NEWSLETTER OF THE SYDNEY UNIVERSITY SPELEOLOGICAL SOCIETY

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Edited by Ron Murray

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CALENDAR OF ACTIVITIES

March	6	GENERAL MEETING - top floor, Geography Building 7.30pm
	15 - 16	TIMOR Freshers' Trip Full Details Within
	22	PALM BEACH - AVALON Field Day. See p. 63
	29	ASF NSW Co-ordination Meeting
April	4 - 7 (EASTER)	BENDITHERA (some walking) Rick Crowle 447415
	4 - 7 (EASTER)	COOLEMAN Qualified trip leader required - apply at March General Meeting
	10	ANNUAL GENERAL MEETING - note meeting not on usual first Thurday in month owing to Easter. Location - top floor, Geography Building, 7.30pm
	19 - 20	JENOLAN - collecting insects etc. Specialised trip only. Glenn Hunt 9298675
	19 - 20	BUNGONIA - general trip Rick Crowle 447415
May	1	GENERAL MEETING - top floor, Geography Bldg. 7.30pm
	3 - 4	COLONG Ron Murray 6498620
	17 - 18	CLIEFDEN - surveying Lenis Ward 6442497
June	5	GENERAL MEETING - top floor, Geography Building 7.30pm

NOTICES

THE BARBARA DEW MEMORIAL LECTURE

At its last meeting the Committee resolved to establish an annual Lecture in memory of Barbara Dew as being a most fitting way of remembering her long years of membership and assistance to the Society. The motion passed was

"That a Barbara Dew Memorial Lecture shall be established, to be held annually to commemorate the great contributions Barbara Dew made to speleology. As well as her well-known interest in and study of bats, she did much of the tiresome but essential tasks of running the Society during her membership of S.U.S.S. from 1963 to 1968. Her membership gave a stability and continuity to the Society, the loss of which is sadly missed. The lecture shall be given by a person prominent in the field of speleology or other closely allied field, and the lecture will be open to all interested persons"

We hope that other Societies will be interested not merely in attending the lecture, but may wish to suggest suitable speakers Within reason, it is proposed that speakers' expenses will be paid and to defray this, a small admission charge may be necessary. Arrangements regarding each Lecture are to be made by the S.U.S.S. Committee.

Final details of the mechanics of the proposal, and a decision about when the first Lecture will be held, will be determined at a. later date. In the meantime, the constructive comments of members are invited.

ORIENTATION WEEK STALL

Help is wanted at the S.U.S.S. Orientation Week stall. Please phone your offers or suggestions (constructive) to Denis Ward at 6442497.

ENGAGEMENT

We take pleasure in announcing the engagement of Ludwig Muenzenrieder to Joy Blunt. Congratulations to them both.

PROSPECTIVE MEMBERS

Prospective Members receive a Newsletter from the date they pay their 50c. for six (6) months. All of last years prospective members are now unfinancial. If you don't pay up again in a week or so, this is the last Newsletter you will get.

FRESHERS' TRIP to TIMOR -- 15-16 March, 1969

Organization - Ludwig Muenzenrieder is in charge of getting the trip off the ground. Enquiries regarding costs, camping equipment, caving equipment etc. should be directed to Ludwig, telephone no. 733886 (home). As far as possible, intending participants will be allocated to cars on the night of the next General Meeting, Thursday March 6th. Car drivers are asked to contact Ludwig as soon as possible to let him know how many vacancies they have and when they want to leave.

