NEWSLETTER

Cave Exploration Group

South Australia Feb – April 1971.

C/O SOUTH AUSTRALIAN MUSEUM NORTH TERRACE ADELAIDE

EDITORIAL

It is disappointing that since the resignation of Ken Heyne as a batbander, little work has been done in this field within South Australia. If it were not for the efforts of Mr and Mrs Fred Aslin in the south-east it could be said that no work has been undertaken at all. But perhaps one can look to the future with optimism when he or she has witnessed the growing interest in scientific investigation which has expanded within C.E.G.S.A. in the past year. It was most certainly the excavation of fossil material from Victoria Cave which initiated this change of scientific attitude within the group but I feel it is reaching beyond this.

I am sure that most people within C.E.G.S.A. are not aware that a new study project has been undertaken in Bat Cave at Naracoorte and that this study has attracted the interest of scientific bodies outside the group.

Unfortunately the situation has arisen where there is more work to be done at Naracoorte alone than the small group interested can possibly handle. Let me just draw your attention to one field of study that has been neglected since the days of Elery Hamilton-Smith. This is the field of invertebrates. Did you know that there are several species of invertebrates which have been described from the Naracoorte Caves and three of which have been found in no other location? A new genus, Novotettix (Richards, 1966) was erected and a new species, naracoortensis (Richard, 1966) was described from these caves and its subsequent disappearance has been noted from several locations. Could this be due to an environmental change? Here is a field of study for some interested person.

I hope this year will show an even stronger movement in the study of cave sciences than the past year has. Let's make C.E.G.S.A. a name that really means something as many in the past have striven to do. Have you got the time to do something really worthwhile?

Trevor H. Maddock

<u>FOR SALE</u>: The following publications are available from the librarian, Peter Chappell, as Mac informed you in the last newsletter. However, we are going to keep reminding you until they are sold so, if you are getting a headache from reading this take Chappell's quick relief (the prices are included below). The publications are:

Mullamullang Cave Expeditions 1966.	1-50
Caves of the Nullarbor 1967	1.35
A Preliminary Report on the Karst Morphology of the Nullarbor	1.20
Transcript of the Proceedings of the Seventh Biennial Conference	1.40

All prices include postage within Australia. Reductions are available for bulk buying.

CHRISTMAS AT NARACOORTE 1970.

During the holiday break, from the 25th of December, 1970 to the 4th of January, 1971, eleven C.E.G.S.A. members stayed at Naracoorte. We were also visited later in our stay by a group of S.S.S. members who arrived almost unannounced and went caving in the area under the leadership of David Williams. Although the weather was not very pleasant a surprising amount of work- was done.

Haystalls Cave, situated near Fox and Smoke Caves, was visited and mapped to grade six standard. Entry is quite simple via a small sixteen-foot deep solution tube. The cave is almost 200 feet long with an average passage width of between 15 and 20 feet, and an average roof height of about four feet. The first half of the cave is about the entrance has a sand floor while most of the second half consists of large rock slabs with the very last section being sand floor also. At both ends of the passage there is rock and sand block.

Many wetas, <u>Novotettix naracoortensis</u> were found distributed throughout the length of the cave. Temperatures were taken at all occurrences of the weetas and was found to be constant at 58 deg. F. Between 110 and 120 were found in a small niche about twenty-five feet from the entrance.

There are two bone excavations in the cave, both in the sand floor and each gaining a depth of about three to four feet. One excavation is about 35 foot from the entrance while the other is at the other end of the cave. The sides of the dig have collapsed a fair bit and much rubbish left by the diggers is shown around the cave. Apparently <u>Sthenurus</u> was quite prominent in the dig and a new species, was described by D. Merrileos.

A location map was made of S102 and caves S131 S205 and S204 were tied into it. S131 is called Haynes Cave in the group records which, till this stage, was considered lost because no location was known and the legendary Mr. Haynes, after whom the cave was named, has passed on.

Near S131, just over the fence, there is a solution tube (S204) which is filled to within six feet of the top with decaying sheep. David Lloyd Wright claimed that, at one stage it was about fifteen foot deep.

