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NEWSLETTER

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The Dune in
Mullamullang Cave
Nullarbor Plains
Western Australia.

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Number Thirty One - March 1966

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Editorial . . . . . .

AT THE 1966 COMMITTEE MEETING OF THE FEDERATION THE ROLE OF THE NEWSLETTER WAS KEENLY DISCUSSED. THE OUTCOME OF THESE DISCUSSIONS WAS A COMPLETE REVERSAL OF POLICY SUGGESTIONS PUT FORWARD BY SOCIETY DELEGATES AT THE PERTH CONFERENCE IN 1964-5.

THIS COMPLETE REVERSAL IS INDICATIVE ONLY OF ONE POINT: INSUFFICIENT REPRESENTATION OF FEDERATION SOCIETIES AT THE MEETINGS. SEVENTEEN SOCIETIES COULD HAVE ATTENDED THE CANBERRA COMMITTEE MEETING, HOWEVER BARELY SUFFICIENT WERE PRESENT TO ESTABLISH THE NECESSARY QUORUM. THE ATTENDANCE AT PERTH WAS SLIGHTLY BETTER.

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NOTICES

NEW SOUTH WALES SEARCH AND RESCUE COMMITTEE

Illawarra Speleological Society is organizing, for the N.S.W. Search and Rescue Committee, a S&R operation at Bungonia Caves.

This practice will be held over the weekend of April 30, 1966. An invitation is extended to all societies and all N.S.W. societies should endeavour to be represented. Intending participants are requested to contact ISS at PO Box 94, Unanderra, N.S.W. in advance.

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Convenor of the NSW Co-ordination Committee, Ian Wood, wishes to notify society representatives that a meeting of the Committee is scheduled for Saturday, April 2, 1966. The meeting will be held at Flat 6, 15 Wilga St., Bondi, N.S.W. and will begin at 10:00 am.

Two important items on the agenda will be further discussion of the suggestions, offered by SUSS at the Canberra Committee Meeting, regarding administration of the Co-ordination Committee and a request by UNSWSS to re-open discussion of the case for gating, rather than permanently sealing access between Punchbowl and Signature Caves at Wee Jasper.

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CONSERVATION ACTION

NEW SOUTH WALES

Colong

The Colong Caves, situated within the watershed of the Warragamba Dam, have been known since 1899 when they were first reported by O. Trickett of the N.S.W. Department of Mines. Sections of the cave were considered to be extremely beautiful and it is reported that at one time it was considered worthwhile to open them to tourists.

Since then extreme depredation has occurred to the more accessible portions of the cave. Extensive damage occurred at the hands of the early settlers of the colony and probably the miners from the nearby town of Yerranderie--now abandoned. In more recent years the damage was completed by the influx of the bushwalker and scout, well before the organization of bodies actively engaged solely in the sport of caving.

With the rise of the speleological societies came greater insight into the preservation of caves.

In 1956 the long lost and famed Woof's Cavern was re-discovered. The difficulty of access to the cavern had saved it from the uninitiated and the vandal and even today with a cave map showing the access, (which, incidentally appears to have very free circulation), many parties fail to locate Woof's Cavern.

Cooranbong Speleological Society, then a member of the A.S.F. but now no longer in existence, decided in 1962 to erect a gate in order to seal access to all but those considered sufficiently mature in their attitude towards conservation.

The gate was constructed and taken to the caves but the Society suddenly disbanded and the gate remained in the caves--but uninstalled.

Recently, and with little publicity, the Sydney University Rover Scout Crew installed the gate, much to the thanks of the many societies who have caved and will continue to cave in the area.

The Colong Caves Trust has offered selected organizations in N.S.W. keys to the gate under certain stipulations.

Wee Jasper

At the 1966 Committee Meeting of the Federation the question of reducing access to the Punchbowl Cave at Wee Jasper by sealing the man-made tunnel from the Signature Cave Arose. The unanimous opinion of the delegates was to close this access as the vandalism mainly in the form of signatures and signs was progressing from the Signature Cave into the Punchbowl. The work is to be carried out by the Canberra Speleological Society.