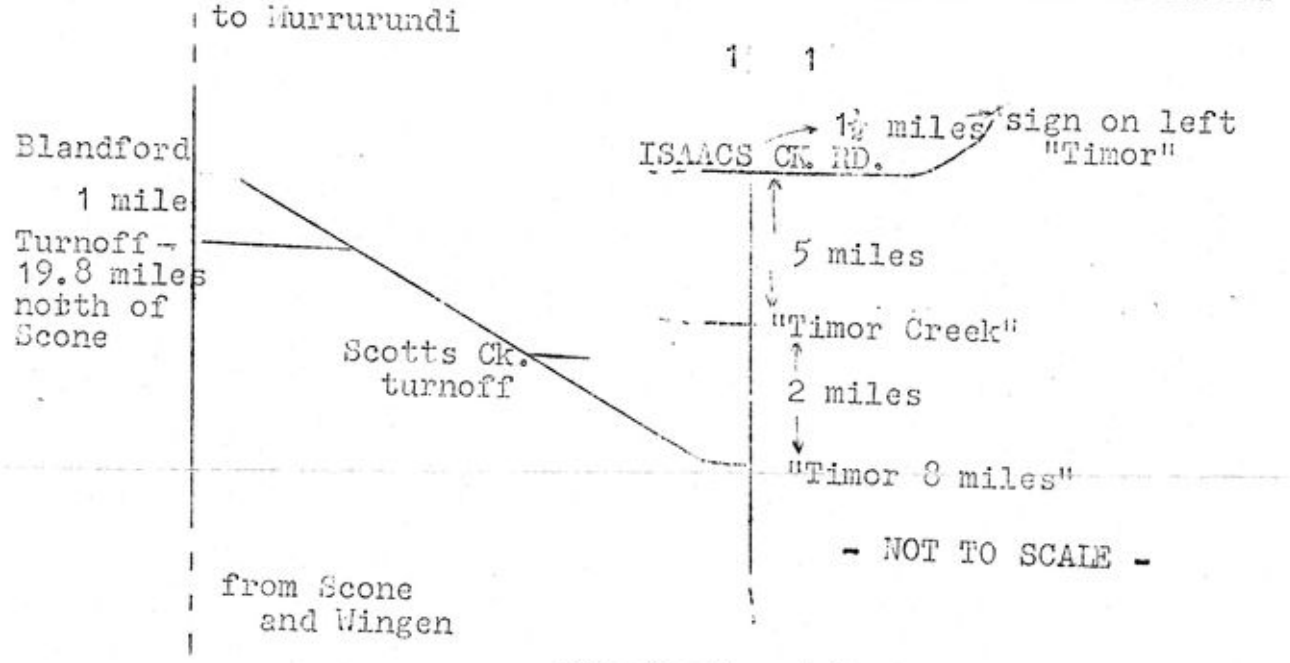
Directions - The Timor (Isis River) Caves are located in the Isis Valley, the most northerly of the Hunter Valley, about 40 miles south of Tamworth, 18 miles ENE of Murrurundi. To get there:

1. Drive to Scone (Putty Road is fastest and is sealed all the way. Thence New England Highway north.
2. Follow New England Highway to a point exactly 19.8 miles beyond Scone. Turnoff to right is marked by signpost "Timor Caves". If you overshoot turnoff, turn right at Blandford a little way further on and return along road to right.
3. About one mile from highway turn right at T intersection.
4. Pass a Y intersection with sign reading "Scotts Creek .. miles" but remain on Timor road for another ten miles.
5. Come to T intersection well marked with a signpost reading "TIMOR 8 miles". Turn left.
6. About two miles past this last intersection come to a turnoff marked with a sign "TIMOR CREEK". REMAIN ON MAIN ROAD - DO NOT TURN LEFT.
7. Five miles further an intersection marked with sign "ISAACS CREEK ROAD". Turn right, follow this road for ½ miles. Campsite is on left side of road and there is a sign bearing witness to the fact that you have arrived. Follow track in for 75 yards.

The Area - The area surrounding the caves is one of steeply rolling hillsides with some foliage. If the weather is good there will be ample opportunity to savour the scenery. Bring swimming gear as there may be opportunities for swimming. However the water is unsuitable for drinking so it will be necessary to bring your own. Most car drivers will carry a few gallons

The Caves - There are about five good-sized caves within easy walking distance of the camp. As well as caving, there will be ladders dangling from trees etc. for practice.

