

## **Cave Exploration Group**

South Australia

C/O SOUTH AUSTRALIAN MUSEUM NORTH TERRACE ADELAIDE

## **ANNUAL REPORT**

1974-75

NINETEENTH ANNUAL REPORT to be presented to the Annual General Meeting on Wednesday, 26th of February 1975 at the Museum Lecture Rooms - North Terrace, Adelaide at 8:00 p.m.

# CAVE EXPLORATION GROUP OF SOUTH AUSTRALIA NINETEENTH ANNUAL REPORT 1974 -1975

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#### PRESIDENT'S REPORT

The past year has seen many advances in a large number of the Group's activities, due to the hard work of the Members involved in each Project.

The records system now has most of the standard forms and sheets and the mammoth task of transferring all the past data onto them is progressing well. Trip cards should be seen on all trips in the near future, which will make the job of record keeping much easier.

The new standard (C.E.G.S.A.) A2 Map Sheets have been printed and work upgrading, rescaling and transferring the old maps to them is progressing very well. When this is completed we should have the most up-to-date set of cave maps in Australia.

During the year the Group set about the task of producing approximately 500 metres of ladder. Excellent progress has been made with the rungs cut and drilled, ferrules produced and some lengths of ladder completed, except for finishing off the ends. This will not only mean that the Group will have a completely new set of ladders, but also several of the more active members will have their own ladders, which should reduce the wear and tear on the Group's ladders. Also rescue ladders will be able to be kept at Naracoorte and Kelly Hill on Kangaroo Island.

With the continuing aid of the jack hammer and many keen diggers an easily negotiable passage has been opened up to the Great Hall area of the Victoria Cave at Naracoorte. A party of some 20 dignitaries from the Naracoorte Council and the National Parks and Wild Life Service were taken on a tour of the new area just after Christmas and apparently had no difficulty negotiating the new passage. I must mention the ingenious method (devised by some brilliant trog) of removing surplus rocks from the jack hammer work. This consists of placing the rocks in small plastic bags together with a detailed brochure explaining what the rock is and inviting the tourists to remove it from the cave as a sample of rare cave rock. Also of note in the Naracoorte area is the fact that the closest cave to the hut and the old standby for a quick warmup cave on a Friday night has suddenly decided to grow and produce miles (well nearly) of new passages and chambers and the most spectacular decorations in South Australia (might even give Tasmania a run for its money if the raves I've heard are true). These include a 5 metre straw and clear flowstone that the rocks underneath can be seen through. I've got to get my camera in there.

Our lines of communication and cooperation with the National Parks and Wildlife Service have been kept wide open again this year through Ross Gobby (Superintendent of Field Operations) and Peter Macrow (Naracoorte area Senior Ranger and representative on C.E.G.S.A. Committee). A joint working party consisting of representatives from N.P.W.L.S., S.A. Museum, Dept. of Education and C.E.G.S.A. was formed during the year to prepare a submission to the Australian Government for funds to improve the facilities within the Victoria Cave. If this comes to fruition it will give considerable boost to the paleontological work in the Fossil Dig in the Victoria Cave. This work is still progressing very well with new techniques being developed all the time to make the work easier.

To conclude this already too long report I would like to thank the Committee for the hard work they have done without having to bop them over the head to get my own way. It has made my job so much easier having a conscientious and hard working Committee. I must confess that I have not been as active as I would like to have been. Which means that I don't get to know the members as as I should and they don't get to know me either. There is a world of difference between sitting in front of you trying to rule the roost and getting amongst you socially on trips. I hope I can find the time to attend more trips in the coming year and get to know a few more of the members. If the Committee next year gives me as much support as the past Committee (if I am re-elected, that is) it should be a ripper of a year when we should see the results of the past year's work.

#### COMMITTEE

Your Committee for 1974 has been:

Athol Jackson
Ian Lewis
Anne Wilson
David Hawke
Max Meth
Ed Bailey
Wayne Goedecke
Graham Pilkington
Neville Pledge
Peter Macrow

President
Vice President (Membership)
Secretary
(Quartermaster)
(Library and Treasurer)\*
(Publications)
(Search and Rescue)
(Records)
Museum Representative
National Parks and Wildlife Service Rep.

 $^{\star}$  The post of Treasurer was subsequently relinquished by Max Meth and Anne Wilson undertook the joint position of Secretary/Treasurer.

#### SECRETARY'S REPORT

1974 saw the Group as busy as a cartload of beavers, due to the unceasing supply of energy poured out by, as usual, a select few. A lot has been achieved and the challenge thrown at the Group by John Foulds - to "pick ourselves up and do something useful" has been met and surpassed.

In the Records department, newly assigned to Graham Pilkington, wonders have occurred. Order and organisation, down to the last T, are the key-words now. Everything is dated, recorded and filed. Good work, Graham!

Corra-Lynn Cave has had the roughest treatment it has had for some time (and, may I add, dealt it out, too). Ian Lewis has unceasingly and devotedly surveyed and surveyed and is now in the throes of completing the final mapping sheets of the cave. Congratulations Ian, a well-earned achievement.

Regular Field Days have been reinstated in the past year. Group members have attended well and enjoyed themselves, adding a barbecue lunch. The emphasis on these days has been on abseiling and ladder pitch technique.

A new type of project, "clean a cave a month," is billeted for 1975. Lets hope to keep this aim, although straying is understandable, considering the new discoveries on the horizon.

More work has appeared in the form of ladder construction. The few opportunities that were available for this in the past few months have been quite well attended.

The Constitution, never to be left out, has also been under review. The suggested amendments will be presented at the A.G.M.

Unfortunately, there was the very low attendance of nil at the 10th Biennial Conference in Brisbane. Reasons for this may well have been the long distance and expected poor weather for Queensland at that time of the year. Even so, C.E.G.S.A. needs to be represented at such functions, to keep ahead and remain recognised in Australian caving.

