

CAVE DIVERS ASSOCIATION OF AUSTRALIA

(Incorporated in South Australia)

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GUIDELINES

NEWSLETTER OF THE

CAVE DIVERS ASSOCIATION OF AUSTRALIA

No: 2, May, 1979

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Editor and General News Items - Peter Stace.

GUIDELINES

No: 2, May, 1979

C.D.A.A. CALENDAR. A.G.M. and CONFERENCE.

The Annual General Meeting of the C.D.A.A. will be held at Mount Gambier on Saturday 22nd of September. In conjunction with this meeting, the second Conference on Cave Diving will be held during the afternoon. For those who attended the First Conference in 1977 there will be no need to say how informative, and interesting it was. This year is going to be even better, so keep the weekend of the 22nd and 23rd September free, and make it down to Mount Gambier. Further information on the A.G.M. and the Conference will be in Guidelines No: 3 which will be out about July.

TESTING DATES.

VICTORIA: Tests are scheduled for Saturdays' June 23rd, September 15th and December 8th. To book in please contact Allan Jolliffe via the Victorian C.D.A.A. address.

Several Cat 1 and 2 tests have already been run this year however if anyone has missed out and requires testing, contact Ron Allum via the S.A. address for further information.

SPECIAL NEWS FOR N.S.W.

Allan Grundy has been appointed regional representative for the C.D.A.A. If you have any enquiries concerning Cave or Sinkhole diving and the C.D.A.A., contact Allan at P.O.Box 583, Manly, 2095 or phone at home on 939 6657.

For those who don't already know Allan, he is an experienced all round diver, a FAUI instructor and has C.D.A.A. Cat. 3. As well as sinkhole diving he has experience in penetration cave diving throughout Australia.

Two other N.S.W. people, also recently successfully completed their Cat.

3 at Mount Gambier showing how keen some are to dive the area even though the trip from Sydney is a long one. Congratulations Chris and Doug Olding.

AIR FILLING AT MOUNT GAMBIER.

Only one compressor is known to be operating in this area and that is situated at the ALLENDALE EAST GENERAL STORE, owned by B. & V. Vauser. The store is opened and filling available 7 days a week from 8 a.m. until 7 p.m., and phone contact can be made on $38\,72\,74$ if necessary.

NEW RANGERS.

Two new National Parks Personnel are now resident in the Mount Gambier region. Firstly Mick Hinsliff can be found at 'Dingley Dell' National Park, and is responsible for patrolling of Ewens Ponds and Picanninie Ponds.

Secondly Phil Menhennet has taken Jim Wesley-Smith's position in Mount Gambier and can be contacted at 35 Canavan Road, Phone 25 1121.

With the extra staff now in this area more frequent patrols of Picinnie Ponds will be conducted so watch out anyone who might be contemplating a sneak dive. If you are caught, prosecution can occur, as it has in the past!

PICANNINIE PONDS PERMITS.

Anyone wanting a Pics Permit should contact Phil Menhennet by mail two weeks before the planned trip to Mount Gambier giving him a time when you would like to meet him to obtain the permit. This will mean you won't spend half the weekend chasing Phil, and you will also save some of his valuable time.

EWENS PONDS.

As anyone who has been to the Mount area recently will know, there has been some changes at Ewens Ponds. It is now being leased by MR. DIRK VERSCHURE, who intends to set up a trout farm nearby - (not in the Ponds).

Access to the area is still a legal right to the public, however, we ask that all members comply with the request of Mr. Verschure not to drive vehicles over the area, and to remove all litter and in general take care not to disturb

the area - especially the ponds themselves! As far as the Conservation Park which is the area to the east of the access road is concerned, it is becoming very obvious that the increase in camping is having a very adverse effect.

Members are therefore asked to limit camping when possible. Several other, more comfortable and less crowded areas are available within close proximity.

CAVE DIVING TRAINING COURSE.

On February 24th and 25th, the C.D.A.A., Victorian Branch, held a training course at Oakleigh Pool. On the Saturday eleven participants attended which was somewhat disappointing, as the organizing committee had expected a greater number. However, on the Sunday, the numbers increased to fifteen.

