

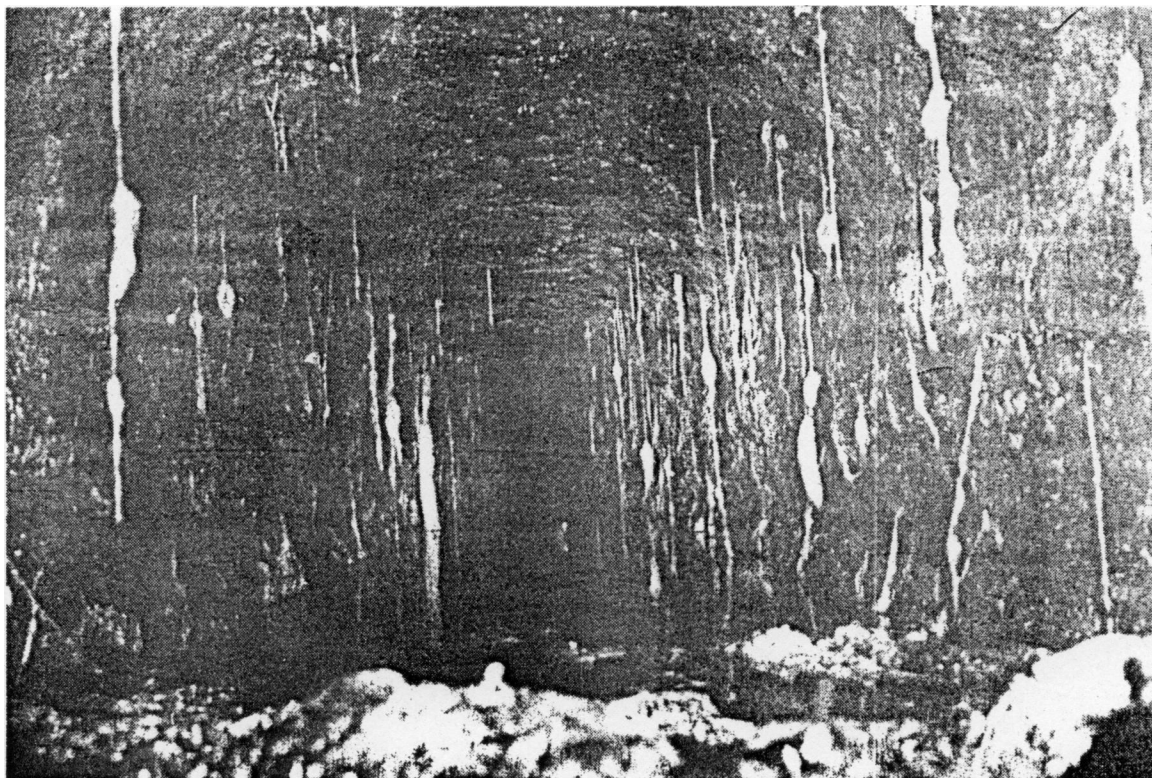
CAVE EXPLORATION GROUP SOUTH AUSTRALIA Inc.

c/o South Australian Museum, North Terrace, Adelaide.

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N E W S L E T T E R



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CAVE EXPLORATION GROUP SOUTH AUSTRALIA INCORPORATED

MEETING PLACE: 4th Wednesday of each month at 7.45 p.m. at the
South Australian Museum

OFFICE BEARERS

PRESIDENT	John Ellis	P.O. Box 21 STIRLING 5152 (W) 227 3018
VICE PRESIDENT & PUBLIC OFFICER & MEMBERSHIP & ASF REPRESENTATIVE	Graham Pilkington	66 Eyre Crescent VALLEY VIEW 5093 (H) 264 2598 (W) 274 7630
SECRETARY	Peter Horne	3 / 9 Muriel Avenue SOMERTON PARK 5044 (H) 295 6031 (W) 225 7025
RECORDS & TREASURER	Stan Flavel	Murray Road INGLEWOOD 5133 (H) 380 5404
PUBLICATIONS & EQUIPMENT OFFICER	Kevin Mott	3 Harcourt Road PAYNEHAM 5070 (H) 42 2441 (W) 227 3644
LIBRARIAN	Bill Parker	1 Anderson Street FULLARTON 5063 (H) 79 1013
SOCIAL SECRETARY	Kerry Ninnes	96 Hutt St ADELAIDE 5000 (W) 223 1318
SAFETY & TRAINING	Peter Kraehenbuehl	8 Ravensthorpe Avenue MILLSWOOD 5034 (H) 272 9015

POSTAL ADDRESS: Cave Exploration Group (S.A.)
P.O. Box 144
Rundle Mall
ADELAIDE South Australia 5000

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Recently discovered photo of a cave somewhere in South Australia

DEADLINE for articles for Vol 31 No 3 is Wednesday 22 October 1986

Opinions expressed in this newsletter are those of individual authors and not necessarily those of the Cave Exploration Group (South Australia) Inc. nor its' Committee.