Early in the year a Government Advisory Committee in connection with scuba diving in fresh water sinkholes and underwater caves was formed. Two of our members, Fred Aslin and Grant Gartrell were elected to the Committee. Ian Lewis has been elected to take over from Grant when he goes overseas.

One of the Group's valued members, David Hawke, has left South Australia for awhile to study at the University of Johannesburg, South Africa. David is responsible for a lot of work achieved at Naracoorte and was an excellent quartermaster.

Most of the General Meetings of the year were followed by films or slides, with a few guest speakers. Two guest speakers were Doug McLean, from the Climbing Club of S.A., who spoke on and showed slides on ladder and rope techniques, and Dr. Marker from the University of Johannesburg who spoke very interestingly and informatively on Karst landforms of South Africa.

C.E.G.S.A. had two successful dinners in 1974. The third C.E.G.S.A. / V.S.A. Eating Contest was on 29th June at Naracoorte, and thoroughly enjoyed. The Annual Dinner on 30th November took a slightly different form as a smorgasbord at the "Golden Door" restaurant. Attendance was down for the annual function, but "eat, drink and be merry" was definitely in force.

Presentations made at the Dinner were:-

Spirit of Caving	Dennis Burke	(for efforts in Victoria Cave)
Leather Medal	Joyce Bakker	(for not riding her bike to Naracoorte)
Leather Medal	Grant Gartrell	(for an exploding battery to which he claims he is innocent)
Leather Medal	Dennis Burke	(a jack harmer with a handle falling off)
Leather Medal	Ian Lewis	(for attempting to commandeer climbing E.T.S.A. poles in his sleep)
Leather Medal	Anne Wilson	(for aiding and abetting Ian Lewis in his dastardly doing with E.T.S.A.)

David Hawke received a beautifully chromium plated shovel as thanks for his work for the Group.

Noel Mollet presented Grant Gartrell with - wait for it - a POTTY???

Winners of the photographic competition were:

Athol Jackson the best general caving slide Tim Burke the best personality slide Silver spoons were awarded.

I feel the past year has been most successful. A lot of hard work has achieved excellent results even if a few worn out trogs! 1975 holds lots of promise if there are willing people.

Finally, my thanks, on behalf of the Committee, go to the Group for their support throughout the year.

Anne Wilson.

#### TREASURER'S REPORT

During the past twelve months our income has been greater than that of 1973, but we have not increased our balance since our expenditure has also been greater.

The sum spent on the purchase of equipment was the largest amount spent and has been far more than in previous years. It has mostly been spent on rope.

Trip leaders seem to have been more pressing and the amount of trip fees collected have increased.

Fortunately our income has sustained our expenditure so that our bank balance has remained steady from the beginning of the year. The account at present stands at \$618.34.

Account No.2, the slide account, has been very promising this year, paying for the drafting and mapping materials. The account stands at \$298.40. Account No.3, which is for the Alan Hill Memorial Library Fund, has been stagnant during the past twelve months with no further contributions. The balance remains at \$320.53. Contributions for the Fund are welcome and will be most appreciated if you have any cents to spare.

Anne Wilson.

#### MEMBERSHIP REPORT

For all those interested in breaking records, it appears that next year we will exceed the all-time\_high of 108 members in 1971, if the upward trend continues. So what!? So long as the evident enthusiasm keeps up, it won't really matter how many members we have, since the work output per head this year is greater than it has been for a long, long time, and the gulf between the knowledge and experience of the older members and the newer ones has been significantly lessening.

The plain fact of the matter is that our Group and its membership is consolidating, that is, our overall strength and collective enthusiasm is not frittering away in the form of disenchanted members losing interest. I pinpoint the reason for this as the decline of the "Experience Consciousness" syndrome, whereby older members are no longer ignoring or lording it over those new and eager to become involved. There is a lot more encouragement from us "oldies" becoming apparent, as we extract ourselves from our private caving projects at least long enough to help the others understand what we are trying to achieve and how we are going about it. The result will be (indeed. already is) keener new members who can begin with growing confidence to organise their own caving projects and interests within the C.E.G.S.A. framework. So if you've learnt something about caving in your years with the Group - teach someone else. This encourages membership.

There is nothing more off-putting to a prospective or even an official new member than being dragged off on some deeply advanced private caving project and then being expected to obey orders like a trooper, or risk the wrath of the trip leader. You can't teach people the art of digging or surveying simply by thrusting a spade or tape in their hands; all they learn from that is the mechanics of the job, and also not to go on a trip run by that particular b---- trip leader again. My message, therefore, is -  $\underline{\text{Encourage}}$  others to understand.

#### General Aspects.

The advent of Flinders University Speleological Society (F.U.S.S.) into the S.A. caving field my have affected the numbers of C.E.G.S.A. slightly, but if cooperation between the two groups has an easy passage, then there is much to gain. However Id still like to know why they have such ready access to our hut. Come on, FUSS, see if you can help out a fellow Speleo Society by extracting some extra Student Union funds for us!

I can also report (with suitable fanfare) the important news that at last we have on our mailing list the Italian Caving Society, "Speleologia Emiliana." We're not aware of the origins of our continental kinship, but I understand we have been receiving their newsletters for several years, printed neatly and entirely in ITALIAN, (even the photographs). Finally we have responded in kind, and are now mailing our ORSTRYLIAN publications to a Rome address. What's Italian for "G-pick?" or perhaps "Wombat?".

On a more dignified note, the Group early this year conferred its highest honour on Grant Gartrell whose face and voice are undoubtedly known to everyone attached to C.E.G.S.A. Grant has left his mark on South Australian caving throughout the whole spectrum of speleological interests, with digs, surveys, innumerable Committee positions, page upon page of entertaining newsletter articles, editorials and annual reports and endless backnown diplomacy all being encompassed in the short space of 13 years or so. We will be fortunate indeed to secure the services of another speleologist of his ilk in the next 13 years or so. Grant will be absent from the Group for a while this year, but such is his interest that he will know almost as much as we will of the coming year's activities, even during his absence. Congratulations, Grant, from all of C.E.G.S.A. (There is no truth in the rumour that the conferring of Life Membership is a signal for instant relaxation and diversion from caving - just look at Fred Aslin!)

