# CAVE DIVERS ASSOCIATION OF AUSTRALIA

(Incorporated in South Australia)

C.D.A.A. NEWSLETTER

**GUIDELINES** 

No. 34: DECEMBER 1989

## PRESIDENT'S REPORT

Politically the 1988/89 year was cave diving outside of our current for Sinkhole Liaison Committee that body. meetings. Four were convened during the past year.

one of my original goals was to that has passed. establish the Association's

The support recently shown for the Restructure Policy has given its beginnings. I stress to those me the confidence Association's ability to demonstrate are appreciated. Development of to landowners and divers at a federal the policy will be gradual and with level the advantages of legal regular membership consultation. protection, training and unity the Association can offer.

Mr & Mrs Ashby re-open the Shaft, Oueensland cave diving identities toward the CDAA.

at the volume and character of sites being investigated in not only Wales.

Each state has existing cave diving new sites. representation, and must be able to stand in its own right: hopefully support the Association. under the direction of the one body. If the CDAA can provide a centre of expertise, fair acceptance and recognition of those people actively

relatively quiet. Landowner charter, and continue to develop confidence in the Association's the best form of legal protection stability has reduced the necessity for landowners, then we can be

Despite a few management "hiccups", our reputation has I have regularly mentioned that strengthened and spread in the year

I thank both the supporters and recognition on a truly national basis. the critics of the new policy: each have in their own way helped shape in the with reservations that your concerns

The bottom line is that you cannot be heard if you don't speak. It is The Indemnity Package has seen vital that those members with concerns, suggestions or confused brought forward two new sites ideas contact me as often as is currently being negotiated and led necessary to find common ground.

I would also like to invite all those 'explorers' to contact Andrew Ibelieve you will soon be surprised Cox (Research Co-ordinator telephone AH (03) 391 3935) in preparation for 1989/1990 projects. Oueensland but also New South gearing up to assist interstate members in the investigation of

Again thanks for continuing to

Lance R Mitchell President



## CAVE DIVERS ASSOCIATION OF AUSTRALIA

INCORPORATED IN SOUTH AUSTRALIA)

PO. BOX 2161 T

P O. BOX 290 NORTH ADELAIDE 5006

Mount Gambier District Council 324 Comercial Road West MOUNT GAMBIER 5290

4th October 1989

Dear Sir.

Due to the recent C.C.A. concerns in the South East Region, the Cave Divers association of Australia indertook a mater monitering program over a variet: of sites in the area, we will continue to re-moniter on a regular basis in the

is the proposed C.C.A. Blending Plant at the corner of Carpirco and Mulwala Roads is situated over a major cave joint system and the ground is of a recognised cavernous nature, the C.D.A.A. would appreciate the council taking the necessary steps to ensure that site pore tests are carried but to assertain the credibility of the site with regard to infiltration of C.C.A. products into

The C.D.A.A. feels that through a combination of our monitoring program and the assurances of council the health and well being of our members can be

Yours faithfully

Lance R Mitchell

President.

## **BARNOOLUT ACCESS**

There is a change of access requirements for Barnoolut: Contact Colin Traeger, Manager, Barnoolut Station, P.O.Box 12, Mount Gambier, S.A. 5290, nominating an a.m. or p.m. time. He will reply with a time that best suits his schedule. Divers are still required to obtain indemnity (through C.D.A.A.) as previously.

The C.D.A.A. wish to entend their deep appreciation to Reg Watson for hisefforts and his commitment to the safety of cave diving in the Mount Gambier area over the past 20 years.



#### CAVE DIVERS ASSOCIATION OF AUSTRALIA

(INCORPORATED IN SOUTH AUSTRALIA)

PO BOX 2161 T MELBOURNE 3001

PO BOX 290 NORTH ADELAIDE 5006

Ray Tunk Secretary Mount Gambier Australian Labour Party

20 October 1989

Dear Sir.

Regarding the special meeting being held at 10.00 am on Monday the 23rd of October in Mount Gambier, concerning the proposed C.C.A. Plant.

The Cave Divers Association of Australia regrets that on such short notice both of our representatives who are handling this issue, are committed to other duties, and will be unable to attend.

We have forwarded the Mount Gambier District Council correspondence on the matter, a copy is attatched.

The Association's stand on the issue is that it recognises the council as being responsible for the health and well being of our members in the event of any contamination of the water table from products handled by the C.C.A. Plant, should it go into operation on the proposed site at Cafpirco and Mulwalla Roads.

The letter we forwarded to the council will be printed in the next issue of our membership journal, at this point in time I feel all we can do is inform our membership that the council has been made aware of the nature of the site, and if insuficient tests are carried out at the site to validate the issueing of a permit then in the future should environmental damage result then I am certain that not only the C.D.A.A. but Mount Gambier District residents will be calling for the council to account for it's actions. We appreciate your concerns and thank you for considering ours.

ance R Mitchell

President

PROPOSED C.C.A. BLENDING PLANT INFORMATION WILL BE MADE AVAILABLE TO C.D.A.A. MEMBERS AS SOON AS POSSIBLE AFTER COMPLETION OF THE MONITORING **PROGRAM** 

#### **PRODUCT REVIEW**

We've all been taught in a basic cave As indicated at the CDAAAnnual General diving course to eliminate snag points of our body. The one area that con tinues to elude us is the tank valve and regulator.

Many makeshift methods have been proposed to solve this. Ideas included taping the valve assembly, to inverting the tanks therefore allowing us to easily reach the valves in the case of a snag.

A product is now available which will greatly assist cave divers. It is basically a tank hood which covers the entire top portion of the tank.

The head simply slips over your currently assembly and is held in place by your tank band.

Slits in the hood allow gauges and regs to be passed out. The material is made from a non-tear plastic coated material. The unit takes only seconds to slip on and requires no extra bits or pieces.

Having used the hood in cave diving courses, I can vouch for its ability to significantly reduce snares and snags. It is good to see people placing a little innovation into cave diving equipment.