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EDITORIAL

Ignorance is bliss - or so the saying says. This may be all right for some people but it is doing caving a lot of harm; especially in the field of land owner relations. Caving should not be left in the dark. All too often cavers are rarely seen. We need to let land owners know what we are doing and share the results of our activities with them.

The Adelaide based management of several large properties in the Western Australian section of the Nullarbor has refused to grant permission for cavers to visit the caves on their properties. Their reasoning is:

- increasing problems of liability to landowners of those using their property legally and illegally
- over-visitation.
- abuse of facilities on the property.
- excessive use of four wheel drive vehicles off regular tracks.

Although much of this problem is occurring on their other holdings in places like the Flinders Ranges they have extrapolated the problems to all their properties. Although we might question the motives of management living in ivory towers we must appreciate their managerial problems.

Responsible caving clubs generally enjoy good relationships with the local management of properties on the Nullarbor and it is up to us to ensure that any work that is done is brought to the attention of management.† Just as importantly we must establish that we are bona fide members of a caving club by production of a current membership card.

Time spent communicating with owners establishes two-way contact between the parties and often leads to useful information exchanges. If we establish that we are not merely know-all city slickers out for a good time at the expense of others our reputation as responsible cavers who genuinely care about the property of others will spread amongst neighbouring landowners.

Kevin MOTT

TRIP REPORTS

NARACOORTE 14-16 September 1986

PARTY Jack HAYWOOD, Mark KEAN, Andrew ELERY, Peter HORNE, Paul JOHNSTONE and Chris HALES.

After arriving late on the Friday night, everyone was slow off the mark on Saturday morning and it was 11 am. before we arrived at SOS Cave and began to set up. Before long Mark was in the cave describing the various antics of a rather active brown snake that was slithering about. Jack, Peter and Andrew joined him and found the snake had curled up under a nice large rock for a sleep.

Paul and I stayed above and lowered Peter his dive gear when it was called for. Eventually after a few jam ups we managed to get it all into the cave, and the boys transported it from there through "Aussie Crawl" to the second lake. Peter geared up and dived only to discover the lake went no further than 1.2 metres, (after all that effort he just blew a gasket).

Shortly afterward they caught up with Paul, Jack and I in SOS and we again moved the dive gear up the rockpiles etc. to the third lake. This time Peter dived for a whole 3.5 metres under the wall and was not impressed. Mark and Andrew gave us a display at precision wading and then simultaneously went into an Esther Williams display which met with great approval from everyone else.

While the original group had been in SOS, a local farmer, Charlie Boddington had joined us and spoke of a hole which had appeared some 8 weeks previously on a property north of Naracoorte. This caused some excitement and a phone number and address was soon acquired and arrangements for a visit the following afternoon made.

The next morning (Sunday) after returning from Mt. Gambier where we had attended the Cave Divers A.G.M. we visited Beekeepers Cave and then headed north to visit this new hole (U143). We were first shown a large runaway hole, and then moved out into the paddocks to look at the recent collapse.

It was about 2.5 metres in diameter and 7 metres deep. We climbed in and decided to have a bit of a dig and poke. So with borrowed shovel and crowbar we got stuck into it, much to the amusement of about a dozen locals who had come to watch the city idiots perform. Every now and then the crowbar would drop into the ground taunting us. Mark noticed a breeze coming out through the hole the crowbar had made and again we dug eagerly but the afternoon soon ended and we went back to the caravan for tea and lots of discussion. That evening we visited V.D.C. Cave with the landowner's son.

On Monday morning we called on the N.P.W.S. guides at the tourist caves and then visited Wombat Cave and in the afternoon Smoke/Tortoise Caves.

Chris HALES

MT. GAMBIER/NARACOORTE

On January 6th this year Jack Haywood, Tom Person and I visited L179, a cave Peter Horne had told us about earlier. With an up to date survey we made our way through and finally ended up bridging the joint above a small lake some 5 metres below.

