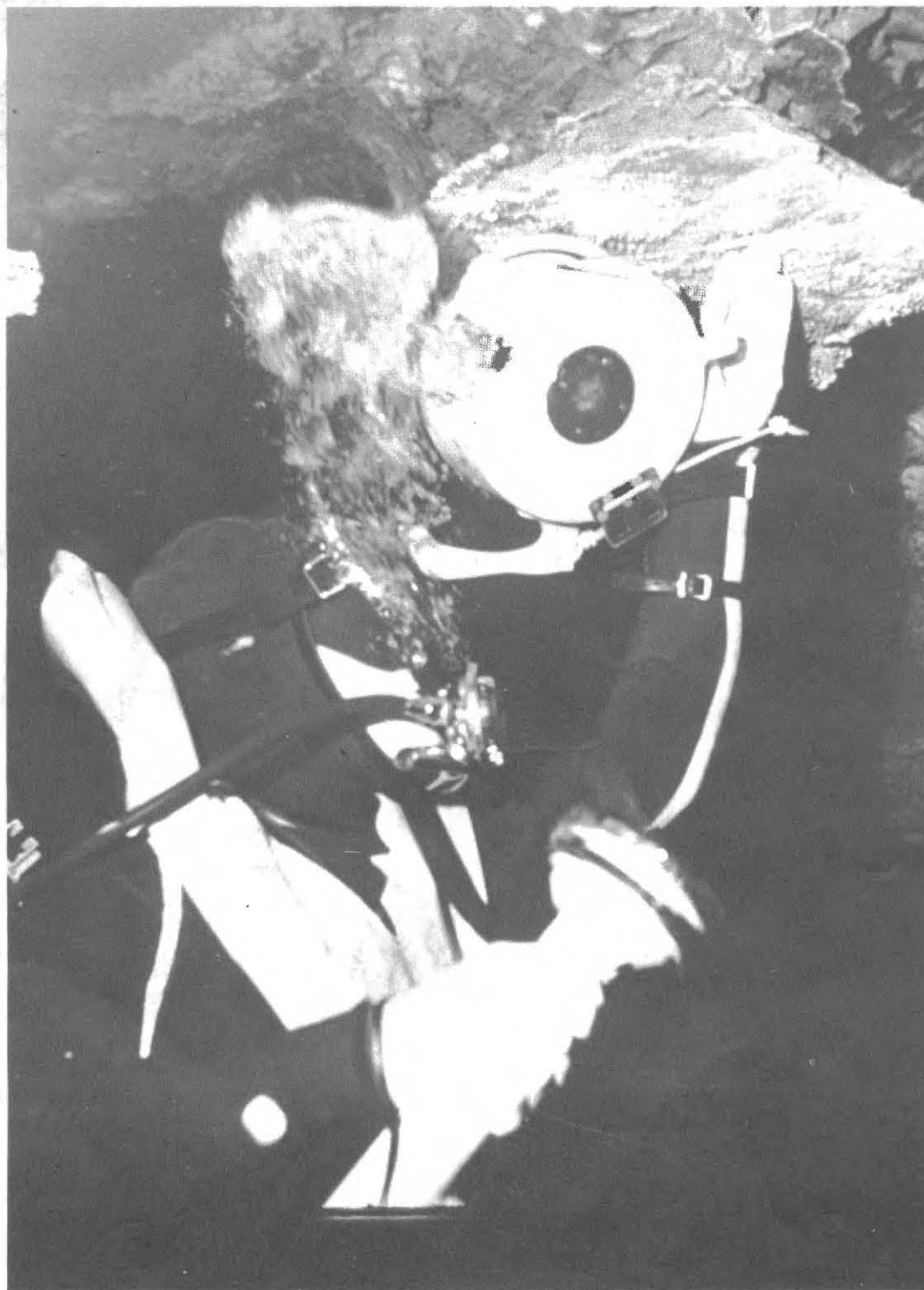


# ASF

## NEWSLETTER

Winter, 1979, No. 84



*"Adjusting an underwater safety line"*

B. & W. Print by Glenn Pure from colour slide by Ian Lewis

### THE AUSTRALIAN SPELEOLOGICAL QUARTERLY

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# ASF NEWSLETTER

**Number 84 , Winter 1979.**

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My apologies to those Societies who have kindly sent contributions to 'Down Under All Over'. Space does not permit the inclusion of this section in Issue 84. Rest assured that a copious section will be available in Issue 85. I recently sent a form letter to all member and affiliated societies regarding 'Down Under All Over'. The response has been good, coming from several new contributors. If your club/society has not sent a precis of activities to me, please try to do so. The newsletter is one method by which clubs/societies can keep informed of each other's activities throughout Australia. Please send also articles for future issues of the newsletter.

Two events in the future are the ASF Committee meeting in January, 1980, and Cave Convict in 1981. Inform your delegate to the meeting of your views on any matters you feel should be on the agenda, and he/she can send this to Tony for inclusion in the meeting.

So, participate in any decision making, and contribute articles to your newsletter. The ASF is what you make it.

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DEADLINE DATES FOR FUTURE ISSUES - Nos. 35, 86 and 87 are 15th. October, 1st. November, 1979 and 1st. March, 1980, respectively.

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## CAVE DIVING IN AUSTRALIA

Ian Lewis

The following series of articles have been collected together to give Australian cavers a good look at Australian Cave Divers and their activities. Cave diving is the realm of a relative few, and the achievements are not always well publicized for two reasons, namely :-

- (a) Not many people have heard about cave diving, or understand what we are doing...
- (b) Some of the discoveries that have been made are too dangerous, or simply too advanced for the information to be widely distributed among divers of only general open-water competence.

These factors have perhaps worked against cave divers a little, in hindering a wider acceptance of the sport by the public, and even the acceptance by speleologists. It's amazing - I hear speleos who shudder at the thought of a cave dive, yet are quite happy to suspend their lives from a single rope over a rock ledge, or under a waterfall. It's really all relative!

However, a little understanding of the distribution of diveable caves, and the location of the people who dive in them, will help establish the peculiarities of this specialized branch of diving/caving. The bulk of cave diving in Australia is undertaken in the lower South-East of South Australia. Within an area of thirty kilometres by fifty kilometres, there are possibly over 150 caves, fissures and sinkholes that extend below the water table. There are many sinkholes that reach great depths. Some exceed eighty metres in depth, and have never been bottomed owing to the cold water temperatures, and most importantly, the limitations of equipment and the limitations of the divers themselves. These factors at present restrict safe advanced deep diving here to about fifty metres, although the recommended depth limit for sinkhole diving, (set by the Cave Divers' Association of Australia), is thirty-six metres.

The majority of the rest of the caves are enlarged joints, or medium sized chambers, partly or completely water filled. Some are very clear, but most have very liberal quantities of fine black silt, resulting in a further difficulty during exploration.

The lower South East of South Australia is the most popular cave diving area, but diving activity is restricted by 450 kilometre journeys from Melbourne or Adelaide. There is a 'tiredness factor' present even before the weekend's diving begins, coupled with the need to leave the area relatively early on Sunday afternoons to return home. This is the principal reason why so little systematic exploration and recording would seem to have been done in the area. On a typical weekend, perhaps no more than four hours is actually ever spent in the water, and often one quarter of this is decompression time before exiting. It's a slow business, and energy consuming!

