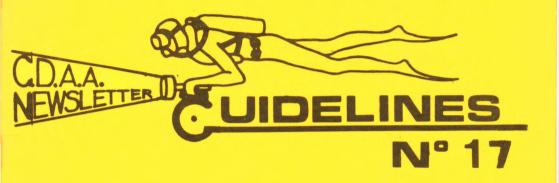
FEBRUARY 1984



CAVE DIVERS ASSOCIATION OF AUSTRALIA

(Incorporated in South Australia)

C.D.A.A.

P.O. Box 2161 T

G.P.O. Melbourne. 3001

C.D.A.A.

P.O. Box 290

North Adelaide 5006

DIVERS DIARY



CATEGORY 1 AND 2 TESTS

While tests may be arranged at any time which is convenient to both the candidates and examiners (usually requiring at least 4 candidates), a system of rostering the dates is being undertaken in South Australia. The new standard test dates to 30th June next year are:

Application Closing Date	Theory Exams	Practical
1st December 1983	4th-10th December 1983	Sunday, 18th December 1983
1st February 1984	5th-10th February 1984	Sunday, 26th February 1984
1st April 1984	8th-14th April 1984	Sunday, 29th April 1984
1st June 1984	3rd-9th June 1984	Sunday, 24th June 1984.

GUIDELINES

NEWSLETTER OF THE

CAVE DIVERS ASSOCIATION OF AUSTRALIA.

No. 17 FEBRUARY 1984

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Editing and Typing......Dennis Thamm & Peter Horne

EDITORIAL

After a rather busy November quarter in the cave diving scene, the past few months have been somewhat more sedate. A point of interest though has been the opening of a new emergency recompression chamber in Morwell, Victoria. This is of particular interest to the C.D.A.A. as it is mobile and can be moved to the accident site. The Association is currently fully assessing the facility.

It is that time of year again when all those budding Cat. 3 divers get to show their skills at the half-yearly March test. So check the dates and times please and we'll see you there.

We also present an article regarding line techniques which is a must for all safe cave divers. It is good to see the membership coming forward with such information, as I am sure we will all benefit.

It seems that lately, landowners are getting a bit of a bad deal from divers, so let's see some consideration for those who make our sport possible (see articles in this edition).

Dennis Thamm.

DIVER'S ROLE

As a follow-up to our recent article "Are you a rebel?" and in light of our tenth birthday and no accidents, I find the following paragraph suitable for the occasion:-

"Regardless of one's previous experience, when diving in a new and strange underwater environment, it is imperative to learn the specific dangers that might be encountered and how to cope with these before entering such caves."

Taken from an American accident report in which 3 experienced Navy divers were killed whilst cave diving.

CDAA NEWS • CDAA NEWS • CDAA NEWS • CDAA

MARCH CATEGORY 3 TEST PROGRAM

The March Category 3 test will be held at the usual venue at Piccaninnie Ponds on Saturday 24th March 1984.

Test format at Piccaninnie Ponds:-

8.30a.m. (S.A. time) - Examiners assemble at Pics car park. 9.30a.m. - Candidates assemble for briefing by N.T.O.

It is advisable for candidates to arrive in their buddy pairs prior to 9.30a.m. and be partially kitted-up and ready to go, so help testing run smoothly and prevent any complications.

2. BARNOOLUT PROTOCOL

We have recently been advised that divers entering Barnoolut property are causing concern to the Manager, Mr. Reg Watson. After receiving permission to dive a specific location, some divers are heading off in all directions in search of other caves and sinkholes. Divers are granted permission to drive across to specific holes, and are NOT to stray. Please respect landowner requests and directions rather than taking scenic tours of their properties.

3. RUBBISH IN HOLES

It has been brought to the Committee's attention that the amount of rubbish in, around and on top of numerous dive locations is increasing. Especially noticeable is the number of empty bottles, cans and used toilet paper! Most thoughtful divers and landowners don't like to see locations looking like rubbish dumps, so spare a thought for others and take what you brought.

4. N.A.C.D.

The N.A.C.D. (National Association for Cave Diving) in America would like to know if any C.D.A.A. members are interested in purchasing any of their publications on cave diving. If so, please write to the C.D.A.A. care of the S.A. address.

5. GUIDELINE AND BATTERIES

Yuasa 6-volt batteries, D-size NiCads and 3mm braided orange floating line are still available through the C.D.A.A. For those interested in purchasing any of these, please contact the S.A. Committee.

These items are available at lower prices than at retail outlets, and with considerable savings for bulk orders.