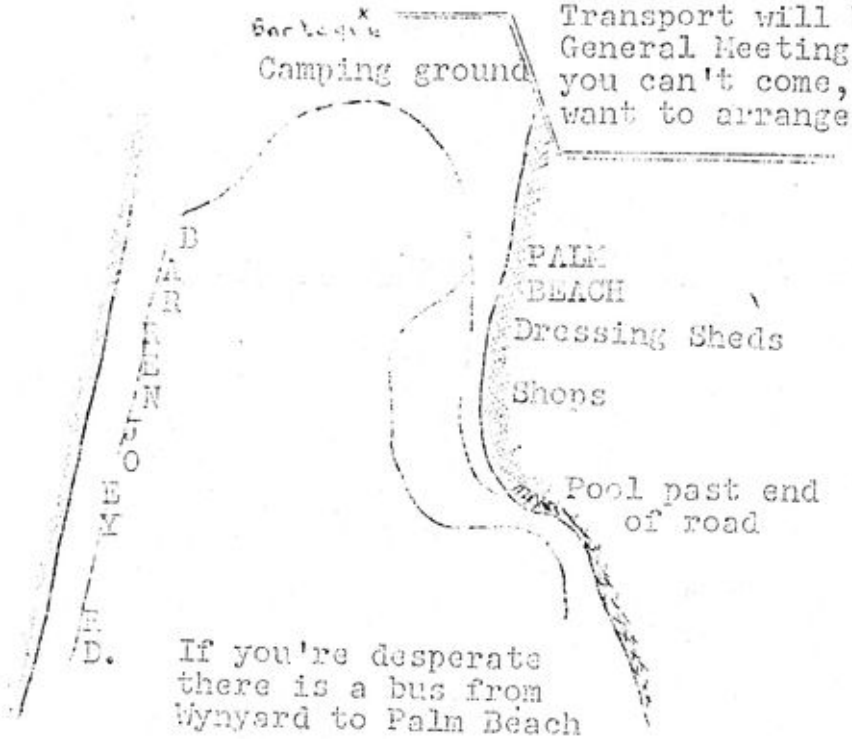
SEE MAP NEXT PAGE



For further details about freshers trip to Timor, ring one of these:

Ludwig Muenzenrieder 733886
Denis Ward 6442497
Ron Murray 6498620

Transport will be finalised at the General Meeting on March 6th. If you can't come, ring Ludwig if you want to arrange a lift.



For transport to Palm Beach, ring the most appropriate of the following:

Rick Crowle 447415 (10.15 Turramurra)
John Dunkley 854333 (10.15 Pymble)
Ron Murray 6498620 (10am Auburn)
Glenn Hunt 9298675 (10 North Sydney)

SEA CAVES TRIP and FIELD DAY Saturday, 22nd March

Activities will kick off at approximately 11am. Meet at the rock swimming pool at the south end of Palm Beach, just past the end of the road. There should be some very unlikely types hanging around.

You have no excuse for not coming on this field day. Activities are arranged to suit ecery taste. Sloths and keen bods will be equally accommodated. For example, you can spend the whole day slothing in the sun on the beach if you prefer, maybe making ornithological observations. Or you can exert yourself paddling in the water and go home with nothing more gained than a sizzling sunburn and sore eyes.

For the active types, Palm Beach Cave will be examined first, then St Micahel's Cave and finally the Hole in the Wall. In between there will be rock climbing, ladder climbing, rope work and knot practice, abseiling and belaying etc.

Palm Beach Cave is about 300 yards around the rocks from the beach. The entrance is about 20' high, narrowing to 1' at about 35' in. From there a narrow tunnel squeeze continues for a short distance, finally opening out to a chamber about 8' high and 50' long, completely in the dark zone.

St Michael's Cave is reached by a path down the cliffs almost opposite the junction of Marine Pde. and North Avalon Rds. Avalon, through a vacant allotment. It has a high level entrance descending steeply into an impressive daylight chamber about 250' long , 30' wide and up to 40' high. Both caves are developed along the line of an eroded dyke with surrounding collapse of sandstone.

The cliffs in the area are excellent for ladder and rope practice and there may be a direct descent into the entrance of St Michael's Cave from a vacant allotment at 77 Marine Pde.

