

C.D.A.A. Newsletter  
**GUIDELINES**

No: 76 - JUNE 2001



**CAVE DIVERS ASSOCIATION OF AUSTRALIA**

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*Editorial*

Thanks to all who have contributed to this issue, it is good to see some not so familiar names making a contribution.

I had a lot of calls regarding photo's and articles after the last edition but unfortunately not much turned up in the mail !!

As always we are short of front cover pics, so send in your favourite photo and have it published.

*Glenn O'Connell*  
 Editor

**ARTICLES FOR GUIDELINES**

Members wishing to submit articles for inclusion in guidelines can do so in the following manner:

- Send articles & photos via post to:  
 The Editor, Glenn O'Connell,  
 P.O. Box 290, North Adelaide, S.A. 5006.
- Email to [glenn@vds.net.au](mailto:glenn@vds.net.au)
- Any files for inclusion should be saved in "TEXT" or "ASCII" format. Hardcopy should also be provided wherever possible.

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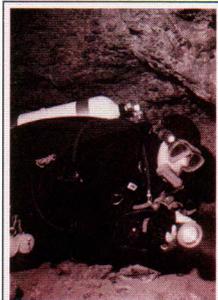
FOR SPACE - APPLY TO THE EDITOR

"Guidelines" magazine is circulated to over 1200 members and retail outlets.

Back Page	2 colour	\$350.00
Inside Front Page	Black & White	\$300.00
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## Front cover:

Rob Wallace  
in Tank Cave

Photo:  
John Winkler

## CAVE DIVERS ASSOCIATION OF AUSTRALIA

P.O. BOX 290, NORTH ADELAIDE,  
S.A. 5006

GUIDELINES is a newsletter of the Cave Divers Association of Australia. All articles for the following issue are to be sent to the Editor, Glenn O'Connell, P.O. Box 290, North Adelaide, S.A. 5006. All articles and submissions shall automatically constitute an expressed warranty by the contributor that the material is original. We assume no responsibility for unsolicited material. Articles and information may be reproduced without prior permission provided reprints are accredited to the authors and GUIDELINES. Private advertising for caving and diving equipment may be advertised free at the discretion of the Editor. Opinions expressed in GUIDELINES are those of the individual authors and are not necessarily those of the C.D.A.A.

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The following is a list of people that can be contacted for CDAA matters. Please contact the most relevant person or, if unsure write to:

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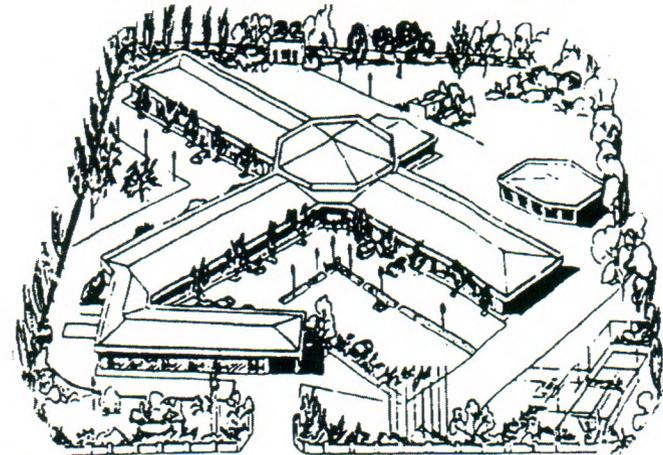


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# RECHARGING "DISPOSABLE" CELLS - FURTHER COMMENTS

The following article has been kindly supplied by the Cave Diving Group of the UK and is printed here as it appeared in their magazine.

In the last Newsletter Rob Murgatroyd (1) published some interesting work on cell recharging. He pointed out "Some people have reported success with systems to recharge alkaline cells" but later concluded that there is "little point" in doing this. However, my own experiments (2) have given more encouraging results, so here are a few points that I felt were worth throwing into the debate:

1. Of the four alkaline cells I experimented with, described in reference (2), three of these still retain useful capacity after two years and many charging cycles. One of them died recently and was replaced with a new one to enable the test to continue.

2. Rob concluded that "the tried and tested NiCad cell has not been bettered" but I wouldn't necessarily agree with this because it depends on the diver's requirements. The slightly higher voltage of nickel metal hydride batteries (compared with nicads) has advantages in certain situations. Also, the environmental problems associated with disposal of nicad cells should be remembered. Furthermore, recharging alkaline cells is more environmentally responsible than frequently replacing them, not to mention the huge financial saving if you go cave diving a lot! For ultimate duration there is no substitute for a (new) alkaline cell - their capacity is much greater than any alternative currently available at sensible prices. Alkaline cells also have the highest voltage (compared with nicads and nickel metal hydride batteries), which may be

very useful with certain bulb / battery combinations.

3. I can only re-iterate that my "Battery Manager Ultra" charger has successfully recharged alkaline cells many times for me. For anyone else who wants to try one, they cost less than £30 from "Innovations" (tel. 0870 908 7070 - or via [www.innovations.co.uk](http://www.innovations.co.uk)).

4. I intend to continue using alkaline cells in at least some of my torches, but if anyone knows of any battery technology which is better than those which Rob and I have tested to date then please tell us about it!

5. I know that Rob has further experiments underway - neither of us has obtained replicated results to date so our findings are far from final. There may be large differences in the charging / discharge characteristics between individual cells, and in their internal resistances. Keep an eye open for further information from Rob on this.

#### References:

- (1) Murgatroyd, R, 2001, "Battery Capacity And Recharging Dry Cells", CDG NL 138, pp 1,2.
- (2) Cordingley, J N, 1999, "Recharging Disposable Alkaline Cells", CDG NL 131, p4.

*John Cordingley*



## THE FOLLOWING ARTICLE WAS FOUND RECENTLY ON THE WEB.

HIGH SPRINGS - On a gut level, there is something that clearly separates those of us who would wriggle into a tiny black hole in the bottom of a dark river from those of us who would not.

Florida's cave divers - some of the most extreme modern explorers on the planet - can't resist seeing what's inside. It might lead to a limestone cathedral humans have never seen or a tiny tunnel where rare creatures hide.

The explorers swim through the aquifer, one of the few uncharted territories left on Earth. New technology means that Florida's cave divers can go deeper and farther than ever before.

Some of them, like Steve Berman, don't make it out alive.

Steve Berman, who died earlier this month exploring an underwater cave in Florida, dives near Akumal, Mexico.

Berman was a 40-year-old underwater explorer who friends say had logged some 10,000 dives. He died May 7 in Gilchrist County, 3,500 feet back in a cave system near the Santa Fe River, mapping new sections of the underwater maze.

In the tight-knit community of cave divers around High Springs, northwest of Gainesville, Berman's death hit like a fighter's punch.

"If (the cave system) can take someone like him, it can take anybody," said Dave

Sweetin, a 29-year-old dive instructor and one of Berman's students.

This is more than extreme sport. Cave explorers return from their dives with things all of us need to know.

Divers swim silently in the dark under roads and farm fields, subdivisions and minimarts. They bring back prehistoric whale bones, mastodon teeth, Indian artifacts. They chart detailed maps. They collect vials of deep spring water and creatures that have reproduced without light and air since dinosaurs walked the planet. There might be a cure for cancer in these frigid black caves, the divers say. Who knows?

The work of cave divers is especially important now, with Florida environmental regulators pushing to pump water polluted with human and animal waste into the deep aquifer. Engineers on the ground can speculate about what happens under our feet, but the divers experience it firsthand, down where blind albino crawfish live.

Berman was one of eight cave divers around the world to die so far this year. Four died in Florida.

He was alone. Friends found his body near the outer limits of the area that cave divers have explored.

Cave divers will tell you: Most of the time, we can't predict where the water might twist and turn. Many are like frustrated astronauts. They will tell you it's like another planet down there.

Cave diver Frank Richardson uses a scooter to dive in Jackson Blue Spring, near Marianna in North Florida. AT TOP: Four years ago Steve Berman retrieved these wine glasses during a dive to the Andrea Doria, the luxury liner that sank off the coast of New York.

Their world mecca is Ginnie Springs, a private campground about 26 miles from Gainesville. Down in the maze around the Santa Fe, Suwannee and Ichetucknee rivers, there are underground rooms so big you could drive three semi-tractor trailers through and still have room for a passing lane. There are holes so small you take your tanks off to get through. There's a giant underwater sand dune. There are tunnels that lead nowhere, and tunnels that open new territory. Divers say it's like going into Westminster Abbey with no lights, or floating through the Grand Canyon.

Diver Jim Stevenson remembers shining a light into a cave and seeing dozens of albino crawfish fall from the ceiling like snow. In a cave just a half-hour drive from the state capital are huge, fossilized heads of coral. This was the ocean's bottom once. Now it is a freshwater cave, miles from the coast.

Under Wakulla County, divers have broken the world record for the longest dive, mapping 3 1/2 miles of labyrinth 300 feet deep. Some divers made a video and took it to county officials. The county changed development laws to protect an underground resource that no one had ever seen before.