The hood is available for \$40 (including postage) and should fit most single tanks. Orders can be made for twin tank assemblies.

> Contact Joe Camaleri (03) 367 8927 with your order.

THANKS to Steve Keiven (?) from Geelong, who reported that Peter Norman's phone number is wrong (Trevor Telford's is listed of this was recovered from the membership, twice) in Guidelines No. 33 (blue one). Correct telephone number for Peter Norman is (087) 385287

#### **BRASS PISTON LUFF HOOKS**

(as in Ian Lewis' book) **\$3.50** (free postage)

Contact: Tony Richardson 754 6163 between 7-9pm any night

#### FINANCIAL REPORT

Meeting on 30 September 1989, the problems this financial year were much the same as for previous years. With two separate accounts in S.A. and Victoria, it is impossible to track the income and expenditure in both States. Accordingly, figures for Victoria are accurate but those for S.A. may be incomplete. One suggestion made at the AGM was to centralise all the accounts with one National Treasurer.

With the re-opening of Pics, there were several members who suddenly remembered they were unfinancial. These members were charged back fees plus a fine. This, in conjunction with \$10 Pics fees, resulted in a significant injection of

Bi-annual membership also allowed investment of fees in a high interest account. The net result was an annual income of \$26,776.

The usually high cost of producing Guidelines was lower this financial year because fewer issues were produced. Telephone costs were higher than usual because of the large amount of liaison being done by telephone.

Other positive savings resulted from a reduction of National Committee meetings. With the political scene at Mount Gambier easing, the Committee required fewer meetings. Due to a reduction of meetings, an increase in phone calls was naturally recorded. This however still resulted in a net cost saving.

On the negative side, \$6,000 was paid to NPS for 1st year Pics permits. Only half hence members now are being required to obtain permits direct from NPS.

The expenditure for the financial year was \$23,715, resulting in net profit of approximately \$3,000.

The exact financial figures may be obtained by requesting in writing to Nick Jones for Vic. figures and Pete Gurdler for S.A. figures.

It is anticipated that this profit will be used to assist the interstate groups to develop their local cave diving for the benefit of all members.

#### TANK CAVE - 5L230

#### LOCATION

Twenty seven likometres from Mount Gambier, 200 metres off the Millicent Road on private property.

#### HISTORY

Tank Cave was first dived about 20 years ago by a few of the early pioneers of cave diving in the Mount Gambier region. It was never explored very far due to the problems of negotiating the very tight entrance, lack of powerful underwater torches and lack of good gear and experience.

In mid 1983, Peter Horne and Mark Nielson. two members of the association, managed to negotiate the entrance and explore the cave to about 100 metres. Again, due to lack of suitable equipment for negotiating restrictions, the extent of the cave was not fully realised.

In July 1984, Phil Prust, Paul Arbon and myself obtained permission from the Manager of the property to dive the cave. Due to ground water running into the cave, During this time the cave was extended to the visibility was down to approximately 300mm at the entrance and after negotiating were heading off in several different the entrance restrictions, we were unable to determine which way the cave went due to the poor visability. The dive was abandoned and no more dives were done in the cave and more complex the maze of until May 1989.

#### PRESENT

On the dive in May 1989, Phil Prust and myself each wearing twin 40 cu ft capacity tanks set up as twin independent systems for solo diving, managed to break through into the main system that had been partly explored in 1983. We continued along the most obvious path until we entered a large underwater chamber about 30 m. long, 12 m. wide and 4 m. high. The visability was as good as the 55 watt torches that we were using. Small particles of silt were dislodged from the roof by our bubbles. At this stage, we were approximately 100 m, into the cave and on the left hand side of the chamber combined total of 3900 m. of surveyed was a tunnel leading off. We explored the cave. I am pleased to report that the full crystal clear waters of this tunnel to a distance of 240 m. from the entrance. The in excess of 5000 m.

tunnel was about 1 m. high and 6 m. wide and the floor was made up of fine mud that produced large clouds of silt that quickly reduced the visability if careless finning techniques were used. Our air bubbles again dislodged small silt particles off the roof which added to the rapidly reducing visability. At 240 m. in I had used a quarter of my air supply from each of my tanks so I 'called' the dive and Phil and I retraced our path through the cave to the entrance. The visability in the last 15 m. was down to just about zero and it took about 40 minutes to negotiate the restrictions and out into air.

The first weekend in June saw a return to the cave with Paul Arbon and Brenton Woolcock joining Phil and myself. Four dives were done during the weekend and 380 m. of virgin cave was penetrated extending the known limits of the cave to 600 m. During July and August, four weekends were spent exploring the cave with additional help from Ron and Robyn Allum, Peter Stace and Dave Warnes. 2500 m. of known tunnels. Major tunnels directions with side passages interconnecting many of the tunnels. The more the cave was explored, the larger interconnecting tunnels became.

As they were being explored, sections of the cave had fixed lines laid in them. The lines were knotted every five metres with direction arrows pointing the way out every 20 m. The distance from the entrance was marked on each arrow to help with the surveying.

Two weekends in September were also spent exploring and surveying the cave with Tony Richardson and Scott Carpenter helping. The maximum distance from the entrance was 560 m. in a south easterly direction and 465 m. in a north westerly direction, with a total distance of about 1400 m. of fixed line being laid to make a extent of the cave could be considerably

#### **FUTURE**

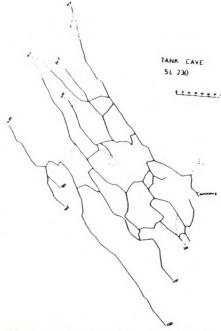
Permanent access to Tank Cave has been negotiated with the landowner and at present an Indemnity Agreement is being drawn up for the owner by the Association.

One of the access requirements was that the Association had to instal a lockable steel gate over the entrance. The gate is held in place by half a tonne of concrete and tied into the limestone with large steel star droppers driven into the underlying limestone. This gate has replaced the concrete lined rainwater tank that was rolled over the cave entrance to stop cows and horses falling into the cave. This rainwater tank was where I assume the name 'Tank Cave' originated.

