



C.D.A.A. Newsletter

No. 99 - MARCH 2007

CAVE DIVERS ASSOCIATION OF AUSTRALIA

(Incorporated in South Australia)

Print Post No. PP 381691/00020

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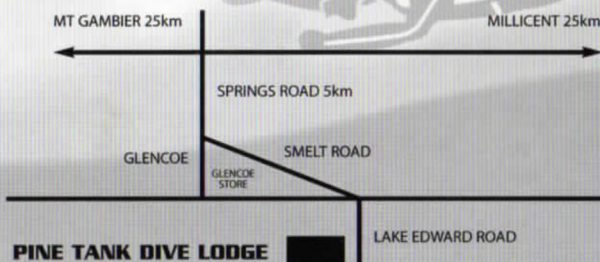
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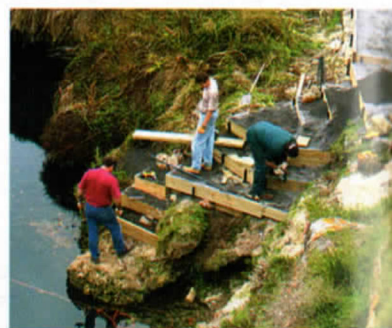


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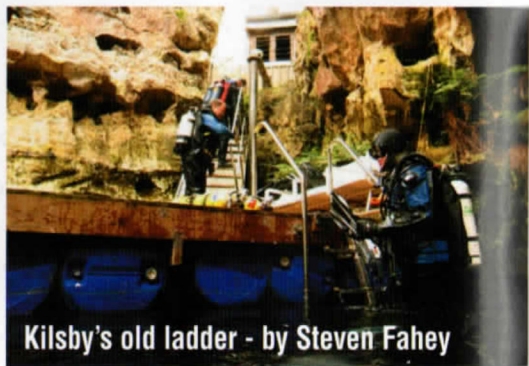
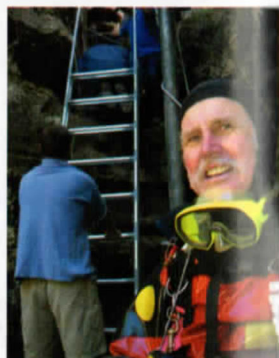


Working Bee at Barnoolut, late 2006



Kilsby's Fly Over, by Gary Barclay

Dave Warnes
at the new
Kilby's
Ladder



Kilsby's old ladder - by Steven Fahey

EDITOR'S CORNER

Hello All

Welcome to Guidelines issue number 99! And what a bumper issue it is. We have loads of articles and photos, quite an international affair this time with reports from Germany, Florida and Mexico. Good to see so many CDAA members being able to go out and cave dive internationally. We also have a fossil theme as well with the "arty" front cover shot from Agnes Milowka as well as a farewell to Stan Bugg as a CDAA instructor (only joking Stan!) from his fellow instructors and some great old photos supplied by John Lippman from DAN.

You will also find in the middle, the renewal form for membership for 2007. Please remember that membership is due June 30 each year unless you have paid up for a few years. Do the right thing by the records officer and get your renewal in on time and please make sure you have all the necessary bits sent together. We are also looking at moving some of this across to an on-line system soon so keep checking back at the web page to see the progress on this. Same goes for the products on-line pages (Thanks to Helen). Also check your DEH indemnities as well as your Kilsby's indemnity.

The Kilsby's indemnity will be updated soon due to us getting a new lease directly with the landowner. Thanks to Warrick for his huge, almost single-handed effort, in renegotiating this lease and drawing up the new contract. This will give us increased access time to this wonderful sinkhole.

We have also been very busy with writing up and redrafting the new Deep Cavern course to replace the cavern/sinkhole thanks to the many excellent comments from instructors all happy to see the changes brought in. Once again we can hopefully be proud of the training we provide that suits technical diving in the 21st century. It was a real eye opener visiting Florida and seeing the state of training over there from a number of agencies. It was a good chance to chat to and then email instructors while waiting for gas fills and asking their opinions about standards, prerequisites, etc. Oh and the diving was bloody good as well! I think Geoff is planning on buying a scooter now and zooming back to his trailer-trash home over there as soon as he can!

Next issue is number 100 and we now have 100 divers for Tank cave. Let me know your ideas for this special issue. Larger format? Old articles? Start writing now.

Come and visit us at the Oztek stand this week in Sydney.

Terri Allen, Publications and Records Director,
Email: pubdir@cavedivers.com.au



GUIDELINES TURNS 100!

We need your articles and photos for our 100th issue of Guidelines!... It's gonna be a big one!