Wyanbene

Also brought to the attention of the 1966 Committee Meeting was further signs of vandalism in the Wyanbene Cave. This previous tourist cave still contains steel ladders throughout its length. In view of the recent desecrations it was considered advisable, on permission from the property owner, to remove at least one of the ladders so as to impede progress into some of the better decorated sections of the cave.

WHICH ROPE?

A further comment on caving ropes

by E. Hamilton-Smith
Sub Aqua Speleological Society

The editor has suggested that I might care to comment further on the question of rope properties which I raised in the letter reprinted in a recent issue of this newsletter. (See reprint: "Letters to the Editor, 'Stop Press'"; ASF Newsletter, No. 29, Sept. 1965.) On thinking about this I felt it might be most useful to draw attention to the factors which must be taken into account in any evaluation of ropes for caving purposes, rather than just collating technical data. One reason for this decision is that the variation in standards between ropes of supposedly the same specifications can be quite extreme, and technical data alone can be quite misleading if not related to specific products: e.g. to rope of a certain size and type made by a specific manufacturer from a specific material.

THE NEEDS OF THE CAVER

Some confusion has been introduced into discussions about caving ropes by quotations of climbing experience as authoritative. It should be remembered that climbing rope is used under different conditions, and usually for different purposes. Rarely is a climbing rope exposed to mud in the way that a caving rope often must be; similarly, a caving rope should never be exposed to the extreme shock loading of a climbing rope which saves a falling leader.

Caving rope must, therefore, be chosen with the following in mind:

Regular wettings, or contact with mud and wet sand.

Suitability for holding firmly in the hand.

The extent to which members are trained and disciplined in the care of the rope.

Good working strength--although not necessarily high shock strength.

Low extensibility.

These requirements assume that the normal use of a caving rope is to belay a caver on vertical pitches, to act as a fixed hand line, or to lift equipment on a vertical pitch. If we find ourselves indulging in actual rock-climbing practice in caves as is occasionally necessary, then there is no substitute for a recognized climbing rope--but how often are we involved in real climbing? While on this point, nylon climbing rope should only be accepted if it is made in conformity with British Standard 3104 : 1959, and a great deal of Australian made nylon just does not neet this standard.

TYPES OF ROPE

The conventional rope is a three strand, hawser-laid rope (i.e. one in which fibres are twisted right-handed into yarns, which are twisted left-handed into strands, which are twisted right-handed) and this is stronger than any other twisted rope of the same material and size. Plaited rope is however also of equal tensile strength but more expensive and not in common use. It is more flexible, more resistant to kinking, but harder to hold and has a lower shock strength.

Sheathed rope (or Kernmantel) is of exceptionally great tensile strength does not kink, but is extremely expensive, stiff to use, and disappointingly low in shock strength. To date, so far as I know, it has not been investigated as a caving rope--it may have potential, but its cost would most likely be excessive for caving purposes.

Other types of twisted rope are not worth consideration, as they do not compare with hawser-laid for strength. Braided rope is stiffer than plaited and has less shock strength--so again, it is not worthy of consideration.

THE STRENGTH OF A ROPE

The quoted strength of a rope is usually in terms of tensile strength. However, two other measurements are important. The first of these is shock strength. Many ropes have a considerable extensibility under stress and this "stretch" gives the rope a property of energy absorption: for instance Nylon BS 3104:1959 has only about twice the tensile strength of a similar sized manila, but its energy absorption by stretching under a sudden stress gives it a shock strength at least five times that of manila.

The second significant measurement is that of working strength--the steady load which a rope will bear over an extended period of time. In most ropes the fibres will tend to "creep"--to slip over each other and gradually draw apart. This tendency is extremely high in sisal or coir ropes, moderate in manila and good in polyolefine group ropes, low in nylon and terylene. Some polyolefines of inferior quality are not to be trusted here and other synthetics should be regarded with great suspicion until proven. In general, safe working load is usually considered to be one-fifth of the tensile strength. This is a more important consideration for the caver than for the climber again--while shock strength is paramount for the climber.