There are several other areas of cave diving in Australia, but none are as easily accessible as the lower South East. Any speleo who has not heard by now of the underground lakes of the Mullarbor Caves doesn't know his/her subject! Out there, highly advanced penetration diving, (i.e. long distance traversing) has been required to explore extensive tunnels leading off lakes. The logistics of a Mullarbor Cave Diving Expedition are large, and becoming larger. A recent expedition to Cocklebidy Cave (N 43) had a supply of twenty-four diving tanks to be used on an eleven hour exploratory dive, in a sump 2,000 metres long, with only one large air space - an undisputed world record! The end has still not been reached.

In the eastern states of New South Wales, Victoria and Tasmania, cave diving is fairly rare, and probably rewarding only for fanatics! Stream sinks and resurgences form all the cave diving in these areas, and systematic exploratory diving has been done by ASF members at Jonolan, Yarrangobilly, Bungonia, Wyanbene, Cliefden, Narrangullen, (New South Wales), Buchan, (Victoria), and Mole Creek, Junee-Florentine, Hastings, (Tasmania). Conditions are very cold, while passages are very small, and usually dirty, requiring a great deal of energy to explore. The two reports in this issue give some idea of the differences between Mullarbor conditions, and cave diving in Tasmania.

The unique quality of the lower South East sinkholes, and the technical challenges of the Mullarbor diving, place the sport in Australia in a special perspective in world wide terms. We are fortunate to have not one but two special areas to dive in, and cave divers have a special duty to ensure that future divers have the same privilege - that of being able to explore the unknown for themselves.

## CAVE DIVERS' ASSOCIATION OF AUSTRALIA



Ian Lewis

**CAVE DIVERS' ASSOCIATION OF  
AUSTRALIA**

(Incorporated in South Australia)

This organization was formed in 1973 after a spate of multiple drownings in the caves and sinkholes around Mount Gambier in South Australia's lower South-East, in view of the ominous threat of closure of the sinkholes to all divers by the South Australian Government, as a result of public alarm and concern.

The Association runs the only cave diving, training and testing programmes in Australia, with an emphasis on sinkhole diving. This has been expanded into pump and siphon diving, and penetration dives on the Nullarbor Plain. Over the last few years, as the quality of divers has improved, and the challenge of new areas has come to our notice.

Membership is open to anyone, and training and testing is provided at regular intervals, after the member produces evidence of the successful completion of a basic SCUBA course, and produces proof of sufficient open water diving experience.

The Association is not a club, but an organization which aims to promote safe and sensible attitudes to diving in caves, by publicizing its activities to appropriate interested groups—such as all diving clubs, ASF affiliated clubs and other caving clubs. It is the desire of the Association that any caver interested in cave diving should contact the CDAA for information on techniques, required equipment and testing.

There are CDAA members in five states—New South Wales, Victoria, South Australia, Western Australia and the Australian Capital Territory. South Australia serves as the headquarters for the Association, although it is the intention to have committees in each state administering and training cave divers, in ways to suit local conditions. At present, South Australia and Victoria have committees doing this, with individual representatives in New South Wales, Western Australia and the Australian Capital Territory.

As its baseline activity, the CDAA has listed the popular sinkhole and cave diving sites in the lower South East and divided these into three "Categories" on the difficulties of diving conditions and hazards. These are as follows:-

Category 1. Open sinkhole with no submerged passages.

Category 2. Sinkholes with submerged passages leading off.

Category 3. Waterfilled caves with submerged passages and silting conditions.

Beyond Category 3, there are a number of harder degree dives in adverse conditions in all the cave diving areas. This type of diving is restricted to advanced cave divers, and is the most serious aspect of the sport. The CDAA does not attempt to test this level of competency, as the demand for such dives by the general diving community is almost nil.

For interest, the Categories are as follows:-

### Category 1.

Goulden's Hole	L3
Little Blue Lake	L9
Hell's Hole	L40
Evans Ponds	L159-
(three ponds)	60-61

### Category 2.

One Tree Hole	L7
(Wurwurlooloo)	
Ela Elap	L14
Ten-Eighty	L42
(Simpson's)	
The Sisters	L43
The Black Hole	L47
Piccaninnie Ponds	L72

### Category 3.

Allendale Sinkhole	L11
The Pines	L61
Fossil Cave	L81
Max's Hole	L100
The Shaft	L158
The Bullock Hole	L163

THE CAVE DIVERS ASSOCIATION OF AUSTRALIA, (Continued)

The "I", and following numerals have been allocated by CEGSA and have been taken from the Group's Occasional Paper No.5, "South Australian Cave Reference Book", by I.D.Lewis.

The CDAA has established relations with landowners, Government and private, through a steady public relations campaign, and constant contact with these through its national committee. In order for a diver to dive in a Categorized hole, he/she must present to the landowner, in person, a sealed CDAA certification card, containing a photograph of the holder and stamped in red to indicate the standard to which he/she has been trained and tested. Landowners can, and sometimes do, refuse permission to divers about whom they do not feel confident, or divers who do not present the right credentials.

The CDAA sees as its main aims those of promoting safe cave diving, safeguarding the interests of cave divers and educating both divers and the public about the nature of the sport, its hazards and its attractions.

\*\*\*\* - \* - \* - \* - \*\*\*\*

PUBLICATIONS AND INFORMATION AVAILABLE FROM THE CDAA.

The principal activities relating to the Cave Divers Association of Australia, are set out in the "Information Bulletin" of March, 1978. This production covers the following fields:-

- Aims and Objectives of the CDAA
- The category system for sinkholes and caves
- Relations with landowners and permission to dive
- Equipment requirements
- Emergency procedures for the Mount Gambier area
- Decompression tables

This publication is available free to all, from the addresses at the end of this article.

A newsletter, entitled "Guidelines" is also published several times a year for members, but individual copies can be made available elsewhere as requested. As said before, the aim of the CDAA is to educate through communication and training, and not to restrict information to its committee alone. Items featured in "Guidelines" are testing programmes and the relevant dates, development in equipment and the use of it, changes in policy from time to time, which affect relations with property owners, and so on. All this, with articles of general cave diving interest.

The CDAA organizes a bi-ennial conference at Mount Gambier in South Australia, and has produced "Occasional Paper No.1"- a report of the 1977 Conference. In this publication, there are seven topics covered in thirty-two pages, namely:-

- The First Years of the CDAA
- A Summary of Australian Cave Diving Deaths
- Penetration Diving on the Nullarbor
- Cave Diving Lights
- Cave Diving Reels
- Geology of Caverns
- Mapping of Underwater Caverns

Cost of this Paper is \$1 post paid. Orders can be taken at the addresses listed at the end of this article. The next Conference has been planned for August 1979, in conjunction with the Annual General Meeting.

A selection of other cave diving publications can be obtained through the CDAA. Principally, these are the cave diving papers produced in the United States by the National Association of Cave Divers, (NACD). Some are very detailed, and are good instruction manuals, while others are conference proceedings of varied application and relevance to Australia. Work is proceeding slowly on compiling a Handbook of Australian Cave

PUBLICATIONS AND INFORMATION AVAILABLE FROM THE CDAA, (Cont.)

