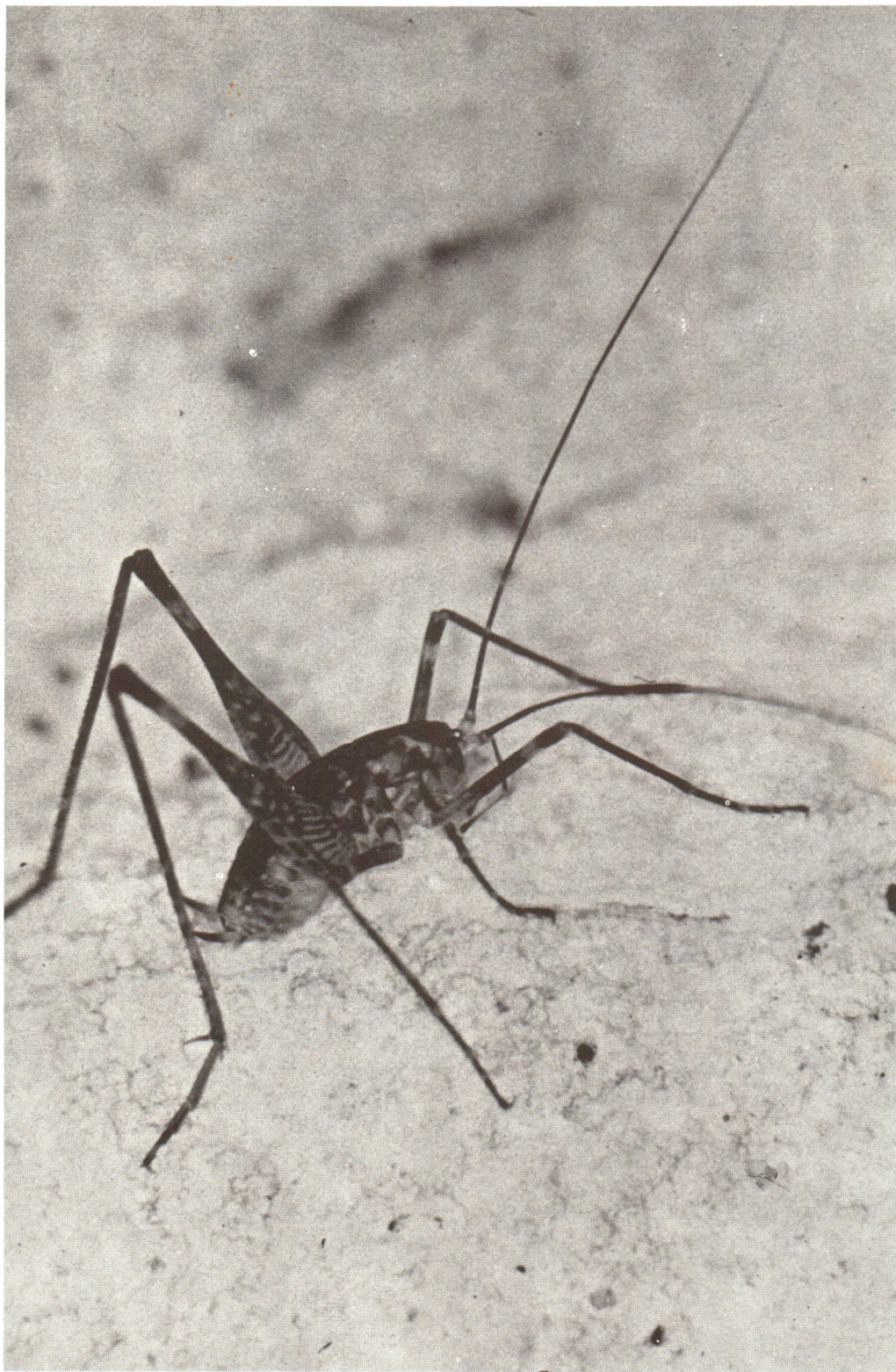


ASF

NEWSLETTER Summer, 1976 No. 74



THE AUSTRALIAN SPELEOLOGICAL QUARTERLY

The Yarrangobilly cave-weta (*Cavernottix montanus* Richards) in the Grotto Cave
Yarrangobilly, N.S.W. (Photograph E. Hamilton-Smith)

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ASF NEWSLETTER

I.S.S.N. 0313-413X

Number 74, Summer 1976

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EDITORIAL

Although the distribution of Issue No.73 was unavoidably delayed (due to the petrol strike in New South Wales), five issues have appeared within the last twelve months. Even an addition to my family failed to disrupt the ever-pounding keys of my over-worked typewriter. Articles are flowing in at a steady rate and already Issue No.75 (Autumn) has received its quota. You may also note that we have revived the "Caves of Australia" series and look forward to receiving further contributions.

Well, enough of my joyous ravings and onto a more serious aspect of caving - conservation. One of the main topics causing much discussion in Tasmanian conservation circles at present is the continuing exploitation of wilderness areas, particularly, South-West Tasmania. The recommendations of the Special Advisory Committee on this area failed to give any satisfactory answers in their report. No immediate protection is afforded to any part of the South-West. The Forestry Department are continuing to push their roads deeper into the South-West at an increasing rate. Of particular concern is the bridging of the Picton River and latest reports indicate that a bull-dozer track is in the vicinity of Farmhouse Creek, not that far from Judds Cavern in the Cracroft area. Despite the recommendations of the Special Advisory Committee, the HEC and mining interests continue with their current operations. Walking clubs and other interested bodies feel that it is time for the Tasmanian Government to impose a moratorium on development in this area.

With a possible change of government, the outcome of which will be known by the time you read this editorial, perhaps we can look forward to the removal of that big question-mark which has been hanging over the whole South-West for a number of years! However, whilst the issue continues to bug politicians and conservationists, the bull-dozer bites deeper and deeper into the most highly regarded of Australia's wilderness areas.

Another area which could also be under the hammer is Exit Cave at Ida Bay! Latest reports from reliable sources indicate that this highly esteemed Tasmanian cave, Australia's longest, is unlikely to be declared a State Reserve by the present government. It is hoped that more information will be available shortly.

Finally, I would once again like to take this opportunity of wishing all readers a very Happy and Safe Christmas and all the best for the New Year.

**** - * - * - ****

DEADLINE DATE FOR ISSUE No.75

News only, please!

February 28th. 1977

CONTENTS ISSUE No.75

Reducing Cave Survey Data With a Hand Calculator.
by Ken Grimes, UQSS.

**** - * - * - ****

Editor ASF Newsletter: Laurie Moody, 13 Mason Street, Claremont, Tasmania. 7011

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POSTNOTE:

The Cartland committee has been reconvened to proceed with the further stage of its inquiry into the South-West National Park. (5/12/76)

CAVES OF AUSTRALIA : No.11

EAST DEEP CREEK CAVE

by Alan Warild

Introduction

After recomputation, East Deep Creek Cave now stands at 139 metres deep, and 1406 metres long, or 3rd. deepest and 10th. longest in NSW. Being a typical Yarrangobilly cave it has an abundance of complex rockpile, excellent formations, a small stream running into the entrance, and no hint of ever needing anything more specialised than a trusty troglamp to bottom one of our deepest caves.

History

The Yarrangobilly caves were probably found in the 1830's by cattlemen such as I. Bawerman, who reported "holes in the hills" around the Yarrangobilly River.

Sometime before 1870, they had come under the control of the NSW Dept. of Mines, the southern ones being easily developed as tourist caves, while the others (such as East Deep Creek and Eagles Nest) remained virtually unknown on the plateau to the north.

Being situated only 1km from the Snowy Mountains Highway (SMH), and at the bottom of a 50 metre deep doline, it is very unlikely that it wasn't entered before the first recorded entry by SUSS in 1951, but no records exist to prove otherwise.

The amount of known cave grew rapidly over the next few years, with all of the lower level being found, as well as the connection through to the Y4 entrance and possibly much of the upper level. But it was in 1953 that East Deep Creek made caving and Media Headlines -

On a routine trip to the lower level one Brian O'Brien decided to have a look at some unexplored holes on the way out, while the rest of the party went back to camp. When he didn't return, and a quick search by the remaining cavers was fruitless, the alarm was raised, calling in the local Police, and cavers from Sydney. After a brief search of the known cave was made and still no Brian, it was assumed that he was lost on the surface (getting lost on the Yarrangobilly Plateau was quite a popular pastime in those days). When he wasn't found on the surface either, a thorough search of the cave was made, and Brian was found about 30 metres into Shatter Passage, 74 hours after he was last seen toddling off into the dark. Apparently, while exploring alone, his only lamp went out, and, being unable to relight it, he sat and waited for what he thought was about 12 hours.

