

Editorial

This year there are at least four caving trips organised for the Christmas period. Two of these are being run in conjunction with the A.S.F. Conference to two vastly different types of caving areas. The conference itself would produce a vast improvement to your knowledge speleologically both from the organisation point of view and the technical side as there will be several papers presented by leading speleologists from all over Australia including two from our own group. A trip of shorter duration to Naracoorte to give some practical experience to 120 Boy Scouts has been arranged with the Boy Scouts Assn. If you have a few spare days come along and help foster these future speleos by acting as training guides. Last but not least is the Nullarbor trip to the famed Mullamullang Cave. There are a few vacancies left and if you have longed to see this magnificent cave now is your opportunity. If anyone can't find something from this selection to suit him then he is just too dammed hard to please.

Following on very soon after Christmas will be the annual elections in February. It is time to start thinking about your nomination for the various positions on the committee. It is also time to consider whether you should be standing for any position and make it known so you may be nominated.

Attain the ultimate in caving by providing the club a service instead of letting the club provide all the services for you.

A.R.J.

Cave Mans Dinner

The Cavemans Dinner this year will be held at Florentino's Restaurant in Hindley Street at 6.30 p.m. on Friday 9th December. The approximate cost will be \$2.50 per person which must be forwarded with your application form to Fred Sanders, 8 Wattlebury Road, Lower Mitcham by the 3rd of December.

The Slide competition will also be held at the Dinner and will be judged by an independent judge on the night.

There will be two classes - namely best caving slide and best Personality Slide. All slides must be with the organiser, John Bishop, 11 Auburn Ave Myrtlebank or a committee member by the 3rd of December.

Coming Trips

For some years, hazy reports of cave occurrences in the Strathalbyn area have been filtering in. These caves are presumed to be in the Tertiary Age sandy limestones of the Mannum Formation. This occurs in a belt to the east of Strathalbyn on both sides of the road to Wellington. Members participating in the proposed cave search will have to be prepared for quite a lot of hiking, and we hope, a little caving. A map of the area (Milang and possibly Echunga O.S.) and a compass would be useful. I suggest this could be a one-day trip on Sunday 6th November, but I can go on Saturday afternoon also if anyone wishes. If the search is unfruitful, good sightseeing and swimming can, be had twelve miles away at Milang.

It is one year since the Group last had a Flinder's trip. Help us break this record by coming along on the 19-20th November. The proposed venue is Buckalowie, which is near Carrieton, 180 miles of good road from Adelaide. Not only is the cave one of the best for sightseeing and photography, but it has good potential for a 'dig'. Those that are looking for further challenge can try themselves on the 8¼" squeeze in Mair's Cave. Anyone wanting further information should contact Ron Smith.

Caving Venture for Scouts

Plans are progressing well for a party of guides from the Cave Exploration Group to conduct 120 Senior Scouts through some practical caving activity at Naracoorte.

The Scouts, from all States of Australia, will arrive in groups of 40, and then be subdivided into parties of 10, each requiring 2 leaders. We intend to utilise four caves:- Beekeepers, Brown Snake, Smoke and Fox; and to include some organised photography and mapping projects. All this must be done in the space of 24 hours with each of the four groups - and repeated for three successive days, from the second to the fifth of January, 1967. More bods to help would be very desirable, but our most urgent need is for one lady to accompany our sole volunteer female cook. Anyone able to help is requested to contact Ian Holt at 656074

Ron Smith

Past Trips

Mullamullang Cave (N37)) W. Aust

Yet another successful expedition, the third this year, was completed at Mullamullang in late August and early September. Peter Hawkes led a joint party of C.E.G.S.A. and S.U.S.S. members with the end of the Easter Extension as an objective. Almost another mile was mapped in the Eastern and still there are unexplored possibilities there. The passages continued in the same form as before but now in one place there are four recognisable levels.