6. ASPIRIN AND DIVING

Having learnt that aspirin after deep dives may assist in the prevention of The Bends, some divers are taking the drug PRIOR to such dives in the belief that this works the same way. Medical advice has been received indicating that this is NOT the case, and problems such as bleeding of the stomach may occur in some instances. Divers are therefore advised to continue the practice at their own risk!

LANDOWNER RELATIONS

Maintaining good landowner relations is as important as holding the appropriate Category card.

It might be worth remembering that the landowners are doing us a favour by letting us onto their properties, so if you're a 'rebel' you are again breaking the rules -

- not categorised to dive the sinkhole in question
- Trespassing if you don't hold the correct Category then you couldn't have obtained permission. You may not always get caught, but there is always a first time!

It is also advisable to keep on the friendly side of landowners by heeding their requests and directions - otherwise you may be refused entry on future occasions, regardless of your qualifications or experience.



'SECRET CAVES' OF MT. GAMBIER -SOME FACTS

by Peter Horne.

Most of us have heard rumours about the existence of "secret", uncategorised caves in the Mount Gambier region during our involvement with the activity of cave diving, and many divers would know of at least one cave or sinkhole containing water which does not have a CDAA-category rating attached to it.

Recently, some fairly amazing rumours to the effect that the Committee keeps a "secret file" on such wonderful, uncategorised places for the exclusive use of themselves and their friends have been spreading through our membership, encouraging some people to indicate that they intend to stand for election onto the Committee, not to actually work for the Association but solely to gain access to this special file. It is a pity that the entire Association would suffer when these mercenaries discover that there is no such file!

There are, indeed, caves and sinkholes containing water (or substances similar to water!) which have no category rating in the Mount Gambier region. However, many people fail to realise that there are legitimate reasons for this. Just because a cave contains some water does not automatically mean that it is a 'dive'; in fact, most caves containing water hold only small pools less than a metre deep. This is the case in the vast majority of caves known in the Lower South East. Rumours of the existence of 'hundreds of divable holes' in the region are way off base when you consider that just over 200 caves in total are known to exist (Cave Exploration Group of South Australia records). Of these caves, CEGSA has reference to a minority which contain water at all, and even fewer contain divable pools - almost all of which have been categorised to one of three categories by the CDAA, totalling some 20 sinkholes and caves. These caves are the places which were popular at the time of the accidents in the early 1970s, and all but three have been re-opened to qualified sport cavedivers, as a result of lengthy access negotiations. The three locations which remain closed to sport diving are The Shaft, Kilsbys Hole and Alleyns Cave caves which were the sites of multiple-fatalities.

Divers sometimes stumble upon worthwhile diving locations, and slowly the word gets out that some such place has been found, and the rumours begin. This was the case with L97 ("Mud Hole") when the dive pool was first checked out by a small group of divers, and finally when the rumour reached the CDAA officially. action was taken to formally categorise the hole, which naturally meant that its location and features became popular knowledge. Not all cave features can be handled this way, however, for a multitude of reasons which I hope to briefly cover in this article.

CLES . ARTICLES . ARTICLES . ARTICLES . ARTICLES . ARTICLES . ARTICLES .

The question of non-categorisation of caves in general (including interstate dive sites) was raised yet again in a recent issue of "The Scuba Diver" magazine, when Victorian cave diver Russell Kitt published an article entitled "Cave Diving In Australia - The Uncategorised Caves". In an otherwise excellent article which graphically described several waterfilled caves in detail, the reasons for non-categorisation were not discussed, resulting in divers gaining the impression that there were many caves in the area which should have category ratings, but didn't. The value of each location was clearly expressed, but Mr. Kitt barely touched upon the problems each site presents with regards to cave diver access. These problems are not special to the caves mentioned in his article, and they can be used to illustrate fairly well the reasons why many other caves remain uncategorised and unpublicised.

Mr. Kitt opened his article with a description of a dive in what members will now know is the Western Side of Englebrechts Cave - what the CDAA considers is an "Experienced Category 3" dive. At the time of publication of his article (unbeknowns to Mr. Kitt), the CDAA was on the verge of finalising a legal Agreement of Access for members to the cave with the Corporation of the City of Mount Gambier, after almost 2 years of legalities and negotiations. These negotiations began shortly after the Western Side was discovered. As a result of the article (which somewhat pre-empted the arrangements involving access gates and the like), many divers with ratings below Category 3 tried to find out where this 'magic' cave was. Comments heard around that time included statements like "if it's uncategorised, it must be safe like Ewens" and "better get in there before they make it Category 3"! The point is, of course, that we don't "make" it category anything - it already IS of a particular level, and many Category 2 divers, thinking it would be something like Allendale or The Pines, would have got the shock of their lives if they'd dived there without knowing what it was really like. (Stories of this type involving Cat. 2 divers in the popular side of Englebrechts, and some near-tragedies are already floating through the system). Common sense would seem to dictate that any hole found which is not categorised should be treated as an "Experienced Category 3" hole until proven otherwise, but unfortunately, there are a lot of people out there whose total cave diving experience is the easy, open sinkholes of Category 1 and 2 standard, who do not know what other caves are like. It really seems to be a pity that Mr. Kitt did not bother to contact the Association regarding the situation at Englebrechts before rushing off into print.