Consistency, or reliability, of strength is also of vital importance--a rope made of short fibres is subject to far greater variation in strength from one piece to the next than one of long fibres--hence manila is satisfactory, but never sisal. Similarly, synthetics should never be bought other than from a truly reputable manufacturer.

FACTORS WHICH AFFECT STRENGTH

MOISTURE often changes rope strength. For instance, cotton looses most of its strength when wet, and nylon is appreciably affected, loosing 15-20% of its strength. Manila gains strength when wet, while terylene and the polyolefines are unaffected.

ABRASION RESISTANCE is a matter of special concern to cavers. Reports on various ropes tend to be at variance with each other, but on the whole, natural fibres (e.g. manila) are preferable to synthetics. Robinson and Greenbank report a 40-50% strength loss in nylon over two years of caving use.

EXPOSURE TO SUNLIGHT will have rather bad effects on any rope, but some are worse than others--terylene is probably the least affected, while uncoloured polypropylene is the most affected. Generally, this is of little consequence to cavers, although one should see that ropes are not left out in the sun all day on trips.

MILDEW only attacks natural fibres, of course, and synthetics are immune. Careful drying out of natural ropes after use is vital, and even with this care, regular inspection and regular replacement are to be very strongly advised.

TEMPERATURE materially affects the strength of many ropes, especially the synthetics. Terylene is again the most resistant to both heat and cold. Polythene melts at about 135°C and is probably the most sensitive to heat. However, working temperatures are far below melting points, and the usual safe working temperatures are considered to be: Terylene 150°C, Nylon 80°C, polyolefine group 45°C.

Low temperatures are claimed by many authors not to affect synthetics, but some polyolefines of the polypropylene type have been proven, at the cost of climbers, to become brittle near freezing point--the moral seems to be not to trust until proven.

CHEMICAL RESISTANCE should never be a problem if people treated ropes as carefully as they should. But they do not. Manila ropes are weakened dangerously by almost any chemical: petrol, oil, acid, alkali, bleaching agents, detergents, etcetera. Nylon has little resistance to acid or bleaching agents. Terylene and other synthetics are much better, with the exception that terylene is susceptible to strong alkali, which, unfortunately, is encountered in the nickel-cadmium wet cells used by some cavers.

THE USE OF ROPES

Apart from the matter of drying after use, keeping away from chemicals, etcetera, there are several other use factors of importance. One is the question of flexibility and ability to hold knots. Many synthetics do not take readily to knotting--for instance polyolefines will not hold in a Tarbuck Knot and the Bowline is suspect for many synthetics. This requires greater investigation--two dependable knots for almost any rope are the Fisherman's Loop and the Figure-of-eight Loop, but they are slow to tie, often slower to untie. (They have the advantage of weakening the rope less than any other knots--a Bowline decreases the strength of a rope by about 40%.) The practice of using a Bowline and securing this by use of a Thumb Knot or a Half Hitch is another useful precaution.

Many cavers seem unaware of the great loss of strength resultant from a sharp bend in a rope: for instance, a bend around a karabiner can reduce

strength by as much as 90% depending upon the respective sizes of rope and karabiner and the angles involved--it is just like the old trick of breaking string by interlocking two bights around your finger and jerking the end. I am appalled when I occasionally see a party of cavers "saving time" on a pitch by tying a loop in the end of the safety line to which each caver in turn secures himself with a waist loop and karabiner. Surely time is cheaper than lives.

Similarly, a karabiner should never be used as a pulley. For safe working, a pulley should be ten times the diameter of rope used: e.g. for a $1\frac{1}{4}$ inch circumference rope, a pulley of at least 4 inches diameter would be required.