Finally, the most tedious duty of the Membership Officer is that of posting the millions of newsletters that our Publications Officer manages to keep turning out. The conclusion has been that a "mailing night" is arranged (generally at the Naracoorte Hut) where all the budding address writers, stamp lickers, envelope staplers, rubber stamp bashers and membership card shufflers can indulge their whims. These occasions are rather mirthful, to put it mildly and I invite everyone to help out the new Membership Officer in this task in the coming year. Thanks to all those who helped me in '74.

	1972	1973	1974	1975
Honorary Life Members	7	6	6	7
Full Members	37	37	48	47
Honorary Associates	5	5	5	5
Associate Members	53	40	41	47
	102	88	100	106

Ian Lewis.

#### PUBLICATIONS REPORT

One thing I've learnt in the two years I have held the position of Publications Officer is never be satisfied, or at least never reveal your satisfaction. In last year's report I thanked members for their readiness to supply me with more than enough articles and trip reports for the newsletter. This year, the writers must have been resting on their laurels, or some other unmentionable part of their anatomy, for not only did the quantity of contributions fall off, but also some were received very late, making the task of producing a newsletter on time much more difficult. Special thanks are due to Sandra Sangster, who, despite the occasional lateness of material, always managed to type the stencils on time with great efficiency and willingness. Thanks are also due to those members who made the effort to support our newsletter by submitting articles and reports for publication.

The drop in contributions has prompted me to do a little investigation. Over 12 months, 4 newsletters (Vol.19 nos 1 to 4) listed a total of 24 official trips, these same newsletters (assuming they are representative) only contained a total of 14 trip reports. Even allowing for the occasional cancelled trip and reports covering more than one trip, the difference is still significant. Additionally of course there are those extra trips arranged at meetings and between individual members. So what happens to all the missing reports? No doubt the Records Officer would also like to know!

The last newsletter (Vol.19 no.4) and this Annual Report, are the first Group publications to be printed on A4 size paper. This should be aesthetically more pleasing to the eye, as the A4 size follows the proportions of the Golden Rectangle beloved by the Ancient Greeks (e.g. the Parthenon, whose sides and plan are in the golden ratio of  $1:\sqrt{2}$ ). After that delightful diversion, more practically, using the A4 size means the Publications Officer has slightly less work to do. A given amount of typescript can be printed on fewer A4 sheets than the old quarto size. Hence less time is needed for printing and collating, but typing and stapling times remain unaltered.

Last year I reported that stocks of duplicating paper were rather low and giving this as one reason for keeping the newsletter down to a reasonable size. This year, as the Group now possesses ample stocks of A4 paper, this restraint no longer applies, so let's see plenty of contributions in the coming year.

#### RECORDS REPORT

The last year has been one of preparation rather than action.

For the first six months I was involved heavily with the new A.S.F. Karst Handbook data assembly, being responsible for completing 'computerised' forms for every numbered karst in the State. Although this effort Used up all the Group's "spare" manpower (while not caving of course) it did serve to highlight the need for the break-up of the old S area into the new M, U, and L areas with area Y contracted. Other advantages were the forced examination of our allocated karst numbers (note that the previous use of "caves" in place of "karst" is inaccurate as it does not indicate numbered dolines and other features); the allocation of numbers to more karst features; updated karst descriptions (although this may not be evident in the new A.S.F. Handbook due to the 'computerisation' of descriptions); my own introduction to C.E.G.S.A.'s records and my indoctrination into the means and methods used by Committee to keep the Group operating. I was also pleased to have the time to sit and ponder the best ways to combine the various ideas from the many experts with my own vague conceptions as to how 'Records' should be run.

My problem is complicated by the Group's Constitution under which we must all work. It is out-of-date. Hence a few more months have been spent (in agreement with the Committee and sanction of a G.M.) rewriting the Constitution. Hopefully this updated version will become operative from the 1975 A.G.M.

I have attempted to keep the Group's members informed of my ideas for the Records function through articles in the newsletter. From the verbal replies I received I gather that the methods I intend to employ are satisfactory (after amendments due to discussions with interested parties had taken place). But the changes were mostly details which will no doubt be altered by future Records Officers anyway, although some changes would have been costly to implement later.

To summarise the year's preparation for the complete reorganisation of data held in Records, the following has been done:

- (a) Standard Mapping Sheets of A2 size designed and produced.
- (b) New Standard Mapping Legend and Symbols devised.
- (c) Trip Cards designed and printed. Their scope and method of use for past and future trips stated.
- (d) Karst (Cave) Report Sheets designed. Their scope and use are held back pending field trials.
- (e) Karst (Cave) Folders purchased and labelled.
- (f) Record Keeper's Manual started.
- (g) Map Holders (carry cases) are to be made but the design is not finalised. It will be A2 size and stiff to keep the maps flat during transport.
- (h) Various indices and systems constructed for the best (naturally that means best from my of view - future Records Keepers may change these to suit themselves) method to achieve the goals of Records - maximisation of Group activity leading to maximisation of speleological data entering Records; ease of handling the data within Records; and ease of researching data from Records.

Trip Leaders' Folders may be supplied when or if an appropriate folder has been decided upon. Different types may be purchased for different type or length of trips, or it may be found better to just supply the form and data in a simple folder and let each Trip Leader buy a folder to suit themselves.

The transcription of maps has begun. Transcription and/or sorting of data for the Karst Folders is about to start. Time estimates for completion of this work are difficult, depending as usual on the amount of aid given to me. A minimum of 2 years for the Karst Folders and anything up to 4 years for the maps is envisaged.