Send stories & pictures, or photos for Guidelines Gallery to:

Dave Bryant (graphics); seapics@alphalink.com.au
and also to Terri Allen (editor); publications@cavedivers.com

The deadline is May 20th, 2007. Thanks!!

CONTENTS

Editorial, Terri Allen	5
Bus Directors Report	19
National Director's Report	24
CDAA Instructors	26
Site Director's Report	27
Courses Update	30
Tank Cave Dates	31
Site Access	32/33
CDAA Products	34

Articles this Issue...

Stan Bugg - An Icon Retires	7
Peter Buzzacott - Bakers Delight	8-9
Warrick McDonald - Florida	10-13
Ken Smith - Aachquelle	16-19
New Books/Guides	23
Peter Mosse - Cenotes, Mexico	35-37



Front cover:

Photo title:
"Phantom's Skull Cave"

Photographed by
Agnes Milowka.

Photographed at
One Tree Sinkhole.

Composite art design:
David Bryant

CAVE DIVERS ASSOCIATION OF AUSTRALIA

ABN 65 062 259 956

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GUIDELINES is a newsletter of the Cave Divers Association of Australia. All articles for the following issue are to be sent to the Editor, David Bryant, PO Box 2198 Rosebud Vic. 3939.

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AN ICON RETIRES

The Association's longest serving instructor, Stan Bugg, is retiring from instructing. Stan has been a member of the CDAA since its inception in 1973, becoming an instructor in 1975, when the CDAA first appointed instructors. At that time, the CDAA invited clubs to nominate an instructor to sign off on CDAA members. They had to be FAUI instructors, FAUI being the only operational instructor agency at the time.

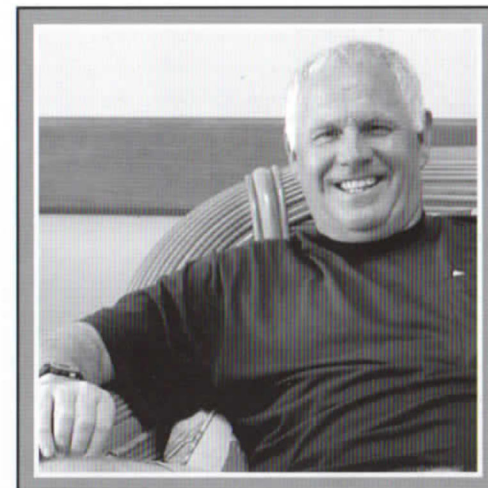
Over many years we have had many enjoyable trips to Mt. Gambier and one to the Nullabor with Stan, and have been fascinated by the tales of early cave diving, many predating the CDAA.

Stan has taught numerous CDAA courses over the years. His students received the highest standard of instruction, and were caught up in his infectious enthusiasm of the sport. Comments from them like, "That's the best diving course I've ever done" were common.

Over the years of the CDAA's often bumpy political ride, many have sought Stan's opinion and advice, which he was always gave generously. He can be relied on for level headed advice in difficult situations.

Stan's involvement in diving is not limited to cave diving. Between 1975 & 1982, he was National Examiner for FAUI, at that time the major diver instruction agency in the country. He has co authored 2 books on diving, and has written countless articles for many club newsletters, magazines and other publications, including being one of Guideline's most prolific contributors. He has gained a reputation as an entertaining speaker, and has given talks at many dive club meetings and conferences.

As a diver, Stan's technique is impeccable. We have co taught many courses with him, and when the opportunity arose, we would say to our students, "If you want to see the perfect frog kick,



watch Bugg."

We look forward to many more trips to Mt Gambier with Stan, and wish him a long and happy retirement.

Brian Cornell #2020 Des Walters #687
and Bob Wealthy #464

Editors note:

Stan partly wrote and contributed to 2 books...

1. Diving First Aid Manual, John Lippmann and Stan Bugg, DAN SEAP Membership Edition.
2. The Diving Emergency Handbook, John Lippmann & Stan Bugg, ISBN 0-946020-18-3

December 2006.

Received a DAN Asia-Pacific Contribution to 'Dive Safety' Award to for many years of contributions to dive safety through dive and accident management instruction and writing.

Also has helped us with the redevelopment of the new Deep Cavern course to replace the CDAA Cavern/sinkhole course.

See colour pictures on page 37. Terri Allen.

Peter Buzzacott Bakers Delight

We all met at Goulden's, the morning was cool and dry and I was excited. Gary Barclay had arranged a visit to Baker's for us, and word was the dive is a cross between Kilsbey's and The Shaft, both of which had blown me away.



Dive Brief:- (L-to-R)

Tim Featonby, Andrew Robertson, Gawain Lynch, Heike Apps, Jason Caldwell, Gary Barclay, Steven Meyer, Andrew Lockwood, Troy Foster and Gavin Crook.