The cave at this point widened to about 5 metres and a small triangular hole some 7 metres further along in the far wall seemed to me unreachable at first, second and third glance; but not to Jack. The survey had a question mark on it that meant no one was sure what it did. That's all the incentive Jack required.

Somehow he crawled, hung on forearms and scrambled around the wall to the ledge where the hole was and then disappeared for a quick look. He soon returned to tell us that the cave continued and parts were much larger than we had already passed through. He maintained that I should have a try to get over to the ledge so we could have a proper look about. This continuation that Jack reached turned out to be over 80 metres long and did in fact have some of the largest sections of the cave along it.

Returning back around the wall was just as scary and I was determined to pass this point only once more, to complete the survey of the cave. This was the objective Peter Horne and I had set for the CEGSA/VSA dinner weekend.

Although we were better prepared on this trip the passing of this section was very difficult and the cave wall being so crumbly deteriorates more with every crossing. Eventually we got over with our gear and got stuck into the survey as efficiently as we could so that we would not be late for the Annual Dinner and the Mott's splendid presentation.

Speaking of the presentation, did you notice the looks of alarm when Kevin Mott said cavers were 'eunuch' (unique). Peter Horne nearly swallowed his fork, while Kevin continued ...'Uni' meaning one of'That's it!' cried Terry Reardon 'they're not getting one of mine' as he headed for the bar. The next morning the Mott did get one back, when I.D. Lewis (Velcro mouth) carefully stirred a large teaspoon of vegemite into his black coffee. Amid large smirks K.M. refused to be beaten and tenaciously drank the lot. Mind you, anyone that enjoys sarsaparilla Spiders must have a good constitution and what about Krunchy .. he breaks mars bars in half and puts them in his coffee. There must be some hope for me yet with all these things happening. Mind you I should have realised on the first morning, when Mott had a possum in his clothes that the weekend was going astray. He could well have been a 'unique caver' if the possum started collecting supplies for winter.

On the Sunday we visited Stick and Tomato Caves to have a look at the clean up that's taken place there. We entered the north end of Stick Cave and could see where the walls and roof had been washed and scrubbed and some form of lime mixture painted on. The effect was good but some graffiti could still be seen. We then went to the south end and couldn't understand why this end wasn't vandalised. The cave appeared unscathed compared to the other end. Upon looking much closer it became evident that we had been fooled, the clean up was so effective it looked quite natural. The first section we had visited was only partially done.

This completed the weekend's caving and all we had to do was make the tedious trip home.

Chris HALES

PUNYELROO CAVE 5M1

30th April 1986

PARTY

Jack HAYWOOD and Steve BUNNEY

The aim of the trip was to try and enlarge a small opening on the side of a rock fall. On a previous trip, myself, Chris Hales and Steve Bunney removed a large amount of dirt from one side of the fall and managed to make a small opening. As there was a definite flow of air we decided to make another trip as we had been digging for about 3 hours.

We managed to get round the fall and the passage continued for approx. 10 metres then opened into a small chamber 2 m high x 1.5 m diameter, then another rock fall. After digging for an hour, and a heap of dirt we were round the fall and again into a crawl way (very wet and hot).

It will require another trip to survey it and check to see if it goes further.

Jack HAYWOOD

UPPER AND LOWER SOUTH EAST

JAN-JUNE 1986

PARTIES: Peter HORNE, Kevin MOTT, miscellaneous CEGSA members, cave divers, Victorian cavers, Japanese Cameramen, kids and others.

Having returned from my trip to America over Xmas totally broke, penniless, destitute, poverty-stricken and poor, I swore that I would cut back on trips to the South East this year. I also decided to actually note most places I visited for a change!

Between 1st February and 30th June, I was involved in 6 trips to the South East taking up some 22 days. During that time (always in the company of others, of course!), I visited about 30 features: 9 for touristy purposes (namely L4, L6, L11, L16, L18, L19, L40, L84 and L144); assisted a Japanese film crew who were making a movie in Piccaninnie Ponds (L72) and Ewens Ponds (L159-161); did a couple of sinful (gasp!) FUN dives in L14, L47, L61 and L125 (but I did keep an eye open for anything that needed 'scientific study!') and even got in a few ... oh, you know ... boring old surveys!