Mapping shows that they finalised only about 80' from Franks Station, much further down the main passage from Oasis Valley where the Extension starts. More collecting and photographic work was done and of great interest now are the fragile decorations of common salt, previously thought to be gypsum.

David Lowry and his wife from Western Australia joined the party for a few days and Roaches Rest Cave (N58) and Nurina Cave (N46) were also visited.

The Nullarbor continues to be a place of pleasant co-existence for cavers from all over Australia.

A.L.H.

TRIP REPORT on Kangaroo Island 18th - 23rd August, 1966

Purpose of Trip: To investigate reports of new caves between Vivonne Bay and Mt. Taylor.

Party: Grant Gartrell, Gail Mitchell, Tom Wigley, Alan Hill, Bert Young, Brian Callen, Ron Galbreath, Fred Sanders and Neville Pledge.

In typical August tradition, the intrepid explorers packed their gear in fine weather, only to find a violent storm raging round their ears as they boarded the good ship Troubridge. At first one and all in quite good humour and smiling at everyone but after a little while at sea it was noticed that many were finding it rather dangerous to smile. It was the roughest crossing ever, and even many of the more nautically inclined trogs and others found themselves "yodelling to the sharks", to quote Bert Young who enjoyed the whole performance immensely. Only two people remained faithfully at their posts throughout the crossing, and it was gratifying to see that these were C.E.G.S.A. representatives Hill and Young. Congratulations, boys, on a fine performance (Actually Tom would have been with them too, but he was looking after Gail at the time). Many tales could be told of that trip, like the veteran who was talking away quite merrily in a group, and suddenly had an attack of mal-de-mar. He looked quite amazed and deeply shocked, and said, or words to that effect "Blow me down, - I only meant to hiccup". The story is completed by Neville, who really ought to watch where he slides.

Like all good things the crossing came to an end, we disembarked only to find that the ground was still rocking from side to side, which made it quite difficult driving around looking for a level campsite. After a good night's sleep the worse afflicted of us had recovered sufficiently to get on with enjoying ourselves, so we set off for the western end of the Island to meet Peter Davis, who would be showing us the new caves.

The first place Peter took us was to the mouth of South West River, a spot we knew quite well through hiking from Kelly Hill on previous occasions. Peter knew it better though, and showed us a cave which we had often passed within a hundred feet of without knowing. We got down to water from one entrance, but have yet to enter the other one. Even if the cave went no further, it's a mighty place for a camp. He next showed us the main area of caves we were looking for, and again these were near an ideal camping spot. We set up camp and then surveyed the cave entrances so that we would not lose them again. In the process we saw over a dozen possible pipes and sinks, although some of these need clearing out. Anyhow, one must be quite careful where one walks with all those holes to fall into. The main cave we saw has extremely good potential, being quite large and well decorated. One section of it is different from the rest, being a maze of solution tunnels. Brian spent a considerable time exploring these, and before long had found himself in obviously new territory, and fast getting lost, despite numerous cairns and stones built along the way. He returned for moral support, and Tom and I accompanied him into the strange land. Tom took a wrong turning early in the piece and soon it was only Brian and I following his cairns. Each cairn was built at an intersection of four or five tunnels, and he seemed to always take the least likely way on, saying "I think it was through here" or "No. This doesn't look right", whatever the case might be. Finally, just as I was beginning to feel really hopelessly lost, he doubled back and took a turn to left, and I followed to find him in a nice room with pools of water, shawls and so on, which the one he had previously found. We didn't feel that it would be safe to carry on into the depths of such a maze even though the tunnels were getting bigger, so we retraced our steps, finally emerging tired and hungry. We attempted to get others to come back with us but they did not have to try hard to convince us that we must be mad, and should follow their example and have tea. As a result we did not get back to those tunnels for the rest of the trip, although a survey of the other part of the cave was carried out.