We moved in convoy through the farm and parked beside the site, gathering around the iron cover as Gary removed one half of it. A dive brief was given, the group divided into two, and I was in the first group. Tim Featonby took us three new cave divers aside and said in a low voice "now look, we're on show here so don't stuff up the viz for the next group or they'll think we didn't train you properly". That said, and this being just our sec-

ond post-cave-course dive, the pressure was on.

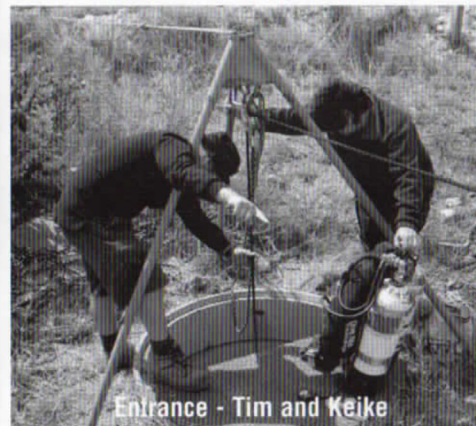
Gary and his team lowered us and our gear down to the 10m wide lake chamber and we kitted up in-water, just like at The Shaft. The drop was somewhat longer though, about 10-12m or so, and the entry-chimney slightly wider. Once we were all ready the team descended and headed South-West along a fixed guideline, looking into nooks and cran-

nies and searching for unmapped passages. Our maximum depth today was 22m though the site reportedly reaches 30m deep, below the narrow restriction that limited us.

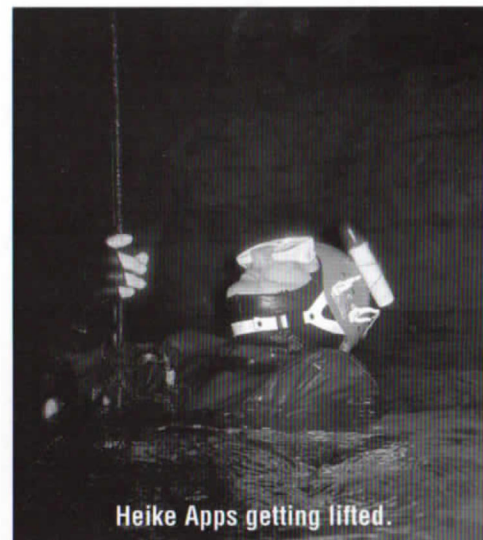
Staying well clear of the bottom my buddy Andrew headed across the chamber for a look at the eastern side, so I tied off my reel to the guideline to follow him, but then the guideline came loose and within ten seconds my dive turned into a line-management exercise, but we sorted it out and thereafter we just stayed near the guideline (like new cave divers should).

Below us Tim and Heike explored the deeper recesses, beside us the penetration-course hopefuls signaled each other busily, and we 'newbies' made our safety stops just glad to have explored this unique cave. Gary organised a 4WD to winch us up, followed by our gear, and then it was our turn to lower the second team in. By lunchtime we were all back up top, everyone had had a go at both diving and surface support so we were packing the trailers and swapping contact details.

A big thanks to Gary and Tim for organising the dive, and to the landowner for letting us in. The dive team comprised: Steven Meyer, Jason Caldwell, Andrew Lockwood, Gawain Lynch, Troy Foster, Gavin Crook, Andrew Robertson, Peter Buzzacott, Gary Barclay, Tim Featonby and Heike Apps.



Entrance - Tim and Heike



Heike Apps getting lifted.



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a taste of the country

FLORIDA Warrick McDonald on the cheap...

(or how to spend \$10,000.00 and smile)

It took me a while to wake up to the "Head in Guidelines" trick. It seems if you get a photo of yourself in an issue you are expected to write a story explaining the context.

Well, I managed to get the last issues front cover; yes that's me on the scooter (Santa on his SS sleigh! So here goes my story....

Jane Bowman, Terri Allen, Geoff Chambers and I went to Florida in October 2006 for 3 weeks and as Jane and I had been many times before we were going to show G&T the sites. We met in Jacksonville, picked up a "kick arse" V10 Ford van, removed the back seat and away we went.

First stop was Wal Mart of course for the necessary vitals, then on to Luraville to meet up with Bill Rennacker and get the key to one of his trailer homes. This was to be

our home for nearly a week. If you want it easy this is the way, dive in the morning come back for fills (no dismantling of equipment, fill in the back of the van) leave everything at Bills and walk around the corner all of 200 metres to our house for lunch. After a rest we would pick up the van, now with full tanks and head off to another dive site. Cow upstream and downstream (get the key from Dive Outpost another 200 metres from our house), Orange Grove, Peacock 1,2 &3 and Telford are all just a short drive away.