At the conclusion of the festivities a barbeque will be held at on the tombolo linking Palm Beach to Barrenjoey, reached via the camping ground. Bring food and drink etc.

You will need a light of some sort and at least a T-shirt and costume, also boots etc. for the squeeze. There should be ample transport.

Further details of the trip may be obtained from Rick Crowle at 447415.

Trip Report

JENOLAN 23 - 24 January John Dunkley

For the past nine months or so, SUSS and SSS have been working on the final draft of the map of Mammoth Cave. The whole cave now appears on a large sheet of paper on a scale of 4" = 40'. When the detail and sections are added, together with some additional small passages, discussions will be held to decide whether and how it will be published.

It seems there are three possibilities here :

1. to publish only the map with a short note on the survey and the nomenclature.
2. to include as well a detailed description of the cave as a preliminary to morphological research.
3. a detailed analysis of the geomorphology, hydrology and speleogenesis of the cave.

The last possibility is beyond us at this stage. The aim of the trip was to assess the task involved in the second alternative.

Passages, rock and earth fill and other features were examined from Horseshoe Cavern via Sand Passage exit to the top of 40', and from Conglomerate Cavern to the squeeze. Throughout these sections there is plenty of evidence of total or partial filling of passages with subsequent removal. H.Shannon hypothesized many years ago that the whole cave had been filled with clastic sediments which were then partially removed. Large quantities of such fill are found, for example, in the main chamber of the extensions above Cusec Creek (Lower Level River), stranded 60' or so above present river levels. In the area surveyed on this trip water worn pebbles and rocks up to 1' in diameter, including shale, granite and basalt were in abundance. About 2' of this fill seems to have been removed in relatively recent times. Water flows through these passages in flood when the Bow Cave - Sand Passage influx system is working.

It must be emphasized that none of the observations made on this trip were really original. The essence of the exercise is in eventually collecting all similar observations into a coherent description of the cave. Very roughly, I estimate that this would take 50 hours of work. Some augur drilling would be necessary (e.g. in Railway Tunnel). The project is both feasible and worthwhile and further work will be done in 1970. By then we should have good long sections of the cave, and, hopefully, someone better trained in field observation than me.

MAGIC WORLDS BENEATH YOUR FEET

Reproduced from "Weekend Magazine" Perth, 8/2/69

Story: David Hynes
Pictures: Kevin Davidson and WA Speleological Group

THOUGH most people could not tell the difference between a stalactite and a stalagmite, there is a dedicated band of enthusiasts in Perth who can answer almost any question on caves and their exploration.

The WA Speleological Group, according to secretary Peter Bridge, of Carlisle, "goes on caving expeditions as often as possible."

Organising a trip almost every weekend, and a major expedition about once a month, the members of the Group—or speleos, as they call themselves—have plenty of opportunities to examine WA's bountiful supply of caves.

We accompanied the cavers on a recent expedition to the caves near Margaret River.

The group's main objective on the trip was to find out whether a stream running through Lake Cave—one of the more popular tourist caves—had an outlet on the coast.

The method was surprisingly simple.

We found the stream and a special chemical—Rhodamine B—was poured into the water.

Pieces of cloth impregnated with a detecting agent sensitive to Rhodamine B were then placed in other caves and in springs along the coast.

Then we waited.

I asked why the group wanted to know the path of the stream.

"It helps us learn the way caves are being formed in the area," said Peter Bridge.

"It also helps in pinpointing the likely locations of new, undiscovered caves, although we know that most caves in the South-West have already been discovered."

The biggest cave we entered on the trip was Easter Cave, a former tourist attraction, most of which owes its discovery to members of the group.

The first chamber was discovered many years ago and used as a tourist cave in the early 1900s.

In Easter 1958, some cavers (later to form the WASG) followed up a draught felt in the cavern, and tunnelled their way into a hitherto unknown system of caverns.

We entered the cave through a shaft about five feet in diameter and about 40ft. deep, to find the first cavern partly filled by rubble.

Further progress was temporarily arrested by our arrival at a locked door which barred access to the rest of the system.

