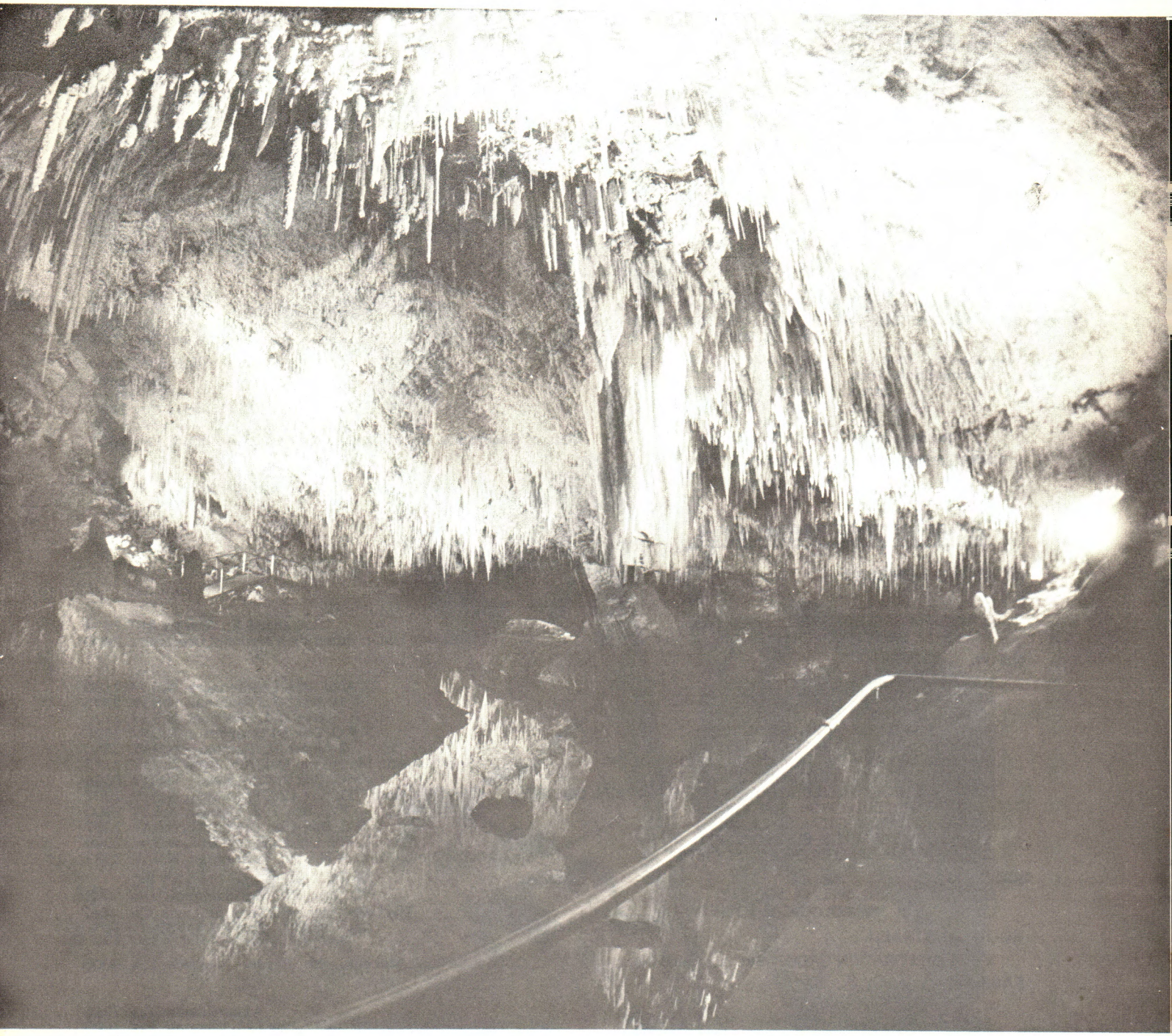
ASF NEWSLETTER
WINTER, 1978, No. 80



THE AUSTRALIAN SPELEOLOGICAL QUARTERLY

Jewel Cave — Main Lake in Tourist Section
(Photo P. Bell — taken with the help of a fish eye lense)

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ASF NEWSLETTER

Number 80, Winter 1978

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EDITORIAL

This particular issue has created a record in regards to the editing of the ASF Newsletter. The record itself is mostly a personal one for me alone. However, without the back-up that I have been receiving from contributors of late, the record would have been utterly impossible to break. Usually it takes about a fortnight even longer to completely type and edit an issue (apart from No.79). This particular issue which is jam-packed with perhaps the most varied caving information for some time, took exactly five days!

Admittedly, a short working week of only three days assisted to a great extent but credit is also due to those of you that have been keeping me supplied with material. Credit too, is also due to my wife, Sue, who has managed to keep three children out of my hair and allowed me to work unhindered by domestic responsibilities. Very gratifying.

In regard to material, perhaps my scathing remarks in issue No.78 had something to do with it - I sincerely hope so! Articles appearing in this issue include methods of deep cave rescue, more on caves of Australia, conservation issues and a various amount of information and news plus other topics related to the Australian caving scene.

I have now spent three and a half years typing and editing this newsletter and as was mentioned in the last issue, I have retired from active caving and am no longer a member of any caving society. As is laid down in ASF policy, I cannot continue in the capacity as editor whilst not being a member of a recognised ASF society or club. Therefore, I have no alternative but to relinquish my post as editor at the end of 1978.

Laurie Moody.

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DEADLINE DATE FOR ISSUE No.81 - 31st AUGUST

NEXT ISSUE - Resurrection Cave, Mt. Etna by John Webb
The Spelean Shunt - A Discussion by John Webb

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DEEP CAVE RESCUE

by Alan Warild

Early on the morning of the 12th. March 1977, Paul Dyson slipped and fell down the last pitch in Argyle Hole (B 31) at Bungonia. He had sustained head injuries and was in shock. His mate got out as fast as he could and raised the alarm.

At least in theory this is what happened, but luckily it was only rescue practise in which John Minchin and I were part of a multi-society team attempting a rescue from the bottom of a deep cave using SRT. When you participate in such a venture, you are sure to learn one hell of a lot. Hopefully these notes will convey some of the knowledge we gained, and give an appreciation of the difficulties that can be experienced.

Apart from basics such as First Aid and protective gear for the patient, our main problem was lifting 60 kg of dead-weight up a 130 metre deep cave without damaging it; and with a minimum of manpower. To do this the patient was attached to a sit harness, a chest harness, a jumar and pulley, plus the largest available helmet with plenty of padding. The sit harness proved lousy and after the first pitch was causing Paul some pain - by the top pitch he was complaining bitterly, and was bruising badly - the most comfortable seat available is what he needed, possibly a Whillan's Sit Harness or the like. The chest harness with 3 metres of trailing tape was good, comfortable, and very handy for manoeuvring him about. The jumar and pulley were set up as shown in Figure 1.

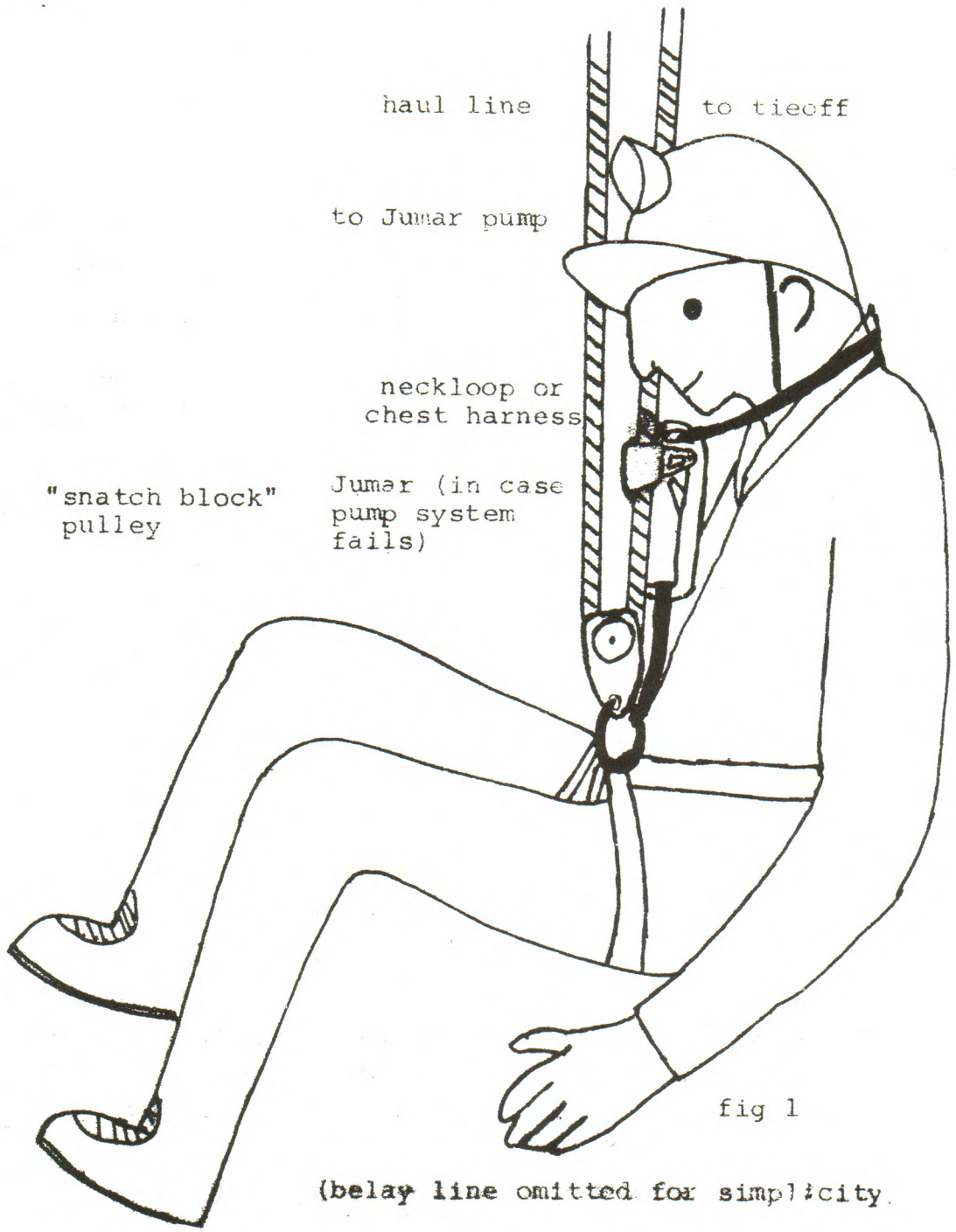

fig 1

(belay line omitted for simplicity)