We used nitrox on every dive and sometimes hired a "hottie" for some accelerated deco. Tanks were interesting with Terri and Jane getting 12 litre cylinders and Geoff and I with 15's, naturally isolation manifolded. Terri, Geoff and Jane were using Halcyon 18's and I was using a Halcyon 10 watt system all of us had Scout or Pelican back-up lights and were wearing Dry suits (DUI and Dive Rite) with Hot n Dry fleece or WeeZle thermals for those of us that feel the cold. Our plates were all aluminium (weight restrictions on the flights) and our harnesses Halcyon with wings and one Dive Rite wing. Having been converted to go back to the "old ways" all of us were using Scubapro Jet fins with spring heels. See my

Jane Bowman wizzing past



• TRIP TO DIVE WELLINGTON CAVES • June long weekend (June 9th-11th, 2007)

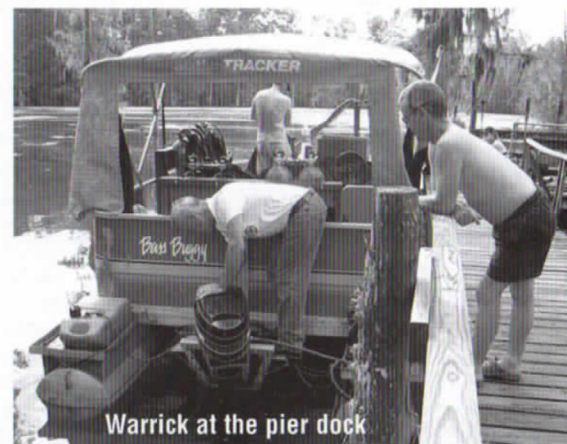
If you fancy checking out the Telephone Booth, Birth Canal, or swimming to Hanging Swamp, Bondi Beach or Dragon-Tooth Ledge, please contact me at least 2 weeks prior to the weekend. I will provide further details of the weekend to interested parties.

Contact: Mark Jobbins
Mob: 0411 191 590 • Email: nswrep@cavedivers.com.au

photo on the front of the last Guidelines and you can see I don't favour any brand in particular but do have a huge choice of gear being the owner of a dive shop.

Our next stop was Merritts Mill Pond, this is the home of Jackson Blue, Hole in the Wall and Twin Caves to name a few. A flooded valley absolutely beautiful, with birds, fish and animals to keep your attention. The only dive shop is on the banks of the pond and they hire everything you need. We had booked a boat, "hotties" a house and scooters. After diving down south we were spoiled by the service because it just wasn't there this time. During our stay, which we shortened by one day for obvious reasons we endured ... No boat today, sorry we double booked. Ahhh, no scooters either they are booked out to someone else (we did point out that we had booked this all over six months ago, but that just got us blank looks!) It was no hardship to shore dive Jackson Blue as you go up to the Police Station and pay your fee, get a key and let yourself in and out. That's where we encountered a few more hiccups. No keys! They were all out, "Don't worry someone will let you in and out!" Sounds good except that "someone" was underwater at the time so we were stuffed around waiting to get

our van into the Park. When we left the same problem, seems it would be easy to leave the lock off but on the "hook" but nobody had thought about that. Finally we cracked it and got our boat and scooters, trouble was the boat wouldn't start so an 8:30 morning saw us depart at midday for our first dive. Shame the scooter was flat, oh and one of the twin sets hadn't been filled. Lesson... don't trust these guys! If it happened once it would have

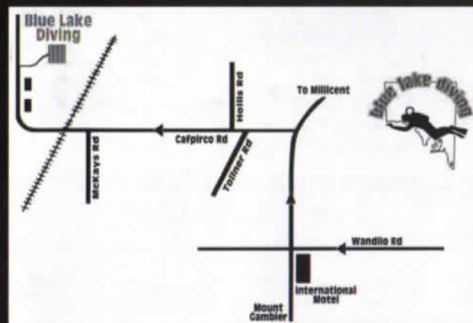


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**Geoff Chambers
at half throttle**

thing....contented customers who come back and recommend you to others!) The final straw was the last day where we had a four and a half hour drive to Crystal River and then a two hour drive to Manatee to find only one set of our tanks had been filled. Should we have checked them? You bet but when the guy insists that they are filled and takes it as an insult that you might want to check you just cop it on the chin!

