is hoping that her trip will show dividends this summer by a big influx of American and Canadian visitors to the West—and particularly Wookey.

TOUR AGAIN?

After her trip four years ago, she says, the American tourist traffic to Britain increased by 27 per cent., but the numbers who visited Wookey Hole went up by 300 per cent.

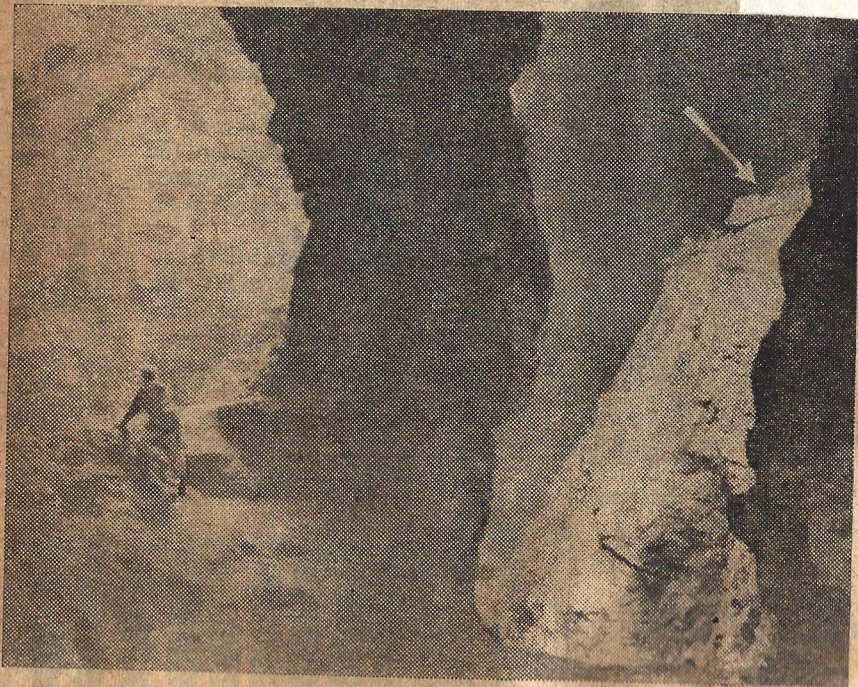
She turned down an offer of a three-week lecture tour in America, all expenses paid, to come back to run the caves—and, incidentally, to present her 18-year-old daughter Sheila at Court next month. But she is considering taking the offer up in the autumn.

Boys stumble on a body..180ft down

GIRL IS FOUND MURDERED IN PIT

By KEN ROGERS

DETECTIVES were searching last night for a killer who strangled a young woman and threw her body into a cavern 180ft. beneath a lovers' wood. The woman—aged twenty to twenty-five—was found dead on



IN THE CAVERN . . . Mrs. Monger. ARROWED . . . where the body lay.

Saturday night. Her body lay sprawled on a heap of rubble, in a disused iron-ore mine below Garth Woods, near Penttyrch, Glamorgan.

A black silk scarf was round her neck.

Last night the head of Glamorgan CID, Chief Detective Superintendent Tom Williams, said: "The woman has not yet been identified."

The woman—in a jumper, blue skirt and black underwear—was found by four 14-year-old Cardiff boys who were exploring the cavern.

The boys called the police. And the police sent for two potholers Dr. David Monger, 52, and his wife, Zena, 49.

Streams

Mrs. Monger led her husband and a squad of detectives on a tough, half-hour scramble along a tunnel to the bottom of the mine.

By the light of carbide lamps, the party picked their way around underground ponds and streams which sent clouds of vapour into the chill, clammy air.

Later, arc-lights were sent in. Crime-scientists arrived. They took away samples of the dead woman's clothes.

Nearly 200 feet above, police cordoned the woods. Dogs were brought in to help search for clues.

Fresh car-tracks found in the wood were covered with beech branches until they could be properly examined.

The killer is believed to have thrown the woman into an old mine-shaft which plunges straight down from the wood into the cavern where the body was found.