Other caves shown and described in the article are far from "secret", although they may be uncategorised. Tantanoola Lake Cave, for instance, has been closed to sport diving by the National Parks & Wildlife Service as considerable damage to the fragile formations in the cave was being done by people lugging gear through the restrictions. If diving isn't allowed there, what is the point in categorising the place? Caroline Sinkhole, although seemingly picturesque from a distance, is a terrible place, farworse than The Sisters which most members enjoy grizzling about! Apart from the resident stinging nettles and (until recently) car bodies, add a few tiger snakes, very dirty green-yellow water and a few cans of poison floating about and you've got a fairly good picture of what this sinkhole is really like! Uncategorised? You bet it is! And until in-water conditions improve to the degree whereby the dive may be almost enjoyable, it can stay that way, in my opinion!

There are a few other holes in the area which are similar in this regard, and haven't been categorised because of their lack of appeal. Cave Gardens in the Mount with its small pool of putrid stormwater runoff and Earls Cave near Ewens, full of orange skludge and metallic debris are two which spring to mind. I would assume that these features are two of the "two dozen other caves in the Mt. Gambier area which have not been categorised by the CDAA although they are obviously known about" which Mr. Kitt stated in his article!

Some of the other caves described in Mr. Kitt's article could possibly be construed as being some of the "secret caves" we've heard mention of, although they are hardly ever dived due to their particular problems, lack of interesting features or difficult landowner negotiations. The sinkhole called "Scrub Hole" (actually "Bottlebrush Sinkhole") lies in a native scrub reserve and as it contains delicate algae growths, special permission is required before diving is allowed there. The people who own the cave with a large tree growing in the entrance likewise do not generally grant diver access, and specifically ask divers to keep it fairly quiet to avoid loss of privacy. It is not a very interesting dive anyway, having only a shallow lake with no obvious extensions.

The Three Sisters and "another interesting dive" mentioned in Mr. Kitt's article have never been officially brought to the CDAA's attention, because of the very limited amount of diving done there under extremely adverse conditions. As the Association has not yet begun access negotiations, it can only be assumed that Mr. Kitt obtained landowner permission for a "once-off" dive as in most other cases. Something which many people don't seem to realise is that there is a very real danger that official access negotiations could fail resulting in EVERYBODY being locked out of the caves concerned. Some landowners may not mind too much if one or two groups a year approach them for diving permission, but the problems of popularity could be more easily dealt with by a solid concrete lid. This possibility is yet another aspect which must be taken into consideration before negotiations commence.

The CDAA has had a lot of dealings with landowner negotiations and legal aspects or agreements (mainly in South Australia), and has no reason to choose non-categorisation purely for the sake of it. You can be sure that there are very good reasons for such non-categorisation, and it should also be remembered that there are probably a lot of caves which are unknown to the CDAA although individual divers may know of them - so ignorance of a feature, in this case, is a valid reason!

So to summarise, there are many reasons for the existence of uncategorised caves - features which are not popularly known, pools which are extremely small and exceptionally hazardous, polluted and potentially dangerous caves (e.g., rolls of barbed wire etc), and denial of general diver access for one of many possible reasons including fear of legal liability, concern about loss of privacy, damage to stock or property, conservation of cave features or lifeforms - even unwarrented prejudice against cave divers in the form of a local Mount Gambier radical who runs around telling landowners "Don't let cave divers in"! Probably the most important of all of these is the justified fear of liability, and landowners are understandably somewhat paranoid about this in view of some of the ridiculous court decisions made overseas in recent times on matters relating to access. All members have a duty to assist landowners as much as possible and not to just take their favourite diving locations for granted, as the landowners (or managers) are really doing us all a very big favour. Landowner requests for secrecy should also be honoured.

TICLES . ARTICLES . ARTICLES . ARTICLES . RTICLES . ARTICLES . ARTICLES .