DEEP CAVE RESCUE Cont;

Instead of using brute force to lift Paul, we used 2 pulleys and a jumar pump system as shown in Figure 2. This worked extremely well provided a few points were watched -

1. The pitch must be rigged (as is usual in SRT) as free as possible. This reduces rope friction and patient damage.
2. The pulley ropes must never be allowed to cross or the effort required is at least doubled.
3. In order for the pump to work effectively, one of the jumars must be fitted with a shock-cord.
4. The greater the available space, the easier it is to operate the pump, although we managed to operate it fairly efficiently in everything from hanging in space, to tight rift, to comfortable open passage.
5. The major tie-off is well above the lifter's head.
6. In all cases it took only one person to operate the pump, although a helper holding the rope to help it run through the lower pump jumar is handy.
7. A completely independent belay line was used throughout.
8. At least one snatch-block pulley is handy.
9. It requires a considerable amount of energy to run a deep cave rescue, so the party should be changed as often as every four hours. This problem is compounded when working in more than $1\frac{1}{2}\%$ CO_2 as we were.

With the practise of a few pitches behind us, we managed to get a reasonable system going whereby everything could be set up and going in only a few minutes:-

Step 1. Lifter arranges pump jumar, tie-offs, etc.

Step 2. Lifter lowers a loop of the hauling rope.

Step 3. Belayer (after setting up) lowers the end of the belay line.

Step 4. Assistant at the bottom untwists haul line, then clips it and the belay line onto the patient.

Step 5. Patient is lifted carefully, with someone jumarring up a fixed rope between him and the cliff to fend patient off.

Step 6. When level with the top, the patient is hauled in and held while the haul line is released (but not the belay line). It is quite difficult to lower him back when there are 3 jumars in the system, all arranged for the other direction of rope movement.

The entire rescue took $10\frac{1}{4}$ hours from the rescuers entry to exit and the victim vowed never to "fall" again because of the painfull sit-sling and the helpless feeling of being hauled up a pitch.

All in all, a total caving experience, the effects of which have lingered much longer than the CO_2 headaches we all gained during that little episode.

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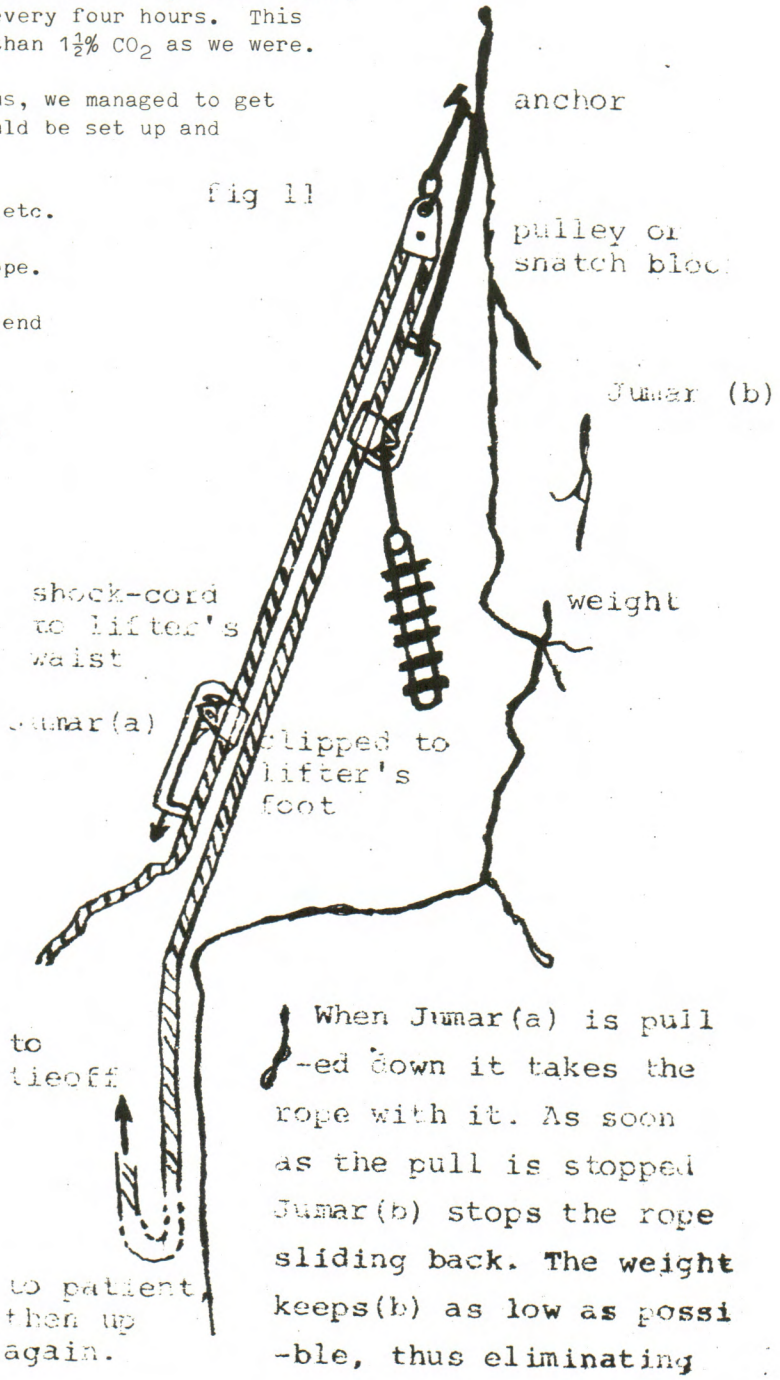
fig 11



When Jumar(a) is pull -ed down it takes the rope with it. As soon as the pull is stopped Jumar(b) stops the rope sliding back. The weight keeps(b) as low as possi -ble, thus eliminating slack.

CAVES OF AUSTRALIA : No.13

AUGUSTA JEWEL CAVE

by Peter Bell

Introduction

Augusta is situated 200 miles south of Perth and is one of the State's oldest settlements. As a caving area it offers some of W.A.'s finest examples of long and heavily decorated caves.

Early activities of the W.A.S.G. were concentrated in this area discovering the 3 major systems and the majority of the 28 known features between 1958-62.

Unfortunately very little of the early discoveries were documented and Augusta has been eclipsed by the Witchcliffe area up until 1977 which saw the commencement of an area survey of the entire Augusta nomenclature area. With Easter Cave (AU 14) well on the way to completion by K. Williamson and the 28 features accurately located by P. Bell, it was decided to commence surveys of the Labyrinth (AU 16) and Jewel Cave (AU 13) (P. Bell) so that an accurate subterranean picture could be established. With Jewel Cave already completed and Easter and Labyrinth drawing close to completion, it has been possible to draw attention to some of the features influencing cave development in Augusta.

History

Jewel Cave was discovered by Cliff Spackman in 1957. He was lowered down the 20 metre shaft by ropes. At first he was halted after only 10 metres. The shaft was blocked by a projecting piece of rock. With the aid of a hammer, he was able to clear the pipe and become the first man to enter the cave.

In February 1958, Lex Bastian, Cliff Spackman and Lloyd Robinson with the aid of Lloyd's wire ladders, began the first serious exploration of the cave. Days of exploration revealed huge chambers festooned with straw stalactites mirrored in the cold crystal clear waters of the immense subterranean lakes.

It was decided to open the cave to the public and so, with the help of government grants and a lot of hard work by Cliff Spackman and Lloyd Robinson, work commenced on development of the cave. It took 12 months to complete the work with over $2\frac{1}{2}$ miles of electric cable, 115 separate lights, platforms and paths being installed. Jewel Cave was then officially opened by the Premier, David Brand, on May 7th, 1960.

Description

Situated 145° 200 metres from Moondyne Cave, Jewel Cave is formed in the Aeolion limestone of the Leeuwin Naturaliste Ridge.

Jewel Cave is a maze cave phreatic in origin developed by corrosion of the coastal limestone. The cave shows a vague N.E. trend despite the fact that the limestone os overlayed on a weathered surface of Pre-cambrian gneiss (Leeuwin-Naturaliste block). Ref. K. Williamson. Lateral development has no doubt been influenced by coastal dunes and a ridge of gneiss running parallel to them (see map).

The immense chambers of the cave are probably due to the many phreatic tubes which have been enlarged until they form one chamber, this combined with collapse, has produced magnificent caverns in the cave. The flat roof chamber is the best example of this, with a total length of 350 metres, with a portion of the chamber's ceiling being perfectly flat, a remnant of the early phreatic development.