Like mountaineers and sky divers and Arctic explorers, cave explorers die for the cause. Even the best can lose their lives. Like Berman: As an instructor, he taught

hundreds of people how to cave dive safely, how to survive.

They found his boat in the dead of night, anchored in the dark Santa Fe River. His wife, Anita, called his diving buddies when he didn't come home.

He had been mapping one of the gnarliest known cave systems around, the Devil's system, named for two blue springs, Devil's Eye and Devil's Ear, that bubble to the surface at the Santa Fe River. Berman went in alone at 11 p.m. Cave divers aren't bothered by night; there's less boat traffic, and they don't need sunlight. Some never dive alone. Others say they can focus better without a buddy.

Inside the Devil's cave system is an underwater sign with a sketch of the Grim Reaper. Around the reaper's feet lie skeletons in dive gear. "STOP," it says, "Prevent your death. Go no further. FACT: More than 300 divers, including open water scuba instructors, have died in caves just like this one. FACT: You need training to dive. You need cave training and cave equipment to cave dive. FACT: Without cave training and cave equipment, divers can die here. FACT: It Can Happen to YOU! There's nothing in this cave worth dying for! Do Not Go Beyond This Point."

Berman had passed the sign dozens of times. He was trained. He used a special gas mix to breathe. He used an underwater scooter to propel him.

The divers who broke the world record at Wakulla used scooters, too. It took them about six hours. Afterward, they had to float for 10 to 14 hours to decompress, making the dive a 20-hour ordeal.

Berman, who also dove ship wrecks including the Andrea Doria and the Britannica, liked to listen to Pink Floyd's

Dark Side of the Moon while he decompressed. He had rigged a Sony Walkman to work under water.

He knew the Devil's cave system better than most. Nine years ago, divers released the ashes of a father and son there. They were once Berman's students and later his close friends. They died elsewhere in a diving accident. Their ashes were shaken into this cold spring, where they first learned to love the sport.

People speculate that the best cave divers die because they get too confident. It's like when you're learning to drive and you're careful about the turn signal, brakes and keeping a safe distance. Before long, you're used to it, and you're just driving.

Most of the skilled cave divers who have died miscalculated. They got caught up in the exploration, distracted from the critical balance required by the tanks, lights and high-tech equipment.

No one knows what happened to Berman. An autopsy is pending.

Eight days after his death, two friends retraced his route. They knew the way because Berman discussed the dive beforehand. Also, when divers recovered Berman's body, his mapping notes were still attached to his wet suit.

The night he died, Berman rode his scooter a half-hour back into the catacombs to start mapping. He passed the Roller Coaster, a dark tunnel that undulates before it joins another passage. Berman and other divers had mapped 4,000 feet of deep underwater caves in the Devil's system – as long as 11 football fields.

In caving circles, there's a lot of rivalry and clannishness. Different factions bicker over which kind of equipment is best, whether

you should dive alone. Everyone is trying to figure out how not to die. Among the best, there is rigid insistence on safety. The watchword is "redundancy." Have a backup for everything. And a backup for your backup. Cave divers place "stage bottles" of extra gas in the caves at measured intervals because if they get in trouble, they can't get to the surface quickly. Berman was 150 feet from one of his stage bottles when he died.

Sometimes freakish things happen. Parker Turner, one of the best explorers, died in a cave off Wakulla Springs in 1991, when rock collapsed around him. Turner's dive buddies got out, but he did not.

A week before, Turner told a reporter: "I feel like we're in a race to document this big resource and get that information to people who can make decisions before it's too late." Today, divers have mapped nearly 19 miles of underwater caves at Wakulla.

Jeff Bozanic, cave diver from California, tracks cave diving deaths. Since 1950, Bozanic says, 528 people have died cave diving around the world, many in Florida.

"Every time it happens, it makes me stop and reevaluate everything I'm doing," Bozanic said.

Still, he'll gladly tell you about his trip to Antarctica, where he had to chase seals away from his breathing hole in the thick ice.

Last year, a cave diver named Bernie Chowdhury published a book called The Last Dive, which tells the story of the father and son whose ashes rest in the Devil's cave system. In the book, Berman talks about the dangers to people who take shortcuts.

“People who are in too much of a rush and who push it too far, too soon, run into trouble. The lucky ones see the flowing robes of Jesus down there, survive a very close call, and then when they get out of the water, the first thing they do is sell all of their gear and give up diving.”

In another part of the book, Berman says, “I thought about going to work in some sort of office environment...But I see how stressed out the guys who come down to dive with me are about their office jobs. ...Me? I get to go diving all the time, I get to take off for weeks at a time when I want

to, and go and do neat stuff like dive the caves in Mexico, the Doria, the Britannica, and even weenie stuff like shallow diving for lobsters in the Florida Keys. Man, I can't imagine any job other than teaching diving!”

In the tiny community of Alachua, near High Springs, Berman is survived by his wife, Anita, three stepchildren and legions of diving friends – all of them hoping to find out what went wrong.

*Julie Hauserman*

(c) St. Petersburg Times, published May 24, 2001

Many thanks to the person who re-posted the info on torches with lamps replaced by LEDs. My mini-Q40 now has a white LED which puts out an excellent lightbeam and lasts days on a single set of AAs. I found it excellent for reading compass & computer & writing slates and was good enough as a backup without any other light source (small underwater passages to be fair).

As you may know, there are different coloured super bright LEDs available each with different intensities (and costs!!). This got me to wondering whether a White LED is the most efficient colour to be using (they are certainly the most expensive!!).

I recently got a hold of the wavelength response chart for the human eye from an optics book which shows that the eye is most responsive to Green/Yellow for Photopic vision and Green/Blue for Scotopic vision. Photopic refers to daylight and the corresponding use of

cone cells in the photoreceptor layer of the retina. Scotopic vision is our night vision capability and this is provided by the rod cells. There are about 6 million cone cells & 120 million rod cells in each retina.

My reading of this is that a Green LED will give you better visibility in a cave than a white LED (spead spectrum) of the same intensity. The fact that Green LEDs have a higher luminous output and are cheaper than most white LEDs is just a bonus! It may not be as aesthetically pleasing to see everything green but I'll give it a go and let y'all know. I also want to try red lights (LEDs) for penetrating silt out conditions as I have seen this work to some degree in the ocean.

Has anyone else tried either of these approaches??

Cheers,

*Paul Hsieh*

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# NATIONAL DIRECTORS REPORT



I have held the office of National Director for less than two years and already my position is up for election at the Annual General Meeting in October. What happened to all of those weeks?

Chris Edwards and Steve Arnel have also served their terms and although Steve will not be re-standing, Chris has decided to re-stand for his position, which has included looking after Guidelines and CDAA Materials. Debbie Williams has looked after Instructor Materials for Chris and Records have been kept and processed by Lorraine Hardman. I'm sure you'll agree with me that his office has been well looked after. Chris's other efforts have included the establishment, with Tony Richardsons expert help, of our Web site. What a lot of members would not be aware of is the process Chris is going through converting all CDAA documents (Manuals etc.) into an interactive electronic format. This is a slow process and although some documentation had already been saved in this manner not all had been and of course everything needs to be checked. He is also in the process of creating a new Membership Data base which will allow limited access for Landowners via the web to check membership details. New products, interesting Guidelines Issues and more information on our Web site will continue to keep

Chris busy for another term. Steve Arnel's busy family life has slowed down his input but he has always come forward with ideas when asked. Steve has served the CDAA well and I wish him the best for the future. We will see him around the Mount, and as a Tank Cave Supervisor I'm sure a lot of members will get to dive with him. Paul Axton will continue as Standards Director and in between his Tank Cave Supervisor duties and his trips to the Nullabour he will continue to give time to the CDAA. Paul has also been giving freely of his time to the many members who took advantage of this years moritorium on membership renewal. He has run several update dives in the Mount since the last AGM and we are all very grateful for that. Richard Price is the serving Business Director and has aggressively attacked the position. Investments have been made ensuring the financial viability of the CDAA and his input in the new lease of Tank Cave, amongst other things has proved invaluable. Tammy Beattie was appointed by Richard as Treasurer and in this issue of Guidelines you will find an interim report (as requested by members) of our financial position. I would like to thank my fellow Directors for their input and dedication, plus putting up with my constant requests for information or reports on projects I have asked them to undertake.

Insurance has taken up a fair amount of time and Richard has followed up on our small exposure to HIH. That portion of our Insurance was picked up by another company, almost immediately. It shows what good standing we have and how our safety record speaks for us when needed.

Contained in this issue of Guidelines you will find the notification of AGM, call for nominations, general business, motions and constitutional amendments. Interest in the position of Site Director has already been shown by Rob Brennan and I would hope that all members seriously consider their availability for the three

Positions available this year.