Diving to cover the special conditions and developments of the sport in this country, but this may not be available for some time yet.

The addresses for ordering CDAA publications are as follows:-

CDAA,  
P.O.Box 2161 T,  
G.P.O., Melbourne, Vic., 3001.

CDAA,  
P.O.Box 290,  
North Adelaide, S.A., 5006.

\*\*\*\* - \* - \* - \*\*\*\*

## CDAA POLICY ON NULLARBOR CAVE DIVING

P. Stace

Effective from 1.8.78.

### PREAMBLE

Owing to the increasing cave diving interest in the Nullarbor Plain, a policy has been prepared to protect the interest of all parties concerned, and to promote safe diving.

In the past, diving in this region has been in general, conducted by well prepared and organized groups. It is expected, however, that the completion of the highway will see an increasing number of divers travelling through this area, who will attempt to dive these caves.

Because of the extreme difference in the type of caves in the Nullarbor, compared to other regions, it is felt the unprepared diver visitor will be subject to great risk.

To assist and promote safety among persons wishing to dive these caves, the Cave Divers Association of Australia, propose the following policy.

### THE POLICY

Approval to dive the waterfilled caves of the Nullarbor Plain region will only be given to people complying with the following;

1. All diving personnel in any party must be financial members of the CDAA, and hold at least a Category 3 Certificate.

2. A written report on the intended expedition must be forwarded to the secretary of the CDAA, at least one month prior to departure.

Information required in the report is as follows;

- (a) Names and addresses of all diving members of the party.
- (b) Names and address and telephone number of the leader of the party, and any groups, organizations or clubs associated with the proposed expedition.
- (c) Number of any non-diving members of the party.
- (d) Purpose of the visit. (e.g. scientific, exploration etc.)
- (e) Names of caves and expected dates of the visits.
- (f) A brief description of the diving methods to be employed, equipment to be taken, experience of members, (e.g. rock climbing, caving, first aid, etc.) to give the Committee an overall view of the preparation and experience of the party.

### APPROVAL

Approval will be given in writing by the Committee subject to permission to enter properties being given by property owners, the appropriate government department and or private organizations having an interest in the caves, (e.g. Speleological Groups.)

Approval will be denied any individual or group, who, in the opinion of the Committee, is not sufficiently competent to undertake safe cave diving in this area. It is envisaged that the Committee may make suggestions, which will make the expedition safer and more enjoyable.

\*\*\*\*\* - \* - \* - \*\*\*\*\*

## CAVE DIVING EXPEDITION - THE NULLARBOR

P. Stace

PERSONNEL:- Ron and Robyn Allum, (S.A. formerly N.S.W.), Phil Prust, (S.A.), Peter Stace, (S.A.), Allan Grundy, (N.S.W.), Joanne Drayton, (N.S.W.), Roger Townley, (Vic.).

The following is a brief summary of a cave diving expedition to the Nullarbor region, with the main purpose being to further explore 'Cocklebidy Cave', (N 43). Several other caves were visited however, the first of the others on the agenda being 'Tommy Grahams Cave', (N 56), which provided a good 'warm up' since the water temperature is a mild 23.5 degrees C. Even though the access is difficult into this cave, five dives were accomplished, and included a small amount of further exploration, and the establishment of two RDF points, with an RDF that was waterproof, built by Ron. (RDF is Radio Direction Finder for locating points on the surface, that correspond exactly with points underground.)

After three days at 'Tommy Grahams', having acclimatized ourselves to the unpredictable Nullarbor conditions, we proceeded to 'Cocklebidy Cave'. This cave had previously been penetrated underwater a distance of just over one kilometre, by a joint S.A. and W.A. group in 1976. Some of the members were in this party.

After the arduous task of transporting equipment into the cave, the first dive was made to a distance of 420 metres, where full tanks with regulators attached were left, to form a tank station to be used in future dives. The next days dive was to a distance of approximately 800 metres, where a long air chamber exists. At the far end of this was secured the guideline. With these two preparation dives completed, the next dive would be the 'PUSH' dive, in which two teams, the first of two divers, and the second of three, would set out. The first two divers were porters, and carried full single tanks, but breathed off twin tanks on their backs. The other three divers set off with twin tanks on their backs, but carried a single tank each, from which they breathed. At the long air chamber reached the day before, the two teams reorganized, the two porters giving the two penetration divers, the full singles, which they had carried in, and taking the partly used single that the penetration divers had used to get to the long chamber. The third diver of the second group was only to go as far as the next air chamber, and thus required no change over single. At this point, the porter divers returned to the beginning, and the other team set off to the large rockpile air chamber, where all the equipment of the two penetration divers had to be carried over the loose, steep rockpile. Once over the other side, the two divers set off, now breathing off their unused twin tanks, while the third diver awaited their return. A further 350 metres were explored, with no end to the tunnel in sight, making a total distance of approximately 1500 metres from the main cave chamber. The time taken was six hours and forty minutes to accomplish. In all, eighteen tanks were used on this one cave dive, with a further three in reserve in the main chamber, totalling twenty-one. Considerable effort had to be employed to carry these down the loose, steep rockpile into the cave.

A further two dives followed to retrieve equipment, and to establish an RDF point on top of the rock pile, approximately 1,000 metres in.

From 'Cocklebidy Cave', the group made its way to 'Weebubbie Cave', (N2), making a short stop at 'Murra-El-Elevyn', (N 47), for one quick dive, during which no further passages were found.

On arrival at 'Weebubbie', the exhausting work of carrying equipment into a cave had once more to be dealt with. After accomplishing this task, a dive was made to a maximum depth of twenty-seven metres, as far as the air chamber. During the dive, spare tanks were left near the beginning of a huge tunnel, leading away from the main tunnel, (named 'Railway Tunnel'). Further tanks were left near the beginning of the dive for decompression purposes.

With the preparation dive completed, two penetration dives followed during the next two days, revealing that the 'Railway Tunnel' becomes gradually smaller to a depth of forty-two metres. At this point, it becomes dangerous to proceed any further. Other small side tunnels were explored however, and these too, appeared to terminate in low flat tunnels.

The last cave to be visited was 'Warbla', (N1), which was the most difficult of access. Even on the shallow side of the doline, a sheer drop of twenty-three metres must be overcome. Because of the obvious problems of transporting heavy equipment into this cave, only one dive was conducted. Not all problems were overcome after entry, since the lake to be dived lies at the bottom of a steep slope of bat guano, which slides down and converges on the lake, even before the divers enter the water.

This was the final cave dive of the trip. In summary, 'Cocklebidy Cave' stands out as having the most potential, as it seems to go on, at virtually the same bearing. It must be noted, however, that this was a highly organized expedition, and the accomplishments were earned through planning, and hard work. One is advised to be thoroughly prepared.

\*\*\*\* \* - \* - \*\*\*\*



## NOTICES & NEWS

### THE PALAWAN EXPEDITION

Two to Six weeks from December 31, 1979.

Cost includes air fare, transfers and six nights accommodation in a first class hotel. Costs on the island will be between \$80 and \$150 per week. Costs may drop considerably if new airfares are announced before December, 1979.

Cost: 28 days \$979.