It should be emphasised that the initial setting up of the new Records' system will be expensive (in the order of \$600 of which \$400 has already been spent, mostly on the map sheets). The expense is of a once-only nature and is financed from the Slide Account (Account No. 2). Running costs will be higher than previously because the Group is to supply the map sheets and recording forms which were donated by the members supplying the map or data. The hidden cost to individual members constructing, this new Records system will be high in terms of time, transport costs, etc. but the benefits will be great in terms of increased knowledge.

Projects required by Records in the coming year include:

- (a) Establishing Bench Marks (fixed, permanent reference points for both location and elevation) along the Naracoorte cave belt and tying them to the national km grid and sea-level datum so that a unified cave map of the Naracoorte area can be produced.
- (b) Locating all numbered karst in terms of the new km grid. Towards this end, as well as for general use, a set of Lands Dept. 1:50 000 maps needs to be purchased. These can be bought as required.

If anyone is short of a good caving project in the coming year, come and see me (or the new Records Keeper, if I'm thrown out for being a spendthrift) and I will find you something suitable.

Graham Pilkington.

#### SAFETY AND TRAINING REPORT

No Search and Rescue Exercises have been held this year for various reasons - the lack of active support being one of them. Previous reports have noted that C.E.G.S.A. has been "very lucky" in not having any accidents each year, but I feel that this is rather an overstatement.

In practice, I think that South Australian caving only has three active and ever-present hazards:

- (a) Rough-and-Ready laddering techniques.
- (b) Suicidal Digging Projects.
- (c) Getting Lost Underground.

Laddering and associated vertical work has been dealt with on a systematic and progressive basis on the 5 or 6 Field Days held this year (a record!) and followed up on several trips. This follow-up is very important if the knowledge is to be absorbed and not forgotten. The comments in the Membership Officer's report apply here - that is, that experienced members of the Group should take more time from their special projects to encourage the newcomers and make sure they have a good knowledge of caving techniques. If experienced members don't know how to judge this, then they had better turn up to Field Days too, and should participate more than they have.

Suicidal Digging Projects are fortunately rare. One instance that comes to my mind was a dig in Corra-Lynn where a younger member of the Group began digging upwards into a dirt fill that fell in on him. It transpired that this dig had been deliberately left alone by another more experienced C.E.G.S.A. member for safety's sake. Moral:— if you haven't done a lot of digging in a lot of different situations, WATCH YOURSELF! Some years ago several cavers were blocked off by a sand collapse in Sand Cave and for some years after, they and everyone else were rather more careful how they dug and where. With the Group becoming more and more like semi-professional excavators all over the State, we must again exercise more caution if we are to avoid strife.

Lastly, the case of getting lost. The Group seems to be on the threshold of a "master cave" era, and I of course refer to Corra-Lynn Cave and the Naracoorte Reserve complex, in particular, Victoria Cave. In the future, we can expect to include other caves in the Lower South East (5 Corners Cave, Collins Cave etc) and some of the larger K.I. caves like Frosted Floor and the Kelly Hill system itself.

Consider Victoria Cave and Corra-Lynn Cave. If the call came out to find someone lost in either of these caves, we would be really put to the test. Leaving aside the possibility of injury, the organisation of parties would be colossal. We would need party leaders who knew the cave very well since the search would have to be divided into sections of the cave to cut down the search time.

The need for a thorough knowledge of each cave is obvious - so many of our cavers rattle off into side tunnels for a digging trip, and these could easily be ignored by a search team. To find someone in Corra-Lynn even for those of us who have been mapping it for 2 years would be a nightmare. Where would you start if someone was lost "somewhere in the Bushwalkers Chamber area ---- "? And as only 3 or 4 people know the cave extremely well, that cuts down the number of experienced search leaders to a threadbare quantity.

One answer is to have maps available. This is fast becoming a reality in the 2 caves just discussed. Another necessary step is to get non-mapping types to learn how to read a cave map competently, even if they are not interested in surveying and the associated work. Lastly, a couple of actual Search exercises should be run this year - perhaps one in each cave. Besides the searches themselves, this should provide the right opportunity for cavers to examine the cave and observe where they are going, instead of just following the trip leader. This again demonstrates the point that the knowledge of the more experienced members must be disseminated amongst the Group more than it has been.

One final point. With regard to the previous discussion, more people should be using the blackboard at the Naracoorte Hut than are at present. If no-one knows which cave you went to, how are they able to look for you? There are 90 or so caves in the area and I'd hate to have search every one of them in one weekend'. So there are certainly several challenges to be faced by the Search and Rescue Officer in the new year.

Ian Lewis.

#### QUARTERMASTER'S REPORT

The past year has been particularly active regarding the turnover of gear and also the interest shown by individual members in improving their personal equipment. This has meant that the Quartermaster has also been particularly active in a number of fields.

The major breakthrough has been in the improvement of our store of ladder. It has been a long-standing tradition in C.E.G.S.A. that each year the Quartermaster moans about the ladder situation. We have been able to break this tradition, despite a number of minor problems. These have been primarily in obtaining suitable materials to construct ladders to take the use (abuse?) which they seem to undergo. The construction of our new ladders has now begun and I would like to thank all those members who have given up their time in helping me with this project, and urge all who possibly can to aid the new Quartermaster in seeing it through to completion.

Once again we have had some problems with cave gates, particularly on Tindale's Cave. This has now been repaired, but the efficiency of the repair will only be seen with time. We should give thought to gating a number of caves to protect both the caves and the public and in particular, I would urge that Wombat Cave be gated as rapidly as possible as anthropological work is proceeding apace in it. The other cave deserving improved protection is Tantanoola Lake Cave, since the present gate is inadequate.

As I mentioned in my opening paragraph, there has been an increasing interest in improving the equipment used by Group members, although this has not all been positive, witness the non-returning G.G. type self-destructing Ni-Cad cells. There has been an upsurge in the use of wet cell headlamps, resulting in very little carbide being used by the Group. Climbing equipment is more readily available and being used, especially on Field Days with the adoption of Single Rope Techniques.