Discussions were held on Decompression Sickness, the use of Decompression Tables, Dive Planning, Cave Diving Equipment and as well as visual introduction to the sinkholes. The practical sessions consisted of buoyancy control, linework, use of the reel and ladder climbing.

Fourteen of the participants attended the actual test on the following Saturday. The feedback from the test was positive and all benefited from the course.

Further training courses will be held when sufficient numbers warrant it. A training and testing programme will be held soon in the Warrnambool region.

Editors Note: A training programme is planned for S.A. this winter. If anyone is interested contact a member of the S.A. Committee. Further details will be available soon.

DIVERS DO IT DEEPER BUT

Ever heard the saying "Divers do it Deeper"?, well, your immediate answer should of course be, "But Cave Divers penetrate further"

But if you always take your decompression tables, then "It's not just how deep you go it's how long you can stay there!"

A RECORD CAVE DIVE IN BRITAIN.

Last year two English cave divers broke the world record for a cave diving "Traverse", between two separate entrances. Over a series of dives, a stream system running from Keld Head Cave to the Kingsdale Master Cave in Yorkshire,

was explored from both the downstream and upstream ends. Dye tracing was used to verify that a connection existed before the serious pushing began.

It seems to rain in Yorkshire all the time! Both cave systems are fed by a number of streams (called 'becks') draining off the surrounding hills and disappearing into a number of cave entrances accross the countryside. The water is cold and varies from clear to filthy, depending on the amount of inflow from the surface. The caves themselves are cold and the rock is crystalline limestone – much harder than anything at Mount Gambier, for example. Passages are small and twisting with muddy or gravel filled streamways running along the bottom.

In these conditions then, the cave divers began their explorations. Working downstream from the sump in Keld Head, they often dived individually in murky conditions which allowed little room for manoeuvering. The furtherest point reached was 950 metres out, just beyond a nasty little constriction which delayed one diver so long that the support party believed he was dead. He managed to get back and named the constriction the "Dead Man's Handshake", after the close shave.

From the Kingsdale Master Cave end, diving would have been a little easier. At least the divers were pushing upstream against the current and didn't obscure their own visibility until they turned around to return.

The final dive came as a bit of a surprise. The lone diver, wearing full dry suit and gloves, 2X50 cubit ft. tanks and 2X80's as well (side slung like bandoliers to permit easier manoeuvering in the small passageways) had penetrated 950 metres upstream from his end when he found some floating guideline. For a while he thought it had been washed down as rubbish from another cave entrance but he suddenly recognised it as the far end of the line he had laid from the upstream Keld Head end on a previous dive. Just in front of him was Dead Man's Handshake. Tying the two lines together he returned down stream.

The total traverse distance is now 1900 metres (6000 feet). The actual 'through trip' from one cave to the other has not yet been done but it soon will be! The record approaches the one held by Florida cave divers for a 2200 metre traverse (6800 feet) in Peacock Springs that has stood for many years. However, neither dive approaches our own world record penetration cave dive in Cocklebiddy Cave on the Nullarbor Plain, where divers have swum 2000 metres and returned the same way without finding an end. There are no other entrances there to give an easy way out! The total swim in Cocklebiddy is therefore 4 kilometres so far.

Just one last point of comparison. The English dives were shallow depths along the entire length of the trip. The Florida dives in Peacock Springs drop to depths of over 30 metres, making their achievements particularly creditable.

In Cocklebiddy, which is a penetration dive rather than a traverse, the average depth for swimming is only about 8 metres.

The English divers have developed cave diving techniques almost unknown to Australians as their caves are completely different to the sinkholes that we are used to. Cave diving in our rather conventional form would never have got these divers out of the daylight in the passages they had to navigate!

They are to be congratulated on their persistence and achievement.

BUDDIES AND TESTING.

In November 1978, the Victorian branch of the C.D.A.A. held their first General Meeting. It was designed as an opportunity for the Victorian divers to get to know each other and speak with the committee, as the President, Peter Stace, and Secretary, Ian Lewis, were visiting for the weekend, from South Australia.