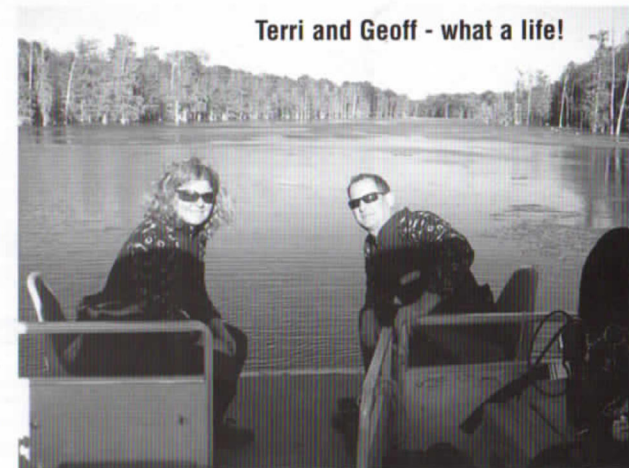
The great thing about Jackson

been Ok, because we were on holidays and easy going, but it happened on a few occasions and there's nothing like being told that we are late, doh...obviously! And who's fault was that...if we didn't have to walk up the hill again to get the quad bike down to take the tanks back up the hill to be filled. (No we didn't get the opportunity to check them before they were loaded on board the boat each morning) if the compressor was working properly, if the owner was watching what was going on in his business instead of going off flying in his new aeroplane (I wonder if he put the maths together and worked out where the money came from to probably buy the

Blue is the visibility, blue water that is bogglingly beautiful. It was quiet time so only a few other divers were in Jackson (apart from the shore dive adventure) we would tie up the boat to a tree, lower the scooters over the side, don gear and drop into this crystal clear water (you could see the opening of Jackson Blue underwater, 150 metres away from where the boat was moored) pick up the scooter and zoom off towards the entrance, placing the "hottie" in a discreet place we would visually pick up the line and head off, apart from a restriction about 50 metres from the entrance the tunnels are wide and clear. A couple of verticals confront you once you start getting into

the system but they can easily be negotiated by using a bit of elbow buoyancy control. The system seems never ending and weeks could be spent just diving this one site. (Having the gear set up with backplates, scooter rings, etc made it easy for us to add a scooter to our dive system, Ed) But, twin Caves and Hole in the wall beckoned, although visibility wasn't good (try less than half a metre on the first dive for the first 400 metres) Jane and I persevered and although passing by Braille a number of scooter divers who were dragging, pushing and manhandling their scooters through the tunnel trying not to lose the line, we found it cleared up at 400 metres and we had a spectacular dive, nothing like going to the end of the line and finding Scheck Exley's marker and date. I'm sure Terri and Geoff thought we had become a statistic but we had stuck to our plan and surfaced right on time. Hole in the Wall had also been trashed by these scooter demons so only a short dive in very poor viz was attempted. Later we were to dive both of these caves many times and although viz was never as good as Jackson Blue it was

Terri and Geoff - what a life!



passable for a bunch of Aussies used to a bit of soup occasionally.

As I'm not writing a book, I'll save the Manatees at Crystal River, our dives in Manatee and Ginnie Springs, the Dive Rite sale with Lamar Hires at Luraville, and meeting up with the GUE team at High Springs until next time.

Regards Warrick McDonald.



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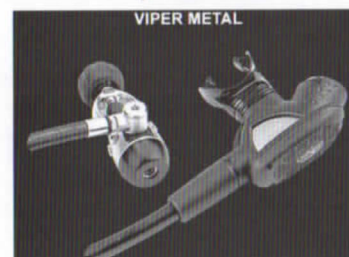


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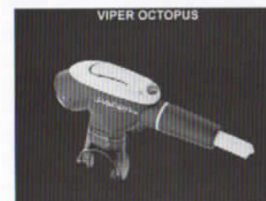
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Diving the Aachquelle

DESTINATION: GERMANY.

By Ken Smith



The situation at Aachquelle looked promising...

- 29th March '06 - Peak with over 20 cubic m/sec.
- 24th April '06 - Current gone back to around 12 cubic m/sec.
- 29th April '06 - Current gone back to around 10 cubic m/sec.
- 1st May '06 - Bernd: diving possible, but he didn't try, current will decrease further.
- 5th May '06 - 3:15 pm The current has gone back to 8 cubic m/sec
- 9th May '06 - Weather forecast has promised rain in the Black Forest for today, this is where the Donau comes from.
Two thirds of the water of the Aach is coming from the Donau.
- 10th May '06 - 1:00 am, The peak in the Donau reached Immendingen. The rains haven't been so heavy as expected. Weather forecast doesn't expect any heavy rain.
4:00 pm The current has gone back to 7 cubic m/sec. Visibility is below 3m. Diving is possible below 6 cubic m/sec. In case the weather forecast becomes true the chances are 80%, that we can go diving this weekend. We have to use much lead. In case it stays dry until the weekend the visibility will also increase a bit."