The past year has also seen an improvement in our 2-way radio installations, although there are still a number of technical problems to be overcome. Our thanks must go to Peter Robertson of V.S.A. for obtaining and installing a more efficient base station in the Naracoorte Hut, and also for making available his R.D.F. gear to aid in increasing the accuracy of the Corra-Lynn survey.

In conclusion, a most successful year, with more interest being seen in the technical side of caving. My thanks must go to all those who have both helped and supported me over the past years.

#### CONTENTS OF THE QUARTERMASTER'S STORE

#### Office

Dyeline print machine

Duplicator

2 Typewriters

1 four drawer vertical file

1 nap cabinet

#### Survey Equipment

2 miners dials

2 100' tapes, cloth, poor cond.

1 100' tape, steel

2 60' tapes, cloth

2 short stadia

2 triangular dial base-plates

#### General Equipment

175' cable ladder

75' cable ladder. emergencies only

11 slings

6 helmets

3 carbide lamps (2 u/s)

Bone Sieves

Carbide sieves

210' mannila rope (hauling etc.)

480' BS3104 No.4 nylon rope

Digging gear (no shovels)

Ladder making gear

Sundry etceteras and clutter

#### Search and Rescue Gear

First Aid Kits

2 sets webbing bands

3 field telephones & wire

1 Clarke stretcher, may be restorable

#### CAVING ACTIVITIES

#### Kangaroo Island

In strong contrast to the frantic inactivity of the past few years, South Australia's castaway County Carnarvon has been almost continuously invaded by cavers this year, with three trips including extended visits at Easter and

Dramatic discoveries in Frosted Floor Cave, as well as the location of at least five significant new cave entrances at Kelly Hill merely demonstrate how little we yet know of the region.

Preliminary excavation of a cave floor in West Bay Hollow, following a breeze, has been abandoned until sufficient manpower can be mustered to deal with a slumping earth bank. No opportunity has yet arisen for a coastal search for the predicted West Bay Hollow Efflux.

Aerial photographs continue to suggest cave entrances in the midst of near impenetrable bush, yet most known cave entrances are just not visible on the photographs because of small size and for scrub cover. If you want to discover caves, get yourself a good compass, a good pair of boots, a big water-bottle and at least three pairs of overalls (to be worn simultaneously) and head to Kangaroo Island.

As a cautionary note, don't underestimate the bush over there. Always tell someone where you are going and take 100 metres of line to pay out behind you so you can find your way back again. After you rapidly tire of stumbling around in the bush, wind your line in again. If you also have the forethought to provide yourself with hooks and sinker, you can then go to the beach and leave some caves for the next generation to discover.

#### Naracoorte

The Naracoorte area remains a focal point for much of the caving activity in S.A. The excavation of the fossils in Victoria Cave is continuing at a steady rate and the work there over Christmas saw the introduction of a screen washing technique for the collecting of the smaller bone material. This process involves the removal from the cave of all the excavated sediment, spreading it on sheets to dry and washing the dried sediment through fine screens. Apart from the small mammals birds and reptiles we have been able to collect our first frogs from the deposit using this technique. As the author has just received an A.R.G.C. grant to employ a technician, the preparation of the fossils should proceed apace in the coming year.

Studies of the regional geology were continued by an enthusiastic group from Flinders University Earth Sciences Association and their growing interest in speleology is evidenced by the formation of the second caving club in South Australia, the Flinders University Speleological Society (F.U.S.S.). The geological work by this group and the palaeontological studies by C.E.G.S.A. members formed the basis of an in service conference run by the S.A. Education Dept. at Naracoorte. This was attended by school teachers from the South East and its aim was to produce a guide book for school excursions to the Naracoorte Caves.

Exploration work has continued in other well known caves with perhaps the most notable discovery being the extensions to Blackberry Cave. Cathedral and Tomato-Stick caves have now been joined and the indefatigable Dennis Burke and his band have jack-picked their way from the Fossil Chamber in Victoria Cave all the way to the Great Hall.

The excavation of the fossil material from a cave at Henscke's Quarry has continued under the guidance of Fred Aslin and the cave now appears to extend beyond the boundaries of the quarry which must be a relief to all concerned.

The perennial debate about the future of the C.E.G.S.A. hut continues and meanwhile we continue to patch it and prop it up in readiness for another winter of mud, sand and possums. Although there now appears to be little hope of an improvement in our accommodation facilities there is a remote possibility that our research interests will be well catered for in a proposed new laboratory which featured in the joint submission to the Commonwealth Government.

The most recent paper published on the work at Naracoorte is by Van Tets, G.F. and M.J. Smith, 1974. Small Fossil Vertebrates from Victoria Cave, Naracoorte, South Australia III. Birds (Aves) Trans. Royal Soc. S.A. 98(4): 225-228.

Rod Wells.

#### more Naracoorte

In October 1974, the National Parks and Wildlife Service informed C.E.G.S.A. that Federal Government funds may become available for developing the tourist potential of the Victoria Cave, Naracoorte. To obtain these funds, it was essential that a case be made in the form of a submission for presentation to the government as soon as possible. Therefore, N.P.W.L.S. invited C.E.G.S.A. representatives to a preliminary meeting, at which a multi discipline working party was formed and given the task of preparing a submission. To this working party, C.E.G.S.A. offered a proposal, which became the basis for the submission that is now before the Federal Government for their consideration.

Briefly, the submission proposes that Victoria Cave be developed to allow a tourists' self-guiding system to operate with a separate entrance and exit. This will allow visitors to set their own pace, walkways would be well defined and calcite formations be protected by distance, rather than the present unsightly metal stanchions and wire. A separate exit would be made through the Little Victoria Cave, which is conveniently close to the existing car park. Attendants would be positioned at intervals throughout the tourist portion of the cave to answer questions and provide security. Steps would be provided at each side of the fossil dig, with a connecting walkway at a new level. This will enable visitors to view the full extent of the fossil deposit.