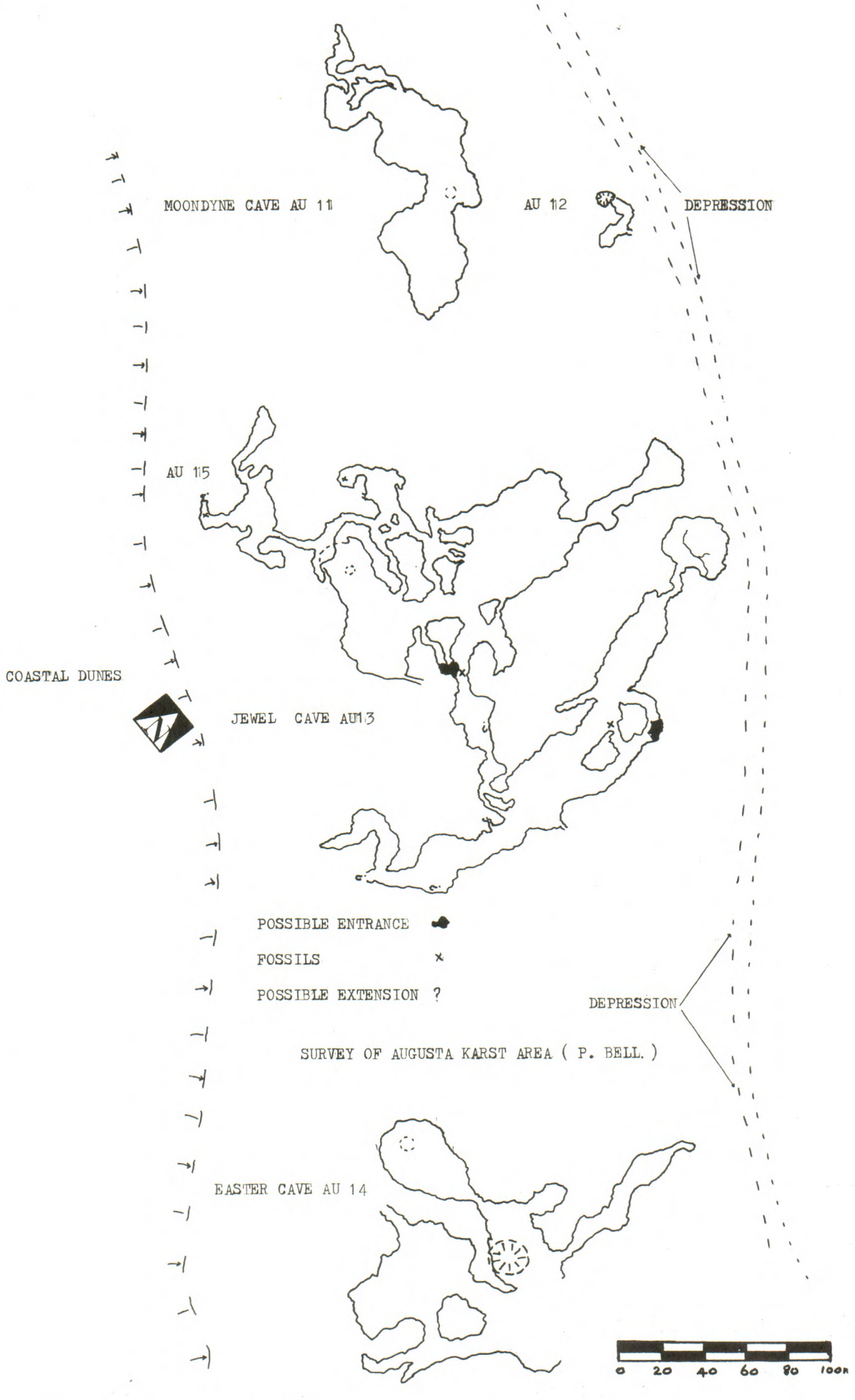
Maximum depth of the cave is 42 metres (water table) and it is at this level where the greatest development has taken place. The upper levels of the cave were probably formed either by a higher water table or by pressure forcing upwards from the present levels.

Most of Jewel Cave is horizontal in development with the exception of Deeondeup (AU 15) which connects by a 10 metre wet crawl. AU 15 has over 40 metres of vertical development. The famed crystal wall of AU 15 has probably been the result of this vertical development. The wall, in fact a large rift in the cave some 20 metres deep, is studded with calcite crystals up to 8 cm in length. The crystals are the result of slow precipitation of the saturated water table as it fell.

With over 3 kilometres of passage, Jewel has by no means been explored to its limits. There are many leads at water level which may result in further extension should the water level continue to drop.

Entry to JewelCave is now by a 12 metre man-made tunnel into a chamber heavily decorated, 60 metres long and 30 metres wide. The floor is mainly flowstone and rubble. On either side of the chamber there are two deep rifts, only one of which reaches the water table and leads to the main section of cave. This chamber contains many fine speleothems including a group of 4 very large straw stalactites, the longest being $19'4\frac{1}{2}"$ (the longest in any tourist cave).

Continuing down the northern side of the chamber, the cave separates into two sections. The left leads to the Jewel Casket while the right leads to the Organ Pipes and Flat Roof Chamber. The Organ Pipes is a huge flowstone canopy, golden in colour and is surrounded by a deep lake which is one of the highlights of the cave. Reaching up to 4 metres in depth, the lake is 45 metres wide by 120 metres


MOONDYNE CAVE AU 11
AU 12
DEPRESSION
AU 15
COASTAL DUNES
JEWEL CAVE AU13
POSSIBLE ENTRANCE
FOSSILS
POSSIBLE EXTENSION ?
DEPRESSION
SURVEY OF AUGUSTA KARST AREA (P. BELL.)
EASTER CAVE AU 14
0 20 40 60 80 100m

AUGUSTA JEWEL CAVE Cont;

long and the ceiling above it is so heavily decorated it is indeed a task to find any trace of bare limestone. At the northern end of the lake the passage continues for 200 metres through a long elliptical corridor, heavily decorated and half flooded with water. This passage ends in a soil choke and is probably at the edge of the limestone where solution has still occured and caused soil subsidence on the surface.

The Jewel Casket section contains two non-tourist sections, one being Deeondeup (AU 15), the other being the Beehive section. The casket itself is where the cave gets its name and consists of many helictites twisted around each other. It is also possible to reach the main lake from this section. The passage opens out to a section of the lake where there are two pendulites. Jewel Cave, apart from Easter Cave, is the only known cave in W.A. to have these unusual formations.

Flat Roof is as its name implies, 350 metres long with a 50 metre section of its ceiling perfectly parallel to the surface of the water below. The northern end of the chamber breaks down to rock collapse, the floor being covered with large boulders and red clay. The passage narrows down into a phreatic tube approximately 5 metres in length and then opens out into a large low chamber. The floor is sandy and has deep channels cut into it resembling stream development. It is possible that drainage from a nearby subterranean lake is responsible for these.

The southern end of the chamber is certainly the most decorated. A section called The Dome has a perfectly arched ceiling crammed with showers of straw stalactites. Continuing south, the chamber gets smaller with heavier concentrations of decorations, particularly helictites. The chamber ends in a rift passage approximately 3 metres deep by one metre wide. It is this passage which comes closest to Easter Cave (AU 14).

Mapping

The survey of AU 13 began in November, 1977 and was completed in March, 1978. With the water table at a record low it was an ideal time to start the survey with all passages at easy access. The first stage of surveying was to put a skeletral traverse throughout the cave so that the results of each survey trip could be placed on the master sheet. A scale of 1:200 was chosen to show maximum detail on the map. Detail was drawn in the cave using the protractor/scale rule method. In this way detail and cave wall can be positioned accurately. Errors of surveying were minimised by closing each survey trip into the main traverse, in this way misclosures can be seen immediately.

To avoid damage to the speleothem-packed chambers, rangefinders were used for some splays. These were of particular value when surveying the tourist sections. With their use, it was possible to avoid damage, not only to the decorations but also to prevent the lake from becoming cloudy and destroying the reflections. Surveying in heavily decorated chambers is hard going with some trips gaining little ground. Fatigue becomes a problem as nerves become shattered while gently threading a 30 metre tape through a shower of straws. Generally, trips were kept short to a 5 hour maximum so as to gain the best possible work. The map has been drawn only in plan form. It is planned to produce cross section and longitudinal sections with the relationship to surface topography at a later date.

Fossils

Fossils of many different species have been found in most parts of the cave. Among them have been thylacine, possums, and kangaroos. It is their wide distribution which indicates Jewel Cave having more than one entrance. Possible entrances have been marked on the map with fossils that are near them. It is the kangaroo skeleton which is most interesting. To reach this part of the cave it would have had to travel some 100 metres over steep rockpiles and lakes. Not only that but the entrance pipe would have barred entry to the animal. Jewel's entrance pipe is barely one metre across and tapers as it goes down. Therefore it is fairly safe to assume that the cave has at one time had more than one entrance.

Conclusion

Exploration in Jewel Cave is by no means complete. There are still many possible leads at water level which could reveal more passages should the present water level continue to fall. The mapping of Jewel Cave has answered a great deal of puzzling questions, not only about Jewel Cave itself but the whole Augusta karst area. As with most scientific projects it poses new questions and makes us rethink our old ideas.

References

Williamson, K. Mapping of Easter Cave, A.S.F. Newsletter No.72.

Bastian, L. Field Notes 1958.

Spackman, C. Field Notes 1957-58.

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HANDY CAVING HINT - ROPE LENGTH MARKERS

Have you ever found yourself dangling 5m short of the bottom of a pitch? The reason - you picked up your 45m rope instead of your 50m length. To avoid this problem have your ropes clearly marked. I have found that short lengths (3-4cm) of clear Heat Shrink will neatly seal a length of survey tape with the length written on it, to the end of the rope. This will also seal in the end of the rope and stop it falling apart. Then write length on survey tape with waterproof ink. - Rauleigh Webb.