In the same paddock as S131, near the pine plantation, there is another solution tube (S205). It was, at one stage, filled with wire and tins but now, thanks to a group of local high school students, it drops fifteen feet, and at this point there is a small tunnel running north.

On the property of J. Groves a new cave was visited and has been numbered S212. The cave, covered with a large pieces of tin, is situated in a large flat paddock dotted with wide, shallow depressions. It appears to have been a single chambered cave with a big roof collapse which has filled with silt at one stage. Now a four foot diameter hole has opened in the middle of the fill and at -20ft.opens out into a small chamber. The rock and silt fill slopes down from one side near the entrance and at about -27ft reaches water. The chamber is about forty feet in diameter. J. Groves suggested that the water level fluctuated by about two to three feet. Checks will be made throughout the year to verify this.

Jeff. Groves gave us information on several other occurrences of caves:-

Behind the sand-pit on Section 463 Co. Jessie - this cave (S209) will be described later in this report.

In a small stony knob on Section 439 Co. Jessie - Owner is –J. Miles.

In a stony ridge on Section 635 Co. Jessie - owner is Lobens.

In a stony ridge on Section 440 Co. Jessie.

An attempt to locate Mosquito Creek Cave failed miserably even though we had Ken Schuster's help.

A small cave S213 in a quarry opposite Joanna Hall was visited. The entrance is in the quarry floor and has been widened from a small crack by some local kids. The name given to the cave by the kids is 'Cheese and Putty' and this well describes the soppy rock of which the cave is made. A further report and location will be submitted later in the year.

Joanna Bat Cave (S69) was visited and mapped to C.R.G. grade six. The entrance is about 45 feet in diameter and is filled with a truly wonderful selection of rubbish, including a 2000 gallon tank. From the entrance a single passage runs tack about 160 feet in a N-E direction. The average width throughout the cave is about twenty feet. For the first 60ft the floor slopes down at an angle of about 25 degrees with a roof height of between four and five feet. At about 80ft from the entrance the roof height is about twelve feet and from there on the passage is part filled with a huge amount of rock.

To the S-W of the main cave at a distance of about 50ft there is a small solution tube which drops about 20ft (ladder is necessary). This connects to a small cave which runs back into the rubbish pile in the main cave. This section is only about 60ft long and has rugged crawls running back under the main passage.

The small cave (S100) was mapped into the entrance of S69. The floor of the cave slopes down very steeply for about 35ft and then a very tight squeeze runs off to the west which could be pushed with either a small caver or a stick of geli.

On H. Appledore's property between Specimen and Appledore Caves a solution tube was located about three feet from the fence. It is too tight, drops about 9ft and has a breeze blowing strongly from it.

Locations were done on Rabbit Cave (S203) and Echidna Cave (S202) and a grade six map of Rabbit Cave was made. Overall length of Rabbit Cave is about 120ft. The first section of the cave is along the side of a crumbly rock-fall. Then there is a low wide crawlway in a silt-filled passage for about forty feet which opens out into a four foot high chamber hereafter called the bone chamber.

The chamber is about 15ft in diameter and has a greyish-white silt floor while the rest of the cave is red sand fill. There is a lot of fossil bone material on the floor of the Bone Chamber and it can be heard to crunch as you crawl across the chamber. A <u>Sthenurus</u> mandible was removed, and a further report will be submitted latter.

V.D.C. Cave S37 was visited and a location map was prepared. Access is now gained through C. Higgs' property. The V.D.C. Cave is about 300ft long with two 20ft deep solution tubes and a 40ft dug entrance.

Across the road from C. Higgs' house behind the stone reserve on Section 1090 about 50 yards from the fence, a small cave was found. The entrance is about twenty five feet in diameter and the chamber is about 20ft in diameter. The entrance slope is covered with briars and the chamber is well lit from the entrance.

Large rocks on the floor of the cave have been arranged in a rough square and it appears as though fires have been lit in it, although there are no smoke markings on the ceiling. In one corner of the cave there has been a roof collapse covering some arranged rocks. The rock in which the cave occurred is quite soft and perhaps fretting has removed smoke markings from the roof.