A surface museum, or to use the latest in phrase "an interpretation centre" will be provided adjacent to the existing kiosk. This will house a display, ranging from how caves are formed to the discovery, recovery and preservation of fossils. A portion of this building will be set aside and equipped as a laboratory for the processing of fossil material. A glass partition will permit visitors to see into the laboratory and view work in progress.

The whole scheme has been costed as follows:-

Development of	the Victoria Cave	42,500
Interpretation	Centre Building	80,000
Interpretation	Display	45,000
Total		\$167,500

In the sort of world we cavers move in, this is a staggering amount of money, but it would be well spent. In fact, it would be a sound investment. Anyone who has seen the number of visitors who are turned away during holiday times will readily acknowledge that something drastic is needed. Very little has been done to the cave to develop its tourist potential since it was opened to the public, in 1898. Let's hope this submission does the trick.

Ed Bailey.

#### more Naracoorte

Besides the activity in the Reserve and in Victoria Cave, a large amount of general work in the area was instigated by David Hawke for his thesis in Geomorphology. This involved much rummaging through old records, trip reports, maps etc. and the deeper we rummaged the worse the records appeared. So on the 10 or so trips that were run for the study work, many old locations were chased up and a large amount of mapping to high grades was done. All in all, 15 caves were surveyed, including Tomato-Stick and Wombat (since the Records had nothing on either of these). Others in the district were Haystall Cave, Joanna Bat Cave, Saddle Cave, Haynes Cave, V.D.C. Cave (part finished only), Jamtin Cave, Wire Cave, Elderslie Cave (formerly Bone Cave - part finished only), sections of Corner-of-the-Fence Cave, sections of Blackberry Cave, the back end of Alexandra Cave, and two caves in Henscke's Quarry - a notable achievement.

Secondary activities included the joining of Cathedral and Tomato-Stick Caves through a yucky mud crawl and pushing two good digs in Corner-of-the-Fence Cave, the discovery and mapping of Middle-of-the-Road hole (30 minutes Work!) and an unnamed entrance nearby, the re-examination of an old tube found by the Field Naturalists near Haynes Cave and of many runaway holes on the east side of the ridge which were caught in the act of "running away". The end result was an honours degree for Dave, which he insists was due in no small measure to the contribution of all the C.E.G.S.A. trips, the filling in of a lot of lost data, and a series of extremely rewarding and satisfying trips.

There is a tremendous amount of work to be done in the Naracoorte area still, and will be for many years to come. Don't ever get concerned about not leaving anything for the next generation, unless it is formation or nice tight natural squeezes!

The work this coming year will concentrate on the total re-mapping of Victoria Cave, using the V.S.A. Radio Direction Finder (they don't know about this yet!) before we find too much passage to cope with. There will also be work in the caves around the kiosk and hut areas to coordinate them on a one-kilometre grid basis.

Naracoorte now boasts almost 100 caves of its own, since Records were re-arranged to separate the Upper and Lower South Fast. The new prefix letters are "U" and "L" the old "S" number has been scrapped and the "S" caves along the Murray River have been assigned the letter "M". This year a new State Cave List may be published, since the A.S.F. handbook will probably be held up for some time yet.

#### Yorke Peninsula

Corra-Lynn Cave was still the cause of more trips this year than anywhere else, as the surveying rolled on. We have 6.4 km (4 miles) of passages on paper with a few very small sections left unmapped or cursorily sketched. Just this week I have finally drawn up the entire cave at the new metric scale of 1:250 (1cm rep. 2.5 metres). All we now need is the correct dyeline printer to print them. There are 15 (!) sheets of cave map, each 40 cm square, which would be more than enough to paper one wall of the museum lecture room. These are split into 3 groups for each of the 3 levels. It comes as quite a shock to those of us who know Corra-Lynn well to see just how simple the cave is, level by level only. Looked at in this light, the mind boggles at the amount of "spare" area throughout the cave, that should have passages in it -- I estimate that if the geology is uniform and consistent with that of the known cave, there should be another 6 km or so lurking nearby. Cartainly there is great potential for scientific "Diglodites".

The advent of R.D.F. (Radio Direction Finders) has improved the speed, accuracy, efficiency and simplicity of surveying trips no end, and hastened the completion of this epic, which has taken 2 solid years of work, almost to the exclusion of everything else (except one Nullarbor expedition and the surveys of 14 Naracoorte caves!). This gadget is a must for Victoria Cave.

I think this is the correct time to offer my sincere gratitude to everyone who has helped me in this project. So many cavers have been co-opted as chainmen in the surveying teams that I believe nearly the entire Cave Group has been pushed through the cave somewhere. To those who have helped me so regularly that they know the place backwards, I can only say that I hope the maps themselves and the new cave to be discovered from them will provide the Group with pleasure and excitement for decades to come.

Town Cave (Y-2) received a couple of visits this year, the first being a well coordinated effort to remove 30m of solid bore casing and sundry broken timbers. This was highly successful, especially with the oxy equipment cutting 5m lengths of piping off as it was winched out of the hole with a vehicle, and the shaft has since been abseiled and laddered in complete freedom and safety. Well, almost complete safety, as one person forgot to put a protective covering on the abseiling rope to prevent it cutting on the sharp metal trapdoor edge while I was bouncing around from side to side in the 34m shaft examining the walls. DON'T ever make this mistake, anyone, and most of all with this particular cave.

The renamed Bone-Stone-and-Bottle Cave (Y-18) in Goldsworthy's paddock received great attention from Dennis Burke and the troops, to the extent that at a depth of nearly 18 metres, they have reached the top of what appears to be a large chamber, nearly chock-a-block full of clay and rubble. It is hoped that some tonnes of this can be removed down along one wall to hit genuine airspace-type cave (which is generally easier to breathe in than silt-piles). There are still 16 metres of depth to water and not an unreasonable chance of success.