Since then, a considerable amount of cave has been found, all in the Upper levels - The Donkey Tail Passage in the early 60's by SUSS, the U.S. Squeeze by Julia James in 1969, and the rest of Shattered Passage by UNSWSS during Easter 1976.

One survey was made of much of the Lower Level by SUSS in 1957; but this is ridiculously enormous, and the grade unknown.

During the Nibicon Field trips in January '73, another start was made, with most of the Upper Level being completed by mid '73 (mainly to CRG6 by UNSWSS members).

After two years of inactivity in East Deep Creek, the Forestry Compass was again put back into gear, and a series of cold, wet and nasty survey trips, the rest of the system was mapped: essentially to CRG6. As a result of the original maps being published in SPAR 50, Elery Hamilton-Smith pointed out that Brian was lost in a section of cave not shown in that survey. Elery was unable to locate it on a later trip, but acting on Elery's rough directions, J. Minchin, S. Voran and A. Warild rediscovered the beginning of the passage (mainly by following a series of reflecting aluminium arrows) which appeared to have only been entered once or twice before. Beyond the arrows was about 100 metres of previously unentered passage which was explored, then surveyed on the way out to CRG5 by Minchin and Warild. It was then named Shattered Passage due to its rather nasty, loose nature. In June '76, the last of the easy leads was followed up, by dropping down some holes in the floor of Shattered Passage and ending in the Upper Level as expected.

All that now remains is to try and dig/squeeze through the Lower Level streamsink, climb the aven in Mud Passage and Lower Level Rockpile and so discover the several thousand metres of supercave hidden from us at the moment.

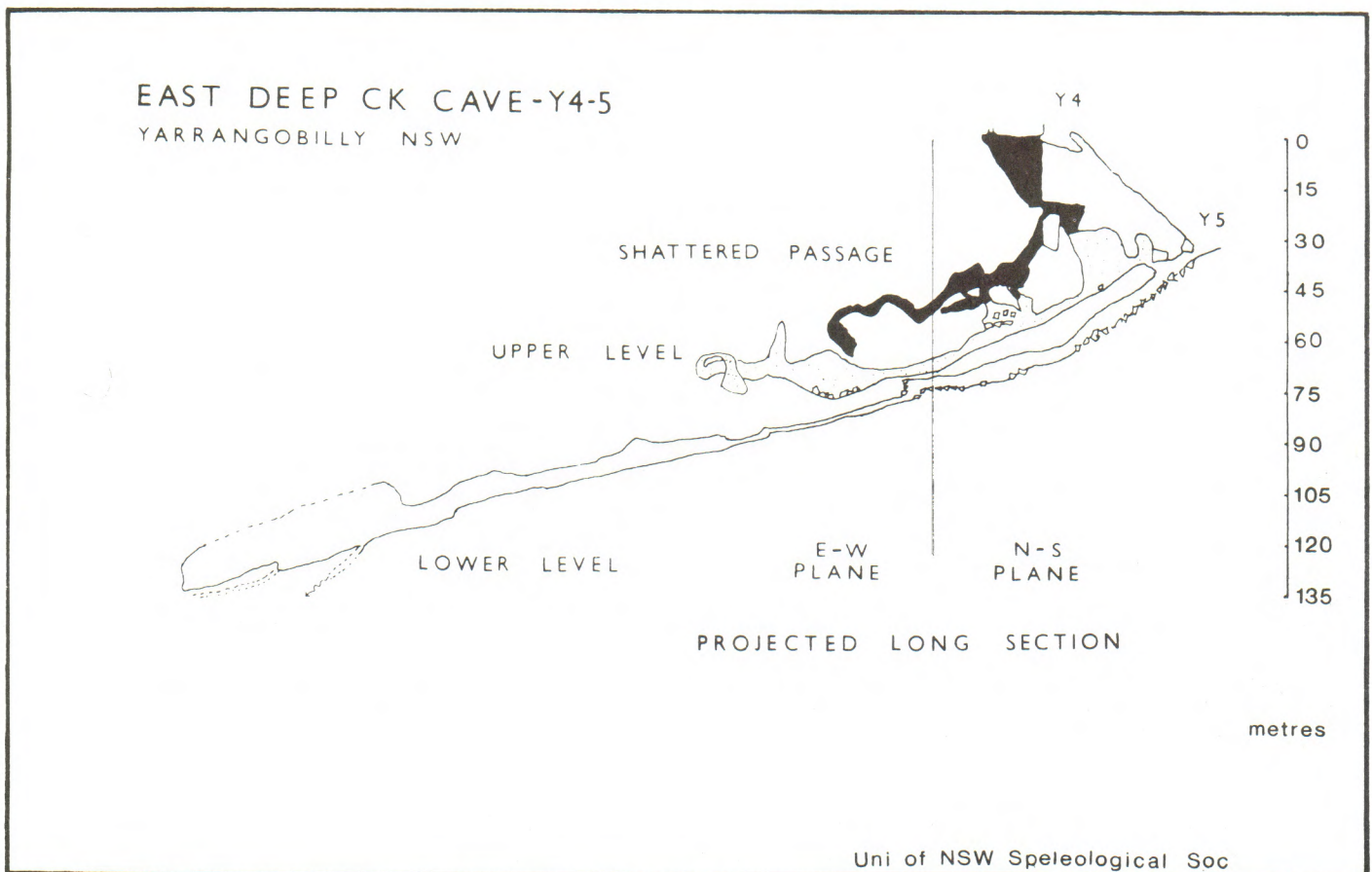
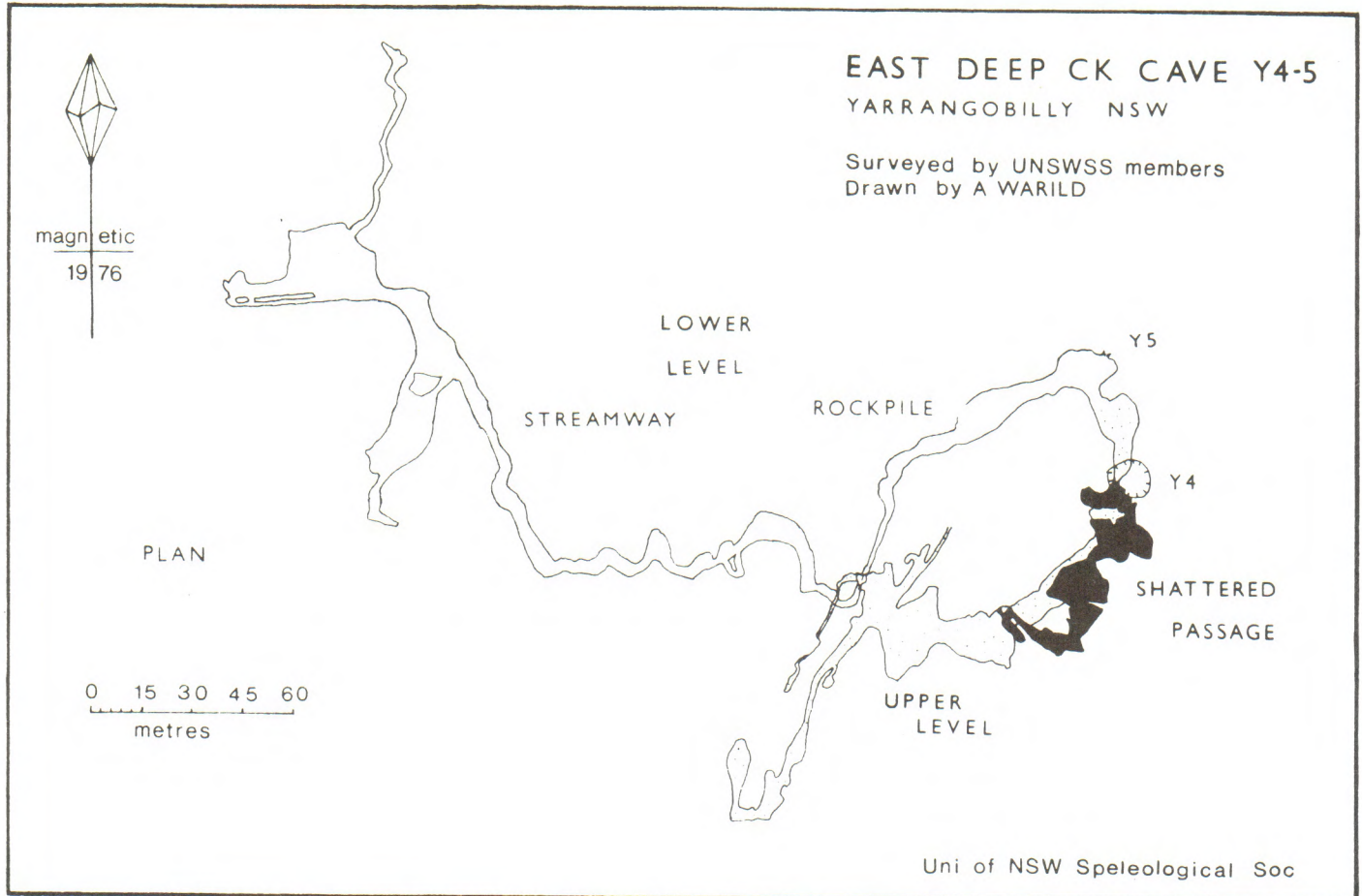
CAVE DESCRIPTION

East Deep Creek Cave is usually entered via the active streamsink of East Deep Creek, at the base of a large doline 1.8km east, and 200 metres above the Yarrangobilly River (which is the drainage base level for the area).