The issue of categorisation of caves doesn't stop in the Mount Gambier area. The CDAA has discussed what role it should play with regards the other diveable caves throughout Australia, including such places as the Nullarbor and Tasmania. As the system at present cannot adequately cater for the required follow-up of categorising remote holes, and also because of the very limited diving done in such places (usually only by some of the most experienced cave divers anyway), the CDAA should probably play the part of an advisory body only at this time unless circumstances change sufficiently to warrant a large national control group. The Association's PRIMARY objective and reason for forming in the first place was to ensure that Mount Gambier cave divers could be represented for the sake of keeping the spectacular sinkholes of the region open to qualified divers ... any extension to this goal is really unimportant if the basis of the system becomes threatened. Perhaps the time will come when the Association grows large enough to categorise and control cave diving from coast to coast - but that time is not yet with us. There is, indeed, more to operating such a large Association than merely labelling caves and sinkholes.



CAT 3 TEST TIPS

by Peter Rogers

The performance of candidates during the blacked-out mask line following Category 3 test of last September and the generally low standard of equipment handling indicates that divers are relying on their Category 2 cave diving experience only to get them through the test, although a fair amount of thought and training is required as well. The following points are made with the recent Cat. 3 test in mind, and should be considered by all divers training towards future Category 3 tests.

- 1. When following a line in low visibility water the best method is to run the line through your fingers with your arm stretched out in front of you. This allows you to gauge by feel where the line is leading you and prevents you from ploughing head first into rocks.
- 2. Line following is a gentle procedure. Carefully work out which way the line is leading you and try to follow it with the minimum of pulling on it.
- 3. A line should be kept relatively taut at all times. If for any reason slack line is encountered, carefully pull it tight until you can gauge which direction it follows.
- 4. If the line has pulled into a crevice that you cannot fit through. check to either side as well as above and below for the opening. (A good cave diver will have memorised any tight passages on the way into a cave while the visibility was good. This makes negotiating such areas much easier on the return journey, when the visibility is poorer.
- 5. When following a line in zero visibility, keep one hand (plus tether!) on the line following its direction, and the other hand in front of your head to prevent damaging it on rocks. (My sympathies to several of the Cat. 3 candidates!)
- 6. When you reach a tie-off point, carefully feel the line around the tieoff until you have worked out where it goes. Do not blindly sweep around looking for the next section of line as this is a sure recipe for getting tangled in any loose line that may be around, and the line you eventually find may not be the one leading from the tie-off point you have just arrived at.
- 7. It is very difficult to perform good quideline work whilst wearing gloves.
- 8. A good cave diver does not have large numbers of torches and other loose equipment hanging from his/her person by long tethers waiting to get tangled in any loose line.
- 9. When diving in the vicinity of quideline, minimize the number of turns you make. If you look around for your buddy, turn back the same way. Then if any line is snagged on your equipment you won't wrap it right around vourself.

These points become applicable in most of the Category 3 caves around Mount Gambier. On the return trip from any of the tighter sections of a silty Cat. 3 cave the first diver of a buddy pair will be following a line through low visibility conditions, while the dive leader will have a much tougher job because the diver just in front of him will have silted things out to a much greater degree, and because he will also be handling the reel.

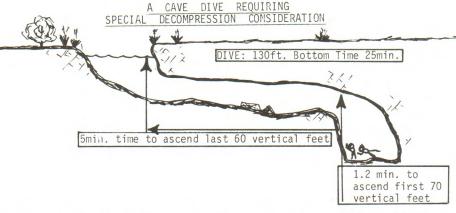
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PENETRATION DECOMPRESSION

The following article has been reproduced from a paper presented at a National Speleological Society (U.S.) Convention in the early 1970s. Although it was written for American cave divers, it is still worthy of consideration in planning your next dive in some of Mount Gambier's larger sinkholes.

How you use your tables, be they U.S. Navy, A.S.2299 or RNPL, and whether you use them safely, is as important as any other part of your dive plan.

PLAN YOUR DIVE - DIVE YOUR PLAN.



The divers have completed a twenty-five minute dive to 130 feet. U.S. Navy Air Decompression Tables call for 10 minutes at the 10 foot stop. But the swim out of the cave will not allow the proper rate of ascent of 60 feet per minute and the last 60 feet of ascent took 5 minutes instead of 1. So, special corrective steps must be taken to adjust the decompression time in order for the tables to give adequate protection. According to the abovementioned tables, if you are unable to maintain the 60 feet per minute reduction in pressure (such as swimming out of an underwater cave) the following procedure should be followed:-

- a) If the delay was at a depth greater than 50 feet: increase the bottom time by the difference between the time used in ascent and the time that should have been used at a rate of 60 feet per minute. Decompress according to the requirements of the new total bottom time.
- b) If the delay was at a depth less than 50 feet: increase the first stop by the difference between the time used in ascent and the time that should have been used at the rate of 60 feet per minute.