At present access to dive Tank Cave is being restricted while the surveying is being completed. In the future the cave will be open to members of the Association who hold the Penetration Diver level and solo independent gear (twin tanks of equal capacity) will be mandatory.

need to attend to be upgraded to Penetration Engelbrechts from the entrance to the Diver will inform them of the additional second air chamber and back in a silt-out gear required and how and when to use it. whilst wearing twin 88 cu ft tanks, then Jump reels and direction arrows will be you should not find some of the sections in required by all divers to safely follow the Tank Cave (especially the entrance) too fixed lines in the cave. Hand signals as much of a problem. used by American cave divers will also be 
If all members of the Association who taught. Initially, a guide system might be get to dive the cave treat it with the respect used to help divers get a feeling for the that it deserves, then many years of excellent type of cave diving that Tank Cave has to cave diving will be had by all. offer as there is no other known cave in the Mount Gambier region that has the same style of cave diving.

The map of the cave shows the complexity of the system and so far only a single line survey has been done. At present the team of divers has the enormous task of measuring the widths and depths of all the tunnels and this information will be added to the map. Tank Cave is undoubtedly the most exciting "find" in cave diving in the Mount Gambier region in the last 20 years and would have to rate as one of the best cave dives in Australia.



If you have no trouble negotiating the The Seminar that Category 4 divers will restrictions in the western side of

**Christopher Brown** 

**CDAA 708** 

#### **BREAKFASTS & DINNERS**

Ye Olde Post Office Tearooms (you know, where you have those delicious Devonshire Teas at Allandale East can offer a full cooked breakfast or evening dinners - providing you book in advance, of course.

Phone Shirley on: (087) 38 7311

#### CATEGORY 3 TEST REPORT

A very successful testing program was held on Saturday 30 September 1989. The day was unusually fine, sunny, and warm!

Twelve candidates presented for the test - four from S.A. and eight from Victoria. Of these, nine successfully completed the test. Congratulations to Pat Coulton, Bernard Harrison, Chris Jordison, Paul Marlow, Tim Martin, Chris Murphy, Grant Pierce, Geoff Riddle, and Ray Tyers. Examiners commented on the very thorough preparation of all successful candidates.

Thanks to examiners Chris Brown, Scott Carpenter, John Dalla-Zuanna, Glen Harrison, Barrie Heard, Ian Lewis, Richard Megaw, Tony Richardson, and trainee Phil Mann.

An equipment innovation noticed at the test was a number of tank valve hoods. These consisted of heavy duty plasticised material strapped down over the valve to the tank band. Slots are cut for the regulator hoses and a small hole in the top releases trapped air. The purpose of the hoods is to prevent entanglement of the guideline in the tank valve.

A final Category 3 Test will be held in Goulden's Sinkhole on Saturday 17 March 1990, prior to change over to the new system. Contact (S.A.) Peter Girdler (08) 380 5205 or (Vic) Tony Richardson (03) 754 6163. Application closing date: 17 February 1990.

#### **CDAA YELLOW STICKERS**

By now, you should have received one free CDAA sticker. If you would like additional stickers, then they are available from our Melbourne P.O. address.

addi Coo.			
Quantity	Cost		
2	\$ 1	-50¢ each	
10	\$4	- 40¢ each	
20	\$ 7	-35¢ each	
50	\$17	-34¢ each	
100	\$32	-32¢ each	
You must	send a	self-addressed	
stamped envelope with your order.			

It appears that the British Cave Diving Group have similar procedures for access as we use - so far we don't have to contend with Alsatians! N.A.Jones

#### ACCESS TO RUSSETT WELL CASTLETON

The new occupants of Russett House are Mr & Mrs Betts. I have approached them regarding future permission for CDG members to dive in Russett Well. They are happy for the old access arrangement to continue, i.e. simply call at the house and ask. It will probably be necessary to complete indemnity forms as before. Mr Betts has asked that the gate should always be secured immediately after having passed through. It is fairly important that visitors do see him personally before walking across to the dive site - there is now a large unchained Alsatian dog named Calamity roaming the garden, J.N.Cordingley Reprinted from: The Cave Diving Group Newsletter, Britain: April 1989, No. 91

#### **CAVE REELS FOR SALE**

Designed and constructed by Cave Divers for Cave Divers. Impact Resistant PVC construction available with or without 3mm orange floating line.

#### Features:

- Handle adapted for carrying torch
- top viewing holes
- large drainage holes
- right or left hand operation
- web strap for side holding.

Special price for CDAA members:

- without line
- \$130.00 with approx 200m line \$150.00
- Orange guide line available separately

3mm orange floating line 15¢ metre **Enquiries and Orders:** 

> **Tony Davis** 44 Queen Street Frankston Vic 3199 Phone: (03) 781 3820

## **CAVE DIVING BOOKS FOR SALE**

The CDAA has obtained some books from the American-based National Speleological Society's Cave Diving Section, and these are offered to CDAA members at attractive prices.

**Basic Underwater Cave Surveying** (John Burge) 1987, 134pp \$15 **NSS Cavern Diving Manual** (Zumrick, Prosser, Grey) 1988, 127pp \$16

**Hand Signals for Diving** (Finley, Stone, Vilece) NACD publication 4th Edition 1988 \$5.50 First published in 1977

as Hand Signals for Cave Diving Basic Cave Diving - a blueprint for survival

(Sheck Exley) 5th Edition 1986 \$5.50 NSS Cave Diving Manual (Sheck Exley, I Young, Editors) 1982 \$15 (reprinted 1986) 290pp

The first two books (Surveying, Cavern Diving) were reviewed by Peter Horne in Guidelines 32 and also offered for sale as a pair for \$30. This offer still stands.

As a further special offer, the two smaller books (Hand Signals and Sheck Exley's 'blueprint' ) are available as a pair for \$10.