35 days \$998.

This is an expedition into a remote wilderness area for those interested in zoology, botany, speleology, anthropology, archaeology, ornithology, scuba diving (and cave diving), marine life, insects and butterflies, mountaineering, bushwalking and conversation.

Palawan is the westernmost island of the Philippines. It measures 425 kilometres by 40 kilometres, and is surrounded by an archipelago of 1,769 islands and islets. A chain of unexplored rugged limestone mountains (new to speleology) runs the entire length of the island.

Palawan is the home of an exotic flora and fauna found nowhere else. It abounds with butterflies and birds. The forests are populated with many animal species unique to Palawan. In the Tabon Caves remains of paleolithic man have been found, that are said to pre-date, and have connection with the Australian Aboriginal. Deep in the forests of the south is a tribe said to be culturally the world's oldest. There are eighty-one different cultural groups who live together in peace and harmony. Very little research has been done on the island, and only the coastal areas have been explored. The island is honeycombed with caves that were once used as burial sites for a people who buried their dead in clay jars. There are thought to be dozens, if not hundreds of these caves undiscovered. The classic is St. Paul's Subterranean River, which is easily navigable for at least four kilometres, and only part of the main river has been explored. The source has not been found, but legend has it that it comes from a large underground lake that can be reached through a sinkhole about eight kilometres directly inland. The river passes through enormous cathedral like caverns, with gigantic living formations throughout.

Traditional Explorations is working in co-operation with the Government of Palawan, Philippine Airlines, and various societies and educational bodies in both the Philippines and Australia. We will collect information on the island, prepare reports, make films and generally assist the Government of the Philippines in their plans to preserve parts of Palawan as a wilderness sanctuary.

On the island, the expedition will divide into small groups, of similar interest. Co-ordination of the expedition will be from Puerto Princesa, but base camps will be set up all over the island. Groups can choose where they want to go. Participants can also visit other islands of the Philippines, but will be expected to contribute to reports which demonstrate the worth of this rare and beautiful wilderness. All costs will be worked out on a co-operative basis. Members should be prepared to contribute \$150 per week for living expenses, however it is hoped that the cost will be only \$80 per week.

If you are interested, contact Tom Hayllar, (SSS),  
23 Burrawong Rd.,  
Avalon, N.S.W., 2107. Ph: (02) 933 484.

### CHINA TOUR

There are several vacancies left on the tour of karst in China. Details were in Issue 83, ASF Newsletter. Please contact John Dunkley, (062) 810 664, before 15th. October.

### NEW ASSOCIATE MEMBERS OF ASF

North Queensland Speleo. Assoc.  
1 Boden St.,  
Edge Hill, Cairns, Q., 4870.

Mt. Isa Caving Club,  
92 Emu St.,  
Mt. Isa, Q., 4825.

NOTICES AND NEWS (Cont.)ASF COMMITTEE MEETING, January, 1980.

Lloyd Mill, who is making the arrangements for the Committee Meeting at Buchan, Australia Day weekend, 1980, advises that he has had only two replies about delegates. Could you please inform Lloyd at the address below, as soon as possible, as to whether you are (a) coming, (b) bringing family etc.? This is especially necessary, as accommodation and food is to be organized.

Reply to: Lloyd Mill,  
19 Regent St.,  
Ascot Vale, Vic., 3032.

NEW SECRETARY FOR ASF ?

Tony Gulberg advises that he will not be standing for re-election as Secretary for ASF. He feels that as he has held the position for six years, it is time for someone else to have the opportunity. Start thinking! Tony has done such a good job in the time, it will be a "hard act to follow."

TASMANIA

National Parks and Wildlife Service, Tasmania, is proposing to implement a permit system for all caves under its control. In effect, this will transfer the right of access from the various clubs to NPWS. Details, when finalised, will appear in this newsletter.

INTERNATIONAL PUBLICATIONS

Two publications have come to my notice. Firstly, from the International Speleological Union, the publication being "Speleological Conventional Signs", in French, English and German. This publication consists of thirty pages, with plates. The cost is twenty French francs, and includes postage. The method of payment they suggest would be by an overseas bank draft. Send to : C.E.R.G.A. (C.E.R.N.),

BP 5060,  
34033 MONTPELLIER Cedex, FRANCE.

Again from the International Union of Speleology, the publication entitled Speleological Abstracts. The title speaks for itself. It is published twice yearly, but can be subscribed to at any time. Annual fee is Swiss Fr. 13. Send to : Commission de Bibliographie,

Union Internationale de Speleologie,  
c/- Universite de Neuchatel,  
Institut de Geologie,  
11, rue E. Argand, CH-2000 NEUCHÂTEL 7 Switzerland.

This publication is in French and English.

CYCLECAVING - A FACT OF LIFE.

Roman Lichacz, (NSWITSS) reports, "It has been expressed that caving trips may become very restricted by petrol rationing and the inherently high costs of petrol, but I have news for those who subscribe to those ideas.

In May, 1979, after finally deciding to re-join the Bicycle Institute of New South Wales, I was somehow co-erced into leading a cycling trip (September 1 st. and 2 nd.), with a caving trip at the end of it, as an experiment into the feasibility of combining the two. I was also asked to write an article about the trip.

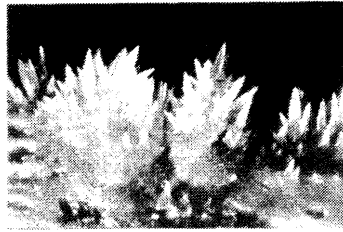
The trip was to have been in conjunction with NSWITSS, but owing to prior commitments of the cycling members of the Society, I was the only member of NSWITSS to attend..

For an initial outlay of \$29 (front panniers) and \$33.75 (back panniers), plus the bike, it is very cheap compared to the outlay of a car and running costs.

(Continued on page 10.)



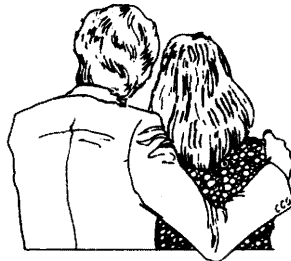
WV1



WH5

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Overseas - Surface.. \$1.00, SAL.. \$3.50, Air Mail.. (USA-Canada).\$6.30,..(UK).\$6.40..

SAL denotes Surface Air Lifted to UK, USA, Canada, Italy, Netherlands, Greece and Federal Republic of Germany

Postal insurance, add \$2.00

The first letter of the code numbers below signify the state or area where the photograph was taken, the second letter denotes Vertical or Horizontal format. T = Tasmania, S = South Australia, N = Nullarbor Plain, W = Western Australia...