NOTICES & NEWS

CAVCONACT 76

ASF members are advised that the Cavconact proceedings have been published and are now available. This 157 page, profusely illustrated, standard setting volume can be purchased for a mere (paltry) $8.00 and posted for the same price (approx.) that people paid for the ASF Handbook 10 years ago (is $8.00 still the same?).

It may be obtained from:- CAVCONACT 76
18 Arabana Street,
Aranda, A.C.T. 2614

ASF Editor's Note: Having received a copy ex officio, I would recommend that every ASF member should purchase their very own individual copy. This splendidly presented publication is undoubtedly a credit to the editors, A.P. Spate, John Bush and Marjorie Coggan plus the Canberra Speleological Society

CHRISTMAS IN MEXICO

Last Christmas, Julia James, Alan Warild and Neil Hickson joined an American trip to the Huautla area which is in Oaxaco province in southern Mexico. Their main objective was a cave called La Grieta which the Americans had pushed to a depth of 665 metres on a previous attempt. According to information which I received from Neil Hickson, it is a long hard cave and required camping underground. Camp was set up at a depth of 525 metres. Unfortunately the cave was stopped by a boulder pile at 760 metres. The Australian contingent spent a total of five days camped underground while some of the Americans spent twelve days. Before and after descending La Grieta, they entered a known but previously un-entered cave, Sotano De Aqua LeCarrizo. In a few days, the Australians had pushed this cave to a depth of over 300 metres. Two further attempts succeeded in raising the depth to 517 metres and it was still going. On the last day they were joined by four Americans for a final big push which resulted in the cave going to a depth of 778 metres and still not bottomed. Progress was halted by a 10 metre pitch! Julia then returned to Sydney while Alan and Neil went north to do Sotano de las Golondrinas. This cave is 512 m in depth but they were only concerned with the entrance pitch which is a 333 metre free fall. They described it as being a very spectacular shaft!

Note: A full trip report can be read in The Journal of The Sydney Speleological Society and Spar, which should be published shortly.

SPELEOLOGICAL BIBLIOGRAPHIES OF S.E. ASIA AND PACIFIC ISLANDS

I am compiling speleological bibliographies for countries of South-East Asia and the Pacific Islands (excluding Japan, New Zealand and Tasmania). It will be many years before these are all published, if ever, but I am willing to make the information available to speleologists who are working in the region or plan to do so.

The cover is very variable. Only Papua New Guinea is really well covered (800-900 entries). I have quite a large number of references for Malaysia (c.150) and Indonesia (c.100), especially for Irian Jaya. The number for other countries range from about 30 for the Philippines, Fiji and the Solomon Islands to 6-8 for the Galapagos Islands, Cambodia and Tonga down to a solitary reference for the Wallis Islands.

Speleologists should not imagine there is a goldmine of information on caves of the region. Many papers are archaeological or biological ones and refer but fleetingly to caves. Nevertheless, they do give some indication of where the caves are to be found.

If anyone wants a list of references, I would appreciate knowing specifically what they are after. Time is too limited to type out a list of papers covering "anything you have on Asian karst/Pacific cave art" or whatever. As is the fashion with bibliographers, I am always pleased to hear of further references. My address is:

H.A.E.S., Aiyura, P.O. Kainantu, E.H.P., PAPUA NEW GUINEA.

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ASF NEWSLETTER

Articles are needed to keep this publication functioning. We need your support and you can do this by supplying us with anything related to the caving scene. For example you can assist us by sending info on Caves of Australia, club news (rather poor of late), book reviews, cave accidents, overseas trips by Aussie cavers, coming expeditions, in fact anything related to caving in Australia.

NOTICES AND NEWS Cont;

C.B. RADIO - "KV" CLUB

The KV (pronounced "Cavey")Club was originally formed by CB operators within the NSWIT speleos. It was then expanded to include members of the NSW Cave Rescue Group and from there, after some discussion, it was decided to include all cavers from ASF recognised groups in New South Wales.

The "club" has no committee, no rules, no meetings, no fees. It is simply meant to be a way of being instantly able to recognise another caver simply by his KV call sign. For clarification it is often necessary to phonetically pronounce the KV as Kilo Victor.

Following discussions with several delegates at the January 1978 ASF committee meeting, the KV club is now open to all ASF cavers in Australia. As previously mentioned, it costs nothing and is a way of knowing someone else is a caver just by their call sign.

At present, there are 41 members and to join just ring Robin Steenson (02) 637 6045 or write C/- 10 Binda Street, Merrylands West, N.S.W., 2160. All he wants to know is your Telecom licence number (if you have one) and what club you belong to. Simple isn't it! This KV club has great potential in rescue situations and also may be of a great use when crossing the Nullarbor to the Perth Conference (WACCON) next year.

It is intended to publish a full list of all KV members in the next ASF Newsletter No.81. Also, if anyone in South Australia knows anything about the KV9 Club, could you please let Robin know who or what it is and does.

73's!

WATERPROOF GRAPH PAPER

Rauleigh Webb has informed us that he has had printed an amount of waterproof graph paper (19cm x 24cm) and is ecstatic about the result. It will apparently withstand complete immersion without even krinkling plus you are still able to write on it when wet and it doesn't even smudge! As can be expected, it is relatively expensive but Rauleigh can sell it at 10c per sheet. The paper is double-sided, in 1mm squares and printed in blue ink.

Having received a sample, the editor tested same and can assure that the results were most pleasing. It is ideal gear for that wet mapping trip and can be purchased from - Rauleigh Webb, C/- Organic Chemistry Department, University of W.A., Nedlands. 6009.

It is asked that you order a minimum of 20 pages as this will cover postage to anywhere in Australia.

SEAT BELT WEBBING

The following item was extracted from the Sun-Herald, 11/12/1977.

"Sir, Evan Green stated (Sun-Herald, Nov 27) that Mercedes-Benz had had to replace its German-made seat belts because they failed to pass Australian sunlight fade test and that "the authorities decided that our strong sunlight somehow weakened the German belt."

He called this Australian requirement a 'bureaucratic-inspired rule'.

The fact is that Australian defence scientists have found over the years that, at similar latitudes, sunlight in Australia is twice as strong in degrading the strength of textiles as it is in California. For this reason, some textiles that are satisfactory in other countries would degrade far too quickly in Australia.

Three separate studies have been carried out in Australian sunlight to determine the strength of the seatbelt webbing after 9 months' exposure. Some of the results are interesting. One polypropylene webbing started with high strength but could be broken in the hand after this exposure. Nylons varied enormously, some standing up well, others losing half their strength. Polyesters (of which Terylene is the best known) were consistent in slow, predictable degradation and so have been used by most seat belt manufacturers in Australia.

Another problem with nylon webbings generally is that their strength degradation in sunlight cannot be predicted from their performance in accelerated tests in the laboratory. Thus there is no overall advantage in promoting the use of nylons, which admittedly are better in some less important characteristics, because each type would have to be proved by 9 month long exposure trials.

I was involved personally in all three of the studies, and have pre-presented Australia in international discussions of the subject in Brussels. The public can be assured that public servants such as my colleagues and I will continue to do our best to ensure that safety equipment sold in Australia is suited to Australian conditions.

D.C. Herbert,
Acting Director
Traffic Safety,
Dept. of Motor Transport."

COMPETITIONS

In regard to the competition announced in issue No.77 - results to be announced in issue No.81. Caving Equipment also intends to present two separate awards of $20.00 for the best humourous article and the best map over a twelve month period. More information will be available in the next issue.

WACCON

12th BIENNIAL CONFERENCE OF THE AUSTRALIAN SPELEOLOGICAL FEDERATION - 1978/79

WACCON PROGRESS AND INFORMATION REPORT No.2

P.O. BOX 151, NEDLANDS, W.A., 6009.

FIELD TRIPS

Trips will be held to at least the following areas after WACCON (make a request if you want something else):

NORTH WEST CAPE - closed due to wet season.

ENEABBA/JURIEN (300 km north of Perth) - relatively untouched, big exploring and surveying trip planned for the 6-13th. January, volunteers needed, 4WD can be handy but not essential.

NAMBUNG (200 km north of Perth) - fascinating and unusual karst area as well as caves, highly photogenic, 4WD very handy.

YANCHEP (40 km north of Perth) - numerous small caves, easy access, day trips, relatively untouched (believe it or not).

LEEUWIN-NATURALISTE (300 km south of Perth) - several major areas, a variety of caves, typically very interesting and well decorated, bushbashing and surveying planned.

SOUTH COAST (400 km south of Perth) - several very unusual caves and karst areas, fascinating for geol freaks.

NULLARBOR - nice place, hot, ask someone that has been there.

Most caving in W.A. is horizontal, fairly easy and dry (the only two wet suit caves are now dry due to a drought). Vertical caving is limited to the entrance pitches. None is over 50 metres and almost all are under 20 metres. The most difficult thing about W.A. caving is not breaking the pretties (most caves are heavily decorated). Start learning and repeat after me . . . "I will be careful. I will not break pretties or else!"

All field trips will be based at camp sites (i.e. no buildings as yet). So come prepared. Conditions are likely to be very hot particularly in the north, but it can rain, especially in the south. Standard caving clothes are trogsuit (shorts) and shirt. All camp sites are within an hour or two by road of the nearest town. 4WD will be useful in the two northern areas and the south coast. All camp sites are 2WD.

If you require more information now, or have requests/suggestions, write to Ray Hart, Field Trip Organiser, C/- WACCON.