A dig, was started in a doline on the hill nearest the campsite, which started off from level ground, and finished due to lack of time at about 30 feet down, having broken into a couple of small chambers with stalactite formation, and quite a strong breeze coming from the way on. These two projects alone will probably provide plenty of interest for next trip to the area, but if that's not enough, it now seems that there many more caves of similar type reported on adjacent properties in the area as well as numerous others to look at on the Kelly Kill ridge. At this rate K.I. could well become the States major caving area. Only one more thing remains to be said, and that is that most of the time the Troubridge crossing is most enjoyable, and we had a very pleasant trip back. Next time we'll study our weather a little more carefully before booking the tickets.

Grant Gartrell

SO YOU THINK MULLAMULLANG IS A BIG CAVE? by T.M.L. Wigley

Well, maybe it is, by Australian standards. At present some six miles of passage have been surveyed with many extensions yet to be properly explored. But how does this compare with long caves in other parts of the world? As a part answer to this question I have prepared a list of long caves in the U.S.A. This list is meant as a guide only and does not pretend to be absolutely correct or complete. Both estimated and mapped lengths are given; the values quoted as estimates have been made by people connected with the exploration and surveying of the particular cave.

The word "length" does not seem to have a precise definition as a speleological term and this could explain the apparent contradiction in length estimates in caving literature. This is particularly so in the case of Carlsbad where Halliday states '23 miles of survey' and British Caver quotes the length of the cave as being 7.4 miles. In a cave with such chambers where walls are many hundreds of feet apart it is easily conceivable that the mapping of 7.4 miles of passage could necessitate 23 miles of surveying.

CAVE	ESTIMATED LENGTH(miles)	MAPPED LENGTH(miles)	REFERENCE
Flint System (Kentucky)	more than 50	more than 50	1
Mammoth Cave (Kentucky)	more than 50	44.5	1,2,3
Greenbrier Cave System (X.Va.)	30	15.2	1,2,3
Carlsbad Cave (New Mexico)	23(7.4)	23(7.4)	1,3
Carroll Cave (Missouri)	18	8.3	1,2,3
Butler Cave (Virginia)	15	10.5	1
Half-mile Cave (Arkansas)	14	1.5	1
Jewel Cave (South Dakota)	13.2	13.2	1
Mystery Cave-Minnesota Cave System (Minnesota)	12	12	1
Anvil cave (Alabama)	12.0	12.0	2,3
Blue Springs Cave (Ind.)	10	10	1
Beauty Cave (Arkansas)	9	-	1
Gilley Cave (Virginia)	9	-	4
Sullivan Cave (Indiana)	8.5	8.5	2,3
Powell's Cave (Texas)	8.2	8.2	2,3
Devil's Icebox (Missouri)	8	5.5	1
Wyandotte Cave (Indiana)	8	-	1
Binkley's Cave (Indiana)	6.5	6.5	5
Windy Mouth Cave (W. Virginia)	6.1	6.1	1
Cumberland Caverns (Tennessee)	5 to 6	-	1

REFERENCES

1. Halliday, W.R., 'Depths of the Earth', Harper and Row (N.Y.), 1966
2. Droppa, A., Slovensky Kras, October 1965
3. British Caver, Vol.42, 1965
4. 1962 Speleo Digest
5. 1963 Speleo Digest

DIPROTODON HILLII (continued) FROM AUGUST NEWSLETTER

As we still have not seen any details of Private Crowle's Diprotodon Mk III, as proposed in our August issue we will now describe its successor in South Australia - D. Hillii.

As far back as late February this year (we were waiting then for plans of D. Mk.III) an interesting piece of junk presented itself in the form of the valve and jet piece from an old pressures lamp. In almost no time at all a Diprotodon was made out of it on the same presumed principles of the D. Mk III. A simplified sketch of it follows in this article.