Small rocks which have at one stage been in the fire and sand-stone rocks, not from the immediate area, were found placed in small niches from four to nine feet up the walls. The cave is well protected from the wind and is well lit. It could possibly be an Aboriginal rock shelter

Two caves S210 and S211, on G. Cameron's property were located and a location map was prepared.

The Hynam Quarry Cave S39 was located. It is on Section 420 not 419 as records state. The access road is near the Section 419 - 420 corner-post on the Hynam Road.

Cave Park Cave S68 was visited and we met the new owner, Malcomn Smith, a damn good bloke! In the low chambers of the cave an adult male bat was found and in the entrance chamber an adult female was found. Both were very cold and appeared to be hibernating. The cave was much bigger than I ever realized with about 400ft of high rockfall passages and an even bigger area of low flatteners.

Another cave was located on Cave Park at a bearing of 330 degrees from S68 near the base of a stobie-pole within thirty feet of the scrub. The entrance is a solution tube dropping about 20ft to the top of a rock-pile with low crawl-ways running over the top.

Sand Funnel Cave is located on Section 463, Co. Jessie and a Grade Six map has been made. The cave is located in scrub behind the sand pit on the Hynam Road near the caves reserve. The entrance, as the name suggests is a sand funnel about 15ft in diameter at the top dropping 15ft to where it closes to a very tight solution tube for ten feet then opening out into a huge chamber.

Running west there is a tunnel 40-50 ft in width and about 200 feet long. There are huge blocks of rock down the chamber with a roof height in the middle of more than eight feet and up to twenty feet at the sides. The walls are almost vertical and there is a silt floor between the wall and the rock-pile. There is good formation and curtains of tree-roots in the chamber as well as extremely good deposits of lublinite on the walls. There are several large sand cones fed from blocked tubes in this chamber. The cave ends with a huge rock-fall blocking the way.

To the east of the entrance there is another large rock-fall but on the northern side one can slide down the sand slope into another rock-fall chamber about 25ft wide and 120 ft long. This chamber ends in rock-fall also. There are quite a few small sand cones near the end of the chamber and it is devoid of formation.

This is a very attractive cave very much like Brown-Snake with its large chambers, sand-cones and constricted entrance. About a 44 gallon drum of sand falls into the cave when anyone climbs in or out.

The cave has not had many visitors and has probably only recently opened up. There are no foot-prints in the sand and no rubbish. Perhaps this would be a good cave to try to keep in its present state.

Swamp Cave S41 was visited. The entrance is now collapsed and entry is almost impossible. The owner Mr. Possingham showed us several other holes in the same paddock but they were a little too small to enter. He indicated that there were several caves on the adjoining property.

The owner of this property, Mr. John Stuart could not help us but showed us a. hole that had collapsed under his motorbike while he was rounding up sheep. There seemed to have been a rock collapse leaving a hole about 5ft in diameter and about 5ft deep, but the soil had been held in place by tree roots completely disguising the hole until he hit it.

Many years ago (1845) some natives were rounded up on Mt Light after the murder of a bloke named Brown. One of the natives was wounded and he made off across country until he flaked out. He was thrown down a cave near the old caves hut.

The caves hut in question is situated on the northern side of the Hynam Road about one and a half miles from the reserve. This hut was built by the Light family in 1865 and was burnt down some years ago in a bushfire. All that is left is two chimneys and a few exotic trees.

To the south-west of the old caves hut there is a native waterhole and in front of the hut there is a rock shelter now filled with wire. The cave is on the brow of a hill to the north of the hut near a big dead gum-tree.

A good deal of silt and rubbish was removed from the cave but no aboriginal has yet been found. Since most of the soil appears to be clay that was washed in I would say that this was not the poor aboriginals resting ground. Two other caves were located near this but they are only small and would need much excavation before they will go anywhere.

A plane-table survey of the reserve was begun and caves between Victoria and Blackberry were mapped in.

Peter Chappell.