- |  |   |
|--|---|
| TV 1 <u>92ft. ladder drop</u> , Khazad Dûm.<br>Australia's deepest cave                      | WV 1 <u>Straw on calcified tree root</u> , Labyrinth Cave<br>multi prize winner   |
| TH 2 <u>Shawls in the Forbidden City</u> , Kubla Khan.                                       | WV 2 <u>End of Straw</u> , Calgardup Cave<br>multi prize winner   |
| TV 3 <u>The 'Waddle 'n Splosh'</u> , Exit Cave<br>Australia's longest cave.                  | WV 3 <u>Straws and Helictites</u> , Crystal Cave<br>prize winner  |
| TV 4 <u>The Pendulum</u> , Exit Cave   | WH 4 <u>Helictite</u> , Crystal Cave, see cover, The<br>Western Caver Vol. 18 #2, August 1978                               |
| TV 5 <u>Gypsum Tree</u> , Edie's Treasure, Exit Cave   | WH 5 <u>Calcite Crystals</u> , Crystal Cave see cover,<br>The Western Caver Vol.17 #4, March 1978                           |
| TH 6 <u>Gypsum Flower</u> , Edie's Treasure, Exit Cave                                       | WH 6 <u>Cave Pearls</u> , Crystal Cave see cover, The<br>Western Caver Vol.14 #4, Jan/Feb. 1975                             |
| SV 1 <u>Entrance to Puyvelroo Cave</u> , see cover ASF<br>newsletter #34-36 for similar view | WH 7 <u>Abandoned Stream Passage</u> , Giant's Cave see<br>cover Helictite Vol.15 #1, 1977<br>and - for the bottom fanciers |
| NH 1 <u>The Lake</u> , Weebubbie Cave  | WH 8 <u>The view of a tourist in the 'Crawl'</u> , Yallingup<br>Cave.   |
| NH 2 <u>The Terminating Dome</u> , Abrakurrie Cave   |   |
| NH 3 <u>Entrance to Murra-el-Elevyn Cave</u>   |   |

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NOTICES AND NEWS (Cont.)CAVECYCLING-A FACT OF LIFE, (Cont.)

The cost on the train to Gouldburn was lessened by catching the train from Liverpool, (\$1.50). Who knows? If enough groups lobby the Government, bikes may even be free on trains someday. The experimental trip only consisted of fifty-seven kilometres of riding, with over half of this distance on reasonably good gravel roads.

As all cavers know, there is more to caving than a hand held torch, some old clothes and camping equipment, as used on all cycle touring trips. So, as well as a change of clothes, tent, tent fly, sleeping bag, the universal mini frying pan and sandwich maker, the jaffle iron, bowl, air-bed, raincoat, soap and food, I carried on my body a helmet and miner's lighting system, a water bottle, and in the panniers the Bungonia Book, overalls, five-metre tape, dynamo light, gloves, and a camera to prove the existence of the Bungonia cycling trip. I brought no heavy caving equipment, as this was mainly an experimental trip. I did bring two spare helmets for people driving down on Saturday.

Well, on with my story. On Friday night the inevitable rain, which seems to follow me around a lot, came as we were leaving Gouldburn Station. It decided to stop when everyone was inside their tents. In the morning we set off, with some of our group including me, having had only a few hours' sleep.

We had lunch upon arriving there, and caved for about three hours, and then did a walk around Bungonia, but fatigue set in on me. In the morning, we did two fairly energetic caves for about three hours, had lunch, then headed out to Marulan to catch a train back to Sydney.

CONCLUSIONS AND RECOMMENDATIONS

1. This is a general reminder to all cyclists and cavers that a good, but expensive superdown or dacron sleeping bag is necessary. This lack of one was the reason for all the lost sleep on the Friday night.
2. The helmet and miners' light can cost up to \$100, but it was the best light we had that Friday night.
3. It is of the utmost importance that you try to place your bike in the Guard's Compartment with the Guard, rather than in the unguarded one, as we very expensively learned. Some "fellow" cyclists went through our panniers and stole a dolphin torch, a bike's 'Wonder Light' and a pair of trouser clips.
4. The old brand of bicycle tyre with very thick tread has to be recommended on gravelly roads to prevent flat tyres and to keep better traction on the road. I know this from personal experience. I have never had a 'flat' yet, except when I wore the tube away around the valve, which was rusty.
5. Newcomers to cycling should practise for rough roads by riding cross country as much as possible before a trip to gain confidence on gravel roads.
6. To those who drive to caving areas, do not pass cyclists too fast, as this kicks rocks into the body of the cyclist.
7. The most important recommendation is that the car can't be replaced completely for safety's sake. When the enormous weights of ropes and ladders are considered, along with the long distances which have to be covered to obtain access to caving areas, and the short time which is available, a car must be considered. So, I believe that cyclecavers should share the petrol money of a medium sized vehicle to carry the caving gear, while they carry the camping gear. This should ease the load of cyclecavers considerably, and they will still be capable of going caving when they reach the area.

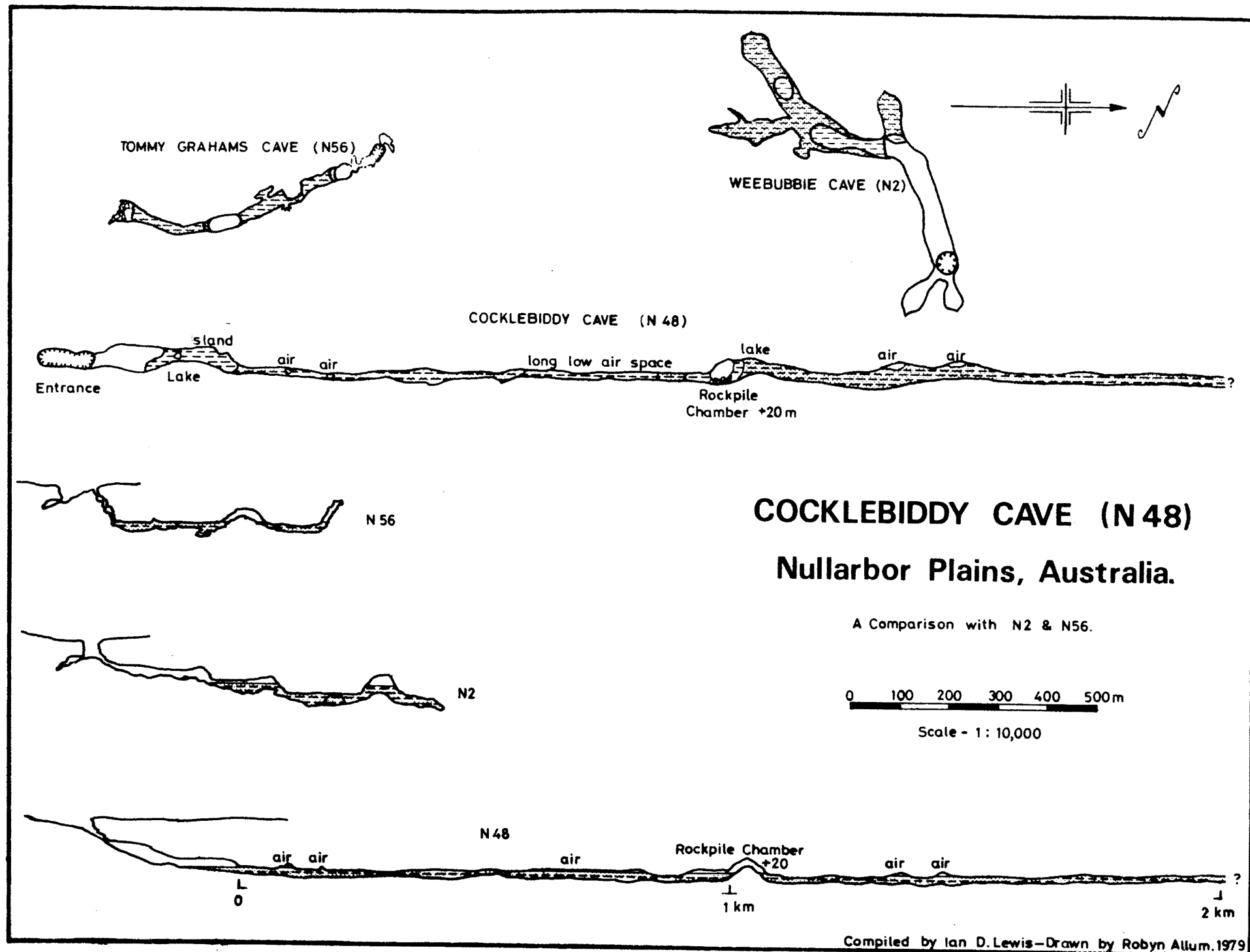
In conclusion, I should say the experiment was a complete success, even though the other three cyclists opted to place their panniers into the car for the trip to Marulan. I hope I have introduced a new word into the vocabulary of cyclists and speleologists alike - CYCLECAVER.