"The most attractive caves are the most easily damaged," explained laboratory technologist Moira-Jean Martin, of Scarborough. Her husband is also in the team, and she is one of only two women on the trip.

"Formations have been broken, walls written on, and the white limestone stained with dirt by unauthorised visitors, so, in the interests of conservation, we have had to put gates on some of the important caves.

"Early conservationists worked to limit damage to the caves, but now, with the increased mobility of the population, strict supervision of tourists and better public education is needed to maintain the caves."

This effort to conserve the natural features of the caves plays a big part in all the group's activities.

members adhere to a strict code of ethics, which they say must be observed if the caves are to be left in as near a natural state as possible.

New members are tested by senior cavers in techniques and attitudes before they are allowed to enter the difficult caves.

Most of the group's work on conservation is done in conjunction with the local authorities, according to Mr Bridge.

"North of Perth, we generally work with the National Parks Board.

"South of Perth it is the Augusta-Margaret River Tourist Bureau, which controls access to most of the South-West caves.

"We also work with the WA Museum on the preservation and investigation of fossils and other important finds."

The door was unlocked and we advanced on hands and knees along a narrow, winding passage to the next cavern.

At the end of the passage I took advantage of a short rest to ask Mr Bridge about the dangers of caving.

"There is no danger of flash flooding in the caves of the South-West," he said.

"In the Kimberleys and at North-West Cape, where the rains are often monsoonal downpours, this does present a risk, but the alert caver can usually notice the signs and get out before he is in real danger.

'We don't encounter bad air and poisonous gases.

"In some of the sealed-off caves the air is sometimes a bit stale, but that's all.

"Falling rocks? Negligible. Though we wear helmets, they are aimed more at preventing a careless caver splitting his head on a stalactite than protecting him from falling rocks.

"People who suffer from claustrophobia don't go in for caving in the first place, so that's no worry to us."

Thinking of our entry into the cave, on a small wire ladder which had dangled uninvitingly down the shaft into the blackness below, I asked if the heights sometimes encountered in caving ever bother them.

"We have to go down deep shafts quite often," Mr Bridge said.

"But that's quite different from climbing down the face of a cliff—you feel much safer in a shaft, when you can't see the bottom.

"Besides, we nearly always have a cable ladder and a lifeline."

By this time we were moving on again, further into the cave, and I had no time for questions as some of the remarkable features of our South-West caves were pointed out to me.

Cave "pearls" is an appropriate name for the first formation I saw.

The small, round, white calcium carbonate concretions are very similar in structure to real pearls, being formed by dripping water coating a nucleus such as a grain of sand.

They are rare, and there was considerable excitement among the members of the group when they were discovered growing in the Easter Cave.

They have grown on the wall of the tunnel since it was dug in 1958.

"Straws" are another aptly named feature of the caves

They are hollow tubes of transparent calcite, generally about 1in. in diameter.

Water drips from the roof of the cave down through the straws, and they can grow to a considerable length. (One straw, in Strong's Cave, near Witchcliffe, has been measured at 20ft. 6in., and is tentatively claimed to be the world's longest).

The straws usually grow in groups called showers, and I saw my first "shower of straws" while standing on a subterranean beach with the waters of a shallow lake lapping the black mud at my feet.

"The Bristles" is a formidable-looking mass of miniature straws, about one millimetre thick.

Other features in the cave include crystalline pools, massive tree roots growing down through the roof of a cavern, and false floors—sheets of crys-

talline calcite which formed on the surfaces of pools which have since dried up.

One of the most startling sights I saw in the caves was the fossilised skeleton of a Thylacine - otherwise known as a Tasmanian Tiger or Tasmanian Wolf.

The creature is thought to have entered the cave thousands of years ago, and subsequently died, thereby providing a fascinating study for the speleologists and archaeologists who later discovered its remains.

But the best was yet to come.

While most West Australians know of the mineral riches of their State, few are aware that the same ground which contains vast deposits of nickel, iron and gold, is also rich with some of the most beautiful natural phenomena in the world.

I consider myself lucky to have seen them "in the flesh."