Windmill Cave (Y-3) was bottomed for the first time in many years and gives an impression of being remarkably similar to the crevasses in Corra-Lynn. This would be well worth a clean-out and a dig, as the entrance shaft is 25 metres deep, and it may go in the same direction as the larger cave.

Ian Lewis.

#### Murray River

Since it's no fun to go caving by holding your breath and being pushed along by submerged logs, the Group didn't even attempt to look at Punyelroo Cave, Swan Reach. Let's hope when the water finally drops that the cave roof doesn't do likewise on the first trip in! It's also high time we re-visited Murray Bridge Cave (wherever that is) and had a thorough look at it (whatever is in there) to record it for posterity (for whatever good that might be).

Ian Lewis.

#### Flinders Ranges

One trip braved the ice of the June long weekend to do some locations and general tourism/familiarisation runs in the Buckalowie area. Mairs Cave (F-3) had 3 metres of superbly clear and relatively warm water at the bottom of the shaft, a result of the highly unseasonable rains of the 1974 season. The cave was completely drowned, as was Clara St Dora (F-4) nearby, where the trip leader attempted her first cave dive by striding straight into the water which was indeed deceptively clear. It is understood that water of this quantity has not been seen in either cave since before 1930, in the days of the guano mining. Both caves probably feed the efflux that was discovered slightly downstream in the walls of Buckalowie Creek and the flow rate has been such that the water has dropped about 5 metres in the following six months.

Two caves were successfully relocated (F-27 and Lizard Cave F-28) and mapped to grade III. Arcoota Creek cave was also visited and a comprehensive survey of all the surface features on the hilltop was made, taking longer and longer to finish as more and more geological features were found.

The rediscovery of Mt Remarkable Blowhole (F-1) was a real event, and prompted a follow-up trip shortly afterwards. The total depth to water level (discovered only this year) is 46 metres and therefore one of our deepest caves, with a spectacular slit shaft entrance pitch of 34 metres. With a fit and competent party, this cave could be pushed through the hillside for a considerable distance along the outcrop and will undoubtedly attract further visits. Like Town Cave, it is a challenging and rewarding hole.

Ian Lewis.

#### Nullarbor Plains

Several spectacular discoveries were made at the beginning of the year on the 2nd Nullarbor Cave Diving Expedition. A total of 1300 metres of new cave was discovered with relatively little effort and 2000 metres of cave surveyed - a tremendous effort and the biggest contribution to Nullarbor knowledge since the Mullamullang Expedition of 1966. Briefly:

- (1) <u>Tommy Grahams Cave</u> was surveyed and dived, and 350 metres of passage including a huge dry chamber were found. This has since been extended another 50 metres to a further small airspace, not yet fully investigated. Total length is therefore 550 metres in a straight line.
- (2) Pannikin Plain Cave was also completely surveyed (total length 360 metres) and extensions of 15 and 100 metres of submerged chambers were discovered at each end in the two lakes. 75 metres of rockpile passage was also discovered, still going and with a breeze at the end.
- (3) <u>Warbla Cave</u> was dived for 50 metres, with the faint possibility of more to be found. A spectacular 45 metre abseil was undertaken in the exploration of the cave's entrance doline.
- (4) Koonalda Cave was dived after a marathon slog through two very long muddy lakes and a large rockpile. 120 metres of wet passage with a large circular lake chamber were found, and another 40 metres discovered in a side lake on a later trip. This cave now is 1350 metres long but further underwater extensions are not obvious.
- (5) <u>Cocklebiddy Cave</u> has been pushed on a separate diving expedition for a distance of about 550 metres at a constant shallow depth, and is now simply a huge, straight, sloping-and-horizontal chamber nearly 1000 metres long, with more than half being water-filled. There is simply no end to it, and there is a possibility of it being an underwater version of Mullamullang. Further extension will require diving of a highly advanced nature which we haven't really developed yet.
- (6) <u>Murra-El-Elevyn Cave</u> yielded 300 metres of dry and well-decorated passages which haven't been pushed very hard at this stage. The discovery was aided by the presence of a strong breeze and hundreds of bats that had been seen coming from a low chamber on a previous C.E.G.S.A. expedition. This cave was also mapped in its entirety, and is 650 metres long. The potential for further dry extensions is very strong, and the cave is earmarked for exploration on the next trip, planned for early 1976.

(7) <u>Mullamullang Cave</u> also produced another 300 metres of very well-decorated crawls and the Easter Extension was briefly examined. The next expedition planned for this cave will concentrate on the systematic surveying of this maze, as long as Corra-Lynn Cave and on at least 4 levels instead of 3. Experienced surveyors will be needed!

One other aspect worthy of mention here was the kind loan of the original Diprotodon Magnus, made by Captain J.M. Thomson years ago. This bulk-lighting powerhouse provided some quite spectacular shots of the larger halls, and I would like to thank the Captain for making it available to us for that purpose. I hope vie can use it again in 1976.

Never write the Nullarbor off - there's so much still to be found.

Ian Lewis.

#### Glenelg River

Two trips to the river this year were extremely enjoyable and profitable too. Cliff search along about 15 km of the river resulted in discoveries of 2 caves (Lookout Cave (dry) and Crawl-up-the-Creek Cave which is an active efflux) and several interesting dig sites. Visits to P.M.R., Amphitheatre Bend, which also needs a thorough dig in it, 1886 Cave, Snowflake, "S-161" and "G-14" provided a different caving experience for most of the 20-odd people on the trip. A rapport was established also between C.E.G.S.A. and V.S.A. on the combined efforts of cliff searches along the Glenelg, and we are now a little more clued-up on the Lower Glenelg National Park, thanks to the very friendly liaison with the resident park rangers, who helped so much with the running of the trips.