Thanks to Maree, Ian, Jerry, Joanne, David and the Bicycle Institute for their attendance, and being the guinea pigs in an experiment which didn't hurt too much after all."

\*\*\*\* \* \* \* \*\*\*\*

**OBITUARY**

The members of the Central Queensland Speleological Society express thier deep sympathy to the Kersey family at the loss of the late Mrs. Adela Kersey. Mrs. Kersey is survived by her husband Bob, son John (Mackay) daughter Rhonwen, (Mrs. Miles Pierce, Melbourne) and four grandchildren. The family is well known through caving circles in Australia. During the early years of CQSS, Adela provided valuable service in the capacities of Secretary and Treasurer. Her loss will be felt by many cavers.

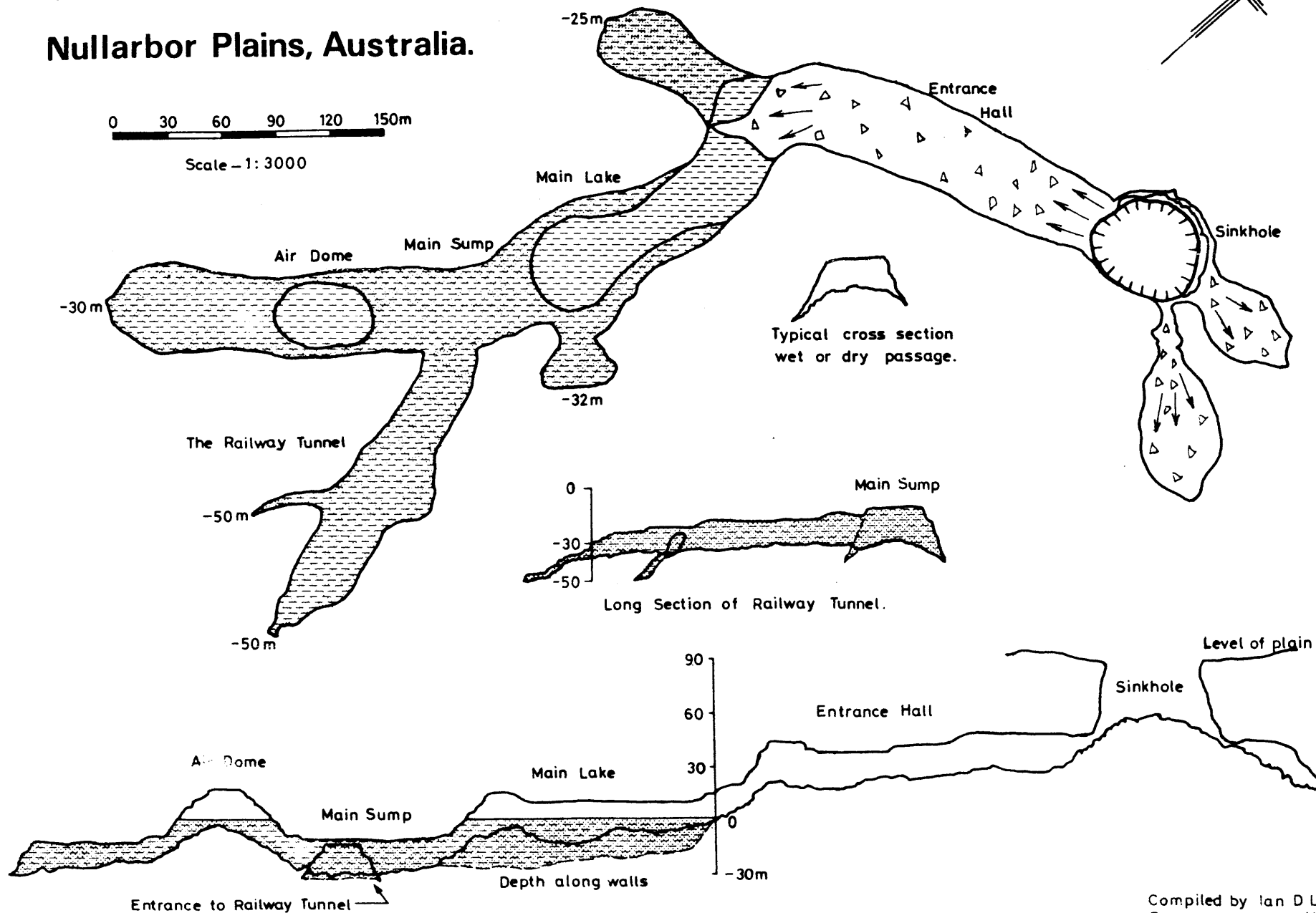


# WEEBUBBIE CAVE (N2)

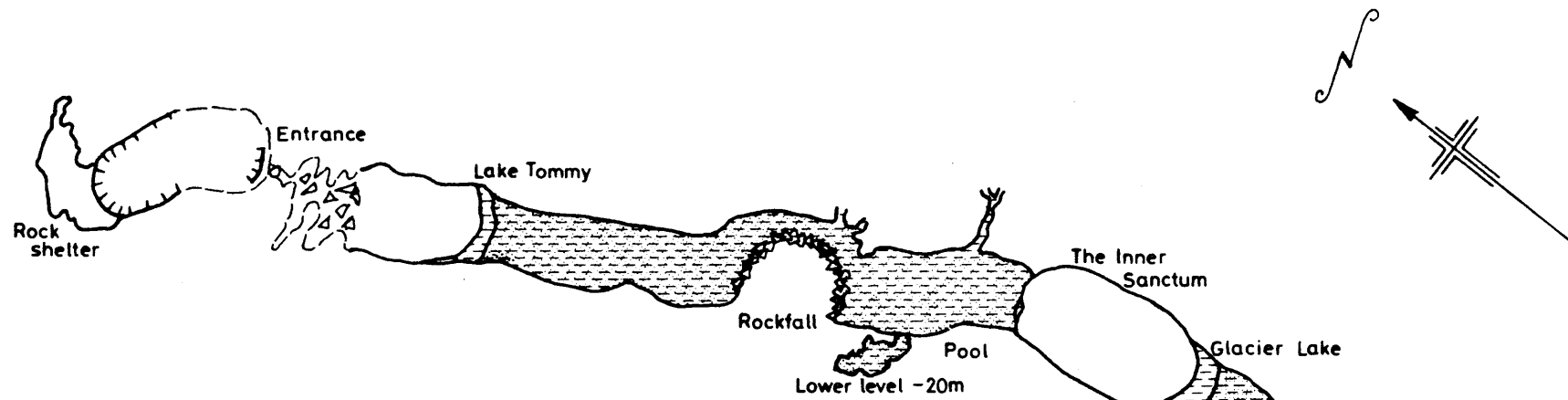
## Nullarbor Plains, Australia.