As an additional offer, the two smaller books are both available at \$5 each if you order in quantities of two or more. Prices shown include postage. To get your books, write to the CDAA Melbourne P.O. address.

Please print your name and address, indicate which books you want and include a cheque for the correct amount. Please note that there are limited quantities of some books.

#### **NON-FINANCIAL MEMBERS**

Please pay your 1989/90 membership fees now. This will be the last correspondence you will receive as non-financial members. If fees are not paid immediately a late fee may be applicable. Members who have been unfinancial for more than 12 months may become financial again by paying current and back annual dues and a \$20 fine. Please note members may have to re-sit exhaustive tests at the discretion of the National Testing Officer.

#### **NEW PROMOTIONAL PRODUCTS** SUPPORT AND PROMOTE YOUR ASSOCIATION.

New stocks of clothing and stubble holders are finally now available as seen at the Bush Dance Weekend in November:

Windcheaters: NavyBlue/White Logo /Black Logo Red

Sizes: 16, 18, 20, 22, 24 only Price: \$25.00 inc return postage

T-shirts: NavyBlue/White Logo Red /Black Logo

Sizes: 16, 18, 20, 22, only Price: \$10.50 inc return postage

Polo Shirts:

Quality Poly Cotton with Collar & button NavyBlue/White Logo

Red /Black Logo

Sizes: 16, 18, 20, 22, only

Price: \$24.00 inc return postage Stubble Holders: Red with Black Logo Polystyrene Foam with Plastic Shell Price: \$3.50 inc return postage.

Send order and cheque/money order made payable to CDAA, specifying sizes & colours to CDAA Melbourne P.O. address.

#### **VOTING RESULTS**

As only one nomination was received for each position, the nominees were automatically placed in their positions of nomination. The people were:

Lance Mitchell (National Director) Ian Lewis (National Standards Director) John Vanderleest (Business Director). You will note from this that the position of National Secretary has been renamed 'Business Director' - this is the result of discussions of the new Directorate as to the detailed responsibilities of each Director. It was viewed that the position of National Secretary had far more responsibilities than that of just Secretary. Responsibilities include all aspects of the general running of the Association, i.e. co-ordination of secretary, treasury, records, Guidelines, etcetera.

As the responsibilities are now expanded beyond what was originally envisaged, people who wish to nominate for this position are still entitled to do so. If further nominees are received for the position, John Vanderleest will step down whilst voting takes place. If no further nominations are received, John Vanderleest will continue to assume the pesponsibilities of the position. Nominations must be made in writing as outlined in the last special mailout.

In order to get things rolling, the new Directorate has already appointed a few delegates:

Andrew Cox **Nick Jones** 

Research Officer Secretary/Treasurer

Pete Girdler

Records Officer

Maurice Parry

S.E. Representative

The Directorate felt that, given their past track records, these people had the expertise to fulfill these roles. Any objections should be forwarded in writing to the Association.

#### A CLIMBING COURSE WITH A DIFFERENCE

Have you not dived Hell's Hole because that 30metre drop to the water, and the return back UP, UP, UP (with all that gear!) has been too daunting a

Have you ever thought that CRAYS exist where the entry into the water seems impossible?

Has the classic wreck dive always eluded you simply because of the cliff you must scale before you can get into the water?

maybe you would simply like to know how to safely get up and down cliffs.

WELL FINALLY .

HERE IS YOUR CHANCE

JOHN VANDERLEEST has arranged at NEW UNIQUE COURSE

## CLIFF ENTRY SUPERVISOR

- · a must for all cray hunters
- · a must for divers who would like friends involved in their weekend enjoyment
- · a must for all cave divers

#### THIS UNIQUE COURSE WILL **COVER SUCH TOPICS AS:**

- · equipment needed
- · signals for cliff work
- knots for climbing
- mechanical/free descent
- mechanical/free climbing

You will spend a weekend learning all the different types of abseiling, equipment haulage and climbing cliffs.

You do not have to be a diver to join in. It is a course for you and all your friends. So, DON'T MISS OUT -

COST - \$150.00

Contact John VANDERLEEST

on: (03) 416 9370 (A.H.)

#### 'WONDER DOWN UNDER'

over fifteen years of closure, the Shaft was the crystal clear water just swallows the open again, and we were booked in to dive beam as though it was a 2-cell aquaflash. the largest and possibly most spectacular sinkhole in the Mt Gambier Region!

late change of guide, Wayne and I headed continues to extreme depths, and again off to the Mount on Friday night, bound for Ian Lewis' place. The trip was uneventful, by the inky blackness below. It is rumoured except for the constant rain that kept us that a French diving team pushed the company for most of the way and we tunnel to a depth of over 280 ft, and they arrived at Ian's place right on midnight.

We woke the next morning to bright blue sky and started bolting our tanks together, making those last minute adjustments to our gear. The others in our little group, Geoff. Lisa and Tim arrived from Mt create a magnificent sight as it cuts through Gambier and with Ian we all headed off to the blue water like a huge spotlight. Due Cave View to meet Mrs Ashby. After signing to the time of year, the sun was at an acute the required forms and looking through the angle and when the shaft of light appeared, Visitors' Book we headed out to the hole, it speared its way down the side of the all of us just itching to get in the water to finally see what has been described as the best dive in the Mount.

brief, we set up ladders, deco tanks and ropes, and lowered our gear through the tiny hole to the small surface lake 20 ft stop, we spent our time poking around below. The lake chamber is only about 10 x 20 metres, and gives absolutely no bottom of the ladder or deco line just indication of the immense size of the sinkhole marvelling at what we had just seen. below. A short ladder climb and we were all in the water, and after final buddy checks we submerged into crystal clear water, the top of the rockpile immediately coming into view over 100 ft below. The water was so clear it was like falling through thin air.

check and it was then that the sheer size of the hole became apparent. Looking back towards the surface, the tiny hole in the paddock above appears as a bright dot illuminating a surprising amount of the cave.