A number of changes have come about during my period as National Director. I think you would all agree that the limestone blocks in Englebrechts East have made entry into the water easier and safer. I have previously thanked those concerned. We are now trying to get a donation of blocks for Englebrechts West and will be calling for volunteers for this job. Once in place that slippery and sometimes dangerous climb will be made easier and safer for our Penetration members. Look out for our work party call in July to get this site made more diver friendly. We have re-leased Tank Cave and the new application forms will be with you soon. The new access system should allow more divers into this premier dive site. Tank Cave is about to undergo some changes as well. The roadway into the site is to be improved and the change room enlarged to

provide dryer and hopefully a warmer situation. John Vanderleest has very kindly agreed to take over as Tank Cave Access Manager and I would like to take this opportunity to thank Harvey Grantham for his work in the role up until now. Harvey has done a fantastic job and I wish him well in future endeavors. On going negotiation with the new owners of Barnoolut should see access re-established soon. Kilsbys will have the platform fixed (if it hasn't been already). Improvements to One Tree and Ela Elap are on the agenda and I am looking for input on these sites. The new access arrangements for Nettlebed and Iddlebidy have provided divers with more opportunity to visit these areas.

Mapping projects are currently underway at Tank Cave, The Shaft and One Tree and soon I will be able to announce a new arrangement to allow further exploration of these sites and to produce the highest quality grade maps possible. The site maps we have are good and served us well but it is now time to bring everything up to date and new technology will allow us to do that.

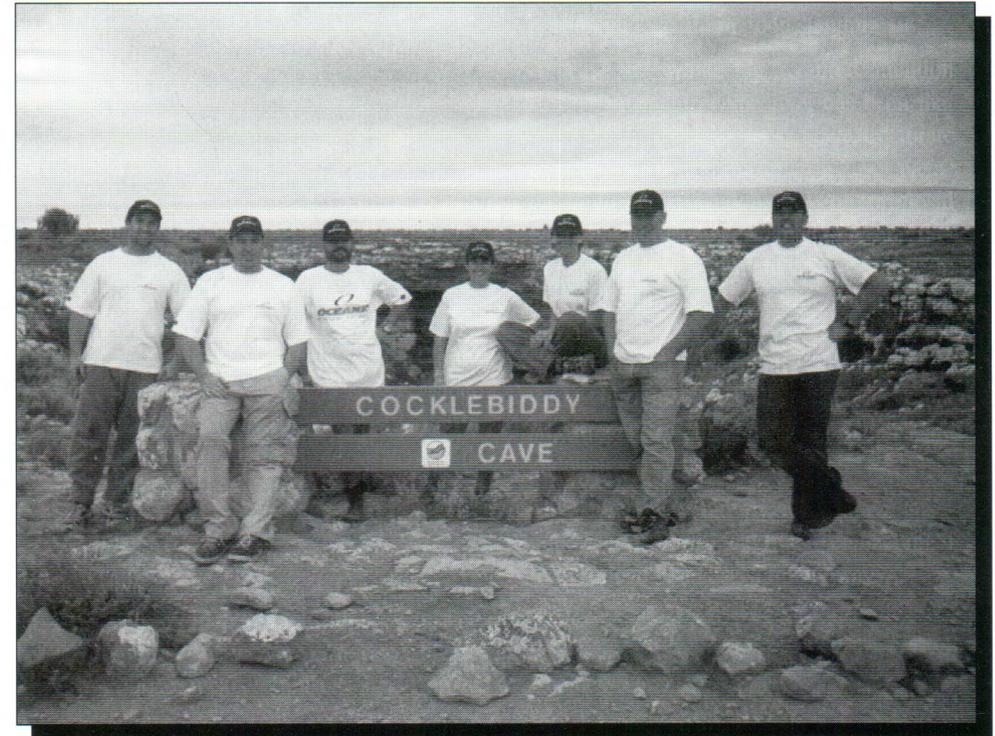
The new Course outlines are being prepared by myself, Paul, Barrie Heard, John Dalla Zuanna and John Vanderleest at the moment. This is a slow process and requires a lot of consultation and effort. We have the groundwork done already and it's just a matter of melding everything together. Thanks must go to the many Instructors that feed us with the information we require getting the job done.

I will be standing again this year for the position of National Director and hope to continue my work for the Association.

Voting is a right every member has and I suggest you exercise your right. We have experienced very poor voting turnouts previously and when I see one vote make a decision that effects

everyone, as happened in the last vote on motions, it makes me wonder about that special gift that Cave divers have and once expressed - individuality! Make the difference in our Association, VOTE!

*Warrick McDonald.*  
CDAA National Director.





## NOTICE OF 2001 ANNUAL GENERAL MEETING, ELECTION OF OFFICE BEARERS AND VOTING FOR MEMBER MOTIONS AND CONSTITUTIONAL AMENDMENTS

This notice is issued pursuant to Clause 32 of the Constitution and serves to advise members that the Annual General Meeting of the Cave Divers Association of Australia will be held on 20th October 2001 at the International Motel, Mount Gambier, South Australia. The Annual General Meeting will commence at 10.00am and will conclude no later than 12.30pm.

This notice also serves to call for:

- Nominations for National Director, Publications and Records Director and Site Director
- Member motions
- Amendments to the Constitution

Nominations for the Directorate positions must be received by the Returning Officer no later than the close of business 10th August 2001.

Member motions and proposals for amendments to the Constitution must be received by the Business Director no later than close of business 10th August 2001.

Items received after this date will not be accepted nor will any extensions to this date be granted.

Members intending to nominate for an Office Bearer position must be an eligible member of the Association as defined in the Constitution. Nominations must be accompanied by a precis not exceeding one hundred words detailing skills, experience and achievements relevant to the duties and responsibilities of the nominated position. The responsibilities of Office Bearers are contained in the Constitution of the Association. Nominations must be in writing and be signed by the nominee, the proposer and the seconder all of whom must be eligible members of the Association. The polling date for the election is 12th October 2001.

The constitutional amendments carried at the 1998 Annual General Meeting and reported in issue #67, (December 1998) of Guidelines, provided for two year terms for Directors starting from the 1999 Annual General Meeting. Nominations in the year 2001 will be for National Director, Publication and Records Director and Site Director, and will then be effective for two years, (Section 26(3), 26(4)).

The election of Office Bearers and voting on amendments to the Constitution will be conducted entirely by postal ballot.

Polling date is 12th October 2001. If you wish to vote you must be an eligible member of Association, you must use the ballot papers to be provided in the following issue of Guidelines or by special mailout.

You must ensure the ballot papers reach the Returning Officer no later than close of business, 12th October 2001. Detailed voting information will be provided with the ballot papers. Questions may be directed to the Returning Officer, M.Ryan, PO Box 4020, Patterson, 3204.

CDAА National Committee.

# BUSINESS DIRECTORS REPORT



In my first report as Business Director let me first thank Andrew Seifried. Only now after some months in the position do I appreciate the workload he shouldered in volunteering to be both Treasurer and Business Director. Andrew performed both these roles with aplomb and still had the grace to continue as Treasurer for a period after leaving the Directorate to ease the transition for me.

That having been said I would also like to welcome Tammy Beattie to the position of Treasurer and to thank her for "volunteering". Tammy has already sacrificed a significant portion of her own time to update our accounts for this year such that we hope to be able to include a forecast of our annual financial position in this issue as requested by Members at the last AGM.

The most significant aspect of the CDAA financial position is in how healthy we now are as an organisation. Recent Directorates are to be congratulated in that our balance sheet has moved from being very skinny indeed to one where we can now consider being more expansionary. I would encourage Members to come forward with ideas and projects that would enhance diving or safety but may require funding. If Members approach the Directorate with these ideas and are prepared to take some responsibility in their application I would be most surprised if they were not considered favourably. Consideration can be given to

anything from new fences to costs of mapping of caves, a caveat being that some prioritisation will have to be applied.

A small matter in which Members may be interested is in the area of insurance. I do not pretend to be an expert in matters of instructors insurance (which has been handled ably by other members of the Directorate) but I can report that the Association's insurance is now on a sound footing. The bad news was that half of our public liability policy was covered by HIH. The good news is that, after paying a new premium, QBE has taken over HIH's portion and we are in good standing.

A last issue, which has required attention from a financial perspective, has been that of Tank Cave access fees. The Directorate has been keen to ensure that a "user pays" methodology be adopted. The proposal being put in place is designed to ensure that Members who do not have the ability to dive this site do not pay for it, and also that the costs aren't prohibitive for those who wish to dive it infrequently. The scheme is to be introduced on an annual basis so adjustments can be made if problems are encountered.

Thanks again to Tammy and Andrew and I hope Members will feel free to contact me if they believe I can assist in any way.