The coldly scientific name helictite does not do justice to these masterpieces of nature, which are somehow more beautiful than man-made objects d'art simply because they are natural.

As if too delicate to be subservient to the mere physical force of gravity, the helictites trace out their fragile pastel patterns in vertical and horizontal shapes.

The speleos proudly showed me "The Epstein Sculpture"— a massive helictite more than three feet long and two feet across.

This extraordinary formation—the biggest of its kind in WA, and believed to be one of the world's biggest—is jealously guarded by the speleos, who consider that hanging would be too kind for anyone who, even accidentally, damaged it.

On the way back to the entrance shaft, by now a mile distant and about 200ft. above us, I asked the members of the group why they went caving so often.

The urge for discovery is one motive, but is it worth the discomfort and risk?

Said Peter Bridge: "The group was formed in 1958, and I have been associated with it since 1960.

My own joining was prompted by an interest in geology.

"About 40 per cent of the group's members have joined for similar scientific reasons.

"There are archaeologists, mineralogists, biologists, palaentologists, geologists and photographers in the group.

"Between them they study almost every aspect of the caves—fossils, sediments, insects, plant and animal life and rock formations."

Compositor Bob Lutmann, of Dianella, seemed to speak for the other 60 per cent when he said:

"There are many caves in WA, and exploring them is always somewhat of an adventure.

"Though other people have firm reasons for going down, half my interest is in the exploration side of caving, as each cave has its own special charm and natural beauty.

"When all the scientific work is finished, I like to press on into the unexplored areas of the cave system.

"Caving is the old contest of man pitting himself against nature. Sometimes nature decides to chastise us, and show us that she is ultimately the boss—but that doesn't stop us.

"Nobody who hasn't experienced it can realise the fantastic thrill you get when, after slithering through miles of constricted passages, your lamp lights up a cavern where no man has ever stood before."

Later, as we stood in the warm sunlight at the top of the yawning black hole in the ground, someone gestured downward and said—"There's another world just beneath our feet."

And I agreed with him.

FOOTNOTE: For those who still don't know which is which stalag-wise, this comment from a Texan cave-guide may be of some use:

"Imagine a young lady in a close-fitting pair of slacks walking through an ant-hill," the guide drawled.

"When the mites go up, the tights come down."

Trip Report NULLARBOR PLAIN January 1969

The purpose of the trip was to determine the levels of the various cave lakes on the Nullarbor Plain in relation to sea level. The trip set out from Adelaide after the A.S.F. Conference. By the time we reached Ceduna (500 miles on) it became apparent that my Land Rover could not continue, due to oil on its clutch, causing it to slip. So, one day and one hired Valaint later, we left Ceduna, bound for the Nullarbor. After passing Ivt Tanks, the location of a cafe, we eventually reached Cocklebiddy, about 200 miles on the western side of the W.A. border, and near our first cave, Murra-el-elevyn. Some days were spent here, surveying, swimming, sleeping, sunbathing etc., including a jaunt to nearby Cocklebiddy Cave, where much fun was had paddling a rubber dinghy on the lake. Some time was also taken to exam ine Pannikin Plain Cave, a highly unstable mess if ever I saw one. However, it didn't fall in on us and the next day we left for Mullamullang, only to find that the property owner had seen fit to erect a fence across the tracks, , shutting off Mullamullang in the short time we had left. We attempted to level the water in a well near Madura but the well was dry. Pity.

Finally we settled on Weebubbie Cave, near Eucla. Thishas a large lake in it, and several hot days were spent swimming in it. The level of water was determined. While surveying was under way, some of the party went to nearby Abrakurrie Cave.

After a two day drive back to Adelaide, some brilliant clot thought up t e idea of driving back to Sydney non-stop (this was hatched in the bar of the Botanic Hotel, which may explain it). Since the Land Rover had to be push-started, we expected trouble but the only problem was getting up Victoria Pass, a formidable foe to a slipping clutch.

Two conclusions were derived from this trip:

1. New Valiants tend to fall apart on the Nullarbor; and
2. Oil-assisted clutches are not desirable

Seriously, though, the surveying of levels was carried out to a surprisingly high degree of accuracy and the results will be useful in solving various problems about the Nullarbor Plain.