A few interesting things came out of the exploratory and mapping work. A seemingly minor passage I had first noted a couple of years back in L179 (on a crumbly, sheer wall on the far side of a chasm, above a lake) was reached with some trepidation and great care by Messrs. Chris Hales and Jack Haywood in January (while I was overseas, the sods!) and they subsequently proceeded to ruin my previous mapping efforts by discovering over 100m of large passage! (I had to redraw the whole thing after surveying it with Chris in May!). Congratulations, Jack and Chris!! (*%@\$||)

I was pleased to have been able to finally relocate a fossil bone site I had originally discovered in April 1985. The find is particularly interesting due to the penetration under the walls - the (now very extinct) kangaroo probably fell into the sinkhole a long time

ago when it was dry at that depth. (Either that, or it was diving without the required certification!).

Some 'serious' exploratory work involving diving with a hand-held 15 cubic-foot cylinder and rather unorthodox techniques and equipment (putting it mildly!!) was undertaken to 'push' some VERY nasty minor cave features, namely L104 (5m deep, very silty and small), L225 (2m deep, very tight squeeze) and (ughh!) L131 (4m deep waterfilled fissure - should be called 'The Tomb' rather than 'Stonecap Cave', in my humble opinion)! Nothing significant was found, unfortunately - but I've now decided to cut back on pushing 'orrible grotty stuff' for a while!

I also dived L13 (The Three Sisters) for the first time this year - an interesting place - just as other cave-divers had described it! A 20m free swing climb into a large chamber leads down to a lake which is 20m deep to a minor vertical constriction between the wall and a floor slab. It bottoms out at 33m. (Handy Hint to divers ... make sure you pack all essentials, like your Regulator, in with your gear before abseiling into the cave LAST - a prussik and another abseil is the last thing you need just before a relatively deep dive!).

Naracoorte was also visited on several occasions including during the CEGSA/VSA Dinner weekend. Smoke, Tortoise, Fox, Tomato, Stick and Brown Snake Caves were all visited. The anti-graffiti efforts by the Naracoorte Reserve Ranger and assistance is looking good. We DIDN'T come across any lost cavers at service-stations this year!!

Apart from discovering that a new old-timer landowner has taken over the property of L244 (Beehive Cave) and has successfully filled the sinkhole in completely with small paddock rubble, the only other cave-type work I helped with was near Penola where we surveyed L5 (Monbulla), L23 and had a look at L21.

The second half of 1986 is intended to be MUCH quieter due to other commitments, but with so much still waiting to be done, it's just SOOO frustrating!!!

Peter HORNE

FABULOUS FLORIDA - A CAVE DIVER'S DREAM-WORLD !

This isn't a dream!", I kept thinking as I tried to grapple with the reality of the amazing situation in which I found myself! It was three minutes to midnight (local time), New Year's Eve 1985. Our group of several dozen cave-diving enthusiasts sat silently in the darkness, with all torches turned off, 20 metres underwater and perhaps 30 metres along the main access passage of "Devil's Eye", one of the most popular and enjoyable cave diving sites in Florida, U.S.A.

My night vision had finally returned when suddenly, I noticed a few brilliant blue-green pinpoints of light silently drifting past us in the current, and I turned expectantly to look down the full length of the velvet passage.

The sight was as spectacular as we had heard it would be - the cave passage was slowly taking a glowing, liquid form as a fluorescent, swirling universe of tiny 'stars' moved weirdly towards us in the warm, crystal-clear water!

Many coalesced to form temporary miniature galaxies and swirling filaments, and the up-welling, normally invisible currents of the cave became strikingly clear along its scalloped walls as the water swirled about

Such was the spectacular effect caused by the underwater dispersion of the contents of some 40-odd sticks of "Cyalume" released by a group of divers further 'upstream' in the cave!

At precisely midnight, dimly lit by the eerie glow all around us, fellow CEGSA member Andrew Cox and I unfurled our "Secret Weapon" .. a large yellow towel with the word "AUSTRALIA" printed boldly across it which Andrew had successfully smuggled into the cave, and which was now being held by both of us in the never-tiring current for all to see (who says cave divers are never patriotic?)! Our saluting the flag brought the desired response from our new American friends ... much underwater laughter, thumbs-ups and handshaking ... and as the last vestiges of the flowing liquid disappeared, we turned on our more conventional light sources and following the straggling stars back to the 'real world', where a winter thunderstorm raged and the incessant downpour turned the carpark into a quagmire (goody goody - who cares when you're already saturated?)!

So, how was it that this CEGSA-paddler and his friends had been able to partake in a fabled Ginnie Springs "Galaxy Dive"? Well, a group of 6 of us including Andrew and another old-time caver/cave diver, Anne Wilson, decided to go into hock and hop over to Northern Florida to attend a National Speleological Society Cave Diving Section Conference in the small town of Branford near the Swannee River. It was (naturally) one of the coldest winters in history, with most midday temperatures being BELOW 10 degrees Centigrade!! Fortunately, the wonderful 20-25 degree C water and thousands of metres of waterfilled passages provided me with a fantastic cave-diving experience I will never forget!