Ignition was simplified by providing a one or two match holder under the element wire. Just before ignition was wanted the matches would be flashed off on the nearest trog and the device fired. By the time the matches were extinguished, the element wire (a Crowle development) would be sufficiently hot to make the flame self-sustaining. This solved the Crowle wilting candle problem, but like Crowle's device, constant powder blockage occurred and the unit needed constant tapping to keep the magnesium powder flowing.

Then a small donor of powder came up with some magnesium that was remarkably different in that it flowed almost like water in comparison with the common chip powder.

The chip powder had a variable angle of repose of about 45° compared with the new powder of 30° . Testing our new D. Hillii with the new powder a $3/16$ " feed hole was all that was necessary for free flow compared with a $3/8$ " hole for the chip type, which even at a $3/8$ " hole still tended to hang up. The new powder has proved to be quite suitable for movie work.

A brief specification of the finished device follows:-

Balloon - Toy (20c for 10) inflates to about 10 inches dia. x 12" long with four average breaths.

Magnesium Chamber - At present a modified Brasso tin - powder capacity 7 oz.

Magnesium Feed - A modified on-off petrol slide valve opened to $3/8$ " dia.

Magnesium Feed Choke - Feed to suit types of powder can be changed from $3/8$ " open to $1/4$ " or $3/16$ " by inserting a washer in the back of the valve.

Air Valve - A needle valve approx $3/32$ " dia seat was existing on the old jet piece with which I'd started. Not shown on drawing.

Mixing Chamber - $3/8$ " dia. vertical hole from feed tank.

Mixture Jet - 3" long x $1/8$ " dia. orifice.

Air Flow Capacity - 1 minute duration of steady condition.

Magnesium Flow Capacity - 2 oz. per minute.

Element Wire - 20 gauge Ni-Chrome.

Reflector (Hand guard) - One very second-hand 6" car type.

Colour Temperature - 4,400K, requires correction filter to 5600k

The dimensions given may need to be varied slightly and the unit can be given dry runs for test purposes by operating without ignition and collecting the powder on spread paper.

Each unit should be tested with film before use in caves. It is difficult to rate these units in terms of guide numbers, and the original D. Hillii has a "guide number" of 1400 per ounce of powder for 64ASA film. As it was set to fire one ounce in 30 seconds, then exposure can be worked out from there.

In the next Newsletter a "Diprotodon Exposure Guide" will be described. It must be noted that the unit is suitable only for high density magnesium powder.

C.E.G.S.A. has a reasonable stock of this material for sale which is vastly superior to the commercial chip type.

The price is \$1.50 per pound up to 10 lb lots.

\$1.20 per pound 10 lb lots and over

This is just over half the normal retail price of chip material.

A.L.H. 13/9/66

LOST?

Rain, hail, storm, scrub - these were the conditions encountered during a practice exercise of the South Australian Mountain Activities Federation Search and Rescue Group. The weekend of 1st and 2nd October saw thirty searchers in the Humbug Scrub area near Mt Gawler searching for a young couple "lost" since previous Friday. A chartered bus left the assembly point at N.F.C. Clubrooms early on Saturday afternoon and deposited the "troops" at Kersbrook from whence they hiked or "thumbed" one mile to base camp. After setting up camp, the day's plan called for a rapid reconnaissance search of local area of roughly five square miles. This occupied all the remaining daylight hours and in the early, or in some cases, not so early, hours of darkness, weary parties of four returned to the fire for their issue of "hot tins and water" at the hands of the Base Camp organiser.

Hurried mouthfuls of porridge and baked beans were downed next morning as the first rays of sunlight appeared over the horizon. The three parties of nine searchers were on their way to their respective areas shortly after 6.00am, with instructions to carry out a pattern search over a total area of about two square miles. Each party was equipped to deal with the patients if they should find them in their sector.

After a trying morning of tedious searching, the two victims were discovered at 11.00am. Five minutes later it began to hail, affording some hectic moments for the rescue party and some uncomfortable one's for all concerned. Nevertheless, couriers were sent for help, hot drinks were made, stretchers constructed, and track clearing commenced, both patients were carried out to the road's end by 3.30pm.