Often the creek is nothing more than a tiny trickle, which flows almost perennially; however, during heavy rain it grows into a formidable torrent, making the lower level a good, sporting wet cave.

For convenience, the cave will be subdivided into -

- a) The Upper Level
- b) Shattered Passage and the Upper Entrance
- c) The Lower Level Rockpile
- d) The Crawl
- e) Lower Level Streamway
- f) Extensions



A. THE UPPER LEVEL

A complex, but open rockpile with plenty of evidence of stream action in the inner regions, including meanders in the roof of the main chamber (24 metres high), stream gravels and scalloping. But it is a long abandoned streamway, and is in a state of confusion. The only part which is not a jumbled mess is the floor, which has gravels which may be followed with minimal difficulty to the Main Chamber.

The Turnoff to the Upper Level is about 15 metres down from the entrance, then up a mudbank on the left, over the top, then down into an open chamber with large rocks forming much of the floor, (and nothing forming the rest of the floor). The gate is reached by climbing down through the rocks at the very bottom of the chamber. From the gate, down a short climb leads to a gravel floor which, if followed will lead to the main chamber. At the end, there is a large, occasionally dry crystal pool; by traversing around this, one can reach the "Pretties Chamber", Donkeytail and U.S. Passages, which seem to be anabranches of the same, main streamway, but please - "Remove Muddy Boots and Overalls", as the sign says.

B. SHATTERED PASSAGE AND THE UPPER ENTRANCE (Y4)

Shattered Passage is a much older streamway than the Upper Level; it shows no evidence of stream action, and is largely collapse blocks, with everything being so loose that it falls somewhere at the slightest touch. As it runs directly above the Upper Level and all the major holes in the floor drop to the Upper Level, it may just be the very top of the streamway or it may be a separate level, collapsing into one below it. No scalloping gravels are to be found in this section.

Entry is most easily gained by moving down the Upper Level to the chamber just above the gate. Directly in front, and 4 metres up, is an obvious hole, which, if followed correctly leads up to a large flat rock with a 13 metre drop off the left side - walk across this and down a hole on the far end, which leads into Shatter Passage. The passage then spirals down through large rockpile blocks into a chamber, on the right of which is a squeeze leading into the largest chamber of Shatter Passage. Here there are a few holes which drop either to the Upper Level, or to loose rocky chambers fenched between the two levels. Leading off also, is a down-sloping passage which leads through a series of rock and mud hazards past a cat skeleton to the end.

The Upper Entrance is gained by climbing across, then up from the Western end of the previously mentioned large flat rock, through a squeeze (quite unobvious) then left, up a large, 20 metre high earth slope to the Y4 Entrance.

C. LOWER LEVEL ROCKPILE

This section is a simple, open, clean rockpile, down which flows the stream if the streamflow is adequate.

Wander down the steep but easy (except for a few interesting climbs) gravel-floored passage, past some large roof pendants, and so out of the simple rockpile into a low streamway which contains more gravel, more water, and an abundance of damaged formation (presumably broken off by large volumes of floodwaters). The passage eventually closes down to crawl proportions and thus becomes -

D. THE CRAWL

- Is 50 metres of masochistic pleasure the height of which averaged 0.6 metres in 1975, but after recent flooding, has filled with gravel to 0.3 - 0.4 metres high for most of the Upper half. The floor is composed mainly of angular gravel and water, interspersed with pools of water.

Upon entering, the caver finds he may crawl and stay dry until the first squeeze is reached; after passing this and the strategically placed pool after it, the caver may(?) be dry. A long 10 metre crawl leads to another pool, and a small waterfall chamber which is a welcome relief from what now separates the caver from all else. More rough crawl leads to the final squeeze which is especially designed to wet those who still remain dry. The crawl has been known to be blocked due to excess gravel and water: " - - - (the crawl) is a very disconcerting place to be when the water changes to a deep muddy hue and rises perceptibly." (Rose 1964)

E. LOWER LEVEL STREAMWAY

Upon emerging from the crawl, one is confronted by a walk-through, high, stream passage with under-cut meanders and a mass of excellent white formation. This point lies exactly 10 metres below the formation choked Upper level. The passage meanders uneventfully for 100 metres or so until it turns sharply, narrows down, and drops over a 2 metre waterfall. Staying on the same level one crosses the ladders, which are the tops of old rimstone pools forming a horizontal ladder, and then climbs down a few metres of waterfall. The passage size suddenly increases and the formations become prolific and good.

Except for one constriction, the cave remains as a high, wide, streamway with devious meanders in the roof, a gravel floor and some mudbanks near the end. The stream disappears down an obvious hole below the left wall, 30 metres downstream from the ladders.

F. EXTENSIONS

1. The Mud Extension : On the right, about 30 metres before the end of the cave a stream may be seen flowing down a large mudslope. The passage is entered by climbing up the mudslope then up a

muddy climb near the stream, for 50 metres. Most of it is a high, narrow passage floored with thick, sticky mud with some desperate climbs up one, and down the other side of mud walls. Here and there are holes in the floor, through which the stream may be heard. The passage ends in a wet, clean rockpile with a 10 metre plus aven heading off, which may be worth climbing. The stream enters through impenetrable cracks in the rockpile.

2. The SUSS Extension : This is located about 25 metres downstream of the ladders, and high up a mud bank to the left. It is an old, inactive stream passage, containing a reasonably sized chamber with large mudbanks in it. Entry is most easily gained via a small hole in the old streamfill. Across the chamber, a climb up a dirty red flowstone leads to a short passage with rimstone floor and some excellent helictites. The other entrance, which is about 10 metres upstream of the usual one is also about 10 metres above the stream. Exit from this passage is usually by means of poorly controlled gravitation, entry is rarely executed.

Geomorphology

The cave shows two separate stages of stream piracy, forming the 3 different levels now visible in the cave.

Stage 1: Water flowed in through the Upper (Y4) entrance, and down Shattered Passage, then down through the Donkeytail and U.S. Passages, then reappearing in the cave through SUSS Extension to flow down the last length of the lower level streamway.

Stage 2: The stream pirated itself and flowed in through the rockpile above Y5 entrance, then down the Upper Level until the last large chamber, where it dropped down and formed the Lower Level Streamway, as well as enlarging that part of it already formed below the SUSS Extension. Thus abandoning the Y4 entrance, Shatter, Donkeytail and U.S. Passages, as well as SUSS Extension.

Stage 3: In its present stage, the water has abandoned the Upper Level, forming the Lower Level rockpile, The Crawl and then enlarging the rest of the streamway before disappearing off into the unknown.

The process I've just outlined, seems to be the most probable (to me), because all of the evidence I've found fits - From top to bottom -

Shatter Passage has the correct gradient for an inflow passage, as do Donkeytail and U.S. Passages, the last two of which also have scalloping and old rimstone dams which also indicate inflow conditions but they are also perched at a higher level than the base of the Upper Level, indicating that they may have been used by water moving down Shattered Passage and the earlier stages of the Upper Level, before it abandoned them for the Lower Level passages below.

By its size, and nature, the Lower Level appears to be much younger. The entrance rockpile has not nearly suffered the same amount of breakdown as have the upper two levels, and it is not of any great size or complexity, the Crawl also seems relatively new. But below that, the passage suddenly increases in size at a point almost directly below the end of the Upper Level, and being pure, undamaged stream passage, it indicates water entering at a higher level than the Crawl. i.e. the Crawl empties into the bottom of the streamway, so the water which formed the higher part must have come from a higher level.