During our 6-week visit, I managed to get at least one dive in seventeen different caves or parts of the same extensive cave system, logging almost 26 hours underwater and 29 cave-dives. It is rare here in South Australia to penetrate more than 100 metres in our cold, still-water sinkholes and caves (although that is not to say they are 'boring', what with their neat silty floors and underwater constrictions), but we frequently found ourselves undertaking dives far in excess of 500 metres penetration in Floridian caves with the longest underwater swim being over a kilometre ... we were not suitably rigged to do long penetrations!

Several waterfilled caves were exceptionally interesting and reminded me of some of the larger 'dry' caves of Mount Gambier area - except these were a 'bit' wetter (1000% humidity??). Although virtually all of our dives were enjoyable, some were outstandingly attractive --"Little River", which gradually drops to over 30m along long meandering passages; "Little Dismal", which is basically a series of interconnected flooded chambers with rockpiles and sculpted roofs; "Cow Spring", a small but pretty cave; and "DiePolders#2 and #3", two VERY spectacular, enormous waterfilled caverns which open up at a depth of some 60 metres and drop to unfathomed depths!

Andrew and I were also very privileged to dive with some mermaids (really!!) in the city of Weeki Wachee, and even got see the recently-opened and very spectacular "Living Seas" pavilion at the Disneyworld "EPCOT Center", from a fish's point of view!

Our trip was made enjoyable despite the flooded rivers and other travel hassles thanks to our many American friends (notably Steve Gerrard, Paul Heinerth, Wes and Terri Skiles, Mike and Linda Cannon, Gene Broome, Jeff Bozanic and their companions and friends at Branford Dive Center and Ginnie Springs), and I hope to have paid off enough of THIS loan to be able to afford to go over there again before the turn of the century (THIS century)! I hear there's even BETTER cave-diving in the Bahamas nearby ... I only hope our dollar doesn't keep plunging further than we cave-divers do!

Peter HORNE

TECHNICAL & OTHER ARTICLES

NULLARBOR CAVING ATLAS USER LETTER #3 20th August 1986

Second Edition

Yes! It's now available.. The **ATLAS** is now more like its' name.

Content

All pages of Edition #1 have been replaced by the new Edition

We hope you like the complete re-vamp. Data for features up to N223 - Edition#1 - have been upgraded where possible. New features have been added up to N343 as at 19th July 1986. This is a 54% increase in 3 years. The number of feature maps has been increased from 55 to 166 while all but a handful of the previous maps have been upgraded with interior details and sections. All available surveys have been scrounged to add to (or in some cases replace) the old maps.

Special Library Edition

For clubs and others who do not intend to go to the Nullarbor but still wish to purchase an **ATLAS** for reference, we announce a special A4 sized edition. It is hard bound and not upgradeable but is ideal for those wishing to keep a record of changes to our Nullarbor karst knowledge. Purchase price is the same as the Field Edition

Pricing

The Edition#2 upgrade of Edition#1 just fits into the two volumes already supplied. The cost of an upgrade has been kept down to \$16.00 plus postage from Adelaide - this will cost a few dollars for each one of you that upgrades. We recognise that part of the cost was due to our enthusiasm in supplying so many updates to so many features and in changing the format to eliminate many of the original short-comings. For estimating postage allow about 1.8kg when packed for Library Edition and 1.2kg for the Field Edition.

A new ATLAS is \$29.00 plus postage (eg from Adelaide to Sydney \$4.70 & Perth \$5.70). However, we have almost sold out of Field Edition covers, so you might have to borrow someone else's or accept temporary covers until we reprint.

Third Edition

We are still keen to get further updates and corrections to the ATLAS - please send them.

Planning for this edition includes reference lists for flora and fauna, multiple maps for the large caves, more locality maps, entrance photographs for a more positive identification and lots more cave maps - the gaps are obvious : please call in on them as you pass and send us your survey. We are already aware of many more features that have not been numbered. You too can add to the list.

The ATLAS is designed primarily to be used in the field. As a user of the ATLAS you know what you would like to see in it. Please let us know what information should be added to the descriptions, what reference lists are needed and how we can make the ATLAS work for you.