Shaft

At the top, the shaft is eighteen feet wide. It opens a few feet from the woodland lane where the car tracks were found.

Detectives believe that the killer thought the shaft was an old well.

Because of this, he would have thought the body would never be discovered.

But under Garth Woods lies a honeycomb of mines. They were used during the last war to store ammunition.

Now they are the haunt of potholers and cavers.



MRS. MONGER . . .
*she led a squad of
detectives along a
tunnel to the bottom
of the mine.*

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5th Nov.
C. Post

Boy rescued after 17 hours in cave trap

A 15-year-old boy trapped by his feet deep in a Devon cave for 17 hours was brought out safely today—walking unaided.

The boy, 13½-stone Jeffrey Buckingham, of Honicknowle, Plymouth, was not seriously hurt.

He was stiff from being in one position all night, his feet wedged in a narrow crevice.

His father, Mr. F. W. Buckingham, who had been waiting all night, met him at the cave mouth and took him home.

Jeffrey set out yesterday with 11 fellow pupils from Devonport High School to explore Baker's Pit Cave, Buckfastleigh. His feet slipped and jammed as he made his way along a low shaft known as the Crystal Corridor.

Two school prefects tried for over an hour to release him before returning to the surface 300 feet above to raise the alarm.

Rescue work was hampered because only two men could get to Jeffrey at a time in the narrow shaft.

Teams from Plymouth, Buckfastleigh, and the Outward Bound School at Holne, with police, a doctor, and teachers from Ashburton School, worked through the night.

At 3.30 a.m., they were able to move him slightly, and he was finally freed with the aid of ropes under his feet with which he was eased up out of the

2nd Nov.

Eastwater Cavern.

A trip to the top of Primrose Pat - there was talk of going down - at least we carried the ladder to the top of the shaft. After much lying, cheating and chickening out only Ray Denny went through the squeeze to the first ledge. I am pleased to say that he bottomed the shaft on Dec 21st.

10th Nov.

Quakering House Cave.

An MNRC Speleo Group trip to this cave at Milverton. Cave has a strange geological position being of Trias age in the lower Siltstone Bed of the Bunter Series. Depth of this bed being 100ft.

See Geological report MNRC Snel Rep Dec 1963 (No 12)

See Also MNRC Snel Group Rep (No 11) Nov 1963

W.A.E. Usher - Geol of Quantock Hills. Mem. Geol Soc (1908) p 89

Geol Survey - Wells & Springs of Somerset, HMSO. (1928).

Bryant - W.C.C. Int 7, (87), 131-133 (1962)

Der Fledermausfanger - W.C.C. Int 7, (90) 212 (1963)

Survey from B. Ellis & H. Kenney 2/90 part free.

14th Nov.
Sunday Times

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CORNISHMEN MAY BE SITTING ON A FORTUNE

Money goes back into tin mines

By a Sunday Times Correspondent

PENZANCE, Saturday.

Cornishmen with defunct tin mines on their land have watched the price for the metal soar to almost £1,000 a ton, a rise of more than £150 in a year, and have wondered: "Are we sitting on a fortune?"

A combination of Indonesian politics, Bolivian inflation and a world shortage has already set some of the big finance houses thinking in terms of a Cornish revival. A dozen areas in the county, mainly the sites of disused mines, are being prospected.

Tin prospectors are cannier than gold miners but Camborne Tin Ltd., backed by a big mining consortium, are discreetly optimistic about the 700-ft. shaft they have drilled at Wheal Grenville, near Redruth. Four miles away across the fields, a rival Canadian company has drilled 200 ft. beneath a stretch of farmland where bullocks (though not spies from the opposition camp so far) have to be kept away from the rig with an electric fence.

From 200 to two

A century ago there were 200 Cornish mines. Now there are two, South Crofty, near Redruth, and Geevor, near St. Just, employing 640 men between them.