This was the information that preceded my dives in the Aachquelle in May last year. My German cave diving friend Joachim Kreislaier, assisted by his friend Bernd Hugger, had been regularly emailing me updates on the water flow situation. I was going to Germany and we were hoping to dive on the weekend of May 13/14. The Crazy Czechs (David and Petra Funda) were keen to dive too. As the water flow predictions improved they arranged to rent a car in Prague to drive from the Czech Republic to meet us. They have a new baby girl, Hedvika, who has already been on several exciting expeditions with her



Turbines blades on display at the hydroelectric power station.

parents. My partner Linley also arranged to join us by train from Vienna. Linley is not a cave diver, so her skills as a baby sitter were very much in demand.

The Aachquelle (Aach Spring) is attractive pond with a café on one side and woods and hills on the other. It is the source of the river Aach which flows through the nearby town of Aach in southern Germany. Water disappears from the river Donau (the Danube) near the town of Immendingen and travels 14 km through the limestone to emerge, 182 metres lower, at the Aachquelle. Water also leaves the Donau further down-

stream at Fridingen and travels 18 km to the Aachquelle. Sometimes all of the flow of the Donau disappears through the cave system, leaving a dry river bed downstream.

The First Attempt.

We left Joachim's home at Dossenheim, near Heidelberg, early on Saturday 13 May. At lunchtime we were eating at a comfortable table beside the (apparently) placid waters of the Aachquelle. Joachim was explaining the dive plan to us. High flow makes entering the cave difficult. Above 6 cubic metres per second diving is not considered possible. This is a lot of water flow, 6 tonnes of water per second, and it all passes through an opening about 2 metres by 2 metres at a depth of 13 metres. As the flow increases the level in the pond rises and divers estimate the flow by checking the level of water against a drain pipe in the wall of the pond. When the water level reaches the bottom of the pipe the maximum flow rate for diving has been reached. We noticed that the level was exactly there as we ate lunch.

I had started to feel excited about the dive as we drove past the hydroelectric power station, which is fed entirely with water that has come from the cave. This suggested to me that there may be some current in the cave. After seeing that the flow was at the maximum for diving I experienced stronger thrill of anticipation!

We began to kit up. Joachim had measured the water temperature at 9.8 centigrade, so dry suits were worn. I wore tough overalls over my rented dry suit to protect it from damage by the sharp limestone. We were not taking fins on the first dive. We planned to be overweighted by about 8 kg, and the first dive would be a walking tour of passages near the entrance. We would take fins on the second dive. They would be carried into the cave initially. Once far enough inside we would put them on and take off the excess weight to allow us to swim.

Bernd was to lead the Crazy Czechs in first and Joachim and I were to follow later. They entered the water at the end of a well made path and walked across a mud bank in shallow water to reach the cave entrance. All three soon disappeared and we watched the swirling bubbles on the surface. A few minutes later Petra surfaced with a free flowing regulator and called it quits for the day. However, Bernd and David made it into the cave for a short dive.

A short time later Joachim and I were on the surface above the cave entrance. A slight disturbance on the water surface gave an indication of the current below. Joachim descended and after a minute or two I followed him down, staying close to the right hand wall, as I had been instructed. As I descended the current became stronger and I made good use of the strong line attached to the wall. I descended onto a floor of large pebbles and inched forward hugging the wall. Joachim had not made it all the way into the cave. He was trying to make the final turn

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Joachim and Ken
before their first dive.

around an outcrop of rock on the right. Unfortunately the large tanks he was wearing were pushing him too far away from the rock wall and into the full force of the flow. With nothing to hold onto except the line in his right hand and the loose pebbles on the floor he was unable to make the turn. After several attempts he backed out and pointed me forward. I inched forward until the full force of the current hit me in the face. I struggled forward making little progress until a free flow on my backup regulator forced me to back out. That was enough excitement for one day, so I called the dive and we returned to the surface.

In the evening the rain started, and we were concerned that this would increase the current even more.

The Next Attempt

Sunday morning was clear and sunny so we returned to try again. The plan today was for Bernd to enter first and to lay a thick climbing rope through the entrance and securely it firmly in the cave. Then David would follow to join Bernd for a longer dive than yesterday. They had a good dive, reaching the Seenhalle where they were able to surface and look around.

Joachim, Petra and I prepared for our dive. Petra had to carefully plan the dive around Hedvika's feeding times. Feeding the baby was one of the last jobs she had to do before zipping up her dry suit. She said that "Milk Valves" could be a useful piece of equipment for tech diving nursing mothers. Maybe some enterprising person could start making them?