*Richard Price*

Business Director

# CAVE DIVERS ASSOCIATION OF AUSTRALIA



"BALANCE SHEET AS AT 31 MAY, 2001"

## Assets

### Current Assets

Cheque Account	"\$20,850.94"
Common Fund AJ NAB	"\$60,000.00"
NAB Term Deposit	"\$33,493.72"
Debtors (advertising)	\$100.00
CDAА Products on hand	"\$10,749.85"
Instruction Materials on hand	"\$1,308.54"
Members Manuals on hand	"\$3,269.75"

### Non-Current Assets

"Property, Plant & Equipment"	"\$7,169.70"
Less acc. Depreciation	"-\$6,044.00"
Office Equipment	"\$11,203.59"
Less acc. Depreciation	"-\$10,893.45"

## Total Assets

**"\$131,208.64"**

## Liabilities

### Current Liabilities

Memberships 2002	"\$12,180.00"
Total Current Liabilities	"\$12,180.00"
Instr. membership 1 yr in adv.	\$40.00
Accrued Expenses	"\$7,475.92"
Overpayments	\$655.00
Penetration Course deposits	\$400.00

### Non-Current Liabilities

Memberships 2003	"\$3,030.00"
Memberships 2004	"\$1,160.00"
Memberships 2005	\$440.00
Memberships 2006	\$50.00
Memberships 2007	\$50.00
Memberships 2008	\$50.00

## Total Liabilities

**"\$25,530.92"**

## Net Assets

**"\$105,677.72"**

## Equity

Member's Equity	"\$96,168.43"
Current Earnings	"\$9,509.29"

## Total Equity

**"\$105,677.72"**

# CAVE DIVERS ASSOCIATION OF AUSTRALIA



"PROFIT & LOSS STATEMENT AS AT MAY 31, 2001"

Year to Date

## Income

Instruction Packages	"\$4,340.00"
CDAА Products sales	"\$3,814.25"
Membership fees 2001	"\$34,800.00"
Joining fees	"\$2,893.00"
Late Membership fees	\$660.00
Cave updates	\$680.00
Nitrox endorsement	\$570.00
Instructor's membership	"\$1,120.00"
Penetration Course receipts	"\$3,250.00"
Tank Cave Fees 2000-2001	"\$5,315.00"
Interest income	"\$3,729.86"
suspense	\$84.00

## Total Income

**"\$61,256.11"**

## Cost Of Sales

Cost of Sales-CDAА Products	"\$2,076.01"
Cost of Sales-Course Materials	"\$1,608.33"

## Total Cost Of Sales

**"\$3,684.34"**

## Gross Profit

**"\$57,571.77"**

## Expenses

Administrative expenses	\$116.50
Accounting & Audit Fees	\$427.35
Postage	"\$1,373.14"
Telephone	\$471.50
Printing & Stationery	\$834.08
Computer expenses	\$384.14
CDAА Liability insurance	"\$14,335.22"
Bank fees	\$220.11
Credit facility fees	\$860.14
Govt. financial charges	\$67.94
Site Expenses	\$767.50
Tank Cave Licence Fee	"\$8,250.00"
Guidelines - production	"\$17,655.40"
Guidelines - postage	"\$2,076.13"
AGM - directors expenses	\$478.17
Meetings - other	\$90.75
Penetration Course payments	"\$2,844.62"
OzTek Expenses	\$318.64

## Total Expenses

**"\$51,571.33"**

## Operating Profit

**"\$6,000.44"**

## Other Income

**"\$3,508.85"**

## Other Expenses

## Net Profit/(Loss)

**"\$9,509.29"**

# CONFESSIONS OF A NULLARBOR VIRGIN



I didn't really hesitate when offered the opportunity to dive the Nullarbor caves. World class cave systems, 2 weeks off work, good company, who would? With the organisation for the trip taken care of by George and Tania Yarra (my ride to W.A.) I really didn't have to think about the trip much, which was a good thing, since I was still a few weeks off doing my cave course. Working through a very thorough check list (and still stressing out continuously thinking I had forgotten something) I got my dive gear together, with camping gear, dry caving gear, trailer..... The list seemed endless. With months of preparation and only 2 post course dives under my belt, we enthusiastically headed west. A drive through the night and 17 hours later we arrive at Cocklebiddy. A quick look around town (it doesn't take long) and we headed off 5 kilometres down the road to set up camp at Murra El Elevyn.

After setting up camp we arranged all our diving gear for the following days diving in Tommy Grahams Cave. It was here we had our first lesson in Nullarbor education. In Tommys a few small bags are better than one large one. Did I listen? No. Did I wish I had? Well..... Yeah. Tommys is small. And tight. And hard work. Diving was another thing altogether. Beautiful rock formations, huge rooms, numerous little runs to explore. Awesome.

Four dives in tommys later we pull out (a task in itself) and prepare to dive Murra.

This presented new challenges for us. Lowering gear, ropes, karabiners, use of lowering frames and cliff edge rollers. Add another long haul with gear (this time each to their own) down to the water and I was just starting to understand this whole Nullarbor thing. The diving? Unbelievable. This would soon become my favourite site. Murra has it all – large tunnels, big rooms, low flatteners, small tunnels, small rooms and plenty of nooks and crannies not on our survey map – as I found out 'discovering' a nice little run on our last dive.

It was actually a relief to have a day off to set up our dive in Cocklebiddy. Although tired, I was starting to enjoy the big hauls in and out of sites. All part of the Nullarbor experience.

Cocklebiddy is big in every way. Big drop in, big long haul to the water, big lake swim and a huge tunnel. Brilliant experience, but the kilometre swim to the first rockpile does take a bit out of you.

After the haul out of Cocklebiddy (and Briggsy lofting a huge drop punt over the doline) we pack up camp and drive 300 kilometres east to Eucla and Weebubbie cave. The easiest access and haul award would have to go to Weebubbie, and definitely the biggest dive of my career. 40 plus metres deep and a 350-400m penetration to the back room makes Allendale sinkhole look a little small. All this was certainly an introduction to cave

diving at its world class best. A week there was not enough. (Although half a day helping the W.A. police after a major traffic accident deprived us of a dive, it did put cave divers in a friendly position with the local constabulary, but that is a story in itself).

After an extraordinary 2 weeks it was time to head home. A quick tour of the local area (Abrakurrie cave, longneck hill etc.) and we were packing up camp. Everyone should do this at least once in his or her cave diving career. Very equipment

intensive, and without the help of our experienced team members- Paul "Mr Organised" Axton, Lorraine Hardman, our esteemed Guidelines producer Chris "Mr Redundant" Edwards and George "Gumby" Yarra, then all us Nullarbor virgins – Adam "Sample man" White, Adrian "Brigga" Briggs, Tania Yarra, John Seddon, Kirra Timmins and myself, Swagman, would not have the knowledge or equipment to do this ourselves. Thanks team, and I'll see you all on the next trip.

*Jarrold White*

*Jarrold White Tommy Grahams Cave*



## **THE FOLLOWING REPORT WAS PREPARED BY GUNNAR WAGNER AND STEVE GERRARD.**

Cave Diving Accident At Cenote Mayan Blue (known locally as Cenote Escondido) This cenote is part of the Sistema Naranjal (The Place of Oranges), Monday, February 26th, 2001  
Victim: Ronald Fraga, Age 46, Rochester, Minnesota, USA. Training Qualifications: Full Cave certified. 125 logged cave dives. Ron Fraga and his wife Nancy had completed a cave dive touring the "A" gold line along with the parallel passage known as "Death Arrow" passage. After the dive, Ron decided to do a second cave dive solo with a "fresh" set of double aluminum 80's he had brought with them in their rental car. Ron informed his wife he would dive the "A" tunnel following the gold line until he reached his 2/3'rds to exit. He was "not" using a buddy bottle as a redundant system. Ron began his dive at 2:18 P.M. After two hours, Nancy Fraga became concerned and drove their rental car into the village of Tulum to the Aktun Dive Center to ask for help.

A phone call was made to Nancy DeRosa at Villas DeRosa, as the Fraga's were guests at this hotel/dive center. At 4:40 P.M. Nancy DeRosa asked Steve Gerrard and Connie LoRe to drive down to Tulum and assess the situation. Gerrard and LoRe loaded a van with their cave diving equipment and double tanks as both had been out all day diving with cave diving guests. Arriving at the Aktun Dive Center, they were informed that Nancy Fraga had gone back to Cenote Mayan Blue with Gunnar Wagner, Robbie Schnittmer and Jules (Julio) Van Der Geld. Gerrard and LoRe arrived at Cenote Mayan Blue at approximately 5:30 P.M.

The group gathered together to discuss the situation and decided that there was a "missing" cave diver. Gunnar Wagner was appointed in charge of the search and recovery. Julio Van Der Geld was asked to drive back to Tulum to inform the local police and asked for their assistance. Julio also made phone calls to inform Nancy DeRosa that Ron Fraga was still missing and that a search and recovery was being organized and performed. A thorough conversation took place discussing all possible "what if's" involving in the search for Ron Fraga.

Two cave diving teams were formed. Gunnar Wagner and Robbie Schnittmer as the first team with Connie LoRe and Steve Gerrard being the second team. From the surface, everyone could see where Ron Fraga had tied off his primary reel entering into the "A" tunnel. It was decided that both teams would enter the cave as a group and would follow the gold line until any clues or signs were found that might dictate the group of cave divers to split off in their search. Following the gold line, the cave divers found nothing unusual except for an abnormal amount of cloudy water. This was expected, as there had been two other groups of cave divers diving the "A" tunnel earlier Monday morning.