There would probably be no shortage of labour for new mines because Cornish industry provides little wage competition. "The money's not good but it's better than working on the land," said John Jervis, a 21-year-old who works at South Crofty. And other miners, compact men with red-stained faces, who had brought the sour smell of their carbide lamps with them from 2,000 ft. under the earth, said the same thing.

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"Try earning £20 a week on the land," suggested Giuseppe Amenta, a Sicilian with 12 years' mining experience. Italians, Irishmen and even a handful of Poles, who fought with Anders' army before finishing up in Cornwall, made the same kind of points.

The existing mines have been doing well enough to attract outside companies to Cornwall—the shares of Geevor have risen in value by two and a half times in nine years. Tin mining involves high capital outlay—the Union Corporation Group of South Africa is one of the big companies financing prospecting—but a lucky man who acquired mineral rights and found a company to exploit them might still make himself rich.

Lots of Cornishmen with mining experience will produce hoarded specimens of rock and tell you they've always had a hunch about this or that site. Few get farther than that, but one mining engineer, Mr William Harry, is certain he knows the best prospect in Cornwall.

'One of the richest'

"I ought to know a mine when I see one. I was fourteen when I started, 2,000 feet down, and I've superintended mines in half a dozen countries since," he says. His Penzance house is littered with a jumble of specimens and mining certificates. "You could

say the Carnelloe mine is one of the richest I've ever seen."

I went to see it, built into the bleak cliffs on the coast road from St. Ives to Land's End. As the shaft is only 156 feet deep, most of it under the sea, reopening would be comparatively cheap. This would still mean a capital investment of between £200,000 and £300,000 but given an 80-ton a week production level—"at Carnelloe that would be a very conservative estimate," Mr Harry maintains—the annual return (as long as prices stay high) could reach nearly 50 per cent. Mr Charles Jelbert, the farmer with the mineral rights,

could forget his cows for ever if Carnelloe got going.

But, like Mr Harry and the Canadian company interested in financing the project, he has been frustrated by a controversy over planning permission. All the same there are plenty of other long-neglected mines in Cornwall that might be made to pay.

The year 1963 has not turned into a Cornish 1849 or produced a Great Tin Rush but powerful interests are trying to reverse the tide of one hundred years' history. There might still be a local revival—and a good profit for the man who finds tin at the bottom of his garden.



Photographs by Kelvin Brodie

Under the derrick in the shadow of an old Cornish tin mine, a new drill goes down, but the miners with their carbide lamps are still much the same, even to the extent of preferring the old-type helmet (top left)

Dec 2nd

L. P. P.

Rescuer is

rescued after 19-hour wait

A former Bristol Grammar School pupil, who has taken part in several Mendip cave rescues, was himself brought to safety yesterday after spending 19 hours underground in a Yorkshire cave system.

Jeffrey Perry (20), son of Bristol dentist Mr. Ivor Perry, was one of seven Cambridge University potholers trapped in Providence Pot, in the Dow Cave series near Skipton.

They entered the cave at 1 p.m. on Saturday, and intended to explore the whole system. But they found the going more difficult than they had expected, and when their lamps gave out, they decided to await help. One of the party who had

stayed on the surface raised the alarm, and members of the Upper Wharfedale Rescue Association staged a four-hour rescue operation.

They were helped by an R.A.F. mountain rescue unit who were in the district.

Jeffrey's parents, who live at 16, Pinewood Close, Westbury-on-Trym, first heard of the rescue when police telephoned them to say their son was safe.

The potholers were said to be in "quite good shape."

PICK OF THE POTHOLERS

SEVEN students put on a pothole "pop" singing session when they were trapped for a night because their lights failed in a cave at Kettlewell, Yorks. Yesterday the seven men, all from Cambridge University, were pulled out unharmed.



Jeffrey Perry, a former pupil of Bristol Grammar School whose home is at Westbury-on-Trym, was rescued after 19 hours in a Yorkshire cave at the week-end. He is pictured (holding cup) with some of his six fellow potholers from Cambridge University, who were also trapped. (See story Page 19).

Rescuers draw up safety code for cavers

The Mendip Rescue Organisation has issued 3,000 copies of a new leaflet containing advice and precautions for caving on the Mendips.