So this section has been used for two stages of cave development, progressing down, one sees no marked increase in size until after the Ladders, which is where the SUSS Extension enters the streamway, indicating that this tract has been used for a much longer period. SUSS Extension is fenched and has both slope and scalloping indicating correct direction, while Mud Extension appears to be a long-lived, but low volume tributary passage which causes virtually no changes in the basic cave form.

Conservation

The major area in need of conservation is the Upper Level, and in particular, the Donkeytail Passage, which no-one need enter, as it goes no-where. It needs a gate in the rift passage on the way in, as some people are entering (and damaging by their mere presence) this delicate section for quite trivial reasons.

Signs have been placed near the major pretty sections - please OBEY THEM! A gate has also been placed to block off the Upper Level, but there are too many by-passes around it, and the key is very easy to obtain anyway. The Lower Level is virtually self-conserving because most of the formations are safely hanging from the roof, and are separated from the outside world by a nasty crawl. However, there are some muddy footprints over good formation as well as a few stupid arrows (nobody needs arrows to find their way out of a simple stream passage!).

Reference

WARILD. A. (1975) Spar 50

* * * * *

DID YOU KNOW -

That Horizontal Scrub (Anodopetalum biglandulosum) gets its name from the way it grows, the main trunk bending and the branches interlacing with themselves and with adjacent trees to form an impenetrable barrier?

NOTES ON THE INVERTEBRATE FAUNA OF YARRANGOBILLY CAVES, N.S.W.

by Elery Hamilton-Smith

INTRODUCTION

Although one of the very early descriptions of an Australian cavernicole was based upon material from a cave at Yarrangobilly, it has often been assumed that the Yarrangobilly Caves are virtually devoid of cavernicolous fauna. Recent collecting demonstrates that this is by no means the situation, and that Yarrangobilly warrants further biospeleological research.

The early description was that of Rainbow (1907) who described the species Isotoma troglodytes (order Collembola - springtails) from an un-named cave at Yarrangobilly. This species was based upon material collected by Prof. Edgeworth David, and although the original description and knowledge of caves at the present day suggests this material may have come from River Cave, this cannot be confirmed. Womersley (1939) re-examined this species and concluded that Isotoma troglodytes was a junior synonym of Proisotoma minuta Tullgren, a common and cosmopolitan species.

Cave-wetas have been familiar components of the Yarrangobilly fauna for many years, and Richards (1966) described the species occurring at Yarrangobilly and Cooleman as Cavernotettix montanus. Other species of the same genus occur at Wyabene (N.S.W.), Buchan (Vic.) and Flinders Island (Bass Strait). Lotz (1968) in a brief and popularly written note, describes seeing C. montanus eating small flies settled on the walls in the entrance zone of Castle Cave.

Other literature does little more than to list recorded species, and will be noted below. These notes are not intended to be comprehensive, but only to list material known to the present author, and draw attention to the potential value of further study. Cave nomenclature and numbering is based upon Brush and Nicholl (1976) as the most recently published cave listing for the area.

THE FAUNA

PLATYHELMINTHES - Flatworms

One specimen has been taken from River Cave.

SYMPHYLA

Specimens have been taken from East Deep Creek (Y5) in the entrance area, River Cave (Y27) and Meat Safe Cave (Y76). Symphylids are relatively common in the leaf litter and upper layers of soil in the area, and so are readily washed into the caves. There is no evidence to suggest that these specimens are anything but accidental to the cave environment. A similar situation occurs at Cooleman, where symphylids are common in many caves.

DIPLOPODA - Millepedes

Recorded from Tricketts Cave (Y13), Castle Cave (Y31) and Meat Safe Cave (Y76). Again, these are almost certainly accidental to the caves.

INSECTA - COLLEMBOLA - Springtails

In addition to Rainbow's description already referred to in the introduction, other specimens (not yet determined) have more recently been collected from Tricketts Cave (Y13), River Cave (Y27), and Meat Safe Cave (Y76).

INSECTA - ORTHOPTERA

Family Rhaphidophoridae - Cave Wetas.

Cavernotettix montanus Richards 1966.

The holotype specimen was collected by A. Goede from an un-named cave (also un-numbered?) near Glory Hole. Precise identification of this cave would only be possible if and when A. Goede again visits the area. Richards (1966) also records specimens from Jersey Cave (Y23), Restoration Cave (Y50), and from an un-named cave. This latter specimen was collected by P. MacGregor on 28th December, 1950. On checking the original trip report (MacGregor 1952) there is reference to a Rhaphidophorid being taken from Jillabanan Cave (Y22) and lodged in the Australian Museum. Thus, this last record probably refers to the Jillabanan, in which C. montanus is relatively common.

Richards (1974) records a further specimen from an un-named cave (Y7). Assuming the number is accurate, this is North Deep Creek Cave. Finally, the present author has specimens from Tricketts Cave (Y13), Grotto Cave (Y30), and Castle Cave (Y31). It will doubtless be recorded in due course from many other caves in the area.

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NOTICES & NEWS

WASG HUT GOES UP IN FLAMES

It is noted with dismay the recent destruction of WASG's last hut at Boranup. WASG lost the use of their house at Witchcliffe earlier in the year and the legendary 'Boranup Motel' mysteriously burnt to the ground later on in the year. At this stage it was just thought of as an unfortunate occurrence but then their third and final (started in 1972 after lying in a timber yard for many years) hut was deliberately burnt down not so long ago. Members arrived back at the hut site to find the hut ablaze and their gear stacked outside, well away from the hut. Needless to say the police have been informed.

PROCEEDINGS OF THE FIRST CAVE TOURISM CONFERENCE

These are now available - \$5.00 plus 75c postage & packing per copy; bulk orders (10 or more to the same address) \$4.00 plus postage. Title is 'Cave Management in Australia'. All orders are to be made direct to Elery Hamilton-Smith, P.O. Box 36, Carlton South, Victoria, 3053.

CONSERVATION OF BEGINNERS LUCK CAVE

The importance of this cave as an archaeological site dating from the last Ice Age was mentioned in Speleo Spiel No.112 earlier this year. In July an official approach was made to the head office of the Australian Newsprint Mills with a request that the site be protected from forestry operations. The following letter was received in reply:

"Dear Mr. Goede,

Thank you for your letter of 26th July concerning the cave site near Settlement Road in the Florentine Valley.

As you know the company has reserved several areas of unusual or outstanding flora within the Concession and we will be pleased to set aside a small reserve around this particular site.

If the boundaries that you propose marking are acceptable to Mr. Frankcombe, then the Company will not carry out harvesting or roading operations within the proposed reserve.

Yours sincerely,

B. F. Gibson, (signed)

Forests and Logging Manager."

This was followed by a request from Don Frankcombe to Max Jeffries (President-Maydena Branch) for the boundaries to be marked out as soon as possible as forestry operations were rapidly approaching the area. Max acted with commendable speed and carried out the boundary marking despite the fact that he was just about to go off to hospital for an operation.

The Tasmanian Caverneering Club and Maydena Branch are grateful for the willingness of the Australian Newsprint Mills to protect this area which is within their timber concessions and also for their prompt response to our request.

Albert Goede.

LARGEST LAVA CAVE

Seven British explorers have found in Kenya what they believe to be the longest and deepest lava tube in the world. The tube or volcanic cave is in the Chyulu Hills, 150 miles east of Nairobi and is inhabited by red-necked bats and white scorpions.

Bob Davies, from Walton-on-the-Naze, Essex, who led one of the two exploration parties, said the cave is at least seven miles long and 1,500 ft. deep. Until now, the longest known lava tube, in Hawaii, was about 6 miles long; the deepest was in the Canary Islands, at 1,400 ft.

The party spent ten days underground. The cave is in an uninhabited, waterless area and they had to take all supplies with them. The Britons, most of whom work in Kenya, are members of the Cave Exploration Group of East Africa. They have named the cave 'Leviathan'.

The tube is caused by the cooling of a lava flow and is thought to be fairly recent - about 1,000 years old. Among the unexpected finds in it were items of pottery 400 years old and an ecology adapted to the complete blackness of the tube. A colony of red bats, for instance, nests more than a mile inside the tube.

(The above was reprinted from the June issue of "Climber and Rambler" and Speleo Spiel No.117)

Re the above:- The Editor has received an article regarding the above lava caves and it will be published when space permits.

ANOTHER DEEP SHAFT LOCATED AT JUNE

As I finish off this particular issue, a report has reached me that TCC & Maydena Branch members have pushed another shaft, close to JF99, to a depth of 137 metres and it is still going strong. So far it has gobbled up fifteen 9 metre ladders and is hungry for more! Alan Warild - please note!