Edition#3 will require a third Volume of the Field ATLAS. At that time we will be able to reprint covers for Volumes 1 & 2 to supply all you unlucky trogs who have not ordered in time! We will probably make more compact covers next time

Graham PILKINGTON



"I REMEMBER WHEN THAT CAVE
WAS JUST A HOLE IN THE GROUND."

The following article was discovered among CEGSA's Nullarbor records. Written shortly after the 1965 Mullamullang expedition it describes the author's (unknown) impression of this newly discovered, wondrous cave. Such rapture can still be found on the Nullarbor in the latest edition of the Greatest Cave - 6N83 Old Homestead Cave.

THE GREATEST CAVE

Overhead, in a white-hot sky, the sun spreads itself in a searing haze. Below, on the vast plain, temperatures measure at 127 degrees in a moving car: at 140 degrees in the open.

A group of people crouch in a depression, 15 ft below ground level. And there, wondrously, the thermometer reads a pleasant 65 degrees. The group relaxes there through the worst of the day's heat before moving on in the relative coolness of the early evening.

This was on the great Nullarbor Plain, spreading for 65,000 square miles across two States in the centre of the south coast of Australia. The group of people were members of an expedition sponsored by the Cave Exploration Group of South Australia, and the depression in which they found shelter from the heat was the mouth of one of the caves that lie deep beneath the surface of the vast, treeless plain.

The expedition, made during the Australian summer of 1965-66, was a follow-up to the first expedition by the group to these fascinating caves in 1957, and to subsequent explorations. Its primary function was to explore the depths of the great Mullamullang Cave, discovered in 1964, the extent of which is even now not fully known, but which is acknowledged to be Australia's largest cave.

Miles of underground mapping of Mullamullang had previously been accomplished, and it was planned to survey and map a further miles on this latest expedition.

Mullamullang Cave lies on the southern edge of the Nullarbor Plain, about 100 miles west of Eucla and the South Australian border. It is one of about 85 known caves and penetrable blowholes in the area. Deep caves (more than 70 ft deep) number almost a dozen, and are restricted to the scrubland close to the coast.

Origin of the caves, and even their still-continuing formation, is a subject of discussion. The caves lie in an area of tertiary limestone (the Nullarbor Plain itself) which stretches for about 500 miles in an east-west direction and for from 75 to 200

miles (the exact limit has not been defined) north of the coast of the Great Australian Bight. At its northern limits, the plain is replaced by the scrub, dunes and salt lakes of the Great Victoria Desert.

Along the coast, the Nullarbor is fringed with sea cliffs, varying from 135 to 250 ft in height. These cliffs form the coastline of the Bight for about 130 miles westward from the head of the Bight, in South Australia, to Wilson Bluff, almost on the SA-WA border.

At Wilson Bluff the cliffs continue in an almost straight line inland as the coast swings to the south. The cliffs here form a steep scarp for about 150 miles, and are known as the Hampton Range. They are about 250 ft high and between them and the sea lies Roe Plain, a desolate area, almost at sea level, consisting of salt flats and dry lakes. The cliffs rejoin the coast at Twilight Cove.

That part of the Nullarbor behind the inland scarp is known as the Hampton Tableland, and it is in this area that many of the most interesting caves, including Mullamullang, are situated.

The survey party, numbering men and women from all parts of Australia and from overseas, was led by Athol Jackson of South Australia, while another South Australian, Alan Hill, was in charge of underground operations.

In addition to the basic exploration and mapping of the vast cave, the survey party had three other important research aims: to carry out extensive investigations in local meteorology; to analyse salt content of the underground lakes found in the caves; and to search for further specimens of a species of blind cockroach.

The remains of such a cockroach were found in Mullamullang in 1965, and has been examined by Dr. M J Mackerras who is carrying out research on Australian cockroaches. Dr. Mackerras has suggested that the insect is truly cavernicolous - that is, it had completely adapted itself to living in the utter darkness of deep caves.

The cockroach has vestigial eye facets, probably non-functional, and is a long-legged, frail-looking, pale creature, like a plant forced to grow in a dimly-lit room. More specimens of the creature were found by the recent expedition, and these are being examined in the hope that they will throw more light on this unique insect.

Meteorological studies were the special province of two University of New South Wales science students, Ian Wood and Michael Smith. They were supplied with an extensive range of equipment by the Commonwealth Bureau of Meteorology and the Meteorological Physics Division of the Commonwealth Scientific and Industrial Research Organisation (CSIRO) for the purpose of studying above-ground weather data (normally difficult to obtain in this isolated and desolate spot) and the connection, if any, between outside weather and the movement of air within the caves and blowholes.