The Caving Code has been drawn up by members of the leading caving clubs in the area, and wardens of the M.R.O. — the voluntary body that organises and carries out cave rescues in the tricky Mendip holes.

It has been distributed free to the many caving clubs in the area, to farmers who control entry to some of the principal caves, and to shops that sell caving equipment.

Another 1,000 leaflets have been printed, and Dr. Oliver Lloyd, of Withey Close West, Westbury-on-Trym, secretary of the M.R.O., hopes to distribute them among the many cavers who do not belong to clubs.

"Half the caving on Mendip is done by young people who belong to small, mushroom clubs, or no clubs at all. These are hard to contact," he said.

FOR EMERGENCIES

One page of the leaflet details ordinary caving god manners and precautions practised on Mendip. The other tells the caver what to do when things go wrong.

Caving tips from the first section include:

- Always leave a note with someone on the surface to say which cave you are visiting and what time you expect to be back;
- It is a good thing to have two forms of lighting with you, and to be able to do repairs in the dark;

- Helmets are essential on verticals and desirable at most other times;
- Keep in touch with the caver behind you at all times to prevent the party from splitting up;
- Never use other people's tackle without making arrangements with them, as it may be missing when the return journey is made;
- It is not usually safe to have

less than four cavers in a party; if someone gets hurt, the second stays with him, while the other two go for help.

Advice in times of trouble includes:

- If your lights fail, or you have lost the way, stay where you are and await rescue;
- If you have to wait, get out of draughts and huddle together to keep warm;
- The party giving the alarm should observe the M.R.O. notice at the cave entrance — go to the nearest telephone, ring the police at Wells 3481, and stay by the telephone until the rescue warden rings back for information;
- To avoid getting trapped by floods, consult the weather before going down a wet cave.

MENDIP RESCUE ORGANIZATION

CAVING CODE

Normal Caving

1. It is usually best to ask the owner's permission before entering his cave. Never grudge the farmer his shilling; goodwill is worth more than that.
2. Always leave a note with someone on the surface to say which cave you are visiting and what time you expect to be back.
3. Make sure that your lights are in good order and that you carry with you the necessary spares. It is a good thing to have with you two forms of lighting and to be able to do repairs in the dark.
4. Clothing should be adequate for the type of trip contemplated. Wet caves need warmer clothing. Strong boots are recommended. Helmets are essential on verticals and desirable at most other times.
5. Keep in touch with the caver behind you at all times; this prevents the party from getting split up. The leader should be on the look-out for signs of fatigue or distress, particularly with beginners. He should give the necessary encouragement and be prepared to turn back. Take food with you for any long or energetic trip.
6. Always take your own tackle for a ladder pitch. Never use other people's tackle without making arrangements with them: it may be missing when you return. If you find a pitch already laddered you may either (a) leave your ladders at the head of the pitch, contact the party below and ask them to put your ladders in position, when they go out, or (b) take up the other ladders and put down your own, especially if they are better. It is courteous to roll up the other people's ladders. Never go away with other people's tackle, not even if you have lost your own. Never put ladders side by side on a pitch. Never have more than one person climbing at a time.
7. A life-line should be available for all verticals and must be used on verticals of over 20 ft. It is not sufficient to have it just in case; the leader must insist on its use. On long pitches (e.g. Lamb Leer) it is essential either to use a double life-line or to leave a life-liner at the head of the pitch.
8. Leave no rubbish in a cave or near its entrance. Spent carbide should be buried or tipped into an active streamway (not pools). Don't use it to defile the rocks and stalagmite. Spent batteries, flash bulbs and toffee papers are rubbish, and should be removed.
9. In Swildon's Hole Sump I is a safe free dive of 6½ ft. Sump II is 30 ft. and should on no account be attempted free. Sump IV of 15 ft. is difficult and should not be attempted for the first time, unless in company with someone who has done it and knows it well. In Stoke Lane Sump I (2 ft.) is safe unless there is flooding. If there is a river running in the Pebbly Crawl, the sump will be impassable. Sump II should not be attempted. All other sumps on Mendip are best avoided.
10. It is not usually safe to have less than four cavers in a party. If someone gets hurt, the second stays with him, while the other two go for help.
11. Join a reputable caving club, if you want to learn and enjoy good caving.