From the rockpile we headed N.W. to probably the only noticeable feature in the cave, Sawtooth Rock, Again looking back towards the surface you can see the rockpile leading upwards, and the bubbles. illuminated by the sunlight and our torches, glittering as they rose toward the small lake 130 ft above.

The longer the dive went on the more the unbelievable size of the sinkhole becomes

Well, our day had finally come. After apparent. Using powerful 55 watt torches

by TONY DAVIS

From Sawtooth Rock we continued to the top of the entrance of what is referred After the usual last minute worries and a to as the railway tunnel - the passage that our powerful torch beams were swallowed still didn't find the bottom.

Following the wall around to the south, we started slowly spiralling towards the surface, always looking up for the moment when the sun would hit the water and sinkhole, illuminating the rocky floor almost 200 ft below. It was truly the most incredible sight I have seen, and one that After Ian gave our group a thorough predive I'm sure will remain fixed in the minds of all who were in the water at the time.

> During our extended precautionary deco the side walls, others hanging off the

After lunch and a 3 hour surface interval we were back in the water again. This time instead of one big group we broke into buddy teams. Wayne and I were last to descend and it was incredible watching the torches of the other four divers flashing all over the sinkhole - sometimes over At the rockpile we stopped for a gear 200 ft away. There is a slab of rock just past Sawtooth Rock that would be almost as big as a house, and viewed from above makes yet another great sight. To give another indication of the immense size of the hole you could fit a 12 storey building between the rockpile and the surface lake - and that's the small part of the cave! For those who have visited the Nullabor caves and thought the underwater chambers were big - wait until you see this one!

After another 20 minutes of decompression we hauled all the gear out and after stopping to thank Mrs Ashby made our way back to Melbourne, already discussing when we could get back again, to relive the two most unforgettable dives we have had.

#### THE DEEPEST UNDERWATER CAVES IN THE WORLD

The following list reflects the present status of speleological activity in the deepest underwater caves in the world.

The given depths refer to the genuine (net) water depths (reine Wassertiefe) in the individual caves, and are to be uynderstood as the vertical difference between the surface of the water and the deepest point (physically) attained or echosounded

All of the cave water depths have been expressed in both metres and feet using following conversion formula:

3.2808 x (depth in metres) = depth in feet

0.3048 x (depth in feet) = depth in metres.

In consideration for differences between high and low water levels, a possible average has been made.

The caves are listed in order from deepest to shallowest, with the following information: NAME, deepest depth in metres/ feet, country in which located, name and nationality of the explorer providing the information, and reference source Revised edition 24.4.89 by Oliver Knab (Switzerland)

LEGEND:

"INFO" - Info Plongee, Feuille de liaison de la Commission Plongee Souterraine, Federalion Francaise de Speleologie. Contact Ch. Locatelli, 34, Rue Michelet 01100 Oyannax, France.

"UWS" - <u>Underwater Scelectory</u>, Newsletter of the Cave Diving Section of the National Speleological Society, Inc. Contact: J Prosser, Treasurer, NSS Cave Diving Section, POBox 950, Branford, FL 32008-0950.

"REFLEKTOR" - Zeitschrift für Hohlenforschung. Contact: Reflektor. Postfach, CH-4002 Basel, Schweiz (Switzerland).

\*AMCS\* - AMCS Newsletter. Contact: Association for Mexican Cave Studies POBox 7672, Austin 1X 78713.

"STALACTITE" Zeitschrift der Schweizerischen Gesellschaft für Hohlenforschung Subscriptions: P Deriaz Neumatteil 19. CH-5300Wil-Turgi, Schweiz (Switzerland). Photocopies: Bibliotehque de la Societe Suisse de Speleolgie, CH-2300 La Chaux de Fonds, Schweiz.

"SPELUNCA" - Federation Française de Speleologie, 130 Rue Saint-Maur 75011 Paris, Françai.

"UWS 13:1" - List of Deepest Underwater Caves in Florida by S Extey Underwater Speleology Vol 13, No 1 (1986).
"BIBLIOGR. #1" - J Y Cousteau, Calypso 1973, p171.