<u>K.I. TRIP – EASTER 1971.</u>

Due to the success of the Christmas trip to the island and the amount of work which is still to be done there will be another trip at Easter. Full details are not available as yet but if you are interested in exploration of new caves, mapping and some damn hard work contact Wayne Goedecke. This won't be a tourist trip but it will be a most rewarding trip for any who attend.

Environment and a Naracoorte Cave Cricket

The Species, <u>Novotettix naracoortensis</u> (Rhaphidophoridae) was described from the Naracoorte Caves by Dr. Aola M Richards in a paper to the Linnean Society of New South Wales in 1966. Dr. Richards noted a colony of over 1500 in Alexandra Cave sharing their abode with numerous other invertebrates. She attributed the existence of this unusually large colony to the absence of predators such as bats and rats, mentioning that no <u>N. naracoortensis</u> bad been observed from Bat Cave. This, however may not necessarily be the case.

A sparse number of N. <u>naracoortensis</u> has since been recorded near the entrance to Bat Cave (Hamilton-Smith, pers com.). Alexandra Cave has also recently been observed to be devoid of her colony. Both these observations conflict with previous distribution records for <u>N. naracoortensis</u>. The other caves mentioned (Richards, 1966), however, do still house their colonies. Haystall Cave was recently recorded (1970) at more than 150 <u>N. naracoortensis</u>.

The existence of a colony in Bat Cave suggests that predation by bats does not influence the existence of N. naracoortensis. Their disappearance from Alexandra Cave has only been recorded since the erection of the new ticket-office entrance (Hamilton-Smith, pers. com). This alteration to the entrance of the cave had a subsequent influence on the temperature and environment within it. This suggested that temperature and environment were more likely to influence the existence of N. naracoortensis. It has also been suggested that large numbers of visitors to the cave could have had an influence on their disappearance but, as a colony still exists within Victoria Cave, this is unlikely.

N. naracoortensis has generally been observed from near the entrances of caves specially at night. This suggests that they, in fact, prefer a cool environment associated with fresh breezes and also the absence of light. In Haystalls Cave the temperature was a low 58 deg. F and remained constant throughout the cave. N. naracoortensis has been observed considerable distances from the entrance in that cave.

T.N. Maddock.

Letter to the Editor

Recently I discovered bone particles in a pile of sand that had been dug out of a passage in Fox Gave. In the material <u>Sthenurus</u> and <u>Thylacoleo</u> were identified.

Care should be taken by members when excavating tunnels to safeguard any prospective fossil deposits. Perhaps before undertaking such a dig someone with paleontological knowledge should be asked to ascertain whether or not it is a worthwhile deposit.

from Boney.

Letter to the Editor

Dear Ed,

Speaking from personal experience I can say I know the effects that alcohol has. I have noticed since I have been going caving, the number of people that take it with them on trips to Naracoorte. I appeal to all members of C.E.G.S.A. to try to stop this. I have thought of two solutions to the problem - either a bar could be installed at the hut or we could organize drug parties in Big Cave,

from Alcoholic Anon.

Fire

Today our bushland is crisscrossed by roads and tracks and regularly penetrated by people, often city dwellers with little fire sense, whose habits of smoking and billy-boiling are almost beyond conscious control.

Again it has been brought to my notice that C.E.G.S.A. members are acting in a most foolish manner. By this I mean lighting and maintaining carbide lamps in the entrances of caves particularly in dry grassed paddocks and timber country with little or no regards for the surrounding country side.

One particular 'cocky' down at Naracoorte expressed his concern to me about this and, if the practice continues, he will not permit people on his property.

Result - two lost caves - due to some foolish, selfish, careless, incompetent members of C.E.G.S.A. sparing no thought for fellow speleos' who may wish to visit these caves in the future.

Even now we may loose Collins Cave at Mt. Gambler. This has been brought about by some young children trying to light candles in the immediate entrance in order to explore the cave. The result was the burning of some twenty acres of grassland. The same incident could have easily been caused by some C.E.G.S.A. member lighting his carbide lamp, and, in the process setting the country ablaze. This would really be publicity for the group, the type we don't need.