THE SPELEOLOGICAL YEARBOOK AND DIARY 1964

Dear Sir,

Thank you for your interest in the above publication which will be published and posted to you early in January - but do not worry, the diary is not operative until February 1st 1964.

The demand for this publication now exceeds the 2,000 mark and because of the high cost of this type of publication we shall only print to supply existing orders.

We therefore ask you to place your order now and avoid disappointment.

QUANTITY DISCOUNTS - Available to Clubs only.

12 @ £5.10. 0.

9 @ £4. 5. 0.

6 @ £2.17. 6.

3 @ £1. 9. 0.

Summary of Cave Altitudes.

800 - 850 ft.

810 - 790. Nedge Hole. linear.

830 - 820. Reads Grotto. linear.

Swallets and shakeholes of Priddy, Cheston and Hillgrove are an important part of this group.

780 - 360. Eastwater.

800 - 400. Swildons.

799 - 378. St. Cuthberts.

700 - 350. Langwood / August.

All these caves start to level off towards their explored ends.

750 - 800 ft.

- 800 - 770. Dalmanes Cove - Odds a rift at 720 ft.
775 - 755. G.B. Devils Elbow - Networks.
760. G.B. Double Passage.
791 - 763. G.B. W. & E. extensions. Network.
750. Watership Caves. Shelters.

700 - 750 ft.

701. G.B. The Ooze. Branchwork.
740 - 700. Rhino Rift. Lineat.
700. Hawks Nest. Shelter.

650 - 700 ft.

- 684 - 650. G.B. White Passenger Gorge. Branchwork.

Great Central Vadose Region.

600 - 650 ft.

632 - 635. G.B. Rhumba Alley / Right Chamber.

500 - 600 ft.

600.	Bone Hole.	150 ft lineat.
570 - 550.	Brownes Hole.	700 ft Branchwork.
600 - 530.	Fairy Cove.	450 ft lineat.
590 - 567.	G.B. Main Chamber.	500 ft Branchwork.
600 - 566.	Hilliers Cove.	2800 ft Networks.
600 - 580.	Piscie Grotto.	lineat.
600 - 574.	Windbot Hill Cove.	lineat

NB. Balch Cove, etc.

Modern vadose after effects.

Withybrook Slashes, Danny Hole, Little hard on etc.

Many risings are modern features.

500 - 550 ft.

550 - 520. Bath Svallet. 100ft lineet.

530. Goatchurch, entrance. 135ft lineet.

Eastern Phreatic Zone.

550. Stake Lane Slacks. Networks.

Many of the large vadose cones extend into this region.

450 - 500 ft.

500 - 464.	Dial Quarry Cve.	120 ft linear.
450.	Goutchuck (part).	134 ft linear.
480.	Reeds (main chambers).	linear.
450.	Sows Hole.	Shelter.
500.	Tunnel Cve.	linear.
500.	White Dancers Hole.	Shelter.

400 - 450 ft.

430 - 390.	Andridge Oak Cavern.	150 ft linear
425 - 416.	G.B. Main Chambers / Sand Digg.	
430.	Pigs Hole.	Shelter.
415.	Reservoirs Hole - entrance.	linear.
450 - 430.	Willels Home Hole.	linear.
400.	Yorkhouse Cve.	Shelter.

350 - 400 ft.

380 - 340. Avelines Hole. 130 ft linear.

370. Honey Combs Hole. Shells.

360. Goutchuck (Drainpipe). 40 ft linear.

300 - 350 ft.

330. Chelms Combe Quarry Cave.

305. Great Omer Hole. 300 ft Branch work.

318. Honey Hole. 25 ft Branch work.

250 - 300 ft.