0 30 60 90 120 150m

Scale - 1: 3000

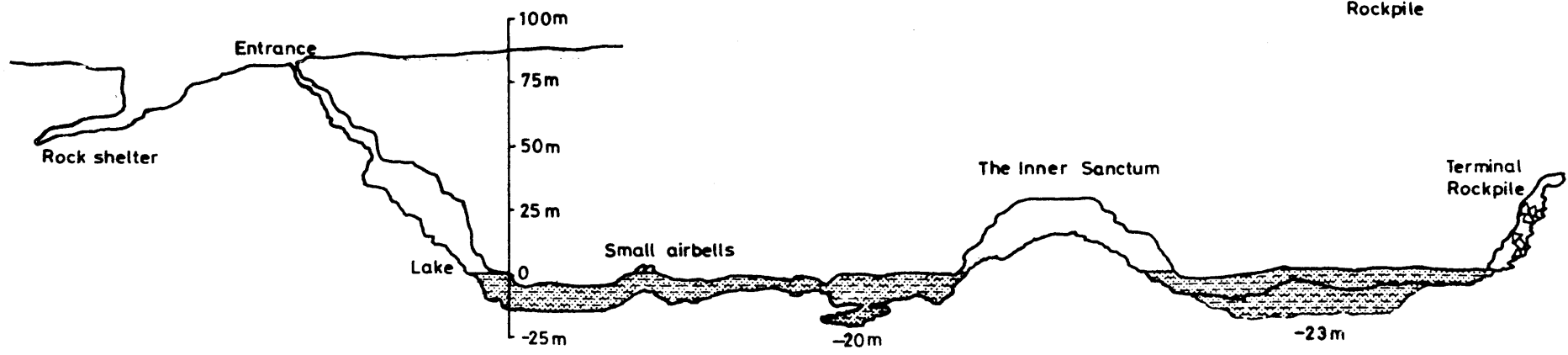
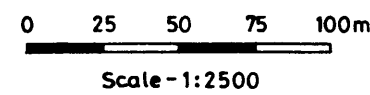


Compiled by Ian D Lewis  
Drawn by Robyn Allum



# **TOMMY GRAHAM'S CAVE (N56)**

**Nullarbor Plains, Australia.**



Compiled by Ian D. Lewis  
Drawn by Robyn Allum 1979

## CAVE DIVING IN TASMANIA

P. Stace

During February, 1978, a small group of South Australian cave divers travelled to Tasmania for the purpose of exploring several water filled caves. Three basic areas were visited and although some basic similarities exist, each area needed differing techniques, and hence I shall discuss each separately, and in chronological order.

### AREA ONE- Northern Central Tasmania.

This was the area first visited after arrival at Devonport. In this region, an extensive area of caves exist, one of which we were principally interested in, named 'Kubla Khan'. This cave has an active stream called the Alph River, which flows through much of the cave and disappears "under a wall" at the sump. At the other side of the hill from the main cave, a stream appears flowing out of the hillside. Since the sump and the efflux are in a line and dye tests had proven very successful, it was almost certain that it was the same stream, and connection could be possible using SCUBA.

Our task was to dive up the underground river from the efflux, and from thence hopefully into Kubla Khan which was estimated to be about three kilometres away!

One attempt had been made several years before, and another more recently. Although only short penetration had been made, the information gained by these proved very useful in the planning of our dives. Along with improved equipment, we also had to our advantage the fact that the water level in the efflux had dropped dramatically, because of excavations of the river bed at the efflux by local cavers. During the previous attempts, the water level could have been as much as two metres higher and so much of the passage they were forced to dive, could now be negotiated by rubber raft as far as 100 metres upstream, where the roof meets the water level. It is this point which I refer to as the duckunder, where we submerged and the diving began.

On the first dive, after initially setting up the guideline, the two divers, Phillip Prust and Peter Stace, set off. Both used manifolded twin tanks, octopus regulators, and thirty watt sealed beam torches. This tunnel was explored for 330 metres, and it was found to include several air spaces, one up to fifty metres long and in areas five metres high. Most air spaces, however, were either just high enough to surface in or too shallow to do so.

The general conditions were:- Water - the visibility was four to five metres upon entry (maximum), turbid, no noticeable flow, temperature at nine degrees celsius, with the visibility on exit at one half to two metres. Tunnel - it followed generally the same bearing without any distinct bends or deviations. The bottom was mainly mud and silt covered rocks. The wall and roof had very loose crumbly coating which disintegrated and fell in large lumps adding to silting. The total distance from cave entrance penetrated was 430 metres, with a duration of fifty-five minutes.

On the second dive, (Peter Stace and Ron Allum), twin tanks were used again, but the main lights were changed to lower amperage to give longer durations. From the duckunder, the two divers swam up the tunnel past the 330 metre point reached the previous day, to the end of the first reel at 400 metres. Another reel was joined and twenty metres further on, a larger air chamber was entered which had a small rockpile collapse blocking the river. Without removing their equipment, the divers made their way out of the water and proceeded down a dry mud floored passage to water again. Continuing along this lower wet section, they came into a wider and higher chamber at the beginning of which was a very oozy deep mud. Great difficulty was encountered in negotiating this section, and eventually the twin tanks had to be removed and only snorkel equipment and lights carried. In this chamber a small flow meandered its way through five metre high mud banks, with the ceiling above being thirty to forty metres high, with large decoration, especially in the upper reaches.

Once through this chamber, the passage again became smaller and continued on partly dry and partly wet, to a point where the roof met the water level. It could be seen that the tunnel continued underwater but further exploration would require tanks.

The divers returned to the efflux entrance after two hours and thirty-five minutes, having penetrated 1300 metres from the entrance.

On the following day, the cave which we were hoping to dive into was visited and the sump of the river inspected so that it could be recognised, if we were able to dive that far. Ten and a half hours were spent underground in the remarkable and unforgettable Kubla Khan.

On the third dive (Ron Allum and Phillip Proust), because of the difficulty encountered in the oozy mud



CAVE DIVING IN TASMANIA (cont.)

during the previous dive, a change of equipment was made. Both divers took two single tanks and regulators in a double back pack, as well as an extra single back pack.

On arrival at the rock pile, they removed their unused single tank from the double pack and fitted it into the single pack. They now had one tank to carry through the mud to the 1300 metre point reached previously.