The exercise provided the team with valuable experience in all aspects of organisation and control, and allowed some insight to be gained as to the type of equipment necessary for such an operation.

The Group now feels confident that it can place its services at the disposal of the S.A. Police Department for use if the need arises. If any hale and hearty gent feels that he could serve on this rescue team, please contact Ron Smith for further details.

Ron Smith

Search & Rescue Representative

STUCK?

Following hard on the bush Search and Rescue operation the week before, a cave Search and Rescue Exercise in Fox Cave, Naracoorte, on Sunday 9th October proved the mettle of C.E.G. personnel.

When it was noted that one member of the party was missing at about midday, a Reconnaissance Search Routine was put into operation. Parties of four were directed to make quick trips down the obvious routes in the cave - those that any sane tourist might take. When this failed to locate the missing person by time the limits of the cave were reached, a General Search Routine was commenced for the return journey.

This means examination of all side branches and holes accessible enough for a sane explorer type to enter. This Routine revealed the patient without recourse to the 'Close Search Routine', in which the possibility of the patient being unconscious, having fallen down a crevasse or covered by a roof cave-in, must be considered. Conducted in this manner, the search took less than half an hour, the victim being found unconscious at the top of the large rockpile in the main chamber, with large slabs of fallen roof material across his right leg and chest.

After it had been ascertained that they were necessary, a team was sent out to obtain the Clarke Stretcher and First-Aid Kit, while rescuers did what they could to comfort the patient. As the other search parties were recalled some were sent out to rest and others set to work preparing the rockpile and entrance crawl for passage of the stretcher. Some first-aid treatment administered at this stage was incorrect or poorly executed, proving the need for TRAINED FIRST AIDERS in the Group. Get with it and do a St John's Certificate Course NOW! A blanket is required in all cases of serious injury to insulate the patient from the cold and it is felt that this could be supplied by C.E.G.S.A. Also required is a close fitting helmet with face shield to protect the patient's eyes and mouth.

The carry was completed swiftly until the first narrow vertical section in the entrance crawl was encountered. We found it necessary to lift the patient off the stretcher, up this squeeze, along the intervening passage and up the second vertical pitch, before replacing him on the stretcher.

The rescue was completed in 3¼ hours, and served to emphasise the following points :-

- (1) The equipment for rescue needs revision and should include mining tools, rope, splints, helmet and mask, blanket, and a more suitable stretcher.
- (2) A large number of experienced members of the group need to snap out of the apathy into which they have settled, before any really worthwhile progress on this subject can be made. The enthusiasm of several of the newer members (in fact, some were only visitors) augers well for the future, but what of NOW!

Ron Smith
Safety Officer

LOST AND FOUND

A Pinnacle lantern was left in the vicinity of the Tomato Sticks Cave, Naracoorte, on Monday 10th October. Somehow I swapped with someone and now have a Premier in poor condition for the owner to claim. If anyone picked up my lamp last trip, please contact me as below.

Ron Smith 317881 Home 791662 Work

One small turtle - answers to name of Fred - named after owner's father "who can get out of anything". End of quote.

MEMBERSHIP

The Committee had great pleasure last meeting in GRANTing full membership to Leslye Mackay, Leslye has come to live in Adelaide and is an experienced trog from NSW. A welcome is extended to her and to Wayne Fidler as Full Members, and to Dean Da Costa, John Ford, and Peter Chappell as Associate Members.

Words from Wanderers

We would both like to say thank you to the club for your present, a really thoughtful gift, and hope we can enjoy your company again down some hole.

Our address is as below. I hope someone may like to write occasionally. Lorraine particularly misses home. Nobody here ever calls me Pommy B.