Ian Lewis.

#### Bordertown

Thanks to C.E.G.S.A.'s Bordertown representative, Champnesses Cave was visited and surveyed one Sunday on the way home and a good dig was begun. We are hopeful that there are others besides this cave and the nearby Mock Cave, and more enquiries would be interesting. A spectacular runaway hole was observed in full flow, just out of Mundulla, with an estimated inflow of 4 cusecs (cubic feet per second, and I  $\underline{\text{don't}}$  know what the metric rating for this measure will be) - anyway it was  $\underline{\text{flowing}}$  like hell! The water-level in the saucer-shaped runaway hole (20m diam.) did not alter at all throughout most of the winter and spring, indicating a 4 cusec soakage rate. It was not dived for fear of being sucked through a hole in the muddy bottom and having to swim through to Robe on the coast! Keep Bordertown in mind, because there is plenty to be found.

Ian Lewis.

#### Eyre Peninsula

No trips were run to the area this year and it is fairly unlikely that attention will be diverted to the area, with so much interest being shown at Naracoorte and areas closer to home.

#### Cave Diving Lower South East

The last few annual Search and Rescue reports have begun with brief descriptions of the year's cave diving deaths. Well, another one occurred just before Christmas, bringing the number of diving deaths to 11 since 1969, when the first two fatalities occurred in Kilsby's Hole. Like several of the others, the diver here appears to have exceeded his capabilities in the deceptive conditions, and his companion was very lucky to survive. Public reaction was fortunately less hysterical than on previous occasions, as if everyone is now either getting used to the idea of sinkhole deaths or are more aware of the dangers inherent in the sport when human endurance is pushed too far.

However, complacency about diving deaths is certainly not the attitude of the Government-appointed, "Advisory Committee on Diving in Freshwater Sinkholes and Underwater Caves", to which C.E.G.S.A. has contributed much relevant information and opinion. The Group has two representatives on the committee of eight which also has members of other diving organisations, and Government delegates from the Public Health Dept., Dept. of Tourism, Police Dept. and the National Safety Council.

Recommendations made by this Committee, now becoming public knowledge through press coverage, are:

- (1) Warning signs to be erected at the entrances of about 20 of the most popular sinkholes, detailing the dangers of that particular hole and of cave diving generally.
- (2) A special Cave Diving Certificate with a photograph of the holder, which is a guarantee to the general public (especially the landowners) that the diver has been instructed and examined and is competent to dive in caves of varying difficulty.
- (3) Permission of the Landowner MUST be obtained prior to diving, and under  $\underline{\text{no}}$  circumstances are the Cave Diving Certificates to be regarded as a substitute for open permission.
- (4) The maximum safe diving depth is now defined as 37 metres (120\_feet), a significant restriction when it is remembered that 7 of the 11 deaths occurred at depths of 55 to 60 metres (180 to 200 feet).
- (5) These major decisions are to be publicised heavily throughout the diving community and the general public (particularly in the South East) are to be informed of all the new developments as they are resolved within the committee.

There is no way that deaths in cave diving can be completely avoided, and it is a sad reflection on the state of things that people talk in terms of "when" the next death occurs, not "if". However, divers who continue to exceed the reasonable limitations recommended by the Committee should now realise that the responsibility for their actions lies directly with themselves, not the landowners or other associated persons. Having contributed to the findings, C.E.G.S.A. can only wait with other bodies to see how their recommendations bear up in practice.

The Issue that still remains to be pursued <u>in depth</u>, however, is that of Liability in the event of a cave diving death. In all the press reports released by the Advisory Committee through the Minister, no attempt has been made to define the legal standing of the various parties who could be deemed at least partially responsible. These include landowners, clubs and instructors who give the O.K. for divers to go down the sinkholes, and even rescue divers, whose involvement leaves them wide open to court cases brought by relatives.

It seems therefore that the Government Investigation cannot be complete unless the legal aspect is pursued to the end. This is <u>essential</u> as the goodwill of the landowners no doubt depends much more on the defining of their legal status than on all the other factors. There must be legal cases of precedence overseas in the U.S.A. and Europe, and while the various jurisdiction processes differ from country to country, the basic issues of suing and liability would be there. The issue of liability must be solved in order to preserve the situation as it exists at present, being a rather fragile "honour" system that has still to be tested in court. Hopefully, this will not be necessary if a strong lead is given by the Advisory Committee or one of its authorities.

Ian Lewis.

#### Lower South East

Relatively little has happened this year in caving terms compared to the large out-put of previous years. Surveying in Furness and Balde's Caves has been completed after much arduous work. Furness Cave has been described as "---" (with all expletives wet deleted) since its average height is about 20 cms with muddy and knobbly wet flowstone floors and a preponderance of smelly chook feathers in the entrance. After surveying Furness Cave, where they couldn't even stand the dial up, Balde's Cave was a real luxury with a roof height of 30 cms. No wonder everyone wants to come up to Naracoorte after being poked into these! Considine's Cave has also been mapped and several dolines in the district have been cleared out for digging - one, full of logs and rubbish, was burnt out to gain access. And Snake Hill survey is still going, like the cave itself.

Ian Lewis.

#### EXPENDITURE

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S.A.M.A.F. subs.	14.00	
A.S.F. Capitation fee	81.00	
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Publication	61.40	
	175.70	175.70
Stationery		102.96
Postage		46.61
Purchase of Equipment	164.00	
Ropes Ladders	164.20 100.00	
Carbide	32.00	
	296.20	296.20
Social Dinners	0.40	
Naracoorte Annual Dinner	242.10 148.20	
	390.30	390.30
Hire of Lecture Room	330.00	16.50
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Petty Cash		25.00
Cash in Bank		618.34
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INCOME		
Membership Subscriptions		
Full Associate	155.00 70.00	
Country	43.06	
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Sale of Publication		138.32
Trip Fees		149.22
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