IMPORTANT: The Nullarbor has special problems of land owner relations, access and safety. Please do not contact land owners yourself under any circumstances. For all trips write first to the co-ordinator for the Nullarbor (Jim Cundy, Coomandook, S.A. until the end of the school year or to the Field Trip Organiser C/- WACCON.

WACCON PHOTOGRAPHIC COMPETITION

Start organising your pictures now for the best photographic competition yet. There will be separate sections for:- colour slides, colour prints, black and white prints. Judges and prizes are now being organised. You have to be in it to win it!

Section Divisions

1. cave entrances
2. chambers
3. scientific
4. pretties
5. action
6. humourous

There is a limit of two slides per person per category with a maximum of 6 slides, and one print of each type per category. Prints must be approx. 10" X 8" and mounted.

Deadline for entries is 12 noon, 1st. January 1979. Slides may be sent to Ros Hart, 18 Violet Grove, Shenton Park, 6008 before the conference or handed in at the registration desk. Please give some indication of your anticipated entries with your registration form (Number of prints or slides and which categories).

General Rules

1. Slides must have been taken in the two years following CAVCONACT, by the person entering them.
2. Any photo or slide may be entered in only one category.
3. Please label slides with category, entrant's name and NB please place a spot in the lower left hand side (as viewed upright) to indicate correct position for projection.

SPELEO SPORTS: A prize will be awarded to speleos for the best design of an event for the speleosports. Send your favourite grotty manoeuvres to Rauleigh Webb, Speleosports Organiser, C/- WACCON - closing date for entries is 1st. December, 1978.

MT. ETNA CAVES & POLITICS

by Glenn Pure

MT. ETNA CAVES - IS THE QUEENSLAND GOVERNMENT BEING UNREASONABLE . . . OR SIMPLY IMPOSSIBLE?

Some ASF members may not be aware of the Mt. Etna caves issue hence I shall give a summary in the first part of this item. However, the main purpose of this segment is to detail the Queensland Government's startling abuse of powers which recently stopped this issue from reaching the courts.

MT.ETNA

Mt. Etna is a conical peak 24 kilometres north of Rockhampton and forming one part of a larger karst unit which incorporates nearby Limestone Ridge and several other features. There are 46 caves on Mt. Etna in the small area of about 12 ha making this mountain the most densely cavernous area in Australia. The caves are of particular interest as they are of the rainwater inflow type and not the classical stream type (1*, 2*).

Most importantly, Mt. Etna is a major bat maternity site. One small cave on the mountain is the sole maternity site crucial for the survival of 250,000 Little Bent-Winged Bats (Miniopterus australis) 1*. During the summer months when the cave is occupied by the female bats, the population is estimated to eat nearly one tonne of insects every night. Mt. Etna is also a haunt for the extremely rare Ghost Bat (Macroderma gigas), the Eastern Horse-Shoe Bat (Rhinolophus megaphyllus) and the Unpouched Sheath-Tailed Bat (Taphozous georgianus), (J.Toop, pers. comm., L. Hall, pers. comm.; 1*, 2*).

Sizeable populations of macropods reside on Mt. Etna (L. Hall, pers. comm.; 1*, 2*).

THE PAST

On the 21st. February, 1920, an Order in Council in the Queensland Government Gazette proclaimed that a small area 24 km north of Rockhampton and refered to as "Mount Etna Caves" be made a Reserve for Recreation. It seemed then that Mt. Etna had been recognised as an important recreational site and would be preserved as a part of Queensland's heritage. It was not surprising then that local residents were shocked when they learnt just 5 years later that limestone mining leases were granted over much of Mt. Etna and Limestone Ridge. Although these leases were never worked and were consequently forfeited, bat guano mining which had begun several years previously in some of the caves was causing increased damage - damage which is still evident today. Guano mining continued for many more years before eventually ceasing.

The history of Mt. Etna has been a coloured one as it was threatened several more times by assorted limestone and guano mining operations. However, it was not until the middle of this century that the threat as we know it today, came into being. Seven limestone mining leases were granted over Mt. Etna and Limestone Ridge to Central Queensland Cement Pty. Ltd. during the period 1954 to 1973. Another lease was granted to Mt. Morgan Pty. Ltd. on Limestone Ridge.

In 1962 the U.Q.S.S. was formed and conservation activities began immediately. Despite several years of research, lobbying and publicity, mining operation started in early 1967. The limestone was transported from the rapidly growing quarry on the eastern face of the mountain, 18 km south to a cement plant on the northern outskirts of Rockhampton.

From 1967 to date, U.Q.S.S. activity on the issue has been intense. In the late sixties and early seventies there appeared to be considerable disparity in Government policy and considerable confusion amongst the public as to the future of Mt. Etna. In 1968, a Queensland Government Inter-departmental Inquiry, with representatives from the Mines Department, recommended that 31 acres, covering most of the caves on Mt. Etna, be gazetted as a national park. Albeit, it was in 1975 that a clear statement of Government policy was made. In the statement, the Mines Minister, Mr. Camm, said that mining would be allowed to continue unabated on Mt. Etna while the three leases on Limestone Ridge would be surrendered pending gazettal of a national park over the same. Mr. Camm carefully avoided mention of the fact that this 'compromise' would allow the destruction of the 46 caves and the huge bat populations which are unique to Mt. Etna.

Suggestions of the existence of alternative limestone deposits to Mt. Etna have been denied, without supplying reasons, by the Queensland Government. Ironically, the Queensland Government recently granted leases over huge limestone deposits at Mt. Larcom, just 100 km south of Mt. Etna. Even more ironically, the leases were granted to Central Queensland Cement's parent company and the limestone is to be used for cement manufacture. The Queensland Government will not deny the findings of an economic report (3*) that the Mt. Etna-based plant is "grossly inefficient" and will be economically redundant when the parent company begins operation of its highly efficient Mt. Larcom-based plant - yet the Queensland Government continues to endorse mining at Mt. Etna!

THE PRESENT

In Mr. Camm's 1975 statement to parliament he said . . . "An over-riding consideration was that Central Queensland Cement Pty. Ltd. had a legal right to mine limestone at Mt. Etna under the terms of the leases already granted to it." Does the company in fact have an unquestionable legal right to mine? Avenues of legal action were investigated and it was found that a genuine case existed questioning the granting of the mining leases over the recreation reserve on the mountain.

Cont. Page 12

MT. ETNA CAVES Cont;

Because of the nature of the legal action, the Queensland Attorney-General's "fiat" had to be obtained before the challenge could come before the courts. After 19 months of stalling, the Attorney-General replied on June 24th., 1977 . . . "I am not satisfied that the action is one in which I should intervene. In the circumstances, I decline to lend my name to these proceedings . . ."

But just 6 days earlier, on June 18th., 1977, the recreation reserve which was the basis of the legal challenge and had covered Mt. Etna for the 58 years since 1920, was revoked!

Did the Attorney-General deliberately delay 19 months to allow time for the decision to be made to revoke the recreation reserve? It is unlikely that we will ever find out for sure because neither the Attorney-General will explain why he refused to grant his fiat to the action or the Premier explain why the recreation reserve was revoked!

THE FUTURE

The Queensland Government's policies and actions over the years on this issue leaves little to the imagination. They appear to have an unbending attitude that mining should continue at Mt. Etna no matter what the circumstances are. The future of Mt. Etna then must be decided solely by the company - will it continue mining until the mountain is destroyed, or will it stop operations before then for economic reasons as we have suggested they might? CAN WE AFFORD TO GAMBLE?

HELP!

You can help save this unique area by writing and voicing your opinion. Write to:

1. Politicians that you consider appropriate (e.g. Qld. Mines Minister, C/- Parliament House, Brisbane, etc.)
2. Newspapers: a) The Australian, G.P.O. Box 4162, SYDNEY, N.S.W. 2001.
   b) The Courier-Mail, Campbell Street, BOWEN HILLS, QLD. 4700.
   c) The Morning Bulletin, 162 Quay Street, ROCKHAMPTON, QLD. 4700.

References

1* Sprent, J.K. (1970) ed., "Mount Etna Caves", Uni. of Qld. Speleological Society.

2* Hamilton-Smith, E. and Champion, R. (1976) "Mt. Etna & The Caves", Uni. of Qld. Speleo. Soc.

3* Ware, J.A. and Metwally, M.M. (1975) "An Economic Study of the Queensland Cement Industry", Capricorn Conservation Council. (photo-copied)

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WHO'S WHO.... on the speleo scene?

41. peter dykes

Peter started caving as a senior scout. Before long he was running his own trips to Tuglow mostly. Peter realised the need for some basic instruction courses for scout cavers in safety and conservation. He was a member of a small group of such interested people who formed the Above and Below Association which later split to become the St. George Area Caving Team and St. George Area Rockclimbing Team. Peter was the inaugural president of the St.GACT. His speleological interests have over the last few years centered on exploration at Jaunter. Peter is also a member of the Highland Caving Group and boasts that he has been refused membership of 5 NSW Societies. This and other anecdotes he frequently repeats at ASF Committee meetings.

42. evalt crabb

Evalt was the son of bushwalking parents and he too became interested in walking. This interest was re-oriented went he went to work at DeHavillands under a supervisor known as Bill Woof, who introduced him to caving at Colong in 1952. Before long and after reading books on the subject, Ev realised there were a special kind of people who solely went caving without ever going bushwalking. Several of these he met at Bungonia, an area which had better access than Colong back in 1957. Evalt caved at Mudgee, Cooleman and Tuglow with a small group of friends who eventually became the HCG. He held a few ASF positions during the 60's and continued caving through a lull of membership of HCG and became interested in geomorphology at Bungonia. Evalt is now president of a re-vitalised HCG and is married with three children. He is self-employed as a printer and quite proud of his new concept in documentation - the HCG Journal. His main hobby is home-wine making and consuming same but he is also interested in local conservation and community affairs.