Approximately 1100 feet/340 meters in or 150 feet/32 meters past the "B" line jump the cloudy conditions were more distinct. Robbie Schnittmer was covering the far right side of the "A" tunnel passage where a white off shoot line exists at the 65 foot/20 meter level exists. But, higher in a shallower area at the 40 foot/13 meter depth level Robbie spotted Ron Fraga who was lying face down on top of a different white off shoot guide line facing

towards the gold line. There was an arrow marker at the end of this line facing in the same direction. This was 21 minutes into the dive. Steve Gerrard immediately tied off a guideline from the gold line swimming approximately 70 feet/21 meters to the victim. Ron was found with mask on and in place, regulator out of mouth, "NO" air in the double tanks but his blue safety reel was caught in the guide line which required unclipping the reel from the victim to untangle the reel from the around the frame. No equipment damage or problems was observed. No signs of a struggle were found. The water was crystal clear at the location of the victim. The body was carefully moved over to the gold line where there was more room to further assess the victim's equipment. After all four members of the search team agreed everything was properly examined; Schnittmer and Lore towed the victim back to the entry point of the "A" tunnel while Wagner and Gerrard went back to this particular offshoot guideline to further examine the situation. They followed the line, as Gerrard was familiar with it. It goes about 250 feet/78 meters as it loops back into the "A" gold line passage further upstream.

At the other end, no temporary jump line and reel was found. This confirmed that the victim did not use a continuous guideline from the gold "A" line to this off shoot guideline. Distance from either end of the loop line to the gold line was over 60 feet/19 meters or more. Gerrard and Wagner were satisfied with their search, they retrieved the guideline and reel used in connecting the gold line to the victim and called the dive swimming back out to the exit. They met up with Schnittmer and LoRe who were waiting with the victim in the cavern area of the "A" tunnel. All four cave divers completed their safety stops. Gunnar Wagner went to the surface and was given permission from the Tulum police officers to bring the victim from the cave to the surface.

After the search and recovery dive, NACD Cave Instructors Danny Roirdan and Christophe Le Malliot (who arrived at 6:30 P.M.) assisted Gerrard with a thorough assessment of the victim's equipment with Riordan translating all information to the five police officers on the scene. All equipment was accounted for and working properly.

The search and recovery began at 6:00 P.M. and was finished by 8:00 P.M. The Tulum Police Department was completely satisfied with search and recovery efforts and took over the operation concerning the arrangements for the victim's body.

Summary: Ronald Fraga was a Division Systems manager for the IBM Corporation of Rochester, Minnesota. It was concluded that the victim did not properly use a continuous guideline throughout his dive and was not properly equipped for a "solo" dive situation.

Ron Fraga completed his full cave diver training in the Akumal - Tulum area of Mexico four years ago and, according to his logbook has completed 125 cave dives. Though no one is exactly sure what happened, it can be agreed that the victim became confused and lost because of "no" continuous guideline. This search and recovery was under the auspices of the International Underwater Cave Rescue and Recovery organization (IUCRR) based in the United States headed by Henry Nicholson of Jacksonville, Florida, USA. Steve Gerrard serves as the Central America Co-coordinator with Gunnar Wagner being responsible for all situations involving the Tulum, Mexico area. Nancy DeRosa also represents the IUCRR with situations occurring around Central America. Connie LoRe serves the Santa Fe River area of North Florida including Ginnie Springs.

## GENERAL

For access to ForestrySA dive sites the following conditions apply:

- Permits for Pines, Mud Hole, Hells Hole, Nettle Bed & Iddlebidy may be obtained by one of the following:
  - e-mail - forestry.recreationse@saugov.sa.gov.au
  - fax - (08) 8724 2885
  - post applications to - ForestrySA, PO Box 162 Mount Gambier, SA. 5290
  - phone (08) 8724 2876 between 8:00am and 4:30pm weekdays
- Permits can be picked up from the Carter-Holt Harvey Mill gatehouse, Jubilee Highway East, Mount Gambier.
- The forest is closed to the public on days of Total Fire Ban.
- Forest Work Bans (which also exclude public entry) may be imposed by ForestrySA on extreme fire danger days.  
If in doubt, check with Ranger Trevor Wynniat, although signs are generally erected at diving sites to indicate such bans.
- Specific permission is required to operate a petrol driven compressor during the Fire Danger Season, ie November to April inclusive (to be included with permit application)

## NETTLE BED AND IDDLEBIDY: *(Please note changes)*

### • Nettle Bed:

- Restricted to - maximum of 4 divers per day, (Penetration rated) 1 dive per day
- Applicants to specify preferred day(s), as this site may now be multiple booked each weekend (Saturday or Sunday)
- Bookings to be in writing (e-mail ok)
- Key picked up from Lady Nelson Visitor Centre

### • Iddlebidy:

- Open every Saturday
- Restricted to - maximum of 4 divers per day (Penetration rated) 1 dive per day
- Bookings to be in writing (e-mail ok)
- Key picked up from Lady Nelson Visitor Centre

## HELLS HOLE:

- Gate key can be picked up from Lady Nelson Visitor Centre

## EQUIPMENT REGULATION Isolation Manifolds

This Regulation is to state the position of the CDAA as to the use of Isolation manifolds in CDAA controlled sites.

Isolation manifolds have two high pressure outlets allowing the breathing mix from both cylinders to be accessed simultaneously from either outlet, or each can be isolated by a **central handwheel**. If a regulator failure occurs then the faulty regulator may be turned off by the **valve handwheel**. The Isolation (central) handwheel controls the flow from the cylinders allowing access to the air in either cylinders or one at a time.

**All previous regulations on the use of Isolation manifolds in CDAA controlled sites have now been replaced by this one.**

**Only Isolation type manifolds are approved for use by the CDAA.**

### DIVING

Members using Isolation manifolds shall be experienced in their use through either formal training or practice. It is a member's responsibility to be able to use their Isolation manifold in normal and emergency situations, before entering CDAA sites. Care shall be used when negotiating restrictions to prevent accidental handwheel turn-offs.

Note: Some access agreements may not allow the use of manifolds.

### REQUIRED KNOWLEDGE and SKILLS

(Divers shall be able to demonstrate the following.)

1. Buddy procedures associated with the use of Isolation manifolds (both normal and emergency situations)
2. Rapid location and change to secondary regulator.
3. Emergency deployment of a regulator, and the use of, in an out-of-air situation.
4. The operation of cylinder handwheels – isolation, left and right, if shut-offs become necessary.
5. The use of an Isolation system as an Independent system.

### EQUIPMENT

The following equipment configuration is approved for use in CDAA sites.

1. Only manifolds with two high pressure outlets and a central control handwheel shall be used (Known as Isolation Manifolds).
2. Each outlet shall have a regulator attached (first and second stage).
3. All valves shall be accessible to the diver and their buddy (see point 4 in Required Knowledge and Skills).
4. If two buoyancy feeds are required, they are to be fed from different first stages to provide redundancy.
5. If only one inflator hose is required it should come from the primary regulator's first stage. (Note argument exists that says the inflator hose should come from the secondary regulator, this is a personal preference)

6. The primary regulator shall be fitted with a hose of sufficient length to allow exit from the cave while supplying air to another diver (penetration sites would require a hose long enough for two divers to exit toe to head, one behind the other).
7. The long hose shall be managed in such a way that it does not create a snagging problem and can be easily deployed if needed.
8. The secondary regulator shall be stored so that it can be accessed immediately if a share-air situation arises (neck lanyards or chest clips are recommended).
9. The hose length on the secondary regulator shall be suitable for the gear configuration and site.
10. The secondary regulator shall be checked periodically throughout the dive to ensure its continued operation.

## PROCEDURES

Normal diving procedures should be followed when using an Isolation manifold, except for special procedures that need to be carried out before and during the dive. Some of the special procedures, although not restricted to, are listed below.

1. Buddies shall be briefed on the operating procedures of your Isolation manifold system even if using one themselves.
2. Equipment configuration shall be carefully examined noting if regulators are assembled with crossed over hoses or gauges.
3. The source of inflator hoses shall be observed in case of failure of a system.
4. A failure in any component of the tank, regulators, Isolation manifold or other equipment should terminate the dive.
5. Isolation manifolds may be used as an Independent system with the centre handwheel turned off. It is recommended that if the Isolation system is turned off and made into an Independent system it should remain that way for the dive.
6. When the Isolation system is used as an Independent system each regulator shall have a contents gauge.

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# SPECIAL SITE INFORMATION BULLETIN NUMBER 7A 5L230 – TANK CAVE

**May 2001.**

**This Bulletin replaces Special Site Access Bulletin Number 5,5L230-Tank Cave and special site information Bulletin number 7,5L230 – Tank Cave**

This is the 8th in a series of Special Site Information Bulletins which have been prepared for the education and interest of Cave Divers Association of Australia (CDAA) members and the general public. It highlights special values and/or considerations felt to be of importance at cave diving sites.