We entered the cave in turn with me bringing up the rear. I descended onto the floor of large



Checking the water level against the pipe.

pebbles and moved towards the final turn. There was no sign of Joachim or Petra so they must have made it in. I hung onto the thick climbing rope with my left hand and inched forward with my chin on the floor and my shoulder pressed against the wall. This time I had tucked my backup regulator into my overalls to protect it from the flow. My finless feet dug into the floor as I tried to hold myself against the current. Pebbles I disturbed leapt up and shot past my ears like bullets. I had started to get my shoulder around the corner, but then I began to drift away from the wall into the main stream. I thought I was gone, but something dragged me back and within a second I was into the cave and in relatively still water. Luckily, Joachim had seen my problem and had reached out to grab my tank valves and pull me in.

We located Petra and began our walking tour of the cave. Visibility was only about 2 metres because of the high flow. However, we completed our dive plan, spending about 40 minutes in the cave. Walking through the cave was an unusual experience. At times we climbed up near vertical walls and descended through cracks, as though we were in a dry cave. The current was much less strong than at the entrance. But it was always present and a clear indication of which way was out. Fixed lines, made of strong plastic covered cables, were present throughout the dive and line arrows gave a clear indication at every turn and junction.

We went out through the entrance restriction one at a time. I dumped all the air from my suit and crawled slowly towards the entrance. I thought I was doing well until I was suddenly hit by the flow and shot out like a bullet from a gun. I desperately tried to reach the cave wall as it flew past. After a few seconds I was back in control and hugging the wall. We regrouped for decompression and a short time later we were enjoying coffee and cakes in the café. As we packed up we noticed that the water has risen into the pipe, indicating greater flow. Thankfully we had completed our dives before last night's rain took effect.

This was one of the most exciting cave dives I have done. I hope one day to return, when the flow is not so great. There is a lot of cave to see and parts of it are rarely visited. Taking a stage bottle would allow for a longer dive and greater penetration. There is no diveable connection to the river Donau. However a team of explorers, including Bernd Hugger, have been digging in a doline in the hills

upstream of the Aachquelle. They have reached water and found some diveable passage. At this stage it does not connect to the Aachquelle, however work is continuing.

An Unusual Hazard

The Aachquelle has a hazard which I had not encountered in other caves. As Joachim explained by email...

"In the 1960s Jochen Hasenmayer started exploring the Aachquelle. He, and later Harald Schetter, used a springy stainless steel wire, which is 0.8 mm thick, as guideline.

Advantages: very easy to be laid out and very robust.

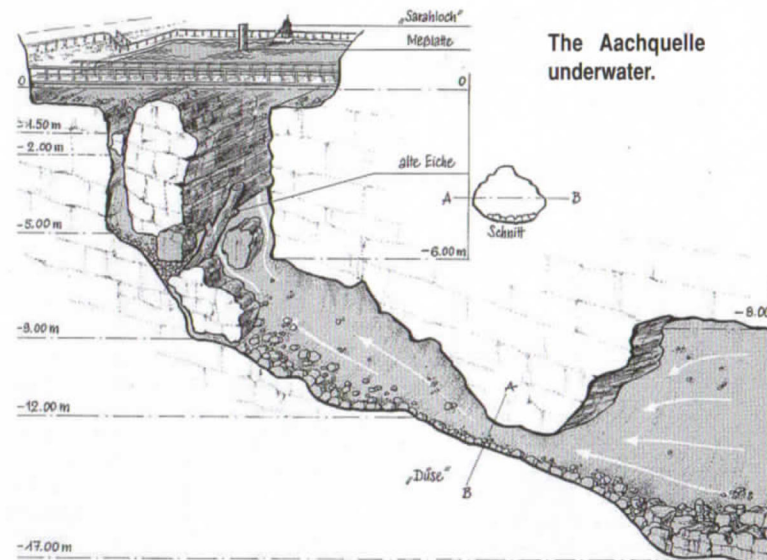
Disadvantages: disappears in the mud and very dangerous when getting entangled, ...

As we started our Aachprojekt, we decided to remove these wires. Nevertheless there are still places, where you can find them. Out of this reason everyone has to carry, in addition to his knife, pliers or electric wire cutters with him."

I am pleased to say we did not encounter any of this wire during our dives. However, the Crazy Czechs have seen it in a cave in Sardinia and gave me a piece as a souvenir. They said that it is very springy and, when cut, it instantly coils up and disappears out of sight down the cave passage, leaving the diver with nothing to follow. However, I guess it has the advantage of being very strong and more likely to survive in a high flow cave.

My Thanks to;

Joachim Kreiselmaier, for organising the entire trip, lending me all the gear and obtaining permits to dive the Aachquelle.



The Aachquelle
underwater.

Bernd Hugger, for help in preparations, for laying the rope which got us in to the cave, and for the photo of the Aachquelle during Hochwasser (High Water).