During a general question and answer session, the topic of category testing with your buddy was raised. We have all been aware that from time to time cave divers have had to be thrown together, to pair off for a Cat 2 or Cat 3 test, and have to try and pass the test as well as assess the other divers attitudes at the same time. Sometimes people fail the test because of this.

If you dive regularly with a buddy, then its obviously to your advantage to take the test together. The C.D.A.A. has no objections to this, of course, and it is the most sensible way to do things.

However, it has also become obvious from discussing the topic that the cave diver has an obligation to himself and other divers to be as self-dependent as possible. I seriously question the ability of a diver who needs his particular buddy in order to feel safe or confident in a cave or cave diving test. The idea of the test is two-fold:-

- 1) an experienced tester can assess your level of competence,
- 2) and you can see for yourself how good or how bad you are.

This all leads to a standard at which a diver should be able to take care of himself in any event except for loss of air, and can equally take care of another diver who may run into this problem in a cave.

It follows, therefore, that you should be able to dive with an unknown diver who has had some cave diving training and be able to figure out the problems between you. I think this is not a bad idea - since we're supposed to be all trained basically the same way. At the same time, it wouldn't be such a good idea in practice to go on a genuine cave dive with someone whose abilities you don't really trust. The point that stands out is that self-dependence is vital, as is competence. Without either of these in cave diving, you'd be better off giving the game away!

AND WHO WERE THE LUCKY DIVERS!

Not far from the crystal clear waters of Ewens Ponds there is a cave entrance with water at the bottom. The local name for this hole is 'Earl's Cave'. It has been known to caving clubs for many years, and was the object of a 'Save the Cave' clean-up programme several years ago.

The entrance is roughly circular and about 8 metres across. The lake bells out underneath in a chamber approximately 15 metres in diameter. The water looks pretty foul, and there's a very good reason for this - Man!

In 1958 there was a huge bushfire that burnt from Kongorong and Carpenter's Rocks in the west right through into Victoria, fanned by raging hot winds. Stock and property losses were extreme. A fireman lost his life close by to Earl's Cave and a memorial stone has been erected on the spot where he died, about 2 kilometres north of the cave at a track intersection.

Until that time, Earl's Cave was a local swimming hole. Its waters were cold and crystal clear, and a welcome respite from summer heat. However, after the fire, some brilliant individuals decided that the cave would be a perfect spot to throw all the burnt sheep carcasses into - and God knows how many of these there were.

This was done. Earl's Cave became a putrid dump. I do not exaggerate - the entire lake was so covered in floating rubbish that it looked like solid ground. It was perhaps the ugliest example of pollution in a South-Eastern sinkhole imaginable and remained so for 15 years.

Then some members of the Cave Exploration Group of S.A. decided to give the cave a chance to recover. They tried a theory that clearing the surface rubbish off would allow sunlight in to speed up the organic breakdown of the carcasses below and arranged a clean-up weekend. TEN TRUCKLOADS of rubbish were scraped off the top of that poor little lake! The Port Macdonnell Council provided the trucks and took it away. Almost no attempt was made to drag the cave floor – this was too much of a task.

And the results? That the water was so polluted that visibility was nil. But after 6 years of exposure to sunlight, the visibility jumped to nearly a metre. That is way beyond any expectations the cleaners had, and represents a remarkable biological change in the water. Many years remain before the water clears completely (if ever) but it has been given a great start.

Not everyone knew the story behind the cave. Only last year, a couple of Brave Victorian CDAA members found the hole and dived in it. It didn't go very far and had a 'squelchy' floor! And who were those lucky divers. If I told you it would ruin their social life forever!

Editors Note: It is not advised that any one else dive the hole for another 20 years, unless you are immune to hepatitis, meningitis and encephalitis, etc., etc.,

FOSSIL CAVE FIND.

Late last year, C.D.A.A. members from Flinders University Underwater Club recovered several bones on a dive into Fossil Cave (L 81). The bones were taken along to vertebrate palaeontologist Dr. R.T. Wells of Flinders University who identified them as the remains of extinct marsupials.

Dr. Wells was aware that skulls of extinct Kangaroos had been recovered from the site by previous divers (1968, 1969), but it was thought that the remainder of the skeletons were dispersed elsewhere.