SPELEO-GIGS

COMING EXPEDITIONS & EVENTS

THE NULLARBOR

VSA and CEGSA are planning an expedition to this area in May of 1977. The expedition is expected to last between two and three weeks. The main objective of this particular trip is to continue extensive exploratory work in Mullamullang Cave. This particular trip is not to be confused with the UNSWSS expedition proposed early in the new year.

CAVE TOURISM CONFERENCE

A cave tourism conference is to be held in Hobart May 2nd. - 6th. (tentative date). Further information will be available next issue or by contacting Elery Hamilton-Smith, P.O. Box 36, Carlton South. 3053

THE NULLARBOR

Yet another proposed trip to the Nullarbor! This trip is also expected to last two or three weeks and is being conducted by NSWITSS. The trip is intended to take place in June/July 1977.

TASMANIA

SSS members P. Ruxton, N. Hickson and S. McCann are planning to invade Tassie at Easter 1977 and hope to cover all major caving areas.

SHEFFIELD, ENGLAND

The Seventh Speleo Congress.

PAPUA NEW GUINEA

Julia James is proposing to lead another trip to the Atea again in 1978.

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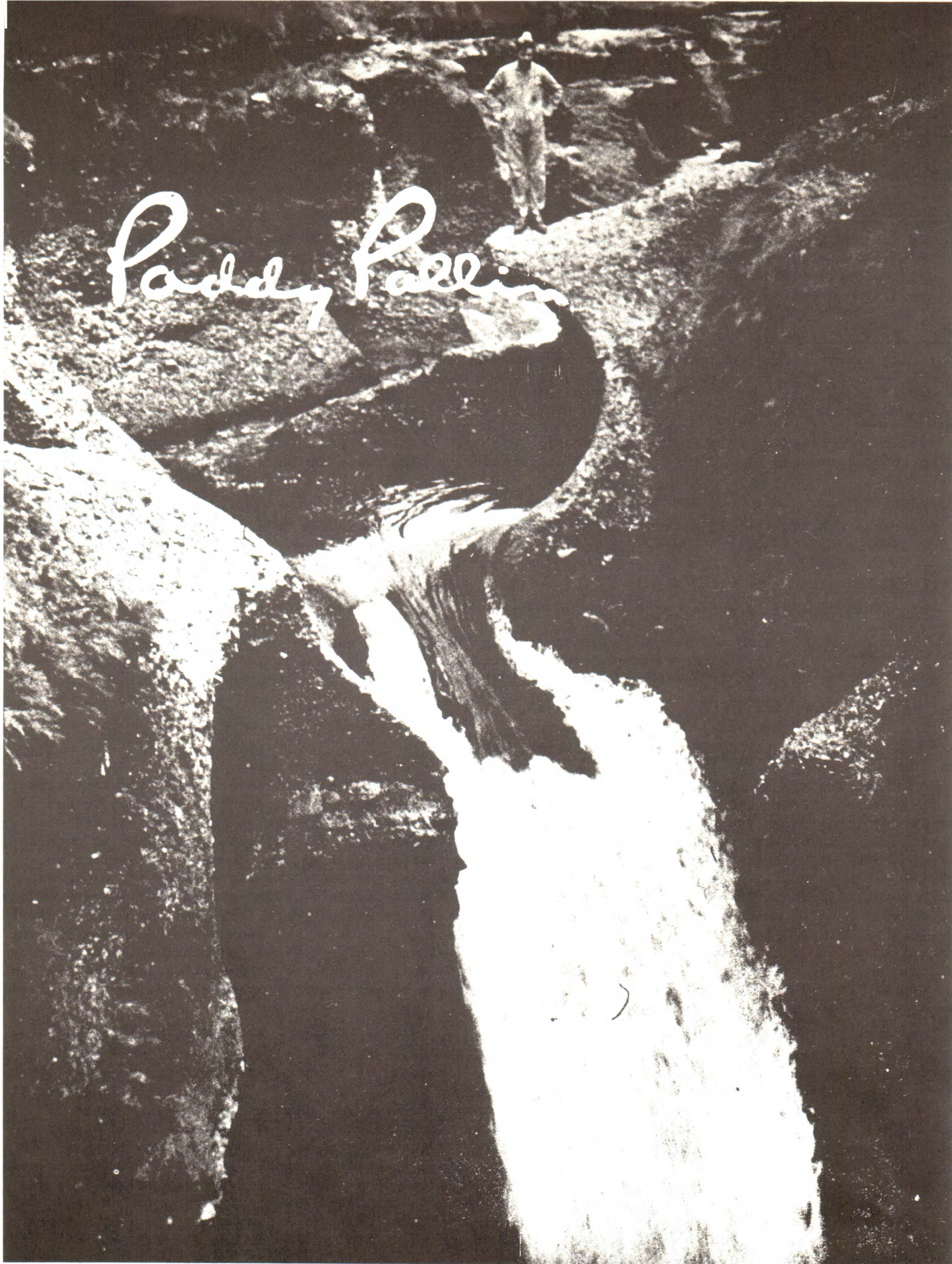
INFORMATION ON MULLAMULLANG N37 by Colin Killick, MUSIG.

For those who are unaware (hopefully nobody), Mullamullang is the biggest cave on mainland Australia and is situated in the huge limestone area of the Nullarbor, near Madura. A permit is required to enter this cave which lies on the property of a large W.A. grocery store chain, Charlie Carter's. If and when you visit this cave there are a few points I feel I ought to mention. You will have to show your permit to the manager of Madura Homestead. When you see him make certain that you get thorough directions to the cave and draw a little map. We spent a cold night 40 miles from God knows where (even the manager didn't know the track we had followed, said he thought it went to Adelaide...?) through faulty instructions. Do not rely on information gleaned from an old buddy who went there five years ago. The tracks are only fire trails and could have changed since then. The entrance to the cave is a massive collapse and is very impressive, the only other sights being a few trees and heat haze. If you read the publication printed by SUSS you will find that speleos were able to make the round trip to Camp One (three miles in) in a minimum of 6 hours. Don't think you can, unless you are very fit and do not intend gawking at the immensity of the cavern around you!

A look at the extremely good map produced by SUSS shows about three and a half miles of mildly winding passage approximately 40' high and perhaps 75' wide all the way. An easy walk, the casual observer will think, why six hours? Look again, whilst the floor may appear to be almost flat, it is far from it! The passageway undulates up and down. While this may appear to be quite gentle, in reality it is exhausting! The 'hill' before Whites Lake is some 210' above the level of the lake. Whites Lake is quite large to stand next to but from the top of the little mountain it almost looks like a puddle! The hills appear to be the result of roof-collapses. To add misery to exertion you will find that the hills are drawn as little boulders on the map. They are big boulders and the rockfalls are made of these (obviously). Climbing ever upwards over them becomes an eternal torture. Beware of sprained ankles - we very nearly had two! By the time you reach Camp One you will be exhausted! Make sure you have taken plenty of water, as the water in Mullamullang is of the artesian basin and is quite salty. A note as regards Camp One. There is nothing here of value, just relics of the SUSS expedition of '66, so how about not taking any souvenirs? Who knows, in fifty years perhaps this campsite will become an historic monument for future generations of speleos to marvel at!

When you go to Mullamullang, I can assure you that you will never forget it! The Dune, a pile of sand some forty feet high stands like a lonely hill, you can walk around it. Some distance further on, the sound of a gale echoes through the cave. When you reach the Southerly Buster, you will find the huge volume of air inside the cave forcing its way out of a fairly constricted space. Trying to crawl against this powerful breeze with your head averted to avoid flying sand is reminiscent of Luna Park. Lying in the cool breeze on the way out, is even more enjoyable!

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John Dunkley contemplating the Sink of Harpan River Cave, Nepal — Photo by Andrew Pavey

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INSECTA - COLEOPTERA - Beetles

Family Carabidae

Teraphis sp. nov. (Psydrinae)

This new species was collected from River Cave by the present author and is currently being described by B.P. Moore. It is closely related to a species described from nearby Mt. Kosciusko (B.P. Moore, pers. comm.)

Lecanomerus sp. (Harpalinae)

B.P. Moore has taken a specimen from Castle Cave (Y31). Members of this genus are relatively frequently found in N.S.W. caves but must be considered as accidentals.

Family Ptiliidae

One un-determined species taken from River Cave (Y27).

Family Anisotomidae

Pseudonemadus sp.

Specimens have been taken from both River Cave (Y27) and Carcase Cave (Y80). The beetles of this genus are relatively common troglaphiles throughout Australia.

Family Staphylinidae

An undetermined species from Carcase Cave (Y80).