BIBLIOGR. #2" - M Farr. The Darkness Beckons 1980, pp 161-163

(see legend for complete expansion).			24 KINSS 1960, pp 161-163.	
1 FONTAINE DE VAUCLUSE		1033ft TELENAUTE/F		INFO 45 p11-12
2 HRANICKA ABYSS, CS	267m	876ft Soundings/F Tra	avenek, L Be	nyesek, CS Pesteri Scuf. 87, p162
3 NACIMIENTO DEL RIO MANTE	264m	867ft S.EXLEY/USA	(28.3.89) per	sonal communication 4.89
4 RED SNAPPER SINK	182.8	600ft Echosoundings	/USA	UWS V3/N4 + V13/N1
5 GOUL DU PONT	140m	459ft J SCHNEIDER	<b>BRD</b>	INFO 46 p3-5
EMERGENCE DE LA CHAUDANNE	140m	459ft C BRANDT/Sw	itzerland	INFO 51 p29
6 FONTAINE DES CHARTREUZ, F	130m	426tt C TOULOUMD	JIAN/France	
7 LIGHTHOUSE REEF - BLUEHOLE	125m	410ft Minisub (A FAL	CO, A LABA	N) Bibliogr. 1
FONT DE LUSSAC	125m	410ft C TOULOUMD	JIANF	INFO 47 p28
8 SORGENTE DEL ELEFANTE BIANCO	122m	400ft J BOLANZ/Swit	zerland	STALACTITE 1/1987, p47
9 LAKE GUINAS, Namibia	120m	393ft Soundings/Ch.M	Aaxwell, SA	UWS V16/N1, p17
10 MYSTERY SINK		390ft Soundings/USA		UWS V13/N1
11 SORGENTE DI GORGAZZO	117m	384ft J BOLANZ/Swit	zerland	STALACTITE 1, 1987 p47
12 FONT D'ESTRAMAR	115m	377ft C.TOULOUMD	JIAN/F	-
13 GOUL DE LA TANNERIE	113m	370ft B LEGER/Franc	20	INFO 35 p11 + 16
14 DIEPOLDER 2	109.7	360ft S.EXLEY/USA		UWS V13/N1
15 SINOIA CAVE, Zimbabwe	102.1	335ft R NYMAN/S Af	rica	BIBLIOGR. 2
16 GROTTE DE MOTIERS	102m	334ft J.BOLANZ/Swit	zerland	REFLECTOR 3/85 p8
17 BENJAMINS BLUEHOLE	100m	328tt F MARTZ/USA		UWS V13/N2 + INFO 13
18 WAKULLA SPRINGS	97.5	320ft R PARKER/W S	SKILES/T MO	ORRISAP HEINERTH (GB+USA)
19 BLUE HOLE 4. Florida		318ft -/USA		INFO 31 p5
STARGATE, Andros	97m	318ft R PARKER/S C	LOUGH/GB	
20 DEVILS HOLE, Nevada	96m	315ft J HOUTZ/USA		INFO 13, p9-10
21 CENOTE UCIL, Yucatan	95.2	312ft Soundings/O Kr	nab, Switzerl	HOHLENPOST 78, 1988 P74-5
22 NACIMIENTO DEL RIO SABINAS		311ft D SWEET/USA		AMCA N10/79 P22-31
23 GROTTE DES CENT-FONDS	93m	305ft E SEGOND/Fra	nce	INFO 40 p17
EAGLES NEST SINK	93m	305ft J LOCKWOOD	F MARTZ	UWS V13 /N1
SALLY WARD SINK	93m	305ft -/USA		UWS V13/N1
INDIAN SPRING	93m	305ft S EXLEY/USA		UWS V13/N1
DEEP LAKE (DeSoto, FL)	93m	305h S EXLEY/USA		UWS V13/N1
DRACHENHAUCHLOCH, Namibia	93m	305ft C RUFVA VAUC	GNIAUX, Sw	itz UWS V15/N3 p6-11
24 DOUBLE KEY HOLE		300th S EXLEY/USA	•	UWS V13/N1
25 DIEPOLDER 3	91.1	299ft S EXLEY/USA		UWS V13/N1
26 BUCO DEL BOSSI, Switzerland	90m	295ft O ISLERAW KE	USEN, Switz	REFLECTOR 3/85 p9
GROTTE DE LA BAUME, France		295ft F LE GUEN/Fra		INFO 31 p12
RESURGENCE DE GOURNEY ROUX	90m	295h J CHOUQUETA	France	INFO 34 p6
LOCATION OF CAVES:				
USA 4, 10, 14, 17, 18, 19A, 19B, 20, 23B,	23C. 2	23D, 23E, 24, 25	BELIZE:	7
FRANCE 1 5A, 6A, 7B, 12, 1				9, 15, 23F
SWITZERLAND 58 16 26A	., 4		ITALIA:	
CZECHOSLOWAKIA 2			MEXICO:	

#### MOUNT GAMBIER

Well if you didn't come along to our weekend "Extravaganza" at Mount Gambier, you missed one of the greatest events the Association has put on. We had approximately 60 people come along to do the Cat. 2 Crossover Programme, 500 people turned up to the afternoon activities, and 80 people turned up for the Smorgasbord and Bush Dance.

The Cat. 2 Crossover Programme people were updated on the latest diving techniques, decompression theory and cave diving equipment. The new system was explained in detail and people were given the opportunity to clarify their training requirements for the future.

In the afternoon we had a number of events happening at the YMCA. Events in the Hall included underwater scooter trials, full-face commercial diving equipment complete with intercom systems and oxygen rebreathers. Our thanks are extended to Frank Zeigler of Professional Diving Services at Portland for supplying the necessary equipment event to the general public. and staff for all pool activities.

given the opportunity to learn and try wire ladder climbing, Jumar climbing and abseiling. Our thanks here are extended to Baxter Hire of Mount Gambier for supplying scaffolding to run this event; toChris Hales and his family, and to Tim Martin, Barbara Hayes and Noel Dillon, for the extraordinary effort they put in on these events.

Andrew Cox, Peter Horne and Mia Thurgate put on an excellent display of research diving in and around Mount Gambier. This generated tremendous interest from both CDAA members and the public.

#### "EXTRAVAGANZA"

Chris Brown brought along a trailer load of his home-made diving accessory equipment and showed members what could be done with a little thought and invention.

John McCormick from Alpha Systems and Geoff Geist from Ocean Graphics displayed their wares, giving divers the opportunity to discuss and purchase the latest equipment used in cave diving.

Tony Davis put on an excellent photographic display with contributions from several CDAA members.

Peter Rodgers, Andrew Wright and Chris Brown enlightened many divers with video footage, slides and stories of their recent Pannikin Plains expedition, and of Tank

Greg Bulling stimulated further interest in the Nullabor by giving a talk on "How to Dive the Nullabor on a limited budget".

Special thanks go to the YMCA for co-hosting the "Extravaganza", and for all the effort they put into advertising the

Saturday evening saw people wining, As well as diving activities, people were dining and dancing until the wee hours of the morning. Mrs Maloney of the Mount Gambier Hotel arranged their usual excellent smorgasbord. The bar finally ran dry at 12.30am! Bad luck for all those people who didn't turn up - but it was good luck for those who did - there was more for us!

#### AMENDMENT TO **EXAMINER LIST**

Scott Carpenter has been appointed as an examiner. He lives in Gippsland in Victoria and can be contacted on (056) 25 2508 for advice on training, testing, equipment etcetera.

#### ANNUAL GENERAL MEETING **MOUNT GAMBIER**

This years' AGM had a different 'air' about it. It didn't seem to have the 'politics' of the past, yet it was the most important political 2 divers contacted Reg Watson to meeting of the CDAA since its inception.