## Introduction

Previous Bulletins have outlined some of the history of Tank Cave and the closures in regard to

access, public liability and divers requirements. This Bulletin has a few changes that will make compliance with the system easier to understand.

This document should be read with:

- (a) Policy number 4, CDAA Cave Conservation Policy.**
- (b) Tank Cave Familiarisation Schedule (May 1999)**
- (c) Tank Cave diving application form.**
- (d) Tank Cave indemnity form.**
- (e) Tank Cave map and plan form.**

## Cave Diving Supervisors

Tank Cave is a supervised dive site and as such diving can only take place on scheduled times and under the supervision of a CDAA Tank Cave Diving Supervisor. Scheduled times and Tank Cave Diving Supervisors are specified in Guidelines. The presence of CDAA Tank Cave Diving Supervisors on site during dives will ensure that divers enter and exit the property in a safe and organised manner, that dives are conducted safely and that diving groups are coordinated. CDAA Tank Cave Diving Supervisors are responsible for giving a dive brief, including an accident management plan and ensuring that the CDAA's rules as well as the provisions of the licence agreement are adhered to. CDAA Tank Cave Diving Supervisors have the full support of the National Directorate and their requirements must be adhered to at all time.

- Only 8 divers at a time, including the Supervisor will be allowed.
- The Supervisor is able to choose a buddy to accompany them, when appointed by the Tank Cave Access Manager.
- The Supervisors buddy will pay for access and dives.
- Supervisors will pay the access fee but not additional dive fees, providing they are scheduled to supervise on at least two weekends for the calendar year, and meet this requirement.
- Supervisors on their scheduled weekends may have to buddy with single "new" divers or follow "new" divers on the "Gold line".

The CDAA Tank Cave Diving Supervisor shall deny access in the event of:

- An approved dive plan not being submitted, before the dive.
- Inappropriate diving equipment configuration or poorly maintained diving equipment.
- Inappropriate attitude or behaviour.
- Failure to follow directions.
- A lack of experience with the equipment planned for the dive.

## Tank Cave Familiarisation Schedule

The Tank Cave Familiarisation Schedule is designed to help divers plan dives, which will progressively familiarise them with Tank Cave. To allow the flexibility necessary to accommodate several dive teams the dives are organised into groups and dives within these groups can be conducted in any order. Whenever more than one team requires the same dive to complete a group of dives, then the dive supervisor will schedule such dives.

Each group of dives builds on previous knowledge; groups must be completed consecutively; Group 4 dives are optional; they can be conducted at any time after group 3 dives are completed, they are not required to complete the schedule.

The scheduled dives are a minimum and divers may wish to repeat any dive(s) in order to become more familiar.

**So that diving may be coordinated on the day, dive plans must be submitted to the dive supervisor on site before diving. Dive plans must be followed except if the dive is aborted, or the supervisor requests an alteration. The dive plan will be submitted with notes if necessary to the Tank Cave Access Manager for record purposes, by the dive supervisor.**

### **The Application**

The Tank Cave Application form is to be used by all members, by those who have previously dived in Tank Cave as well as those who are applying to dive for the first time. This form, accompanied by a signed indemnity form must be forwarded to the Business Director with the application fee to:-

**CDAA Business Director  
Tank Cave Diving  
PO Box 290  
North Adelaide  
SA 5006**

The application will be processed promptly but if application forms are not fully completed or are incorrect the application will be delayed until completed / corrected. The successful application will then be forwarded to the Tank Cave Access Manager. Clarification of the application may be obtained from the Business Director or Tank Cave Access Manager.

All divers wishing to dive in Tank Cave must meet the following pre-requisites:

- Hold the CDAA Penetration Rating or meet the requirements of the Directorate if offering another training qualification for approval.
- Read, understand and agree to comply with the provisions of this Special Site Access Bulletin.
- A broad range of experience in penetration sites including:
  1. Exposure to **restrictions** (where single file access is required to pass).
  2. **Limited visibility** (where visibility has been reduced to less than one metre on part of the dive)
  3. **Isolation** (where the distance from the entrance is greater than 150 metres underwater)

This post course dive experience must be achieved by:

Twelve months experience after completing your Penetration course. This experience must include a minimum of 20 post course penetration dives in at least 4 different CDAA penetration sites or overseas sites acceptable to the Directorate.

Note 1. Multiple dives done between air spaces count as a single dive.

Note 2. All new divers must complete a minimum of six such dives in the 12-month period prior to diving in Tank Cave.

Please note that application fees will be refunded should you not meet the requirements or do not wish to proceed with the application.

All divers have the opportunity to specify 2 preferred weekend dive dates. Please refer to the enclosed Tank Cave Diving Schedule and indicate your preference on the application form.

The Tank Cave Access Manager will advise you when your application has been successfully processed and your diving scheduled.

### **Returning Divers and Cave Diving Currency.**

It is important that all divers maintain a certain level of diving currency. Currency can be maintained by undertaking 4 dives in CDAA penetration sites or overseas sites acceptable to the Directorate, within the last 12 months. If currency has not been maintained, but the diver has completed group 1 dives they will be able to establish currency by undertaking 2 dives on the "Gold line". After undertaking these dives a diver will be considered current and able to resume their diving status.

The Tank Cave Access Manager will keep records of each divers plan form (provided in application package) on file to check currency and Familiarisation Schedule.

### **Applications / Bookings**

All applications must show evidence of similar dive conditions to those described. (See **Restrictions, limited visibility and isolation**)

Incomplete or inaccurate applications will result in rejection.

Additional access times (other than the arranged weekends) can only be arranged by application to the Tank Cave Access Manager, who will refer it to the Directorate.

If you plan to dive with another diver(s) please list their name(s) in the appropriate place on the form. Each diver in the group must lodge a separate application form. Please note that large groups are more difficult to accommodate than small groups.

**A stamped self-addressed envelope and a contact number in case of queries must be included to ensure your application is handled as quickly as possible.**

- All payments will be for one year only, from the 24<sup>th</sup> July 2001 until 23<sup>rd</sup> July 2002 or 24<sup>th</sup> July 2002 until 23<sup>rd</sup> July 2003. No carry-over payments allowed.
- Fees will be \$100.00 per year per diver.
- The \$100.00 fee will include two free weekends in Tank Cave.
- Further weekends will be charged at \$40.00 per diver/weekend.
- Divers may only have one weekend booked in advance.
- Divers only able to dive on single days should register with the Tank Cave Access Manager who will try and accommodate them.
- The Tank Cave Access Manager will allocate preferences for weekends where there is a conflict so as to maximise the number of divers on a weekend and to facilitate group bookings. Preference will be given to new divers and those with special circumstances.
- The \$40.00 fee is to be forwarded with the booking (after initial two free weekends) by sending cheque/credit card details to the Tank Cave Access Manager.

### **General Diving Information**

- The maximum number of divers per day is 8, including the Tank Cave Diving Supervisor and a buddy for the Supervisor if they request someone.
- Generally 2 twin tank dives or 1 stage dive will be possible per day.
- Times on and off the property will be advised when your booking is confirmed; these will be reconfirmed on the dive day. Generally you will be expected to meet at the front gate to the

property, located about 25km from Mt Gambier on the Millicent road at 8.45am and exit the property by 5.30pm. Departure times on the last day will vary depending on the Cave Diving Supervisor's travel requirements.

- Dive propulsion vehicles are **not** allowed in Tank Cave without Directorate approval.
- Divers are asked **not** to touch or remove any bones or remains from the cave. Divers should report such observations to the Cave Diving Supervisor.
- "No Go" zones will exist from time to time for a variety of reasons including mapping or surveying. Divers will be advised of these on the dive day.
- A reference section has been declared, it is known as the "Easter Extension". Access is **not** permitted in this section of the cave. Divers must **not** place a jump from and proceed beyond station "E4" and must **not** place a jump from and proceed beyond station "F3"
- Visual jumps are **not** permitted. Jump lines should be placed and removed when finished with.
- All dive team buddies must follow the dive plan.
- At least one person shall remain on the surface at all times.
- Except for CDAA Directorate approved exploration projects, dives are only permitted in areas of the cave where lines are present and are recorded on the published map. Application can be made to the CDAA Tank Cave Diving Manager, who will consult with the Directorate for a project permit.
- Maps and drawings made by divers in Tank Cave diving under a CDAA lease agreement belong to the CDAA. The Directorate encourages members to record interesting objects and information on maps so that they may be shared with CDAA members and interested cave divers.

### The Dive

On the day of the dive, divers will meet the Tank Cave Diving Supervisor at the time and place specified when your booking was confirmed. Divers will be required to produce their current CDAA membership card. **No card, no dive!**

Generally divers entering and leaving the property will only be permitted to enter and exit once per day unless prior arrangements have been made with the Cave Diving Supervisor. Divers are strongly advised to bring sufficient cylinders to undertake the planned days diving.