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COMMITTEE MEETING - REFLECTIONS

by E. Hamilton-Smith

The so-called "NSW problem" of the Federation made another of its frequent appearances. A membership application was rejected, partly because the real issues were lost in vociferous debate about proliferation of societies in NSW, and a less vociferous (but nevertheless strong) underlying concern by delegates from other states about the increasing voting strength of NSW societies.

I want to argue that the increasing number of NSW societies and the voting structure of the Federation are NOT the real issues. This is just a symptom of a much more important problem - namely that the number of cavers is growing rapidly but the number of caves is not. The Federation urgently needs to focus upon the real problem. Not only does the present situation in NSW have nation-wide implications, but it is a situation which is likely to develop in due course in most other parts of the country.

NSW - a non-coping strategy

Although the current NSW situation is not my major focus, it is important to examine what is happening in that state, and see what we can learn from it. I would go so far to say that Australian speleology has adopted strategies which are exacerbating the situation rather than solving it. This is not just because of NSW cavers, although they must accept a great deal of responsibility, but the failure of others to fully understand the problem is an Australia-wide responsibility.

NSW is the state which has experienced the most rapid increase in demand for outdoor recreation in general and speleology in particular. It has a relatively limited supply of caves, and restricted access to these. The result is that cavers are behaving like 27 monkeys in one cage with only 9 bananas between them - so caving in NSW is fragmented and lacks any sense of unity or direction.

A multitude of organized groups have developed, and probably less than half of these are involved in the Federation. Communication between groups ranges from reasonable to zero; attitudes and relationships are characterized by uncertainty, suspicion, distrust, parochialism, or even downright jealousy and hostility.

Naturally, I am aware of the efforts being made by the NSW Speleological Council. However, I am equally aware that various delegates to the Council tell me what stupid bastards some other delegates are and that many cavers have never even heard of the Council.

Rational access policies are generally lacking, and although it is easy to criticise the various land management agencies, we must accept a share of the blame. The views put forward to these agencies by speleologists have generally been diverse, often contradictory, and usually both poorly developed and poorly enunciated.

Towards better strategies

If we are to help solve the problems in NSW and to reduce their future impact in other states, then we need to look very seriously at the way in which the total Federation tackles things. Here are some suggestions:-

1. We must stop seeing the NSW situation as being separate from the rest of Australia, and accept much greater responsibility for trying to find a solution.

2. We must stop being exclusivist about membership and aim at involving every genuine and reasonably responsible group of cavers as fully as possible.

3. We must aim towards achieving organizational arrangements which will absorb the growing number o of organized groups, will foster communication and co-operation between them, and will minimise the vote-counting power games which distract us from real problem-solving.

4. From this, we must develop sufficient unity and sense of direction to enable the formulation of a clear and strong policy base.

5. This in turn, must lead to not only better caving practice, but to better negotiating capacity in our relationships with land management authorities.

I fully appreciate that all this will not be easy, nor will it necessarily please everyone - but a little thought about the alternative should convince most people that it would be worth trying.

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FORTY ISSUES AGO

ASF Newsletter No.40 appeared in June 1968. A single copy cost 25c and that, my dear readers, was exactly 10 years ago! This particular issue is devoted entirely to varying aspects of conservation and to re-print the same issue today would encompass no more than 4 pages of the present issue. As it now stands, you are receiving an extra 12 pages for a mere 25c increase in price over this 10 year period. Need I say anymore?

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DOWN UNDER ALL OVER...

news from around the societies.

CSS : Gordon Taylor reports that activity has remained high in CSS lately. A pleasant boat trip to Narrengullen and a bushwalk to further investigate Black Perry have been held. A CSS member recently found a new limestone area between Wyanbene and Bendethra which by now will have been further investigated. Other areas visited lately include Yagby, Wyanbene and Dripstone-Wellington. CSS members also participated in a most successful Bar-B-Que at the Cotter Caves with NUCC andCTCG members. The CAVCONACT proceedings have now been printed. If you didn't order one you can get a copy from CSS for just $8.00. Recently an application for an exploration licence at Wyanbene was made by a mining company. CSS aided in the compilation of a submission opposing the lease.

CTCG : Jim Wilson informs us that the Capital Territory Caving Group is continuing the swift pace begun earlier this year and have commenced publication of a monthly newsletter. After a few early printing problems, the club now has its own duplicator and is off to a good start, thanks to plenty of enthusiasm. Regular safety talks by the club safety officer have been well received and the first of their regular Safety Days was held at a disused limestone quarry area close to Canberra. Everyone was put "through the hoops" to ensure that safety standards were satisfactory. Using the varied terrain, all types of pitches were rigged and techniques included laddering, abseiling and SRT. Belays were used on all pitches to illustrate the principles to all present. The club has made trips to Bungonia, Yarrangobilly, Mt. Fairy and yet another to the Bendethra area. Following the successful end to cleaning and path tagging of Y-58 cave, the Yarrangobilly area is receiving extra attention with the commencement of a long and detailed project on cave meteorology and instrumentation techniques. Socially, club members joined with CSS and NUCC in an Anzac Day barbeque at a picnic area close to Canberra. All present welcomed the opportunity to liase with fellow cavers in the A.C.T. region and share in a very pleasant day.

HCG : Graeme Smith reports that HCG is not a club well known by the average caver. It consists of a group of cavers who try to avoid the politics which bedevil much of inter-club communication. The club concentrates on the limestone deposits west of the Blue Mountains. During the last few months, trips have been run to Tuglow, Jaunter, Hollanders River and the Mudgee area. The members are currently engaged in a complete documentation of the limestone in the Mudgee area. This is particularly urgent, as the completion of the Windamere Dam on the Cudgedong River will cover at least five limestone outcrops. Members of the club recently gated Phoenix Cave (B60) at Bungonia. The reason for this is being circulated in the hope that the gate will not be damaged. In addition, work on a number of digs proceed in the hope of digging out another cave.

ISS : Dave Dicker informs us that ISS have been visiting Wyanbene fairly regularly and had two chunderous trips in the recent wet weather. They had one trip with Alan Warild and his climbing group and found that he was 50 metres up the shaft - it was apparently an awe-inspiring sight! Unfortunately, the conditions for aerial photography were poor and the results aren't expected to be very good. The climbing group have indicated that they are still interested so new discoveries in the "Gunbarrel" could still be a possibility. Trips have also been made to Tuglow to install stream gauges and to Cliefden for the same purpose. The club has also held field days to familiarise members with SRT techniques.

MUSIG : Cathie Rothery reports that despite a lack of communication, MUSIG is alive and very active. B68 has been siphoned with the hope that it may be pushed but frequent flooding is making it a slow and tedious job. The club also held a week-long trip to Buchan which experienced numerous hassels evolving from two members not making the journey and they had the battery charger. However, members did manage to visit Kitsons, Canyons, Moons, Spring Creek, Honey-comb and numerous holes were explored in the Pyramids area. The club also held an inter-vasity speleosports during the May vacation. A great time was had by all and plans are under way to hold it again next year.Richard Willson and Dave Rothery are off to New Guinea again shortly. Other areas visited include Jenolan, Wee Jasper, Bungonia, Wyanbene and Mt. Fairy.

NUCC : Gordon Taylor informs us that NUCC is experiencing a high in activity at present with trips being held on most weekends. Once again the centre of attraction is Wyanbene where a very challenging small vertical cave has been found on the ridge. Surveying of unmapped parts of Wyanbene Cave is continuing. A trip was held to Wee Jasper where the usual 'horde of Yobbos' were doing their suicide acts. Other areas visited were Narrengullen and Bungonia. NUCC joined the other Canberra clubs in a most successful Bar-Bee-Que at the Cotter Caves, 12 miles from Canberra. The club also contributed towards the Wyanbene mining submissions.

UQSS : Jan Surridge reports that UQSS has been busy in the following areas:- TEXAS: The Texas Caves are now well under the waters of the Glenlyon Dam. The last trip to the caves was held in March 1977 and found the water so far risen that only the top of Russenden Cave was able to be entered. Subsequent exploration of the nearby Pinnacles limestone has so far resulted in only a minuscule "cave", a spring, and a "leak-in-the-creek". MT. ETNA: The Recreation Reserve classification covering Mt. Etna since 1920, was revoked in June '77 and the area is now classified as mining leases on Crown Land. This has meant a set-back to the legal

DOWN UNDER ALL OVER Cont;