INSECTA - DIPTERA - Two-winged flies.

Small flies from a number of families are shade-loving, and are often found in cave entrances or occasionally deeper. Virtually all of these can only be considered as troglaphenes. The present author has specimens from the Eagles Nest System (Y1-3), East Deep Creek Cave (Y5), Tricketts Cave (Y13), River Cave (Y27), Grotto Cave (Y30), Castle Cave (Y31), Restoration Cave (Y50), Meat Safe Cave (Y76), and Carcase Cave (Y80).

ARACHNIDA - OPILIONES - Harvestmen.

Forster (1955) assigned a specimen collected at Yarrangobilly by A.M. Stead to his species Holonuncia cavernicola. Hunt (1972) has found that although specimens from Yarrangobilly do fall within Holonuncia, they are distinct from H. cavernicola, based upon material from Jenolan Caves. The present author has specimens from Tricketts Cave (Y13), River Cave (Y27), Grotto Cave (Y30) and Meat Safe Cave (Y76).

ARACHNIDA - ACARINA - Ticks & mites

Several species of mites have been collected from River Cave (Y27). An undescribed species of tick, so far the only specimen collected, has also been taken from this cave by G. Middleton. It belongs to the genus Ixodes and so would normally be parasitic upon either a bird or mammal.

ARACHNIDA - ARANAE - Spiders

Gray (1973) in reviewing the occurrence of spiders in Australian caves, lists the following from Y'billy:

Family Gradungulidae	<u>Gradungula</u> sp.	River Cave (Y27)
Family Amaurobiidae	<u>Stiphidion facetum</u> Simon	Grotto Cave (Y30) Un-named cave
Family Ctenidae	<u>Thasyrea lepida</u> L. Koch	Grotto Cave (Y30)
Family Sparassidae	<u>Olois pictus</u> L. Koch	Grotto Cave (Y30)
Family Mimetidae	<u>Mimetus</u> sp.	Grotto Cave (Y30)
Family Linyphiidae	gen. & sp. nov.	Un-named cave
Family Theridiidae	<u>Achaeearanea extrilidum</u> (Keyserling)	Un-named cave Grotto Cave (Y30)
	<u>Steatoda</u> sp. nov. C	Tricketts Cave (Y13) River Cave (Y27)

The majority of these species are clearly troglaphiles, but Steatoda sp. shows considerable eye reduction, and reduced pigmentation. Gray considers it must be regarded as a troglobite.

DISCUSSION

This brief review shows that at least some caves at Yarrangobilly have a reasonably diversified fauna, and that the area warrants further biospeleological attention.

In general, the caves on the "plateau" appear to have only accidental or troglaphenic species. Although

future studies may well disprove this observation, it is based upon examination of a number of caves, some of which have been visited on several occasions. By contrast, some of the caves at lower levels, e.g., Tricketts Cave, River Cave, Grotto Cave, Meat Safe Cave and Carcase Cave, have a complex and diversified fauna. At the same time, the population in these caves varies widely from time to time, probably as a result of variation in available moisture, and some other caves at similar levels, e.g., Harrie Wood Cave, appear virtually uninhabited. I am not suggesting that the 3.400 ft. contour line is in itself significant only that the character of caves above that line is generally somewhat different to caves at lower levels.

This more diversified fauna includes a number of troglophiles, such as Collembola, Cavernotettix monotonus, Teraphis sp., Pseudonemadus sp., and Holonuncia sp. At this stage, only Steatoda sp. is considered to be a troglobite.

I intend to continue the present programme of investigation and cataloging of the fauna, and would welcome any other workers able to share in this task. At the same time, more detailed ecological study of specific populations is necessary. To this end I have already suggested to the National Parks and Wildlife Service by letter, (5th January, 1970 and verbally) that Grotto Cave should be specially reserved for this purpose. This cave has an interesting and complex fauna; it is a relatively small and accessible cave; and it is already gated. The other caves which might be utilised in this way would be much more difficult to close from general access. Such a closure would probably mean that access would normally be restricted to research workers, and that any persons entering the cave would have to take special precautions not to introduce foreign material into the cave.

ACKNOWLEDGEMENTS

Particular thanks are due to the National Parks and Wildlife Service (and previously the Kosciusko State Park Trust) for permission to carry out this study programme. The author has received considerable assistance (and encouragement) from members of the Yarrangobilly Research Group and other interested speleologists. Greg Middleton must be singled out for his assistance on various visits and for the collecting which he has undertaken. Others who have assisted with collecting are Andy Spate, Nick White and Adrian Davey. Finally, I would acknowledge the continuing support of the South Australian Museum in my studies of Australian cavernicolous fauna.

REFERENCES

- Brush, John & Nicholl, Bob, 1976, Yarrangobilly Caves List, The Very Latest, 8(3): 32-50.
- Forster, R.R., 1955, Further Australian Opiliones, Aust.J.Zool., 3(3): 354-411.
- Hunt, G.S. 1972, Notes on Australian Cave Harvestment, Proc.8th.Natl.Conf. A.S.F., Hobart, 1970, pp.76-80.
- Lotz, J., 1968, The dining habits of the Australian "weta", SUSS Journal, 7(2): 1-2.
- MacGregor, P., 1952, Yarrangobilly December 1950-February 1951, SUSS Journal, 1(2): 11-12.
- Rainbow, W.J., 1907, Two new species of Collembola, Rec.Aust.Mus., 6(4): 313-314.
- Richards, A.M., 1966, The Raphidophoridae (Orthoptera) of Australia Part 3. A new genus from South-eastern Australia, Pacific Insects, 8(3): 617-628.
- Richards, A.M., 1974, The Raphidophoridae (Orthoptera) of Australia. Part 11. New Species from the Bass Strait Islands and Tasmania. Pacific Insects, 16(2-3): 245-260.
- Womersley, H., 1939, Primitive Insects of South Australia, Adelaide, Government Printer, 322pp. (see page 155).

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THE MONASH CAVERS: From a letter received by the Editor from Janet Mackay.

As a section of the Monash Bushwalking Club, the Monash Cavers are rarely heard of outside Victorian circles. They do exist however, and feel they can be useful to interstate cavers. There are about 40 active cavers at Monash and numerous others who have finished and passed on to higher things, yet remain as cavers with the club. They have a system of 'leaders' & 'competents' who are judged and proposed by a sub-committee consisting of present leaders. Each year they conduct at least two 'beginners' trips in April to cater for those students who have never been caving before. Areas frequented by Monash are mainly the Buchan area but Bat Ridges and Tasmania also receives their share of attention. Other areas visited by members are Bungonia, Nullarbor, Curamulla and other further afield places. They are in constant contact with VSA and would like anyone from interstate clubs to make contact.

Janet Mackay can be contacted at Monash Uni. Bushwalking Club, C/- Union, Monash Uni., Wellington Rd; Clayton, Victoria. 3168.

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CARTOON OF THE YEAR: Spar 55, June 1976, Page 9. Who is responsible?

CAVE AREAS AND KARST REGIONS OF SOUTH-EASTERN N.S.W. by Bob Nicoll & John Brush, C.S.S.

Over the years, cavers have tended to name cave areas for local geographic features and usually to restrict use of the name to a single limestone body. This has meant that geologically or geographically related cave areas have had to be referred to by area names rather than a single term that identifies the related cave areas. For this reason we are suggesting use of the term Karst Region to apply to two or more cave areas that are related by geographic proximity and/or geologic similarity.

This cave area-karst region concept is similar to the scheme used in the ASF-Handbook (Matthews, 1968) for Victoria, in which that State was divided into a number of districts, zones and areas.

Our scheme does not attempt to deal with non-limestone caves which were discussed in articles by Middleton (1973) and Ellis (1973). Middleton proposed a number of 'regions' throughout New South Wales for non-limestone caves only, but suggested that the 'regions' might also be used for limestone caves.

Figure 1 shows the location of the karst regions and cave areas in south-eastern New South Wales. Where possible, we have tried to use a name derived from an appropriate local geographic feature. Below are brief descriptions of the karst regions.

Burrinjuck Karst Region:

This region is composed of three major cave areas, Wee Jasper, Taemas and Warroo; and several minor areas including Cave Flat, Talmo, and Macphersons Swamp Creek. The name is derived from Burrinjuck Dam. Caves are developed in limestones of Devonian age except for Talmo which is in Silurian limestone. The age of the limestone at Macphersons Swamp Creek is not known but it is probably Devonian.