Because it was not known accurately how far from this point into the main cave, each diver had two extra torches and a reel holding approximately 350 metres of line, totalling 700 metres altogether. To their amazement however, they entered Kubla Khan after travelling a mere thirty metres more than reached the previous dive. The total dive time was four hours, and estimated penetration distance from the entrance of the efflux to Kubla Khan was 1330 metres, much shorter than anticipated.

AREA TWO - Lower Central Tasmania.

This cave system is similar to that of the first area, with a river appearing from a hillside, the river presumably coming from caves. Dye tests had also been conducted here but the results had not been as favourable as with the Alph River. Still the possibility of connecting known caves or finding virgin cave existed.

The first dive (Phillip Prust and Peter Stace), in Juneo-Florentine Resurgence, was an exploratory dive to locate the most likely path to follow. Only single tanks were used, but even so, making headway upstream was difficult against the strong flow. We were told later that this flow was lower than normal! Once inside the cave as far as could be walked or swum, the dive began through a small section of longitudinal passages, and then into a downward sloping horizontal formation to a maximum depth of fifteen metres. This deepest point had a gravel bed and it could be seen that the floor began to slope upward ahead. The divers returned having only penetrated fifty metres from the start of the dive. Time taken was twenty minutes, but even so the effects of the cold water were noticeable. Only six degrees Celsius. Silting had also been acute, with entrance visibility of less than three metres and exit visibility of nil to one metre, since the silt disturbed flowed out at the same pace as the divers were carried.

On the second dive (Ron Allum, Phillip Stace), because of the silting problems and the comparatively small nature of this cave, it was accomplished by using two single tanks and regulators in a double back pack.

Entry was made along the same course as previously, and once the deep gravel bed area had been reached, the divers continued to their left, trying to follow the poorly defined wall up the slope. A dead end was reached at a depth of eleven metres with a very silty floor. The line was then retraced back to the gravel bed and from there the right wall was followed. This eventually led to a tunnel-like passage approximately three metres wide and two to three metres high in twelve metres of water. Travelling along this passage, several squeezes were encountered and eventually the line had to be tied off, so as to ensure that the correct way out could be found during nil visibility.

A total of 120 metres, from the start of the dive inside the cave, was penetrated taking thirty minutes. This was the last dive attempted here since it had become apparent that there was little chance of breaking through in comparison to the hazards of cold, poor visibility, strong flow and the small and treacherous nature of the cave.

THIRD AREA - South East Tasmania.

Once again this was in an area of extensive cave systems, with streams flowing through the mountains. This time the dive took place from the upstream sump in Entrance Cave, hoping to locate the downstream efflux in Exit Cave.

After a very pleasant walk through the rain forest, Entrance Cave was located, by a stream making its way into the large entrance. From the entrance we made our way through several large chambers and passages to a section where a very recent collapse had occurred. We and our equipment descended through this. Off the small chamber below was the sump to be dived, but because of its smallness only one diver could safely proceed. Using a twin fifty cubic foot tanks, Ron headed off down the sump disappearing into the tea-coloured water (stained by button grass). After a few minutes he signalled he had surfaced further along the rift, and within ten minutes he returned to the sump. He had travelled approximately thirty metres into an air chamber, which had obvious signs of having been visited by dry cavers previously. Once out of the collapse area, we set off to find the point to

CAVE DIVING IN TASMANIA (Cont.)

which Ron had dived, not being sure if it was in this same cave or another. As it happened, the point was located in an area at the bottom of a deep canyon in the same cave, and though a connection between two caves was not found, at least we eliminated another possibility.

The rest of the day was spent further exploring the cave, which contains some very interesting stream passages including several waterfalls and many pools which reflect the lights of the numerous glow-worms.

A RETURN TO AREA ONE

Whilst returning to the north in readiness for our departure, Phillip Prust and I decided to use some of our spare time in exploring a waterfilled cave which we had seen during the first part of our trip. This cave was not unlike some of those found at Mount Gambier. The entrance was through a doline collapse down a wire ladder approximately seven metres and straight into the water which was in total darkness. Underwater the cave extended longitudinally and down to a depth of fifteen metres, at which point it was blocked with debris. Once again, loose crumbly walls were encountered and visibility was reduced from three metres to nil.

Only fifteen minutes were spent in this cold black hole, which was rather a low note on which to finish a fairly successful expedition.

In conclusion, I would like to thank members of local caving groups in Tasmania for their assistance and guidance without which the expedition would not have been possible.

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**BOOK REVIEW**

"Caves in the Soviet Karst" by R. Rodzinski, The Geographical Magazine, March 1979, pp. 417-419.

If you think that 300 kilometres of cave is more than enough to boggle the mind, how about 500 kilometres? That is the estimated length of the longest cave in the world, and when, a connection is made between Optimistic Cave and Ozierna Cave in the Western Ukraine near the border with Rumania. The two caves are formed in a gypsum formation, and are at present about one and a half kilometres apart. Optimistic Cave has a known length of 127 kilometres and is the second longest in the world; most of this has been discovered in the last twelve years, so the 500 kilometres estimate may not be too 'optimistic'!

John Dunkley.

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PSEUDOSCORPIONS WANTED

Professor William B. Muchmore is studying pseudoscorpions of Australia and would like to see any specimens that cavers might collect, either inside caves or outside.

Specimens collected should be preserved in seventy percent alcohol and, together with locality details date of collection and name of collector, and sent to:

Professor W.B. Muchmore,  
Department of Biology,  
University of Rochester,  
Rochester, New York, 14627, U.S.A.

John Webb.

\*\*\*\* - \* - \* - \*\*\*\*

Information about CAVE CONVICT in Issue 85.

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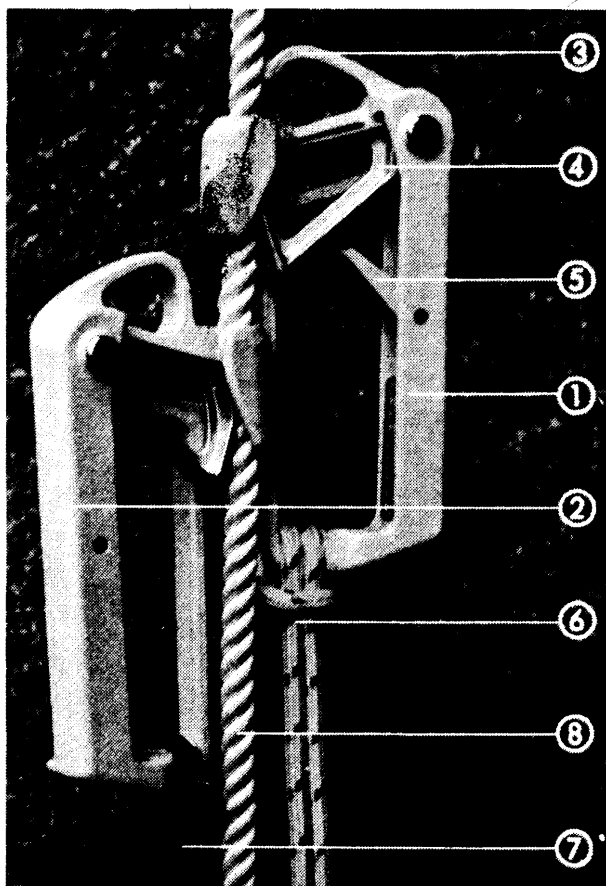


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