-- Ron Murray

POSTSCRIPT

Ron's trip report might give the wrong impression about the value of the trip. Details of levels will be published later elsewhere, but it is now evident from this work that the lakes are only a few feet above sea level - indicating a very low water table gradient (an inch or two to the mile - much lower than had previously been suspected)

-- J.D., information from E.G.A.

Trip Report BUNGONIA 9th February Denis Ward

The party left Sydney early on Sunday morning, arriving at Bungonia before 7am. The primary purpose of the trip originally was to lend a hand in the Grand Cleaning Up of the campsite on the plateau. We arrived to see some sixty odd people peering out of their tents, desperately endeavouring to remain dry - it was raining hard you know. Heddless to say any further attempts at clearing were abandoned. (most of it had, as it happened, been cleared up the previous day). While the others left for Sydney our group went for a quick trip through B31 to test the acoustical resonance of this hydro-speleovoid (wet cave to you). Our main instrument was the Crowle Mark One speleotaperecoredr, loaded appropriately with two sessions of the Goon Show. Three ho rs of intensive research, then we went back to Sydney.

OF INTEREST

National Geographic Magazine, Vol. 135, no. 1, January 1969, pp. 132-3-5

Cueva de los Verdes is a lava cave in Lanzarote, Canary Islands. It is hollow basaltic tube 4 miles long and up to 80' high, with shallow salt lakes and a small blind crustacean Munidopsis polymorpha It is only partly explored but part of it is open to the public. Apparently there is an underwater connection with the sea. There are lava stalactites. A secret chamber entered through a squeeze was used as a refuge from invaders for hundreds of years.

"MUMMIES IN CAVES" from Sydney Sun, sometime in February

"Buenos Aires - Two professors have discovered 11 Argentinian mummies believed to be twice as old as the Egyptians Pharaohs. They have asked police protection for the 'priceless' find. The mummies, discovered in a cave, 744 miles north-west of here, were wrapped in cloth, except for one which was packed in an animal skin with the fur inwards. At least 40 more mummies are believed to be in the cave. The mummies so far include eight children and three adults

Any complaints about this newsletter should be directed to the Newsletter Complaints Officer, who can be contacted at his new phone number, 26-5158.

N.S.S. of the U.S.A. -- SHELTA CAVE PROJECT

The National Speleological Society of the U.S.A. recently purchased a cave, Shelta Cave, which they propose to conserve for scientific research and similar projects. It is hoped that the cave will thus be preserved from the heavy traffic which is characteristic of so many caves in the densely populated east of the United States.

S.U.S.S. is proud to be the first Australian society to make a donation to this project. Our donation is small relative to the $10,000US they want but it helps. We sent off a small bunch of 7 one-dollar US Treasury notes which had been forwarded to us by American buyers of 'Caves of the Nullarbor'. They though that we could spend the bills presumably.

S.U.S.S. JOURNAL

SUSS is supposed to be the publisher of journal on caving. Actually, the journals are extremely irregular in appearance and there have been only two in the last few years. Still, that's two more than most Australian societies manage. Right now, we have quite a bit of material for a new issue. Rick Crowle is in charge if you think you could write a piece on just about anything to do with caves and caving. It is just possible that there will be an issue within a mont or two but that may be wishful thinking. In the meantime, old SUSS journals are on sale at prices varying from 15c. to 50c. Not to mention 'Caves of the Nullarbor' going at $1.25. Only 100 left of the original 1200 or so.

APPENDIX -- TO WHOM IT MAY CONCERN

This being full instructions for reading the report attached hereto with staples to the abovementuoned instructions which will henceforth and heretoafter be known as the instructionsc for reading the said abovementioned report. Enquiries, in the event of conflicting situations which may be at variance with the within-mentioned instructions should, within a reasonable expanse of time be directed forthwith to the not-withinmentioned author who will henceforth investigate the meaning of the said abovementioned conflicting situation and report oh its successful or otherwise completion.

- The Phantom Waffler