Considerable air currents, often reversible, are encountered in the caves, particularly in the smaller ones, and, of course, in the blowholes: long, narrow vertical pipes through the rock, formed by the dissolving of limestone in the water which finds its way down through crevices in the strata.

Blowholes can be up to 100 feet deep, often terminating in a domed chamber which can itself be 80 to 100 feet high. Air volume of these systems varies from 1,000 to 450,000 cubic feet, but meteorological observations have often indicated larger volumes of air passing through, suggesting that the blowholes are interconnected with other caves of greatly larger air capacity.

Reversing of the air currents takes place at sunrise and sunset, strengthening the theory that the changes in surface temperature, which are rapid under the desert conditions, are responsible to a very great degree.

Within the caves themselves are restrictions and passages through which air passes at high velocity. In Mullamullang, for example, is a point about 600 ft in from the entrance where the ceiling approaches to within five feet of the floor. When air might be motionless in cavernous sections, it passes through this orifice - called appropriately and picturesquely, the Southerly Buster - at a speed of up to 35 mph. Direction of the current changes from inward to outward depending upon conditions in the outside atmosphere.

The study of salt content of Mullamullang's underground lakes was of more than scientific use: it had a real bearing on the comfort and well-being of the underground survey party. All supplies - food, changes of clothing, carbide for lamps, and fresh water - had to be carried in on the backs of human carriers, nicknamed sherpas.

Utilisation of underground water supplies where possible could reduce the loads of the sherpas, or allow them to bring in other supplies. For every gallon of water which could be used from the lakes, the burden of a sherpa was lightened by ten pounds.

Maximum salt content of water which can be tolerated by man is estimated at 3,100 parts per million. (For a comparison, sea water can have a salt content of about 40,000 ppm). Salt content of water in Mullamullang's lakes is not high by comparison with lakes in other caves in the area. The first lake had a reading of 7,600 ppm, the second 6,650 ppm, and a third 6,970 ppm. Water tested in other Nullarbor caves has rated from 5,310 ppm to 14,500 ppm: too high for human consumption. Again as a comparison, water of this salinity would be suitable for sheep, if it was available to them, for these animals can exist on water with a salt content of about 15,600 ppm.

Mullamullang's lake water was utilised by mixing it with fresh water brought in. The resultant "cocktail" tasted strongly of calcium and sodium salts, but was quite drinkable.

Experiments by the underground party showed that the natural salt lake water could be improved by boiling, when bi-carbonates formed a sludge on top of the water, and could be taken off. Normal carbonates, being insoluble, could be removed only by chemical treatment.

Another experiment was to rig up a still, using two water bottles and a length of plastic tube. With kerosene as a heat source, about six pints of water was distilled in 12 hours. A more efficient unit was fabricated from the tubular steel frames of ruck-sacks.

These experiments did prove helpful in reducing the work of the willing sherpas, who nevertheless had to keep up continuous supplies by carting in 45 to 80 lb packs along the rocky floor of the tubular-shaped cave, in darkness. The difficult and hazardous return trip (which included a 20 ft vertical climb) took a sherpa 12 hours. He (or she - even the girls took turns with 35 lb packs) could not stop underground as he would consume too much of the supplies he had so slowly and painfully carried in.

This was really hard work. Sherpas lost from six to nine pounds in weight on a return trip. Two of the more heavily-built of the party lost 14 pounds.

Weight loss came not only from the sheer physical labour, but also from the high humidity of the caves. Although temperatures in the cave stayed around a consistent 65 degrees, humidity of about 80% kept the party warm, so that normal underground wear was shorts and singlet or a light shirt.

The humidity provided its own problems for the cave-dwellers, who spent up to seven days underground. Clothing became "soggy" to touch, as one party member put it, and a towel, once wet, stayed damp for days.

Fatigue was induced easily by these conditions. As the days passed, party leaders found it increasingly difficult to rouse their crew every morning, and to urge them to work. Natural metabolism was upset by lack of any sense of day or night in the eternal darkness of the cave, which increased lethargy, and brought on immense inner loneliness.

To combat this, a fairly rigid time program was established. From a portable record player, the majestic music of "Hall of the Kings" from the Peer Gynt suite, echoed through the caverns each morning. The day was taken up with a program of surveying, testing and metering. After the evening meal an hour was set aside for relaxation; to play recordings and to discuss the day's achievements and plan tomorrow's activities.