SOME RECOMMENDATIONS

1. The testing programme being carried out currently by societies will be invaluable if all factors are considered and if all results are published only in relation to a specific rope size, type, material, and manufacturer.

2. Every society should make itself familiar with the published data on rope strengths: see reprinted letter in ASF Newsletter, No. 29 for some references.

3. If climbing in the true sense is indulged in, it should be done with climbing rope manufactured to the proper standard.

4. For normal caving purposes, and purely from currently available generalized data, it would appear that manila and terylene are to be favoured, nylon as a second choice, certain other synthetics as third, and other ropes (e.g. sisal) not at all. However, time may prove certain synthetics superior to this rating.

5. No caving rope should be used for serious purposes for more than two years--if advisable on inspection, for far less.

6. Members should be thoroughly trained and disciplined in their use of rope: standing on a rope; allowing it to come in contact with petrol, oil or batteries; allowing a manila rope to remain wet; etcetera, should all be capital offences.

7. If synthetics are used, the Bowline should not be considered an adequate knot--pending further investigation, a stopped Bowline, a Fisherman's Loop or Figure-of-eight Loop appear to be useful.

SAFETY NOTES

ANOTHER CAVING DANGER?

The Eldon Potholing Club Newsletter, 5, 10-11, p.35 reports an instance where a nylon lifeline was used by five persons ascending and descending a pitch of 180 feet. Its friction over one of the ladder rungs resulted in the rung being cut half-way through. Perhaps a freak accident, but one to be watched.

1965-6 C.E.G.(S.A.) NULLARBOR EXPEDITION

by T. Wigley
for CEGSA Nullarbor Subcommittee

Following the tradition of most summer vacations since 1956-7, a large scale speleological expedition set out for the Nullarbor Plain just after Christmas last year. The Expedition was organized by the Cave Exploration Group (South Australia). Australian groups represented were: CEGSA 23, SUSS 9, UNSWSS 4, WASG 2, HCG 1, VCES 1, UNEMC+ 1, and there was one French speleologist. The primary objective was to explore and map Australia's largest known cave: Mullamullang (N37), Western Australia, and, to do this, a seven-day underground camp was planned. While half of the participants were underground, the remainder were organized to check a number of dolines in the surrounding area for possible cave entrances. (These dolines were located from air photographs by J. N. Jennings M.A., of the Australian National University: see "Air Photographs and the Nullarbor Plain Caves" ASF Newsletter, 23 (March 1964) : 4-5. A comprehensive study of the cave meteorology and its relationship with surface conditions, was also included in the programme. Instruments for this study were obtained from the Commonwealth Bureau of Meteorology, the CSIRO Division of Meteorological Physics, and the University of New South Wales School of Mining Engineering. Finally a professional photographer accompanied the Expedition, in order to make a 16 mm colour film. Negotiations for television screenings of the film are already under way and it is hoped that it can be shown to all caving groups in Australia (through CEGSA) and overseas.

ACTIVITIES ENROUTE

The main party left Adelaide, on schedule, early on Monday, December 27, travelling in a bus chartered from W. Kennewell and a station-wagon; with the 5 ton, 4-wheel drive stores truck an hour ahead. After two long days' driving, with temperatures around 110°F all the way, camp was made at Koonalda. The itinerary allowed for a few days to be spent acclimatizing to Nullarbor conditions in the more widely known big caves enroute to Mullamullang Cave. So, after a day of photographing and wading through the Koonalda Cave lakes, the party moved on--detouring for a stroll through Abrakurrie Cave--to Weebubbie Cave. While most of the group boated on Weebubbie's lake, a few enthusiasts rolled rocks away in the far side of the doline. Possibilities for extensions on this side now appear to be not completely hopeless and the rockpile was penetrated for a number of feet. A rabbiter's report of a large doline north of Chowilla Doline was not investigated.