UQSS Cont; challenge which was to be based on the areas status as a Recreation Reserve. However, trips still proceed to Mt. Etna with only a little more care to avoid the mine workers than before. At Easter '77, the dig in Straw Palace on Limestone Ridge, broke through into a small chamber and could possibly be continued on the other side. On Etna, the survey of Speaking Tube was continued and would have probably been finished but for the discovery of an apparently new section late on the last day of the trip. The birdlist for the area (see the "Mt. Etna Caves" book) was updated and considerably enlarged by the club's 'birdo's'. The December pre-Xmas trips to Etna were designed to boost the club's photographic record of the area. It is hoped to use some of these photos in a publicity brochure to be printed later in the year. The two trips to Etna so far this year have resulted in the tagging of most of the entrances on Etna, the surveying of Valkyries and Straw Palace on the Ridge, and more work on the now-legendary Speaking Tube survey. NORTH QUEENSLAND: A UQSS and VSA expedition visited Undara and Black Braes lava tunnels, Lawn Hill Gorge, Colless Creek Grikefield, Dentalium Plateau and Camooweal where they met up with an UNSWSS party. At Camooweal, the exploration and surveying of Kalkadoon produced a known 3860 metres of cave, but at no time did the party reach the end of any passage! KEMPSEY: Kempsey was the area of greatest UQSS activity in 1977 and our persistence was rewarded with the discovery of 3 major caves (by Kempsey standards at least!) and a number of smaller holes and promising digs. Two of the caves are in the Windy Gap area and have been named Grond and Fenris, and the third, near Mervs Cave, has been called Caber Pot. A new hut, to replace the one burnt down in Carrai Clearing, is $\frac{7}{8}$ ths completed. On the Christmas Dinner trip to Windy Gap the following surveys were completed:- Grond, Wellinghall and River Cave; the survey of Queensland Cave is $\frac{3}{4}$ done. A dig in Wellinghall broke through into a small chamber, still with some promise. On the January trip, the second squeeze in Fenris was pushed by one of the Lilliputian members of the club and appears to connect the cave with Crystal Cave but this needs verification from the Crystal end. Easter 1978 - work was concentrated on surface exploration, entrance digs and flow measurements. Cols Cave and Crystal Cave were surveyed and the link between Fenris and Crystal proved. BRISBANE SEWEROLOGICAL GROUP: The BSG arose in mid 1977 as a coagulation of broadminded UQSS members desperate for some caving around Brisbane. This sub-group has been very active beneath the city, exploring and documenting the local homokarst. OTHER AREAS: Other areas visited by UQSS members in 1977 include Holy Jump Lava Cave, Timore, Wyberba, Bungonia, Buchan, Cooleman Plains and Wombeyan. CONGRATULATIONS to Rosie Murphy and Henry Shannon and also to Jill Landsberg and Dave Gilleson on their respective marriages. Best wishes are also in order to the following on their imminent sproggings - Anne and Andrew Graham, Eileen and Garth Forster, Gary and Joni Pick.

WASG : Rauleigh Webb informs us of WASG activities from Easter 1978 to the 31st May. AUGUSTA: The Easter break saw mapping in Easter Cave - the Gondolin extension being close to completion. However, the Crystal Labyrinth has been commenced and is proving a headache for detail drawers. Mapping at Easter Cave is continuing with trips into the CEGSA Extension and also past the first duck on the main drag. An air tracing experiment was also conducted between Easter and Jewel Caves using an inert gas. The result proved positive! Further traces will be conducted to isolate the exact points of connection. The Moondyne Survey was completed with little tracable as the CO_2 level was only 2%. WITCHCLIFFE: More caves, fissures and depressions have been added to the WI list which now totals 143. Bobs Hollow Cave (WI82) saw one final "very muddy" mapping trip (Thank heavens for waterproof paper). A number of introductory caving trips were also held during this period. ENNEABA: A party led by our correspondent visited River and Arramall Caves over the Easter break. This trip was in preparation for post-WACCON mapping trips to River Cave. NULLARBOR: Ken Lance and Kerry Williamson visited this area in May to aid the ASF Nullarbor Study.

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BOOK REVIEW

by Ken Keck
TA7 OEB ENGLAND.

DAN-YR-OGOF Available from - BCRA C/- Bryan Ellis, 30 Main Rd; Westonzoyland, Bridgewater, SOMERSET.

Vol. 4 Nos 1 & 2 of "Transactions" published by the British Cave Research Association is a comprehensive publication devoted entirely to Dan-yr-Ogof and its associated caves, which is a complex area lying on the western side of the Swansea Valley in South Wales, U.K.

Accompanying the issue are two large and very detailed maps (the cave is too long for one sheet), a map of the geology, drainage and structure of the catchment area, and a map setting out (a) Fault and Joint aligned passages and (b) Synclinally controlled passages of the cave.

The main interest is centered on Dan-yr-Ogof which has approx. 15 kilometres of explored length. Comment is made that there is no doubt that a large part of the system remains undiscovered. After an introductory article, the exploration history is given from 1912 up to 1976 with some very interesting extracts from original trip reports of the explorers and a history of the cave diving done in the cave. Dives of 105 and 128 metres are recorded in some sections.

The next section gives a detailed description of the major passages and is accompanied by some excellent photographs. This is followed by notes o the survey, geomorphology, cave chemistry research, biospeleology and finally archaeology. The standard of publication is excellent, and containing as it does, aerial photographs as well as surface photographs stratification detail as well as thoroughly readable material on all aspects of the cave system, it is highly recommended as an addition to any serious caver.

Price: £4 stg. plus postage

N.S.W. NEWS

by Ian Bogg

PREAMBLE

This is the first in what I trust, will become a regular feature of the ASF Newsletter. The primary intent is an informatory overview of speleo activity not only at the NSW Council level but NSW generally, for a greater awareness and understanding of speleology in NSW.

NAME CHANGE - N.S.W. LIAISON COUNCIL

At the last meeting of the Liaison Council it was unanimously resolved to alter the name of the Council to that of "N.S.W. SPELEOLOGICAL COUNCIL".

WEE JASPER CAVES - RESERVE 87128

Following complaints and rumours that access into the Dogleg Cave was to be restricted by gating the cave, a request was made to the Department of Lands N.S.W. for clarification. The Department subsequently advised as follows:-

"Following representations made to the Department wherein concern was expressed regarding the protection of organisms within the Dogleg Cave, and that a gate would be desirable, a field officer carried out an inspection of the caves area. The original reserve 87128 which covered the Punchbowl and Signature Cave systems has now been increased by approximately 5900 sq. metres in a north easterly direction to include the Dogleg Cave.

The Goodradigbee Shire Council, the trustee for this reserve has been informed that no objection would be raised by this Department to the erection of a suitable gate on the entrance to Dogleg Cave, provided a key to the gate is held by Council as the reserve trustee."

The Department further advised that consideration is also being given to the preparation of a "Design of Areas" suitable for addition to reserve 87128 out of portion 38 (Crown Lease 1946/2, Yass) covering those caves which extend beneath portion 38. Portion 38 adjoins reserve 87128 on eastern boundary.

(Trustee's intention re Dogleg Cave unknown at present).

KANANGRA BOYD NATIONAL PARK - RANGER APPOINTMENT

The National Parks and Wildlife Service of NSW have appointed Ranger Mr. John Giles, as Officer-in-Charge, Oberon Districts (Permanent Appointment) which includes the Kanangra Boyd National Park wherein lies the Tuglow, Colong, Church Creek, Cave systems.

John, is 35 years of age, and has been with the service for 7 years, commenced duties on the 6/1/1978 after being transferred from the Kosciusko National Park - Blowering Station. He now resides in Oberon with his wife and family.

John has been advised that regular weekend patrolling of the cave areas is, and will continue, to be carried out. He is undertaking familiarisation caving trips of all the cave systems with the support of a number of NSW ASF member groups. He further advises that permits are still required and will be policed to ensure compliance.

Note All permit applications must be directed to the Superintendent, Blue Mountains National Park, P.O. Box 43, Blackheath, 2785.

CAVE TAGGING - YARRANGOBILLY CAVES

The N.P.&W.S. Kosciusko National Park have advised re amendments to the cave tagging proceedures for Yarrangobilly. The service will in future maintain tags, register and information forms of which copies will be made available to the Council. The following individuals have been approved by the service to undertake cave tagging - J. Brush (CSS), R. Ellis (SSS), R. Nicoll (CSS), A. Pavey (UNSWSS), P. Wellings (SSS). The service has further advised that any amendments to the list of approved individuals must have the endorsement of the NSW Speleological Council.

MINI-CONFERENCE

A committee has been formed to investigate the feasibility of holding a "mini-conference" in NSW. It is not intended to conflict nor compete with the ASF Conference which is regarded as being somewhat esoteric by many, despite speleo sports etc. The intent is for a low key, low cost, conference with emphasis upon field trips, presentation of papers perhaps too minor for an ASF Conference, topical discussion etc., to, not only stimulate, but attract the fringe speleologist/caver.

This would not only afford us the opportunity of promoting organised speleology throughout the established groups and cave conservation but camaraderie at a common level.

JENOLAN CAVES - MAMMOTH CAVE - GATING

BMSC have advised the Council that they have installed a gate in the lower entrance of Mammoth at the request of the controlling authorities. The key to this gate will be issued at Jenolan on presentation of permit. Similar action is pending for other caves. Societies active at Jenolan will be requested to assist (authorities concerned for high incidence of non-tourist types frequenting Northern Limestone excluding societies with permits).