Australia has some 2000 fires a year resulting in property damage which amounts to some 200,000,000 dollars, and this, of course, does not include damage to wildlife and scenery which, to me, is part of our heritage - the open spaces and all they contain, their balance to the needs of nature.

Fire burns with such fury and leaves a charred trail of destruction. The awesome destruction apparent to the eye may be increased because the soil is then subjected to erosion and loss of micro-organisms vital for the effective recycling of plant nutrients.

Fire not only causes property damage and destruction to our flora and fauna, it can also cause loss to human life - THAT COULD BE YOUR LIFE - due to your foolish habit of lighting fires for carbide lamps outside of a cave.

Therefore, in concluding, I hope that each and every member takes it upon themselves to act in a manner befitting C.E.G.S.A. Show that you care about our Australian heritage.

'TAKE CARE – DON'T LET IT BURN'

Ric. Bowen, Conservation Officer.

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This is the last meeting under the present committee. At the next meeting (the Annual General Meeting) you must elect a new committee to carry on the running of the club for another year. Before placing your candidates and your votes think carefully. Will he be a good man on the committee? Is he the best man for that job? Refrain from electing or voting for candidates merely because they are friends or just a good bloke. This year could be the greatest for C.E.G.S.A. yet. Vote wisely. You've got a hand in the running of the club.

Kangaroo Island Senior Scout Venture - 28th Dec. - 8th Jan. 1970.

They certainly all gained a better understanding about what an organization like ours is trying to achieve. By using the real keen lads in worthwhile projects they were proud to be involved. Many, I am sure, began to realize the value of caves and it is activities such as these I am sure are the right approach toward beginners.

The senior scouts came from all over Australia so C.E.G.S.A. can say it has really done a good turn towards caving. The Island is a fantastic place to go caving and C.E.G.S.A. has not even touched the surface. The formation is something you have to see to believe. Kelly Hill is a photographer's paradise while the Emu Group is the place for the cavers who don't mind getting wet but they are rewarded for it.

Robert Smith, the property owner, has become a real keen caver almost over night. I think he now realizes just what caving really means to a caver - it's not a sport, it's a dedicated cause.

It's property owners like Robert Smith that are really the backbone to our organization. If we had them on our side that is our conservation battle won.

This Easter there will be a trip to the Island but if you are not prepared to do some work and you are looking for a tourist trip then Curramulka is the place for you.

W. R. G.

Notice to all C.E.G.S.A. Members!

Bat Cave, as you may or may not know, is one cave which is off limits to the public. This also means it is off limits to all members of C.E.G.S.A. who are not involved with work in there. This is one restriction that can be rigidly enforced so be warned. The Government Tourist Bureau is prepared and will fine any unauthorized people the sum of 100 dollars. If you can afford it, go caving in there by all means —

Naracoorte Trip, 8th - 10th Jan. 1971.

Although only two C.E.G.S.A. members from Adelaide and Harry Baker from Naracoorte attended this trip a considerable amount of work was completed. Excavation opened a tunnel in Wombat Cave which now extends about thirty feet to a narrow limestone collar with a breeze blowing from it. Geli will be needed to open this up any further.

Rabbit Cave was again visited to tie up a few loose ends for a preliminary report on it. Locations on the three caves on Schultz's property were made and a little digging was done in Rocky-Ridge Cave.

On the Sunday, a cave on Dennis Carter's property was mapped to Grade Six standard as well as Victoria Quarry Cave. About half a ton of rubbish was removed from the back of Cathedral opening about ten feet of solution tube. There is another ton to be pulled out.

THE AUSTRALIAN BAT-BANDING SCHEME (Reprinted from the Speleo-Handbook)

Twenty-two of Australia's 56 species of bats live in caves during the day, and so are often encountered by the speleologists. In order to facilitate the study of these interesting mammals, the C.S.I.R.O. has, though its Wildlife Research Division, made available the necessary bands and co-ordination for a bat-banding scheme in Australia. Similar schemes have operated in other countries for a number of years, but the Australian Scheme was first established in 1957, largely as a result of the interest shown by certain speleological societies. The A.S.F. has appointed a Bat Research convener, who has always worked in close cooperation with the Banding Scheme. Since 1964, a Bat Research Newsletter has been produced jointly by the Banding Scheme and the A.S.F. Bat Research Committee.