+ University of New England Mountaineering Club

MULLAMULLANG CAVE

Late on December 31 the Expedition reached Mullamullang. After a 24 hour break, establishing the surface camp and preparing for the underground camp, the first party--a 'phone cable laying crew--entered the cave, early on January 2. Further groups of underground party members and 'sherpas' started in at set time intervals after them. Once underground, the extreme difficulty of the terrain, even more difficult with a laden pack, put all parties well behind schedule. Minor planning errors and some difficulty in negotiating the 20 feet drop at the 'Drop-off', extended the journey to 8 hours, when finally the first group reached the 'Junction', about 2½ miles from the entrance. This was the planned site for Camp One. Eventually all the group became established at Camp One; the 'phone crew arrived--after a 14 hour journey--and the sherpas dropped their loads either at the Drop-off or at the camp and headed back to the surface.

Previous exploration had pushed the left-hand branch to the 'Dome', about half a mile from the Junction. (Floor to roof height in the Dome was found to be about 130 feet.) And the right-hand branch, which splits into an upper and lower level, had been pushed for roughly 1000 feet. The right branch's two levels were found to join together and over 1000 feet of new passage was discovered. The general appearance of this new section is similar to the main passage, but on a much smaller scale. The section is fairly difficult to enter, and even though only four people have entered it, the possibility of a further major extension here is not great. The left branch from the Junction yielded the most significant discoveries. Apart from a number of incredibly beautiful lakes, magnificent gypsum flowers and crystals of a number of different habits, a new section, the 'Ezam Section', was discovered at the far end. This section extends back towards the entrance, directly above the main passage. Three days of exploration and surveying in the Ezam led to the discovery of over 1000 feet of solution tunnels on three separate levels, all above the main passage. Some twenty or so side passages remain unexplored and, at the limit of exploration, the tunnels showed no signs of ending: time, unfortunately, was against further work.

As is usual, a number of promising leads were found during the last few days. One of these lead to the main part of the Ezam Section. Two others were found within easy reach of the entrance; both less than one mile inside the cave. They appeared to be quite promising.

SURFACE EXPLORATION

The surface party's aim was to explore the south side of the Mullamullang entrance doline and to locate and inspect a number of other dolines in the immediate vicinity of Mullamullang. Nothing major was found in the Mullamullang doline, although, in places, the breeze was quite strong. With the help of D. Lowry, W. Crowle and P. Cook of WASG, 12 other dolines were investigated, but 11 of these were found not to have caves associated with them. The other was not explored, as the team which found it were not equipped with ladder gear. After the underground party had returned to

daylight, a party, by means of compass traverse, estimated the surface location of the 'Dome' at the far end of Mullamullang. A later check showed that, due to an error in calculation, they had actually marched to a position nearer to Camp One than the Dome, but, never-the-less, a blowhole was discovered. This appeared very promising, but was not entered as a ladder was required.

CONCLUSION

Although a great deal of work and exploration was achieved, Mullamullang still has a large number of question marks. The CEGSA Nullarbor Subcommittee plans to publish two Occasional Papers in May this year: one on the Nullarbor in general, (CEGSA is now the co-ordinating group for the Nullarbor region), and one on Mullamullang in particular. These will include all details on running a large scale caving expedition and on establishing and maintaining a large underground camp. The Subcommittee feels that these will not only be useful as reference works and a guide to future expeditions, but should be of general interest to the serious caver.

ABSTRACTS AND REVIEWS

PROBLEMS OF THE SPELEOLOGICAL RESEARCH. Published by Academia, Prague, 1965 : 220 pp.

The proceedings of an International Speleological Conference held in Brno from June 29 to July 4, 1964 have been published in English and provide an unusually stimulating contribution to speleological literature.

The papers included all deal with various aspects of speleological research in European countries; the primary aim of the Conference being to define the main characteristics of Central European Karst areas. Some climate and biology--indicating a strong awareness of the relationship between a cave and the surface above; an awareness all too often absent in speleological research.