Canberra Karst Region:

Cave areas of the Canberra Karst Region include Paddys River, White Rocks and London Bridge. The 'Limestone Plain' that underlies parts of Canberra is also known to contain caves but no entrances are now open. All the areas are of small geographic extent and contain relatively minor caves. The name is derived from Canberra, the geographic centre of the region. The limestones are all of Silurian age.

Boro Karst Region:

The Boro Karst Region lies north and slightly west of Braidwood and includes the cave areas of Mt. Fairy and Etrima. Limestones of this region are of Silurian age. The name is taken from Boro, a small village in the region.

Upper Shoalhaven Karst Region:

This region includes the Cleatmore, Marble Arch, Big Hole, Wyanbene and Bendethra cave areas. The name is taken from the Shoalhaven River which rises in this area. The caves are, except for Big Hole, developed in limestone of Silurian age and which outcrops along the escarpment and drainage divide between the Deua and Shoalhaven Rivers. Big Hole is developed in Devonian sandstone and conglomerate.

Monaro Karst Region:

Cave areas of the Monaro Karst Region include Michelago, Rosebrook and Kybean. The name is derived from the Monaro Plain in southern New South Wales. There are numerous elongate, north-south trending limestone bodies in this part of New South Wales. Only a few of these bodies are known to contain caves, but many of the limestones have yet to be seriously examined for caves or other karst features. The limestones are all of Silurian age.

Fiery Range Karst Region:

This area includes the Yarrangobilly, Cooleman Plain, Cooinbil and Black Perry cave areas. Only Yarrangobilly and Cooleman Plain have significant cave development but the other areas have well-developed karst features. All the limestones are of Silurian age. The region is located in the northern part of the Kosciusko National Park. The name is derived from the Fiery Range which transects the region.

Lower Shoalhaven Karst Region:

This region includes the Ettrema Gorge and Bungonia areas as well as nearby Jenara, from where the caves have been removed by quarrying. The limestones are of Silurian age. The name is taken from the Shoalhaven River which flows through the region.

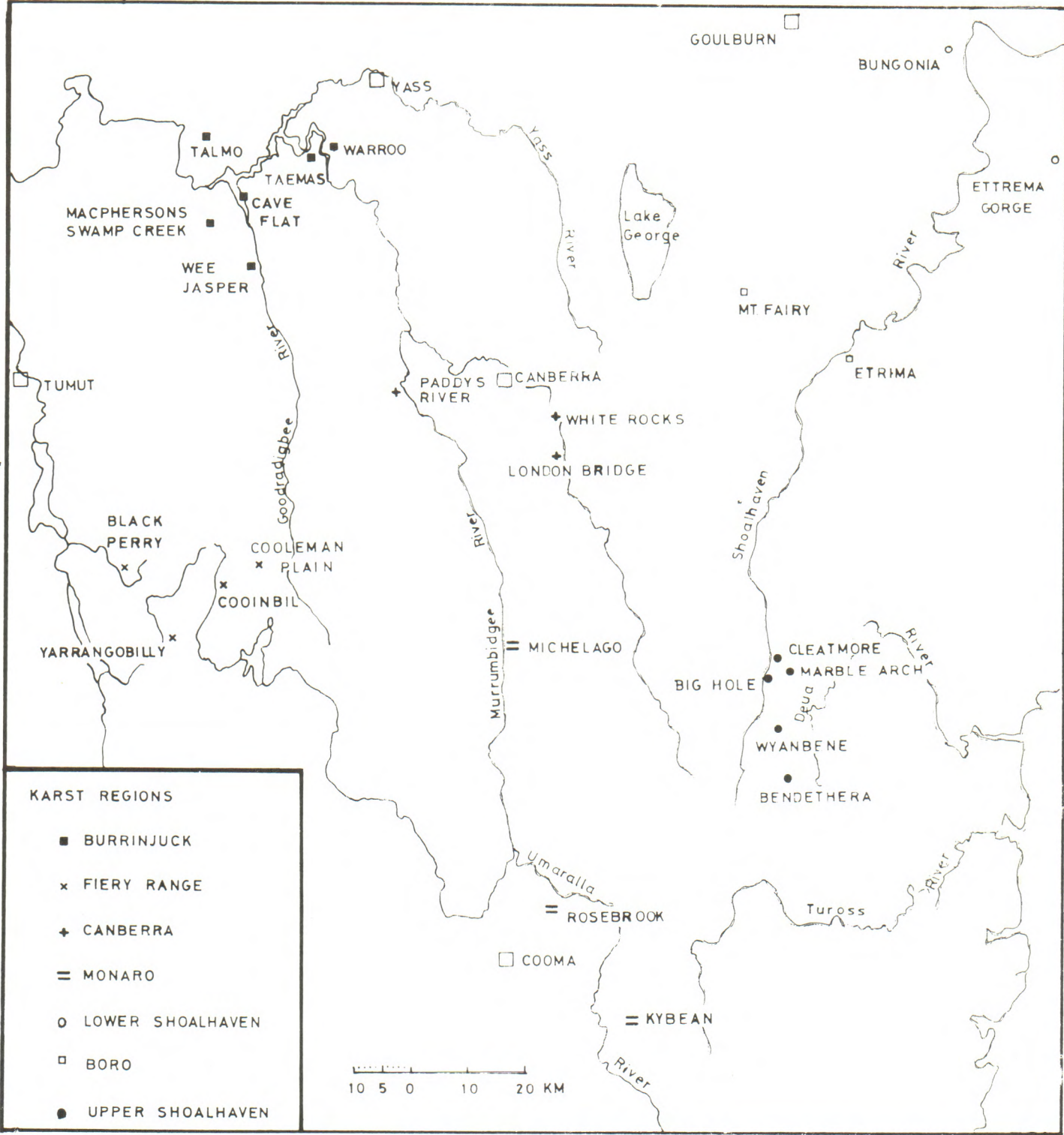
This treatment of cave areas and karst regions has not included caves in the southern extremity of Kosciusko National Park which are geographically and geologically related to cave areas in the adjacent State of Victoria. Nor has it dealt with the Quidong cave area which is an isolated area south-west of Bombala.

Bombala district has several additional areas of limestone outcrop which have not been examined for caves and other karst features. The Quidong area could be treated as a separate region or as within the southern limit of Monaro Karst Region.

References

Ellis, R., 1973. A cave numbering system for New South Wales: Non-limestone Caves. *JSSS* 17(5): 130-133.
Mathews, P., 1968. *Speleo Handbook* Edition 1.
Middleton, G.J., 1973. A cave numbering system for New South Wales: proposed regions for Non-limestone Caves, *JSSS* 17(5): 127-130.

Figure 1.



CAVE AREAS AND KARST REGIONS OF SOUTH-EASTERN NEW SOUTH WALES.

WHO'S WHO....

on the speleo scene?

31. peter matthews

Peter first went caving back in 1958 as a member of the Sub-Aqua Diving Group who, at the invitation of the Victorian Cave Exploration Society, went down to Buchan to look at Sub-Aqua Cave. This enthralled him, so he went off to try a dry cave, Kitsons. This enthralled him even more and he has been caving ever since. Born in 1938, Peter, an electrical engineer, is married with two children. His achievements, in all aspects of caving, are numerous. He has been VSA records keeper since 1959, Secretary of ASF in 1963-64, was editor of the first speleo handbook, is convenor of the ASF Documentation Committee & Speleo Handbook Commission, is responsible for the ASF Documentation system. Before the armchair, he found the entrance to Scrubby Creek Cave, Buchan, in the early sixties and was one of the team that found Conference Concourse in Exit Cave. His interests in caving are exploration, surveying & documentation but at the moment he has one objective - producing the Speleo Handbook. As well as being an honorary life member of the VSA & subscribing to various other Australia clubs, he is an associate of N.S.S. & B.C.R.A. His favourite caving areas are Buchan & the Glenelg River/Bats Ridge area.

32. nicholas white

Nicholas was born in Wales and at the age of 6 explored some caves in a quarry about 100 yards from his back door in Austin, Texas, U.S.A., on the Edwards Plateau - a well known limestone area. At the age of 15, he did quite a deal of caving in and around Columbia, Missouri, also in the U.S.A. He first began caving in Australia in 1961, in Victoria, and his main caving interests are sporting, discovery and photography. Conservation wise, Nicholas has been involved over a number of years with Victorian problems such as quarry interests, mining leases, problems of vandalism, management of caves in Victoria, etc. Of late, his main concerns are the wider issues, both administrative and policy direction of ASF itself. Major trips have been to Tasmania (four times), Nullarbor (twice), Kangaroo Island and also other S.A. and N.S.W. caving trips. Nicholas is currently President of ASF.