Car access is at the discretion of the Cave Diving Supervisor. Normally three cars, plus the Dive Supervisor's will be allowed to enter the property on any given day, but this will depend on factors such as rain and ground condition.

New divers to Tank Cave may be required to dive with another diver or the Cave Diving Supervisor if they do not have a buddy. A detailed map of the cave will be available and new divers will be asked to select the section of the cave they would like to visit and then plan accordingly. The only restriction placed on new divers will be to choose one of the primary routes with gold line and follow the agreed dive plan. Divers who would like to dive the complete "circuit" must first dive both ways along the "circuit".

Once a dive team has decided on a dive plan (within the limits of the familiarisation schedule) it must be communicated to the Cave Diving Supervisor. The Cave Diving Supervisor may request an alteration of the plan to suit multiple dive teams or if the Supervisor deem the plan unworkable for whatever reason.



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multitec@cncsb.com  
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## CDAA SITE ACCESS

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

CN = CAVERN S = SINKHOLE C = CAVE P = PENETRATION

SITE	LEVEL	OWNER	ACCESS DETAILS
<b>MOUNT GAMBIER - SOUTH AUSTRALIA</b>			
<b>Ewens Ponds</b>	Nil	DENR P.O. Box 1046 Mt Gambier 5290 (08) 8735 1177	Groups of 6 or more, phone/mail to Dept. of Environment & Natural Resources (DENR). Smaller groups, no need. Indemnity form to be completed.
<b>Horse &amp; Cart</b>	CN	Peter Cunningham	By phone or mail, 1 week prior. Ph: (08) 8738 4003.
<b>Tea Tree</b>	CN	PO Box 2168, Mt Gambier 5290	
<b>Little Blue</b>	S	Port MacDonnell	Little Blue - permission not required - must carry card.
<b>Allendale</b>	C	Port MacDonnell	Obtain key from Mt. Gambier Tourist Information Centre.
<b>Gouldens</b>	CN	DENR	<b>General Diving:</b> Divers to contact DENR and notify of date and site to be dived. Divers must have the correct CDAA diving endorsement for the site and carry current financial CDAA membership card. The diver must have signed an indemnity with DENR before access is permitted.
<b>2 Sisters</b>	CN	P.O. Box 1046	
<b>Fossil</b>	C	Mt Gambier 5290 Ph: (08) 8735 1177	<b>Training:</b> The Instructor is to notify DENR of the date the sites are needed and to forward signed indemnities from each student and their temporary card number/ membership number.
<b>Ela Elap</b>	S	Mr. Peter Norman	By phone or drop in before diving.
<b>One Tree</b>	S	Private Bag 67, Mt Gambier 5290	Ph: (08) 8738 5287
<b>Swim Through</b>	C	Valerie Earl PO Allendale 5291	Currently CLOSED pending new access arrangements.
<b>Piccaninnie Ponds</b>	S	DENR P.O. Box 1046, Mt Gambier 5290	Permit holders by phone. Be aware of delicate vegetation. Indemnity form to be completed. Ph: (08) 8735 1177 Faxed copies of cards no longer accepted when booking.
<b>Hells Hole</b>	S	ForestrySA	Contact ForestrySA by mail, phone, fax or email to arrange permit. Collect permit from Regional Office or Carter-Holt Harvey Mill gatehouse, Jubilee Hwy., Mount Gambier. No diving on total fire ban days.
<b>Pines</b>	P/C	PO Box 162	
<b>Mud Hole</b>	C	Mt Gambier 5290 Ph: (08) 8724 2876 8.00am - 4.30pm weekdays Fax: (03) 8724 2885	Forest Work Bans may be applied by ForestrySA if forest fire danger is expected to reach extreme. Such bans also exclude the public from entering the forest. If in doubt, please check with Trevor Wynniat, although signs are generally erected at diving sites on such days to indicate such bans. Permits required for compressors during fire danger season.
Email: forestry.recreationse@saugov.sa.gov.au			
<b>Kilsby's</b>	S	Landowner leased to S.A. Police	Restricted access conditions apply - refer Guidelines Issue 54. Twin tanks, maximum of 40 metres depth. Write to: 40 School Road, St. Andrews 3761, Email: mpain@hipex.com.au, 4 to 6 weeks prior to wanting to dive. Please enclose stamped self-addressed envelope (Do not contact landowner). Access date now the first weekend of every month. <b>No animals permitted. No mid-week diving.</b>
<b>Shaft</b>	S	Generally open one weekend a month L. Claridge P.O. Box 290 North Adelaide 5006 Ph: (03) 5565 8793 A.H.	For access dates contact Linda Claridge. Also, see Special Access Bulletin in Guidelines issue 69. Nitrox as a diving mix is not allowed in the shaft. Deco mixes ATTACHED to a shot line are permissible. Divers applying to dive in the Shaft must have documented experience of at least 5 twin-tank dives. Apr 7/8, May 5/6, Jun 2/3, Jul 7/8, Aug 11/12. Email: garinda@tpgi.com.au
<b>Ten Eighty</b>	S	Mr. Colin Traeger	<b>Sundays only</b> Mail Booking Form to Colin Traeger 2-6 weeks prior, stating names/qual. of all divers, and time slot. Please include stamped self addressed envelope.
<b>Bullock Hole</b>	S	PO Box 124	
<b>Black Hole</b>	S	Mr Gambier 5290 (08) 8726 6215	Closed October to November for shearing.

## CDAA SITE ACCESS

SITE	LEVEL	OWNER	ACCESS DETAILS
<b>MOUNT GAMBIER - SOUTH AUSTRALIA (continued)</b>			
<b>Max's Hole</b>		C	Currently pending access arrangements with new owner.
<b>Hann's cave</b>	P	P & A Lasslett	Groups of four divers only apply in writing to Site Director. Limited groups will be allowed access over the summer months. The site is very delicate and therefore only limited access is available. Divers applying will be notified as to further access details. Please include a stamped self addressed envelope.
<b>Engelbrechts</b>		Mt Gambier	Obtain key from Mt Gambier Tourist Information Centre. Access agreement must be signed prior to diving. 2 divers must sign out keys, all divers must sign in advising which groups they are diving with.
<b>- East</b>	C	Council	
<b>- West</b>	P	Lessee Ph: (08) 8723 2299	Please book public holiday dives with lessee.
<b>Three Sisters</b>	P	Millicent Council	Contact Records Officer. Access available for experienced Penetration divers only. Low profile or side mounted independent air systems required. Access agreement must be signed prior to diving. Please allow 4 weeks for indemnities to be processed.
<b>Idlebiddy</b>	P	ForestrySA	5L250 open every Saturday. 5L290 open every weekend.
<b>(5L250)</b>		PO Box 162	Max. 4 divers per dive per day, 1 dive per day for each site. Only Penetration divers.
<b>Nettle-Bed</b>	P	Mt Gambier 5290	Bookings from Forestry Office - key from Lady Nelson.
<b>(5L290)</b>			Contact ForestrySA by mail, phone or fax to arrange permit. Collect permit from Regional Office or Carter-Holt Harvey Mill gatehouse, Jubilee Hwy., Mt. Gambier. No diving on total fire ban days. Forest Work Bans may be applied by ForestrySA if forest fire danger is expected to reach extreme. Such bans also exclude the public from entering the forest. If in doubt, please check with Trevor Wynniat or Forestry Office, although signs are generally erected at diving sites on such days to indicate such bans. Permits required for compressors during fire danger season. Email: forestry.recreationse@saugov.sa.gov.au
<b>McKay's Shaft</b>	S		Contact South East representative Phil Argy at Mt. Gambier access and indemnities.
<b>Tank Cave</b>	P	Mr. DY CER	Access Manager: Harvey Grantham Email: lemaire@senet.com.au Ph: (08) 8370 9816
<b>Baker's Cave</b>	C		Please write to the Site Access Director to dive in Baker's Cave. Include stamped self-addressed envelope. Climbing equipment required.
<b>NULLARBOR - WESTERN AUSTRALIA</b>			
<b>Cocklebidy</b>	C		Apply in writing for permission to dive at least 4 weeks in advance of trip to: District Manager, C.A.L.M., PO Box 234, Esperance, W.A. 6450.
<b>Murra El Elevyn</b>	P/C		Phone: (08) 9071 3733 Fax: (08) 9071 3657
<b>Tommy Grahams</b>	C		
<b>Weebubbie</b>	C		Apply to Gerry Falleiro, A/Assistant Project Officer, South East Region Land Administration Services Branch Phone (08) 9273 7215 Fax (08) 9273 7414 Email: gerry_falleiro@dola.wa.gov.au PO Box 2222 Midland WA 6936
<b>N.S.W. - WELLINGTON CAVES</b>			
<b>Limekiln</b>	P/C		Both Penetration and Cave Level are being accepted for this cave depending on it's water level at the time. The cave has a restriction at the entrance which is underwater making it a Penetration Dive. During drought, the water level drops to form a small lake below the restriction allowing experienced Cave Divers access to this delicate cave.
<b>(McCavity)</b>			
<b>Water (Anticline)</b>	C		Affected by high CO <sub>2</sub> levels during Summer/Autumn. Access arrangements are co-ordinated with an already commissioned research group. Contact Greg Ryan (02) 9743 4157 h. gregr@cs.usyd.edu.au
<b>Rum Jungle Lake</b>	S		Unrestricted access currently exists - Please refer advice in Guidelines No. 68 or check CDAA website.
<b>Burrinjuck</b>	S/C/P		This is a tri rated site. Please see details in issue No. 73. There are no specific access arrangements.