Some papers which attracted my attention as of interest to Australian workers included: Roglic's study of deep circulation in karstic groundwater and of caverns below water-table level; Ivan Gams' paper on types of accelerated corrosion in limestones; Zotl's review of tasks and results in karst hydrology; Eraso's suggested nomogram for cave climate calculations; and Vodicka's review of cave mapping in Czechoslovakia.

--E. Hamilton-Smith

DOWN UNDER ALL OVER

. . . . . Caving in Australia receives impetus during the Christmas period. At no other time of the year does so much activity take place. This year it appears that the impetus to which caving has been subjected has exceeded any previous active periods.

During the last two years Christmas has seen at least one major expedition to the more remote districts of the continent: those of the Nullarbor Plain and the south-west of Western Australia.

Now we can report strong industrious and dilligent speleological activity around at least half of the continent's coastline, namely: from Northern Queensland to Western Australia.

Moreover, New Caledonia has once again been visited by an expedition. A report on this--the Australian Biospeleological Expedition to New Caledonia 1965-6--will appear in the next Newsletter. . . . . .

KEMPSEY SPELEOLOGICAL SOCIETY

"Operation Frederick" was held by the KSS in the Yessabah Caves area. This operation was portion of the Society's search and rescue scheme instigated several years ago.

First held was instruction in the correct tying of knots and rope technique, followed by a demonstration of the bedding and tying of a person into a stretcher.

A dummy was used in the cave section. The stretcher and dummy was transported through the heavy scrub to the Bone Cave, where it was lowered 30 feet to the cave floor. The procedure was then reversed, proving much more difficult.

The operation was successful as it indicated the difficulties involved. The Society feels assured that, after this practice, it would be possible to move a stretcher through most of their caves.

HIGHLAND CAVING GROUP

A cave diving trip to Cooleman Caves during the New Year proved to be successful in many ways, although the Group were unable to extend their recent discoveries with the use of the diving equipment.

Another new cave, the New Year Cave, was discovered; the main passage being a 'few' hundred feet long with a roof to 25 feet. A running stream was encountered but due to the late discovery it has been necessary to leave the cave until the Easter long weekend allows a return to the area.

A rather inaccurate trip report appeared in the daily press without the Society's knowledge.

SUB AQUA SPELEOLOGICAL SOCIETY

Most of the Soceity's activities have been concentrated near Buchan.

Pyramids

The major cave in this area, Dalley's Sinkhole, is being actively explored and a survey to Grade 6 standard is in progress. The cave is one of huge dark chambers, with occasional pockets of decoration, and reveals two extensive sections of the Murrindal River. Elsewhere on the hill, several new caves with strong draughts have been found but none has yet led to a further major system on the river.

Scrubby Creek

The main cave following Scrubby Creek has not been further extended beyond the surveyed two-thirds of a mile, although the far end has been 'pushed fairly hard'. A telephone line has now been permanently installed through the length of the cave. To assist in further exploration, the relevant area on the surface, having a perimeter of about four miles, has just been surveyed. A new hole with a draught but requiring digging has been found in a spot likely to lead to a further extension of the stream.

Several cave-diving projects have been held up until the development of a multi-diver communication system has been completed.

SYDNEY SPELEOLOGICAL SOCIETY

Chillagoe Expedition

Chillagoe is situated approximately 100 miles by road, due west, from Cairns in North Queensland and is set in a landscape which can only be described as 'tropical'.

The limestone, of Devonian age, is first encountered ten miles before Chillagoe and outcrops for a distance of approximately 35 miles. The outcrops often reach a height of 300 feet above the valley floors.

The ten-man Expedition, under the leadership of Ben Nurse, decided--after discussion with local contacts--to concentrate on the systematic exploration and mapping of a few caves rather than attempt to gain an overall knowledge of the limestone area.

Six of the major caves, close to the township, were explored and surveyed.

The caves appear to be large and extensive; lengths of over three miles and chambers 60 feet in diameter and 100 feet high were encountered, many terminating in daylight holes in their roofs.