"Lights Out" was timed to ensure a full eight hours' sleep, and during the period no telephone calls were made from the base camp to the underground party.

The telephone, of course, provided an invaluable, and indeed the only practical means of fast communication between underground and surface parties.

The air-conditioned coach which had transported the group from Adelaide was the base for communications. A check point phone was sited at the "Southerly Buster", another at White Lake, about ... yards in the entrance, and a third at the drop-off point where the steep descent into the depths of the cave was made. The final check-point was at Camp One - the first "permanent" underground camp, 2.5 miles in from the entrance.

At each of these points parties going into or out of the cave (travelling alone was forbidden for obvious safety reasons) had to check their movements with the base.

Rigid safety rules applied both underground and on the surface. As well as the ban on moving alone anywhere, every person was obliged to carry a compass and watch, and to log their intended movements, with estimated time of return, whenever they left any base camp.

Special precautions underground included meticulous care in rock-handling. Few members of the party escaped minor cuts and bruises from slipping and tumbling. To fall on a sloping rock pile could mean a long and painful downhill tumble in company with a minor avalanche of limestone. Sturdy work gloves were cut to shreds on razor-edge rocks, and there was always the risk of an entire rock pile sliding down with the misplacement of a single stone at its foot. The 1965-66 expedition to Mullamullang has widened knowledge of this vast cave, but at the same time has opened as many more areas of investigation as it answered.

New sections were surveyed and mapped; 1000 feet of new branch passageway were explored; excellent examples of gypsum "flowers" and crystals were found and photographed. More than 1 mile of solution-formed tunnels were discovered on three separate levels above the main passage.

Mullamullang, lying deep underground in one of the harshest and most inhospitable areas in the world, is jealous of its secrets. Every piece of new knowledge must be brought out at the cost of vast expenditures of time and skill. Dozens of side passages remain to be explored. The main tunnel and branches still stretch on for an unknown distance beyond the miles surveyed and mapped.

But troglodytes are a persistent race, and plans for the next attack on Mullamullang were being made by members of the Cave Exploration Group of South Australia even as they returned home.

New equipment and improved lights are being assembled and tested. Mullamullang, greatest cave in Australia, is being conquered foot by foot, inch by inch, by determined men and women who crawl, slide and slither through its black passages like blind worms in a huge pumice stone.

Its spidery, sightless cockroaches, its saline lakes, its crystal "flowers" are no longer mysteries it withholds from the world

LIBRARY REPORT

As you know I now have the library stored at home and it is not possible to bring all the books in to each meeting, so if you require any books to be brought in to the meeting please let me know. You may phone me at home on 791013. Some of the books are missing so once again I ask you to have a look in your home for them, thank you.

Bill PARKER

DO YOU KNOW WHERE THIS CAVE IS ?

The photo appearing on the cover of this issue is purportedly a cave near Adelaide? Periodically, reports of caves near Adelaide surface. This is the first occasion that a photo has been found. No details of this cave could be found.

This cave appears to be substantial from the photo. Often when attempts are made to locate historical information the results are disappointing. To encourage a response an incentive is offered for information leading to the discovery of this cave.

Possible incentives considered were

- having the feature named after the informant
- giving the informant the honour of leading the first exploratory trip into the cave
- a monetary reward

Knowing the integrity and high ideals of cavers the above seemed frivolous. The only just incentive was decided to be

- 2 years subscription to CEGSA Newsletter
- autographed copy of Discover Naracoorte Caves
- monogrammed pair of overalls with matching boots, helmet and battery pack.

PROGRAMME

OCTOBER

4 - 5

8

Committee Meeting **7:30 pm**

66 Eyre Cres. Valley View

11 - 13

18 - 19

22

General Meeting **7:30 pm**

25 -26

NOVEMBER

1 - 2

8 – 9

River Murray

Kevin Mott

12

Committee Meeting **7:30 pm**

15 - 16

22 – 23

26

General Meeting **7:30 pm**

29 – 30

Training Day - Morialta

Peter Kraehenbuehl

DECEMBER

6 - 7

Hobby Fair - Wayville

Stan Flavel

10

Committee Meeting **7:30 pm**

13 - 14

20 - 21

27 – 28

JANUARY

SPELOTECH '87 – Sydney

Musgrave Ranges

Stan Flavel

Contact

See Office Bearers

Please inform the Social Secretary of

- any trips you are planning
- any type of trip you would like to see run
- any cave or area you would particularly like to visit

Remember - we can only satisfy your desires if we know what they are.