To June 30th, 1963, 24,235 bats had been banded by 17 banders operating under the aegis of the scheme and over 3,000 of these had been recovered after banding. Of those recovered to date, the oldest bat is one trapped over six years after banding, and the longest journey recorded is over 500 miles.

In association with the Banding Scheme, cards are available on which cavers may report any bats seen in caves. These cards, together with a guide to the identification of cave-dwelling bats, may be obtained from the Secretary of the Banding Scheme.

Speleologists can assist the work of the scheme in a number of ways:

- 1. By reporting any bats seen on the Occurrence Survey Cards mentioned above. These reports are of great assistance in making known a more complete picture of the distribution and seasonal movements of our bats.
- 2. By watching for any banded bats and reporting these. Bats are banded by placing a small metal band on the leading edge of the wing. Each band bears a two or three figure prefix number followed by a five-figure serial number. Both numbers should be written down, along with details of the date and place of recovery.
- 3. By assisting with banding programmes most banders are looking for regular field assistance.
- 4. By making a thorough study of the bats of an area through banding. Applications from speleologists wishing to enrol as banders are always welcome. However, banding is most useful when it is used as a method during integrated and planned study within a specific area over an extended period, and banding licenses will only be issued to approved persons.
- 5. By keeping an eye on the conservation of bats in their respective areas. Maternity colonies in particular, should always be preserved from interference of any kind.

(Editors note: References have been excluded, however, currently available in the Group library is an extensive coverage of material dealing with this subject.)

For details of all literature on Australian bats since 1956, consult the current literature section in the Australian Bat Research News, published approximately twice annually since 1964, and produced jointly by the A.S.F. Bat Research Committee and the C.S.I.R.O. Wildlife Research Division

Brief Notes on the Conservation of Bats

Bats during the summer months store food in their bodies in the form of fats to carry them through the wintering or hibernating season. Should they be disturbed during hibernation they will naturally burn up stored food. This acceleration of the normal winter lose of weight could lead to deaths.

There are wintering colonies distributed in several caves in the Naracoorte area that are frequently visited by C.E.G.S.A. members. Where the colonies are very big as in Tomato-Stix and Cave-Park Bat Cave probably the best protective measure is not to visit the caves during wintering. Smaller colonies as reside in Fox and Big Caves can be easily avoided just by keeping a safe distance from them.

Peter Chappell

Available to C.E.G.S.A. Members

The Sydney Speleological Society has recently published the first of a series of sixmonthly publications of Australian Speleo Abstracts. This is professed to be a complete guide to Australian Speleological Literature and, as such, will be invaluable to the active caver who is interested in some particular study as well as having considerable general interest as a good reference source. Information on its availability will soon be brought to the attention of the group.

PROGRAMME FEBRUARY - APRIL (Easter) 1971.

<u>FEBRUARY</u>	10th	Final date for articles for the Annual Report		
	13-14th	Naracoorte trip	Leader: Peter Chappell	
	17th	Committee meeting	46 Ormonde Ave. Clearview	
	20-21st	Curramulka (training week-end)	Leader: Wayne Goedecke	
	24th	A.G.M.	Museum Lecture Room 7.30pm	
	27-28th	Naracoorte Trip	Leader: Rod Wells	
<u>MARCH</u>	13-14th	Naracoorte trip	Leader: Peter Chappell	
	17th	Committee meeting	(new committee)	
	20-21st	Curramulka trip	Leader: Wayne Goedecke	
	24th	General meeting Speaker: N. Pledge	Museum Lecture Room 7.30pm Lake Callabonna, movies	
	27-28th	Naracoorte Trip	Leader: Rod Wells	
<u>APRIL</u>	9-12th	K.I. trip	Leader: Wayne Goedecke	
	9-12th	Naracoorte trip	Leader: Peter Chappell	

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