If the entire ascent is delayed, it is advisable to follow procedure (a) above, and add the additional ascent time to the bottom time. (See example on next page).

PENETRATION DECOMPRESSION (Continued)

Assume that in the example a slow gradual ascent had taken 6 minutes instead of 2 minutes, add 4 minutes to bottom (25 + 4) = 29 and decompress for a 29 minute bottom time instead of a 25 minute bottom time. Gives : 3 minutes at 20 feet and 18 minutes at 10 feet.

If the delay was near 40 feet, use procedure (b) and add the extra 4 minutes (taken in the last 60 feet of ascent) to the first stop decompression time. This gives (10 + 4) = 14 minutes decompression time at the 10 foot stop.

For further study, refer to :- U.S. Navy Diving Manual Skin Diver Magazine Oct. 1968.

ON-CAVE CAMP SITES

How would you like to hop out of bed, step out of your caravan and go jump in the lake - Ela Elap, to be precise? Thanks to Peter Norman (Ela Elap/One Tree sinkholes) you will be able to do just that!

Peter has procured several very large caravans with complete on-site facilities ... toilets, showers, kitchen etc. etc., ... which will be situated right beside Ela Elap and hooked up to the mains power supply, so divers can actually live on the edge of the sinkhole. Although final details have yet to be worked out, Peter is intending to charge around \$5 per person per night or thereabouts, and can even stock up the fridge with meat and milk if you want!

No deposit is required at this stage, as any diver who may abuse this new facility will have to personally answer to Peter!

Interested? Give Peter a ring on (087)-38 5287 or write to him C/- Private Bag 67, Mount Gambier S.A. 5290.

MEDIA WATCH

National Geographic Magazine of January 1984 carried an article titled "Exploring a Sunken Realm in Australia", which featured Piccaninnie and Ewens Ponds, and included some information about the caves and sinkholes of the Mount Gambier region. Some excellent photographs highlighted the article, which was very descriptive and gave a very good impression on the visitors viewpoint.

EMERGENCY HYPERBARIC UNIT PHONE 051 - 34 4666

The risk of bends or embolism is always present while deep or repetative diving, as in the case of diving in the freshwater caves and sinkholes of Mount Gambier.

It is reassuring to know that in such an emergency there is now available 24 hours a day, a recompression facility at Morwell in Victoria's Latrobe Valley.

The facilities consist of a large fixed chamber and a mobile smaller chamber, which can be moved by road or air transport to the site of the accident.

This enables the diver to be given treatment as soon as possible after the incident, which would aid a faster and better recovery. All treatment is administered by trained medical staff who are also available and on call 24 hours along with the chamber. For more details check your last edition of "The Scuba Diver" 1983, page 49 onwards.

(The Association is also investigating the old Conshelf chamber which is now available in Adelaide. We hope to be able to present more information in the next issue of Guidelines).

CLASSIFIEDS

1. One U.S. Divers Twin Tank Manifold
Any reasonable offer will be considered.
Contact K. Lengs, telephone: 336,1616 (Home)
225.5980 (Work).

Editor: It is envisaged that this column is available free of charge for any C.D.A.A. member who has cave diving equipment available for sale. So, if you want to sell your old diving light, or reel or whatever. write to the Editor.

FOR SALE

Why pay between \$25 and \$30 needlessly?

Elbow swivel joints can be purchased from the Association.

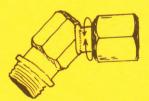
They are good quality chromed, brass type and can be attached to any brand of second stage regulator.

Send \$18 to : CDAA,

P.O. Box 290, NTH. ADELAIDE,

5006.

The item will be sent by mail.



SCUBA DIVING ACCIDENTS

can include:

decompression sicknesspulmonary barotrauma

FIRST AID FOR BOTH OF THESE:

- 1. OXYGEN
- 2. FLUIDS
- 3. ASPIRIN
- 4. OBTAIN EXPERT ADVICE

CONSCIOUS PATIENT

- 100% O₂ mask. High flow
- Fluids salted and sweetened 1 litre/hour
- Two tablets of aspirin

UNCONSCIOUS PATIENT

- Intubate O₂ 100% High flow
- I.V. fluids (saline or Hartmann's Solution) 1 litre/hour

LOCAL CONTACTS

MOUNT GAMBIER HOSPITAL: (087) 24 2211 A.H.(087) 24 2213

ROYAL ADELAIDE HOSPITAL: (08) 223 2855

Ask for Intensive Care Unit.