33. dave rothery

Dave has been caving for approximately four years or so and was President of MUSIG in 1975. He is 23 years of age and my sources tell me that he became engaged to a lovely lady by the name of Cathy Sadler earlier this year. Cathy is also reputed to be something of a caver and accompanies Dave on many of his underground excursions. Profession wise, Dave is a computer operator and he has also handled the task of equipment officer for the Macquarie Mountaineering Society.

34. richard willson

Richard can be recognised by a golden beard and a mane of hair that apparently gives him a strong resemblance to a lion. (Richard the Lionhearted?) He too, is a computer operator. Has been caving for several years, which is amazing considering his is well over 6 foot and of equivalently heavy build. Few are the squeezes he cannot tackle. Other interests include panel-vans and surf (and river) canoeing.

35. bruce welch

Bruce's speleological dedication is well known to many cavers. Although officially unemployed, the time is spent either in an organisational capacity for one of the many speleological projects with which he is associated, or away in a caving area (usually Jenolan!) engaged in some underground activity. ("If you want something done properly then you've got to do it yourself!"). His major project over the last few years has been in playing a primary role in the production of the SUSS publication, "The Caves of the Northern Limestone, Jenolan". (never again!) The positions he currently holds serve to indicate the wide range of his activity: SUSS Secretary and NSW Liaison Council representative; Jenolan Caves Historical & Preservation Society; Business Manager "Helictite", and a member of the Speleological Research Council.

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ITEM OF INTEREST: I have been informed that a familiar landmark, the old log bridge, in Exit Cave has finally called it a day. Seems that it parted company whilst being crossed by the ASF Secretary late in November! He didn't even get wet! Moves are afoot by Roy Skinner to replace it in the near future.

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DOWN UNDER ALL OVER...

news from around the societies.

- BMSC** : Greg Powell reports that BMSC has been continuing its experiments with cave photography and the results have been pleasing. At the recent showing of entries in the club's photographic competition it was very difficult to select a winner. Recent caves visited include Colong, Bendethera, Yarrangobilly, Wyanbene and Cliefden, while family days have been held at Paradise Gardens and the Steam Railway Museum at Thirlmere. Social Secretary, Alan Fairweather keeps everyone happy with plenty of social outings, such as the wine tasting at Gledswood. The club is planning to make a movie at Abercrombie under the direction of Paul Sammut. Abercrombie will also be the venue for the 1977 A.G.M. All will be in 19th. century period dress for the event. Coming trips are proposed to Bendethera, Yarrangobilly, Church Ck, Walli, Bungonia and Cliefden. The big trip for 1977 will be to the Kimberlys in W.A. to explore the region for its caves and other scenic attractions.
- CEGSA** : Dot Peisley informs us that the Victoria-Fossil Cave Project is now well under way and whilst not progressing as quickly as they would wish, things are still going very nicely. A good clean-up in one of the chambers in this cave has resulted in a marked path to prevent further damage. There have been a number of trips all over the state and also interstate. The October long-weekend resulted in trips to the northern Flinders Ranges, one to the Arkaroola area and one to the Beltana area. The Beltana trip resulted in a find of two new caves - one with a lake in it and the Arkaroola trip told of numerous holes as yet unexplored. Trips at Christmas time are going to the CAVONACT in Canberra (naturally) and quite a large trip to Kangaroo Island for two weeks.
- PNGCEG** : Malcolm Pound reports that two expeditions have been in Papua New Guinea in recent months. The first was a follow-up trip to the Lelet Plateau on New Ireland, which was led by Dave Gillieson of Brisbane. They reported a cave in which they reached a depth of 155 metres but did not bottom due to a lack of gear. Julia James took a party back to the Muller Range in the Southern Highlands where their biggest discovery was a series of dry river passages. A major new cave discovery has been reported in North Solomons (previously called Bougainville) but no further details are to hand at present. Port Moresby area remains quiet even though the greater proportion of cavers are based there.
- TCC** : Yours truly reports that Andrew Skinner has resigned as club president and also as a member of TCC. Andrew's contribution to caving and to the club will be sadly missed. His reasons for resigning have apparently stemmed from personal commitments. At the December G.M., the club voted Stuart Nicholas into the vacated position. Several of the TCC "heavies" (of which there are not many) will be unavailable during the first half of 1977. Caving wise, things have been fairly quiet since the last report. Max Jeffries has located a number of small caves in the Western Florentine, all of which have now been numbered. The Maydena Branch has been at work pushing yet another potential "deepie" which is not far from JF99. So far their efforts have pushed the cave to a depth of 70 plus metres and progress has been halted by a deep shaft of unknown depth and the lack of ladders and SRT exponents. Members are looking forward to Alan Warild's coming expedition early in January and hopes are high that a new Australian depth record may emerge.
- WASG** : Kerry Williamson's report covers June, July and August of 1976.
- Augusta:** In Easter Cave (AU14) the miners dial traverse has been pushed through to where the Tutakuri extension leads off - some sights being made in neck-deep lakes. The detail mapping has continued beyond the First Duck. One party mapped into an untrod passage where an end was not reached due to a lack of time.
- Witchcliffe:** Winjans Cave has extended towards Labour Cave. Further work has been done on the Mammoth System surface traverse.
- Yallingup:** A new cave has been found by the Witchcliffe subgroup near Canal Rocks.
- Yanchep:** Mapping has commenced on a cave in the east of the park. Dolines, some entrances, east of Wilgarup Cave have been positioned.
- Kimberley:** One member whilst working in the area was able to visit several Kimberley caves including Caves Spring I.

Editor's Note: All in all news is fairly brief for this edition however, this is only to be expected owing to the delay with the Spring edition.

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I WOULD LIKE TO WISH ALL CONTRIBUTORS TO D.U.A.O. A VERY HAPPY XMAS AND ALL THE BEST IN THE NEW YEAR. LOOK FORWARD TO HEARING FROM YOU THEN. LAURIE

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DID YOU KNOW? Six years ago (Nov. 14th., 1970) Tassy Pot was the deepest Aussie cave with a depth of 800ft. The trio who bottomed it were John Morley (SCS), Phil Robinson (TCC), and Arthur Clarke (VSA). Where are they now?



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Ski Touring is going places and Bushgear can help you get there and back with a full range of Touring skis, boots, bindings and waxes.

Wool Clothing—best for Australian wet-cold conditions—shirts, breeches, pullovers, socks, balaclavas, mittens, underwear.

Down Clothing—lightest insulation for dry cold such as Himalayas—duvets, trousers, boots, mittens, waistcoats.

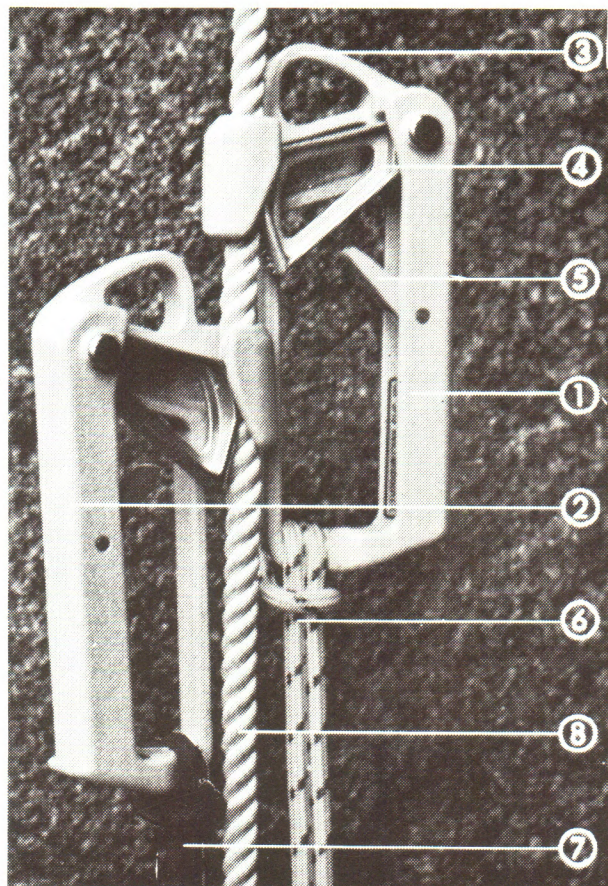
Synthetic filled—good designs can offer a reasonable compromise.

Wind and Waterproof outer clothing of oiled cotton japara or good coated nylon—parkas, overtrousers, gaiters, mittens, overboots.

plus packs, tents, stoves, compasses, whistles, survival bags and blankets, sleeping mats, cooking gear, ropes, chocks, tapes, karabiners, iceaxes, crampons, icescrews, mountain skis, caving ladders and lamps, prussikers.

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