300.	Bochwell Cave,	12 ft caliche vein.
260.	Badger Hole,	70 ft.
250 - 190.	Banwell Bone Cave,	100 ft. Networks.
250 - 190.	Banwell Stalactite Cave,	250 ft. Branchworks.
260.	Churchill Rocks Cave,	50 ft. Limest.
286.	Soldiers Hole,	Shells.

200 - 250 ft.

210.	Hyena Den.	100 ft Limest.
203.	Long Hole.	Limest.
240.	Sun Hole.	Shells.
250 - 210.	Wooley Hole Cave.	Branchworks.
230.	Fissure Cave.	

150 - 200 ft.

- 200 - 100. Bannell Ochre Caves. 550 ft. Network.
190. Goughs Old Cave. main chamber. 40 ft. linear.
190. Loxton Cave.
190. Pride Evans Hole. Shelter.
190 - 180. Skitter Hole. Shelter.

100 - 150 ft.

140. Cooper Hole. Linear.
107. Goughs Cave. 3,400 ft Branchmarks.
140 - 130. Scraggs Hole. Shelter.
140. Supers Sandy Hole. Shelter.
100. Flint Jacks Cave. Shelter.
120. Cross Quarry Cave. Linear.

Western Vado-Phreatic.50 - 100 ft. New Caves.

60.	Aquarium Cave.	300 ft Branchwork.
100.	Coxes Cave.	300 ft lines.
90.	Dennys Hole.	Branchwork.
100.	Sandy.	lines.
90 - 50.	Sages Hole.	Branchwork.
100.	Uphill Caves.	Shelter.



John Cornwell in Wookkey Hole.

Photo by Phil Rayford.

Deep down under the heart

BEP 26.3 57

TUNNELLING 60 FEET A DAY—AND STILL THREE MILES TO GO

PICTURES BY NORMAN MILLER
STORY BY PETER WOON

of Bristol

AS city traffic travels along Cheltenham Road, Bristol, this summer, workmen will be blasting out a tunnel 60 feet below them.

For Bristol's "Northern Storm-water Interceptor," the major project in the city's £10 million scheme to cure its flooding and sewerage problems, is now approaching its second major road crossing—the first was Whiteladies Road.

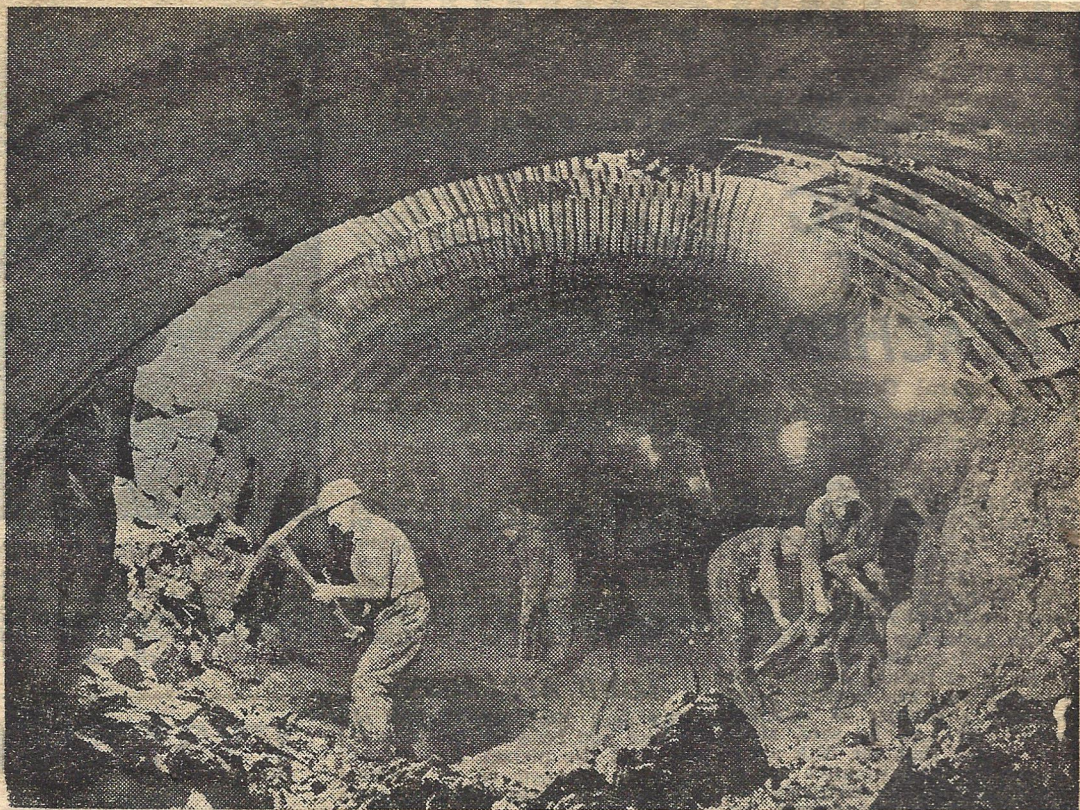
Within a fortnight, the 80 workers who regularly use the "Underground" transport system which runs through the 16-foot high tunnel from Portway will be able to climb into the fresh air again at Shaft 5A in Eastfield Road, off the bottom of Cotham Brow, after a journey of nearly two miles.