The finding of further skeletal bones prompted the organization of an expedition from Flinders University, the first stage of which was to place a grid of reference lines in the cave. The grid was to serve two purposes: to facilitate the accurate recording of any material recovered and to act as fixed guidelines for divers working on the site. Forty diving hours were spent on the grid installation.

The second phase of the expedition took place in mid January 1979. Under the supervision of Dr. Wells various sites on the grid were carefully searched. Twenty hours of underwater searching yielded several complete skeletons and an as yet incomplete map.

No other fossil site has yielded complete skeletons of any extinct species found in Fossil Cave. Because of the incompleteness of previous finds much conjecture has existed as to the exact structure of these animals.

The completeness of these most recent finds is thus of international importance.

It is apparent that only a very small portion of the total fossil content has been found. It is the intention of Dr. Wells and the group to organize further field trips to the site in the near future.

Because of the need for precision in recording the exact location of each bone in the cave, we ask that divers do not attempt to remove any bones or disturb the grid. Removal of bones from the cave involves digging in up to three to four feet of silt, this results in <u>absolute</u> zero visibility. Any cave diver will appreciate the dangers involved in creating such hazardous conditions.

We found that the entire cave became completely silted out after a very short time. Several areas of unstable sediment now exist in various parts of the cave; divers should attempt to remain at least three feet above the grid as any small currents may cause avalanches of silt and rock.

Dr. Wells asks that should cave divers know or find, bones in other dive locations that their position be noted and if possible a tooth or jaw bone be removed for identification. The removal should only be attempted if it does not necessitate the dispersal of other bones, and the group would again emphasize the dangers of digging in silt without fixed guidelines.

HOW TO REMOVE SKULLS OR JAWBONES.

Pick up with teeth pointing upward to prevent loose teeth falling out. Wrap in newspaper and pack carefully.

Contact Dr. Rod Wells or Dominic Williams on 275 2437 (reverse charges if necessary) at Flinders University.

It is the intention of the group to present the complete story of the excavation in a paper to be presented at a later date.

Keith Evans Robin Garrad Martin Garrad Jennifer Hiscock Clive Mills Peter Rogers Richard Stanton.

CARD UPDATES DUE 30th JUNE, 1979.

Send your card, \$3.00 Annual Subscription and this form to the respective C.D.A.A. address. Members in S.A. and W.A. to C.D.A.A., P.O. Box 290 North Adelaide, 5006. Members in Victoria, A.C.T. and N.S.W. to C.D.A.A., P.O. Box 2161T, G.P.O. Melbourne, 3001. This form will help keep our records and your cards updated, please notify below any changes required on your card.

PLEASE PRINT.

| MEMBERSHIP NO PRESENT CATEGORY HELD |
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| SURNAME GIVEN NAMES |
| POSTAL ADDRESS POSTCODE |
| TELEPHONE NO: (Home) (Work) |
| NEXT OF KIN (Name) |
| DOCTOR (Name)ADDRESS |
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| QUALIFICATIONS and EXPERIENCE |
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| An updated photograph can be placed on your card if enclosed. |
| SEND YOUR CARD + \$3.00 WITH THIS FORM |
| Any interested person who would like to receive C.D.A.A. literature e.g. Guidelines Occasional Papers etc. but who does not at this time wish to become a member of the C.D.A.A. can do so by forwarding \$3.00 and the form below. |
| NON MEMBER MAILING, LIST |
| SURNAME GIVEN NAMES |
| POSTAL ADDRESS |
| DATE OF BIRTH CLUB |

CAVE DIVERS ASSOCIATION OF AUSTRALIA INC. AS. CZ18 DECOMPRESSION TABLES

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REPEAT DIVES - FOR SUBSEQUENT DIVES BELOW 10M (30FT) WITHIN 6HRS DECOMPRESS FOR COMBINED DURATIONS AND GREATEST DEPTH, WHERE EITHER DIVE EXCEEDS 42M (140FT) PERIOD BECOMES 12HRS RATE OF ASCENT 18M PER MIN (60FT PER MIN). GREATEST TIME IS THE LIMITING LINE AT THAT DEPTH.