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

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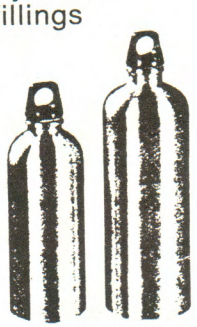

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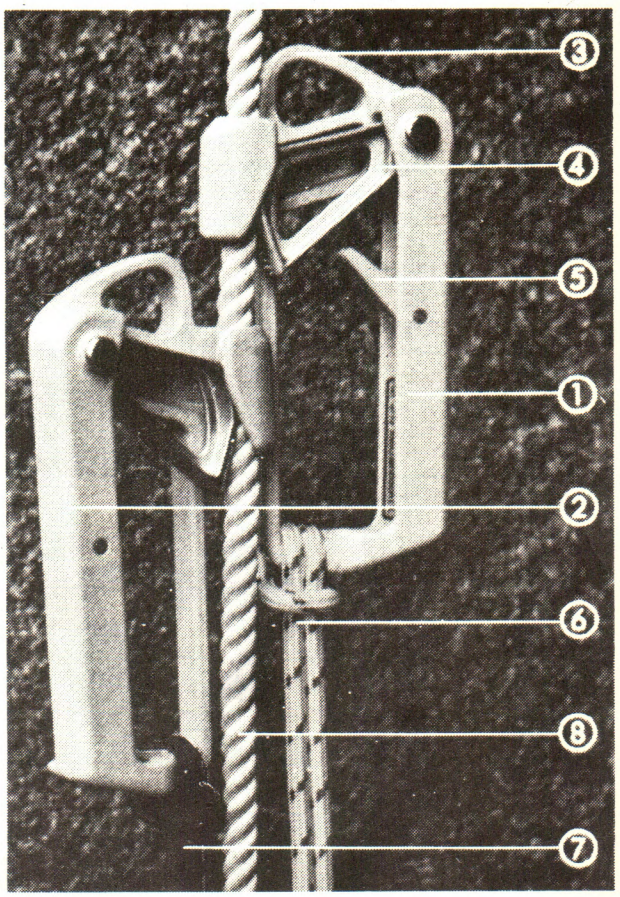

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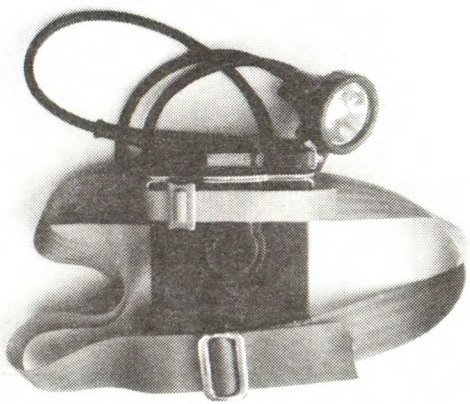

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THE CAVES OF JENOLAN 2: The Northern Limestone Bruce R. Welch (ed.) 140pp 26 plates $ 5 500 gms

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	Surface	Airmail	Surface	Airmail	Surface	Airmail	Surface	Airmail	Surface	Airmail
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up to 1	.90	Not	1.15	3.50	2.00	3.50	2.25	3.50	2.60	3.50
over 1 up to 2	.95	applicable	1.25	3.50	2.25	3.50	2.50	3.50	3.10	4.50
over 2 up to 3	1.00	– delivery	1.35	3.50	2.50	3.50	2.75	4.10	3.60	5.70
over 3 up to 4	1.05	within	1.45	3.50	2.75	3.50	3.00	4.80	4.10	6.90
over 4 up to 5	1.10	50 km	1.55	3.50	3.00	3.75	3.25	5.50	4.60	8.10
over 5 up to 6				3.50		4.15		6.20		9.30
over 6 up to 7				3.85		4.55		6.90		10.50
over 7 up to 8	1.25		1.75	4.25	3.40	4.95	3.50	7.60	5.50	11.70
over 8 up to 9				4.65		5.35		8.30		12.90
over 9 up to 10				5.05		5.75		9.00		14.10
over 10 up to 11				5.45		6.15		9.70		15.30
over 11 up to 12				5.85		6.55		10.40		16.50
over 12 up to 13				6.25		6.95		11.10		17.70
over 13 up to 14				6.65		7.35		11.80		18.90
over 14 up to 15	1.75		2.00	7.05	5.00	7.75	5.25	12.50	8.00	20.10
over 15 up to 16				7.45		8.15		13.20		21.30
over 16 up to 17				7.85		8.55		13.90		22.50
over 17 up to 18				8.25		8.95		14.60		23.70
over 18 up to 19				8.65		9.35		15.30		24.90
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TREATMENT OF EXPOSURE

If a member of the party shows signs of exposure take the following action:

- Shelter from the wind immediately. Move down from ridge crest to the lee side and look for shelter in tussock, scrub, bush or behind rocks.
- Put on extra clothing, have something to eat or drink, and assess the situation carefully.
- Recovery can be swift, but if it has not occurred within 15 minutes or if the victim has collapsed he will be passed warming himself; you must do it for him.
- Stop and quickly pitch the tent on the spot or at some convenient site, and give the whole party shelter from the wind.
- If the patient must be carried a short distance do so with his head down.
- Dress the patient in dry clothing and place him in a dry sleeping bag and again, inside a plastic survival bag.
- If he is very cold, let a warmer person get in with him to warm him up gradually.
- Be careful not to overheat him, e.g. by placing him in front of a roaring fire. Alcohol must not be given.
- Try to get the patient to eat some quick energy food, or a hot drink, but not if he is in a state of collapse as he may vomit and choke.
- If his breathing should falter and/or stop, use mouth to mouth resuscitation immediately and continue until deep regular breathing has begun again.
- If the patient is or has been in a state near to collapse, do not move him for at least a day.
- If he is to be moved on a stretcher, do so only if his body temperature can be maintained at a safe level during the carryout.
- All the party should try to maintain a cheerful disposition in difficult situations, as a high morale may mean the difference between life or death to one or more of the party.

REMEMBER

(1)
HYPOTHERMIA IS A KILLER
The young, fit and healthy
may still be victims.

(2)
The signs and symptoms
are frequently mistaken
for simple fatigue
and the exposure victim
may not realise his own plight.

(3)
People have died of exposure
without once complaining
of the cold.

(4)
A two-man party
is a weak one
in a dangerous situation.
If four are in the party,
one can stay
with a sick man
while two go for help.

For more information the following books are recommended.

Mountaincraft — A.J. Heine
Fundamentals of Outdoor Enjoyment — Fear-Mitchell
Wilderness Emergency — Gene Fear
The Ten Bushcraft Books — Richard Graves

All books are available from Southern Cross Equipment

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EXPOSURE

EXPOSURE OR HYPOTHERMIA

- **The sources of body heat that provide normal body temperature are muscular activity and basal metabolism, both of which are dependent on adequate food (energy) supply.**

  Body heat loss occurs at all times, and although clothing helps limit it, there are factors which cause it to be accelerated. These are:

  (1) Increasing wind speed, which causes increased heat loss from bare skin, especially if skin is wet, even if air temperature remains the same

  (2) Wetness of clothing and skin, which greatly increases the heat loss, especially if the wind speed increases

  (3) Poor insulating (or protective) quality of clothing, which depends to some extent on its "windproofness" and warmth when wet.

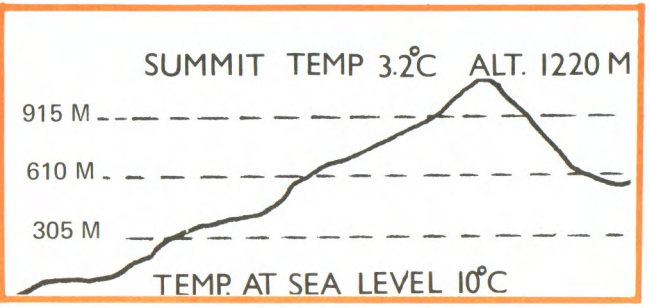
The ability of a bushwalker to complete a particular trip without risk or exposure depends on:

- The physical fitness of the person, relative to the trip he plans to do.
- The capability to follow the planned or escape routes.
- The protective clothing carried.
- The quantity and quality of food carried to provide energy to do the trip.

Make certain that no member of the party has had a recent illness, particularly of the influenzal type. This person is much more prone to exposure.

It is important that whatever the length of trip you undertake, you must be prepared for deterioration in weather conditions.

Remember that the air temperature decreases with altitude – approximately 1.7 C per 305 metres.



EXPOSURE OR HYPOTHERMIA is defined as the general lowering of the Central Body Temperature and is caused by body heat loss exceeding Body Heat Production.

- **When travelling at high altitudes, it is wise to anticipate any possible exposure situation.**
- Plan your day so as to reach your destination with time to spare before nightfall.
- Have a good breakfast before leaving camp.
- Even if the weather is not bad enough to wear your windproof jacket, trousers and mitts or gloves, keep them ready for use at the top of your pack. Wear woollen clothing – wool is warmer than cotton or synthetics when wet.
- Keep some quick energy food in your shirt or jacket pockets for fast access.
- Have frequent short stops during the day, to eat some quick energy food, and at the same time check the physical state of all the members of the party.
- Endeavour to drink some liquid during the day as dehydration can contribute to exhaustion.

At 10°C, a wind of 30 m.p.h. produces the same heat loss from unprotected skin as would be lost in windless conditions at –2°C. Wet skin loses heat 20 times faster than dry. Damp, windy conditions when temperatures are around 4°C are the most dangerous.

If there is a strong wind and the temperatures are fairly low, e.g. 4°C, you may lose one-half of your body's total heat production through your uncovered head, therefore wear a woollen cap or balaclava, or pull up your jacket hood.

As soon as the weather starts deteriorating put on your storm gear, have some food and make a quick decision whether to turn back, follow your planned route, or drop off to shelter.

SYMPTOMS

The leader of any party should consider any complaint of tiredness, cold or exhaustion, because if these factors are allowed to continue and the person has inadequate storm gear, an exposure situation can easily develop when the victim may collapse and die. Indecision by the leader may cost a life.

If the situation has been allowed to deteriorate beyond the point where shelter and safety can be reached easily and quickly, quick decisive action is required.

THE SEQUENCE OF EXPOSURE (HYPOTHERMIA) may follow this pattern:

- Weariness and reluctance to continue moving.
- Unawareness of any danger to life and a false feeling of well being.
- Clumsiness and loss of judgment.
- Irrational. Delirium.
- Collapse and unconsciousness.
- Death.

The period of time from the first symptoms to unconsciousness may be as short as 30 minutes. The symptoms of exposure may be felt, to a greater or lesser degree, by all members of the party, who also may then be lulled into a false sense of security.

NEVER TRAVEL ALONE