Then they will carry on with their blasting under Cheltenham Road, to complete the second stage of the £3½-million project at St. Andrew's Park. After that, the third stage will take them under Stapleton Road station and Eastville gas works to the car park of Bristol Rovers football ground.

And there, by 1960, hopes Mr. W. R. McCann, the contracts manager for A. E. Farr Ltd., the troublesome Frome will be linked with the Avon by a three-and-a-half-mile tunnel dropping one foot every 1,400 feet to carry floodwater away.



● One of the concrete transporters, of which four are in use to carry six tons of concrete at a time along the waterlogged track.



● Under Portway, workmen dig out the last section of the first stage of the tunnel, which stretches from the Avon to Clifton Down Station—and beyond to Cotham.

MEANWHILE, the men have plenty of water on their hands already—43 million gallons of it are having to be pumped out of the tunnel every week. "But that's only a dribble compared with what the tunnel will eventually carry," says Mr. McCann.

His men have been moving at a good pace these last few months and six weeks ago they achieved a new record of blasting, driving 294 feet of new tunnel through in a week. Now, running up against marl, the rate of tunnelling is down to 50 feet a week.

There are other figures in Mr. McCann's latest progress report. To date, he said, 11,076 feet of tunnel has been driven, together with 1,039 feet of shafts.

On the tunnelling side, apart from driving on through to Cheltenham Road, his men are also completing the excavation of the beginning of the tunnel under Portway. A concrete balkhead keeps out the Avon; eventually it will be removed and tidal "flaps" will be put in position. Further up there will be sluice gates.

The other major work is the concreting of the tunnel. Mr.

McCann's figure on this: 34,437 cubic yards of concrete have been used so far.

CLIMB on one of the trucks under Portway and clatter along the waterlogged miniature railway tracks at 15 m.p.h. to 150 feet under Waverley Road, Redland, and you see where all the concrete goes.

There, a 60-foot shuttering, also on rails, is in place. Liquid cement, brought along on new cement transporters, is remixed on the spot and "fired" through a pipe by compressed air. The pipe carries it into the shuttering, which holds boarding round the tunnel in the correct horseshoe shape. In

nine hours the gap between the shuttering is filled up by some 300 tons of concrete.

Twelve hours later the shuttering is withdrawn and that section of the tunnel has been properly surfaced.

Amid the tremendous roar of the mixer and the hiss of the compressed air, it is slow work. Just 60 feet a day with nearly two miles complete and, taking into account the several subsidiary tunnels, three miles to go.

So Mr. McCann and his men are guaranteed employment for some time yet. Apart from the water, the rocks and the rest of it, their major problem these days is visitors. "We seem to spend half our time trying to keep them away," said the contracts manager.