At first we wuffered through the usual formalities of reports from various committee members.

Then the meeting took an interesting turn. Firstly the explanation of the National Restructure Policy and the introduction of the new system, leading to the tentative approval to get the mechanism to implement this system up and running.

All this over with, we got down to some serious business - 'new' caves. Phil Prust entertained us with the magic-looking 'Tank' cave. An excellent narrative from Phil accompanied the slides, and it was hard to believe that a cave system as extensive as this actually exists in Mount Gambier. Certainly this cave must rate with any of the best from overseas! Not content with leaving it there, a video shown to us by Peter Horne of L250 also stimulated the silt in my veins. What a remarkable production and certainly it merited the applause and comments generated.

The AGM of '89 succeeded in heralding in the 'new look' CDAA and if the slides and videos are what we have to look forward to, then bring on - 1990!!

## REPRIMAND

A group of recently qualified Cat. dive Barnoolut:

- NO SIGN OF AN **INDEMNITY**
- NO SIGN OF "DIVER WHO HAS BEENTHERE BEFORE"
- PHONED REG (WHICH IS NOT CALLED FOR UNDER NORMAL CONDITIONS: A WRITTEN APPLICATION ONLY IS STANDARD)

You are reminded that all dive access arrangements are a result of good landowner relations that require adhering to the protocol of access, and breach of this protocol can lead to suspension of diving rights.

P.S. This is the first reprimand we have had to print in the last year so to the majority, THANKS!

## **EWENS & PICCANINNIE PONDS** NATURAL HISTORY

"I consider the times I have just spent with you and Kay studying the creatures of Ewens & Piccaninnie Ponds to be amongst the most memorable of my entire life. Fascinating. Thank you so much." Vicki B (Melbourne).

Come along and increase the pleasures of your freshwater diving (& underwater photography) through a greater awareness and understanding. Find out why the sinkholes of Mount Gambier are much more than fabulous clear fresh water. Learn of their fascinating natural history and the exotic creatures who live in their waters.

Lectures, discussions, audio-visuals, dives in Mount Gambier, hands-on practical work, reference texts, course notes, projects.

WEEKEND COURSE - 1990: Mount Gambier, South Aust - May 19, 20, 21

For free brochure and complete details contact:

Sea-Studies Services Phone (03) 807 0773 70 Railway Parade South CHADSTONE Vic 3148 FAUI NAUI PADI Specialist Course Awards Available

#### MAPPING PROJECTS

Four mapping projects are currently underway at Mount Gambier. The first is Tank Cave (5L230) - refer to article. The number of people involved with this project Melbourne address. is severely restricted. Selection of team members has been based on past experience with cave mapping, owning the required equipment for extreme penetrations, and cave diving experience in general.

The 2nd project being started is L250. Selection for team members here are similar to L230. No team members will be allowed to participate in both projects. This ensures that tasks are completed as quickly as practical and a fairness amongst the research divers.

The 3rd project, currently underway, is 1080. The project presently involves measurements, visability and temperature, and it is hoped that other research will cover water sampling and testing for any and all biology.

The 4th project is Baby Blue. This has never been surveyed. It is an ideal project for divers who would like to become involved with this aspect of cave diving.

Research diving isn't a'glory' job. It requires dedication and a lot of work. Divers need to be able to work in extremely limited visability at times and must be fastidious in their accuracy. It's not everyone's 'cup of tea' but the satisfaction of knowing that you helped produce cave maps and collected scientific data is a personal one and one that cannot be described.

We are looking for both experienced cave research divers and new research divers who would like to become part of the team for this project. Remember, it is a commitment of both time and money. You cannot cap a cave in one weekend and the CDAA cannot afford to pay people for their work, hence you will be paying for things such as airfills, your food and accommodation, etc.

One hidden advantage about joining in a new project is that you don't have to pay any instructor to learn research diving you will be taught as we go along. Your | Guldelines. name is then included on the CDAA research list. This list is the basis of team selection for many projects, e.g. Tank Cave or L250. Remember, you need to learn to crawl before you can walk.

If you would like to become involved with this project and this aspect of the CDAA, contact John Vanderleest (ph 03 416 9370 AH) or write to our

### PRODUCTION OF **GUIDELINES**

As you would be aware, Guidelines has been produced at irregular intervals, and has frequently been late in arriving.

In an attempt to remedy this, we will be sub-contracting out the production of Guidelines, including:

- typesetting & layout
- printing
- · folding & stapling
- arranging for printing of envelopes
- · insertion into, & labelling of envelopes
- · mailing.

#### **REQUEST FOR TENDER**

Any person who is interested in taking on this task is invited to register their interest by writing to the CDAA Victorian Post Office address.

People may tender for all or part; however preference will be given to tenders covering total production.

The tender must state exactly what work is proposed and a tender cost for the production of 1,000 copies of

Tenders must be received by February 1, 1990.

## CDAA CAVE ACCESS

Remember: Access is a privilege, not a right. Please be considerate of landowner wishes.

CAVE	CAT	CAVE OWNER	PERMISSION
Ewens Ponds	Nil	Dept of Lands PMB 124 Mt Gambier (087)241598	Groups of 6 or more, phone/mail to Dept of Lands Smaller groups do not need. Ponds are closed between 1 Sept and 30 Nov
Horse & Cart and	1	Mr Don Telford	By phone or mail
Tee Tree	1	P O Box 2629 Mt Gambier (087)384003	1 week prior
Baby Blue (Little Blue) and	1 .	Port MacDonnell Council	Baby Blue - Permission not required-Must carry card
Allendale	3	as above	Allendale- key from Mt. Gambier Tourist Information Centre
Gouldens and Sisters (Two sisters) and Fossil	1 1 3	Dept of Lands PMB 124 Mt Gambier (087) 241 598	Contact Dept of Lands by phone/mail prior to diving. Stay out of Gouldens when pump operating
Ela Elap and One Tree	2 2	Mr Peter Norman Private Bag 67 Mt Gambier (087) 250 938	By phone or drop in before diving. Accommodation also available