Cave decoration was more extensive than anticipated. Although it was, in the main, dry, the formation was clean and appealing. One cave, the Donna, had been converted to a tourist cave, and is under the control of the Forestry Commission. It appears that several other caves will be gated and a guide appointed.

Delegate River - Buchan

Another SSS trip of 15 days duration included surface exploration on the Maclaughlin River, 17 miles south-west of Bombala, in New South Wales. The limestone is impure and no caves were discovered.

Quidong, 12 miles from Bombala, was found to be more favourable; two caves being discovered, one estimated at 90 feet overall length. The party

mapped the limestone area.

Following this, the trip moved to Buchan Caves in Victoria, and visited several known caves in the Murrindal area.

SYDNEY UNIVERSITY SPELEOLOGICAL SOCIETY

Timor, Wombeyan and Bungonia

A small party visited Timor in November to investigate the bat distribution. Bats were found in the Belfry and in the Main Cave, and in the latter 6 Miniopterus schreibersi and 3 Rhinolophus megaphyllus, as well as quantities of other cave fauna were captured.

Similar trips were held to Wombeyan and Bungonia in November and December last year and in January this year. At Bungonia 206 bats, all M. schreibersi, were banded in one visit and 6 recoveries recorded.

Cliefden

A joint trip to Cliefden with OSS in December was the first trip to this area by SUSS in many years. A maternity colony of M. schreibersi was observed--for the first time, it is thought--in Cliefden Cave. Further joint trips are planned for the future.

Jenolan

A trip to Mammoth Cave, Jenolan, in February found the Central Level River, at its second crossing, dry, for the first time ever recorded. This enabled exploration to be carried out in normally water-filled passages. Some progress was made through rather restricted passages and further work will require use of a 'G-pick' and digging implements. Since Central Level River was flowing at its first crossing but not at, or anywhere near, the second, there may well be yet another semi-permanent stream in this cave. This lends support to the theory that much of this section of the cave is of largely vadose development. Apart from the characteristic smaller features of such development--such as scalloping and several examples of meandering--this section appears to have a remarkably dendritic form of drainage, especially after heavy rain. Work on the origin of the stream in this section has been held up by drought; fluorescein testing has been inconclusive due to flow being too slow and restricted.

UNIVERSITY OF NEW SOUTH WALES SPELEOLOGICAL SOCIETY

Surveying has been recommenced at Tuglow.

Two trips in December carried wall and floor details nearly to the river level, however this work is to be repeated as the surveyors are not satisfied with the standard. During one of these trips the Society recorded its first cave accident, when two prospective members--who had previously entered the cave with a scouting group--decided to enter the main cave before the arrival of the remainder of the party. In attempting to free climb down to the river level, one of the prospectives fell twenty feet on the first pitch, sustaining cuts to the head and slight concussion, requiring a stay of three days in hospital.

During Christmas three members visited Yarrangobilly Caves for the first time, being very impressed by the area and the courtesies extended by the chief guide. Another three members attended the CEGSA Nullarbor Expedition.

CANBERRA SPELEOLOGICAL SOCIETY

Cooleman Plains has received several hard working trips, one in conjunction with the Highland Cave Group, when an attempt was made to force siphons in the Glop Pot and River Cave. The surprising feature of the Glop Pot was its depth. It had been expected to be a river passage but proved to be a very deep hole. The turbid water and the cold forced the only experienced diver to return to the surface without bottoming.

The Society also attempted to free the siphons in Dog-leg Cave at Wee Jasper for the ASF Committee Meeting delegates, but broken hoses and a heavy downpour frustrated the attempt.

WESTERN AUSTRALIAN SPELEOLOGICAL GROUP

The usual December examination period slowed the Society's activities somewhat, however seven members of the Group attended the CEGSA Nullarbor Expediton--two for the full three weeks, the others for shorter periods.

A search and rescue operation was held, prior to Christmas: the subsequent analysis should lead to many improvements in further trips of a similar nature.

In January a trip to Nambung River was held but details are not to hand.

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