## TRADING POST

### FOR SALE ITS CLEAROUT TIME

- ⇒ Dive Rite M.L.S. light with MR-16 Dichroic Head. Twist Style Switch. **RRP \$1400.00 Sell for \$750.00**
- ⇒ Dive Rite M.L.S. light with both H-1 Test Tube style head & MR-16 Dichroic Head. Twist Style Switch. **RRP \$1900.00 Sell for \$950.00**
- ⇒ Oceanic Nitrox dedicated Delta 2 Reg on Bal Diaphragm Din First Stage with Oceanic SPG. **RRP \$1000.00 Sell for \$550.00**
- ⇒ Oceanic Nitrox dedicated Delta 2 Reg on Pistin Din First Stage with Oceanic SPG. **RRP \$850.00 Sell for \$450.00**

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### FOR SALE

- ⇒ Drysuit DUI TLS350  
Suit male approx 6ft. Size 10 feet. New neck and wrist seals. VGC. **\$1500.00**
- ⇒ SF3 one piece undergarment to suit above. Near new. **\$400.00**
- ⇒ Drysuit – Hot 'n' Dry, Pro Diver. Same size as DUI suit. New boots. Excellent condition. **\$900.00**
- ⇒ Extreme 300 series and 200 series undergarments with foot and wrist straps. Excellent condition.

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Call Mary Newman-Debens in Portland on  
0418 521 238 or A.H. 03 5523 5617

### FOR SALE

PEE VALVES – \$65.00 JUMP REELS – \$75.00

Contact Gary or Linda on (03) 5565 8793 or  
Email: garinda@tpgi.com.au

## GENERAL INFORMATION

All CDAA members are invited to the International Cave Diving Symposium as part of 13th International Speleological Congress that will be held in Brasilia DF – Brazil from July 15th thru July 22nd, 2001.

Please access their website: [www.speleobrazil2001.org.br](http://www.speleobrazil2001.org.br)

## UP-COMING COURSES

### BASIC NITROX AND/OR ADVANCED NITROX COURSES

Please call Gary for more information.

### CAVERN/SINKHOLE AND CAVE COURSES, FULL OR PART-TIME BASIS

Please call Linda for course information and dates.

03-5565 8793 or e-mail [garinda@tpgi.com.au](mailto:garinda@tpgi.com.au)

### CAVERN/SINKHOLE COURSE RUNNING JULY 4TH TO JULY 30TH.

Please contact Max B Marriott.

Phone 08 8447 3360 or email [dive69@senet.com.au](mailto:dive69@senet.com.au)



## GUIDELINES DEADLINES

If you would like to contribute to Guidelines, you should note the following deadlines for submission of materials:

Deadline	for publication
20th Aug	Sept
20th Nov	Dec
20th Feb	March

## NOTICE FOR INSTRUCTORS

Procedure for ordering student packs:

1. Check you are insured & financial.
2. Send order & cheque or by phone/credit card.
3. Allow 14 days from when the order is received - so allow plenty of time.
4. Student kits cannot be returned.
5. Instructors must be active.
6. Please do not pass my number on to dive shops - you should deal with them not me.

### • INSTRUCTOR RENEWALS •

Several instructors have not yet renewed their CDAA ratings. Instructors must lodge their current insurance details and renewal fee or packages will not be issued and certifications rejected.

**Instructor Renewals**  
PO Box 8283, CARRUM DOWNS, VIC. 3201

*Deb Williams*  
Instructor Materials Officer



## ACTIVE CDAA INSTRUCTORS

Any Instructor wishing material contact - (03) 9562 9264 or email: debwilliams@one.net.au

STANDARDS DIRECTOR:  
Paul Axton  
Telephone: 0419 346 442  
(email) records@teksupport.net.au

INSTRUCTOR	CN	S	C	STATE	PHONE	INSTRUCTOR	CN	S	C	STATE	PHONE
<b>NSW &amp; ACT</b>						<b>WESTERN AUSTRALIA</b>					
Nick Jones	.	.	.	ACT	0408 423 017 m	Gary Bush	.	.	.	WA	0402 339 652 m (08) 9367 4701 h
Peter Grills	.	.	.	NSW	(02) 4950 6262 (8am - 12 midday)	Marilyn Boydell	.	.	.	WA	(08) 9349 5646 h
Gary Norgard	.	.	.	NSW	(02) 4968 4588 h	Steve Sturgeon	.	.	.	WA	(08) 9527 7667 h/w 0418 940 143 m
Andrew Robertson	.	.	.	NSW	(02) 9548 5987 h 0417 664 255 m	<b>VICTORIA</b>					
Des Walters	.	.	.	NSW	(02) 6041 1405 h (02) 6025 3506 w	Stephen Arnel	.	.	.	VIC	(055) 26 5230 h
Liz Butler	.	.	.	NSW	0409 463 176	Paul Axton	.	.	.	VIC	0419 346 442 m (03) 9782 1671 h
<b>SOUTH AUSTRALIA</b>						Gary Barclay	.	.	.	VIC	(03) 5565 8793 h
Greg Bulling	.	.	.	SA	0409 095 927 m (08) 8265 4978 h	Jane Bowman	.	.	.	VIC	(03) 9579 2600 w
Glen Harrison	.	.	.	SA	0427 608 609 m	Stan Bugg	.	.	.	VIC	(03) 9379 8791 h
John Hanson	.	.	.	SA	(08) 8269 1083	Linda Claridge	.	.	.	VIC	(03) 5565 8793 h
Max Marriot	.	.	.	SA	(08) 8447 3360 h	Brian Cornell	.	.	.	VIC	(059) 85 2514 h
Richard Megaw	.	.	.	SA	(08) 8344 1733 h	John Dalla - Zuanna	.	.	.	VIC	0407 887 060 m (03) 9484 1216
Richard McDonald	.	.	.	SA	(08) 8295 4140 h/w	Chris Edwards	.	.	.	VIC	0417 116 372 m
						Barrie Heard	.	.	.	VIC	(03) 5627 6474 h 0419 401 276 m
						Warrick McDonald	.	.	.	VIC	(03) 9579 2600 w
						Bob Wealthy	.	.	.	VIC	(03) 5985 8338 h
						Timothy Vernon-Smith	.	.	.	VIC	0418 325 309 m
						Frank Zeigler	.	.	.	VIC	(055) 236 392

## TANK CAVE DIVING SCHEDULE 2001

JANUARY 2001		DATE	FEBRUARY 2001		DATE
Saturday		13th	Saturday		10th
Sunday		14th	Sunday		11th
Friday (Australia Day)		26th	Saturday		24th
Saturday		27th	Sunday		25th
Sunday		28th			
MARCH 2001		DATE	APRIL 2001		DATE
Saturday		10th	Friday (Good Friday)		13th
Sunday		11th	Saturday		14th
Monday (Labour Day VIC)		12th	Sunday		15th
			Monday (Easter Monday)		16th
			Saturday		28nd
Saturday		24th	Sunday		29th
Sunday		25th			
MAY 2001		DATE	JUNE 2001		DATE
Saturday		5th	Saturday		9th
Sunday		6th	Sunday		10th
			Monday (Queen's Birthday)		11th
Saturday		19th	Saturday		23th
Sunday		20th	Sunday		24th
Monday (Adelaide Cup)		21st			
JULY 2001		DATE	AUGUST 2001		DATE
Saturday		7th	Saturday		4th
Sunday		8th	Sunday		5th
Saturday		21st	Saturday		18th
Sunday		22rd	Sunday		19th
SEPTEMBER 2001		DATE	OCTOBER 2001		DATE
Saturday		1st	Monday (Labour Day SA)		1st
Sunday		2nd			
			Saturday		13th
Saturday		15th	Sunday		14th
Sunday		16th			
			Saturday		27th
Saturday		29th	Sunday		28th
Sunday		30th			
NOVEMBER 2001		DATE	DECEMBER 2001		DATE
Saturday		10th	Saturday		8th
Sunday		11th	Sunday		9th
			Saturday		22nd
Saturday		24th	Sunday		23rd
Sunday		25th			

# WANTED



## ARTICLES FOR GUIDELINES

**IF SIGHTED PLEASE SEND IMMEDIATELY,  
TOGETHER WITH ANY PICTURES TO:**

**The Editor, Glenn O'Connell  
P.O. Box 290, North Adelaide, S.A. 5006.**

## REWARD

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