Best Regards, Tom & Lorraine Murphy,
c/- Seismograph Services,
PO Box 607, ABA,
East NIGERIA
WEST AFRICA

Nostalgia Corner or 10 Years Ago

- 15th December, 1956 - Second Cave Mans Dinner held at Rignonis.
- 26th - 28th December, 1956 - First Conference of the Australian Speleological Federation held at Parnanga Christies Beach, S.A.
- 29th December, 1956 - The 1956-57 Nullarbor Expedition departed - nearly 60 strong in 4 vehicles.
- 29th December, 1956 - Kelly Hill Expedition under Daryl Morgan ("The Jenolan Javelin").
- 26th - 28th January - Buckalowie Creek Caves - Mairs Cave mapped.

Library Reference Sheets

A.L.H regrets there is no Library Reference sheet this issue. Another one next time.

COMMITTEE CONTACT LIST [originally split across pages 9 and 10]

- President - Alan Hill, 84 Perseverance Road, Tea Tree Gully.
641523(H), 59705(W)
 - Secretary - Grant Gartrell, 6 Gurrs Road, Brighton 234333 Ext.313(W)
967022(H)
 - Quartermaster - Fred Sanders, 8 Wattlebury Road, Lower Mitcham.
763839(H) 513458(W)
 - Search and Rescue - Ron Smith, 1 Ellerslie Street, Kensington
Gardens 317881(H), 791662(W)
 - Editor - A. Jackson, 6 Hudson Avenue Rostrevor. 596467(W)
-

Application Form for Cavemans Dinner

NAME.....
ADDRESS.....
NO. OF PEOPLE.....
Enclosed amount at \$2.50 each.....

GROUP EXPLORATION GROUP (S.A.)
Programme Nov. 66 - Jan. 67

NOVEMBER

Sunday 6th	Cave Search - Strathalbyn Area Leader - Ron Smith (see NL)
Thursday 10th	Committee Meeting - Alan Hill's, 84 Perseverance Road, Tea Tree Gully.
Sat-Sun 19th-20th	Flinders Trip to Buckalowick Ck. Leader - Ron Smith (see NL)
Wednesday 23rd	General Meeting - S.A. Museum at 7.30pm, Lecture by Mr David Heap on Caves of Yorkshire and Norway with slides.

DECEMBER

Sat-Sun 3-4th	Post Exam Trip to Naracoorte, Leader - Peter Hawkes
Thursday 8th	Committee Meeting - Ron Galbreath's, 66 Ashfield Road, Elizabeth.
Friday 9th	Cavemans Dinner and Photographic Competition to be held at Florentines in Hindley St at 6.30pm (see NL)
Tuesday 27th	A.S.F. Conference and Field Trips. Anyone interested can obtain further info. and application forms from John Bishop.

JANUARY

Sunday 1st-5th	Trip to Naracoorte on the Scout Project Leader - Ian Holt (see NL)
Monday 2nd	Trip to Mullamullang to continue Exploration, Survey and Met. Observations. Leader - Grant Gartrell.
Wednesday 25th	General Meeting - S.A. Museum at 7.30pm.
Sat-Mon 28-30th	Long Weekend Trip to Oraparinna and Erie Caves in the Flinders. Leader - John Bishop

TRIP CONTACT LIST

Ron Smith - 1 Ellerslie Street, Kensington Gardens 317881(H),
791662(W)

Peter Hawkes - 46 Hardy Ave East Glenelg 93658(H), 578053 ext.230(W)

John Bishop - 11 Auburn Ave Myrtlebank 795907(H), 634844(W)

Ian Holt - 50 Galway Ave Broadview 656074(H)

Grant Gartrell - 6 Gurrs Road, Brighton. 234333 Ext.313(W),
967022(H)

The QM would appreciate all gear returned promptly after a trip.
Trip Leaders are reminded that a rental will be charged on all gear
returned late.

Applications to attend trips must be with the trip leader at least 7
days prior to trip departure and applicant must ascertain time and
place of trip departure from the leader.