Piccaninnie Ponds	2	Dept of Environment & Planning. NPWS 11 Helen St Mt Gambier (087) 241 579	Permit Holders by phone  Be aware of delicate vegetation
Swim Through	2	Valerie Earl c/- P O Allendale SA 5291	From lessee, Mr David Easton, 8 Tarandi Rd, Mt Gambier (087)250938 By phone or mail one week prior Closed for 6 weeks around May due to ewes lambing
Hells Hole and	2	Woods & Forests Myora Forest Hq	Contact Woods & Forests by mail or phone and
Pines and Elaines	3	P O Box 162 Mt Gambier (087) 255 622	arrange permit  No diving on total fire ban  days
Black Hole and Ten Eighty and Bullock Hole	2 2 3	Mr Reg Watson P O Box 12 Mt Gambier (087) 266 215	Contact CDAA Committee for diving deed. THEN by mail to Reg Watson 2 weeks prior stating names/quals of all divers.  Must take somebody familiar with Barnoolut property and procedures
Max's Hole	3	Mr Trevor Edwards P O Box 1319 Mt Gambier (087) 268 277	Phone or mail 1 week prior to dive
Shaft	3	Mr & Mrs Ashby	ONLY by contacting designated 'guides' who will arrange access
Engelbrechts East and West	3	Mt Gambier Council	Obtain key from Mt Gambier Tourist Information Centre
Three Sisters	4	Millicent Council	Obtain key from Mt Gambier Tourist Information Centre

### CURRENT EXAMINERS

The following examiners are available for any Category tests, Training courses, advice on Training Techniques and Equipment and for any comments you may have on the CDAA operations. The co-ordinator of Category 3 tests is Tony Richardson.

SOUTH AUSTRALIA Ron Allum	SUBURB/AREA Windsor Gardens	HOME PHONE
Chris Brown	Glen Osmond	(08) 266 0949 (08) 79 1445
Glen Harrison	Hackham	(08) 382 9482
Richard Megan	St Agnes	(08) 265 5183
NEW SOUTH WALES		
Andrew Wight	Sydney	(02) 428 2176
Des Walters	Albury	(060) 23 3506
WESTERN AUSTRALIA		
Hugh Morrison SOUTH EAST	Perth	(09) 344 1562 work
Frank Ziegler	Portland, Vic	(055) 26 5288
VICTORIA COUNTRY AREAS		
Ian Lewis	Otways & Geelong	(03) 720 1205
Barrie Heard	Gippsland	(056) 27 5511
Scott Carpenter (Trainee)	Gippsland	(056) 25 2508
MELBOURNE		
Bill Bernhardt	Croydon	(03) 725 9716
Stan Bugg	Strathmore	(03) 379 8791
John Dalla-Zuanna	Ascot Vale	(03) 370 1093
Alan Jolliffe	Mitcham	(03) 874 7669
Ian Lewis (see country)		
John McCormick	Bentleigh East	(03) 579 0570
Tony Richardson	Tecoma	(03) 754 6163
Bob Wealthy	Frankston	(03) 789 6389
Phil Mann (Trainee)	Footscray/Geelong	(03) 689 7791

## **CATEGORY 3 TEST**

A final Category 3 testing program will be held on

## Saturday 17 March, 1990,

prior to changeover to the new system.

Contact: Peter Girdler (S.A.) (08) 380 5205 or Tony Richardson (Vic) (03) 754 6163 Closing date for applications: 17 February 1990

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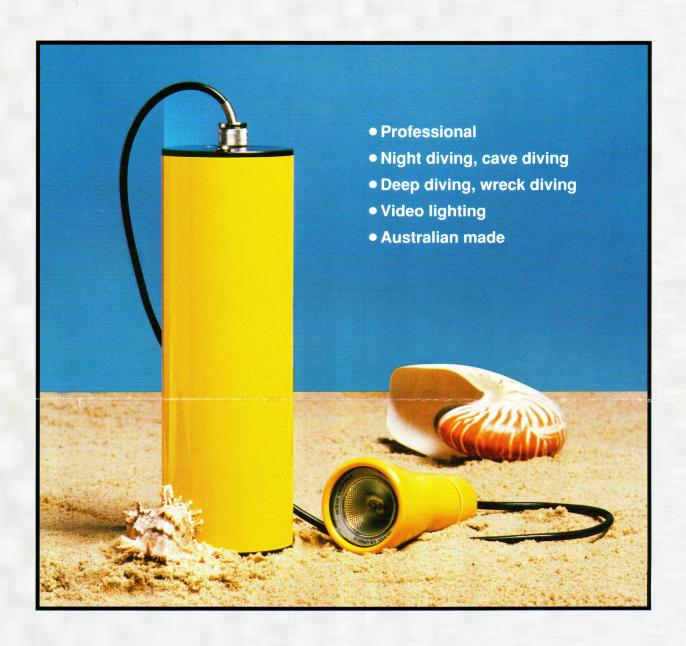
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- Disassembly in minutes for globe/battery changes.
- High strength specially moulded LITE head is completely corrosion free and user serviceable.
- Recharging by means of LITE head switch without disassembly.
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- Maintenance free sealed batteries provide over 200 cycles between battery changes.
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- Running time M50: 50-70 mins, M50L: 90-120 mins.
   (Dual LITE heads available for M50L).
- Narrow, wide (standard), and flood beams easily obtained by interchangeable reflector/lamps.
- LITE head may be released from hand without floating, and fits most buoyancy pockets for convenient carrying and easy accessibility.
- Oven baked paint coating for a tough, attractive and durable finish on battery pack housing.
- Straight cable reduces entanglement problems experienced with coiled type cables-- imperative in guideline (wreck and cave diving) situations.
- Spare parts readily available. 72 hour turnaround for most factory servicing and modifications.
- 12 months warranty on parts including batteries
   (3 months commercial). 1 month on lamps.

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