Harald Schetter, whose excellent book, "Die Aachhoehle", gave me the interest to dive the cave when I had the chance. The drawings of the Aachhoehle and Aachquelle used in this article are originally from his book. They are also shown on the Aachprojekt web site.

Linley Hartmann, David Funda and Petra Fundova for use of their photographs.

For more information including maps and photos of the Aachhoehle (Aach Cave) see;
<http://www.taucher.aachhoehle.de>

For photos from this article in colour see;
<http://users.bigpond.com/k.smith/Aachquelle.htm>

Colour photos appear on page 39 of this issue.

Report from the Business Director

Business is as always going along pretty smoothly. Again please identify any deposits into the CDAA accounts with a name and/or CDAA number. We are still getting some unidentified deposits

This is generally the quietest time of the year for me – so I will be catching up on some of the things I started a while ago – such as the new certificates, course evalua-

tion forms and start some more work on a Business Plan for the CDAA. If any members have experience in these plans – please feel free to contact me and assist in working out a draft.

Regards, Heike



CAVE DIVERS ASSOCIATION OF AUSTRALIA

(INCORPORATED IN SOUTH AUSTRALIA)

Membership Application Form

CDAА #: _____

Mail to: Records Officer, GPO Box 2646, Melbourne VIC. 3001.

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PHOTO OF
YOURSELF TO**

records@cavedivers.com.au

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Given Names: _____

Address: _____

_____ Mobile: _____

Phone: (h) (____) _____ Date of Birth: _____ Gender: _____

(w) (____) _____ Email: _____

In consideration of me being accepted as a member(s) of the Cave Divers Association of Australia Inc., I agree to indemnify the Association and any other officer, employee, instructor, or guide of the Association, or any other person organizing, controlling, or assisting with a function, event, dive, expedition, training, testing, or administrative task or obligation, associated with the Association, from and against all claims, costs, demands and lawsuits that I have or may, have for personal injury or property loss, whenever occurring, against the Association or any of those people, arising out of or in relation to any function, event, dive, expedition, training, testing, or administrative task or obligation, associated with the Association or with the sport of Cave Diving. I have read and understand the aims and objectives of the CDAА and am in support thereof. I hereby apply for membership.

Signed: _____ Date: _____

Please tick applicable boxes

- ☐ I wish to pay \$70 being CDAА Membership for 2007/2008.
- ☐ I wish to pay \$ _____ being for CDAА Membership for _____ years
- ☐ I wish to pay \$35/yr being for Non Active m'ship (no diving) for 2007/2008. (no photo required)
- ☐ I wish to pay \$45/yr being for backfees (max 5 yrs)
- ☐ I wish to pay \$45/yr being for late fee (Aug 31st onwards)
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Payment: _____

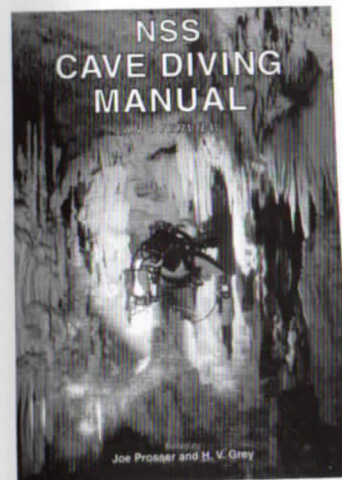
Card: _____

Membership Renewal Instructions

- 1.) Please print and fill out Membership Application Form
- 2.) **Enclose a stamped self-addressed envelope**
- 3.) Please **email** (preferable) a good quality image as a **jpeg** to records@cavedivers.com.au. Alternatively include 1 x passport quality photograph with your application form. Please write your name and CDAA # on the back of the photo. If you have sent a photo to me (Michael Kelly) in the last 12 months, I will have it on file.
No need to send another unless you wish to change it.
- 4.) Enclose your payment. Save time, money and hassle... join for more than one year, there is **no limit** to how many years you can pay in advance. Should there be an increase in membership fees you **will not** be asked to pay the difference. The boxes on the form are a guide only. If you wish to pay for longer, alter the form accordingly.
- 5.) **Please read point # 2**
- 6.) If you wish to have **Non Active** membership, please pay \$35/year. You keep your membership going, receive copies of Guidelines, but cannot dive with such a membership and you do not receive a card.
- 7.) **After 31st August any unpaid renewals will incur a \$45 late fee.**
- 8.) Anyone wishing to add a Nitrox, Trimix or Rebreather Endorsement will need to include a photocopy of their certification and pay a **once only** processing fee of \$10 per endorsement.
Please note that Trimix or Rebreather assumes Nitrox.
- 9.) **Please really read point # 2!!**

Memberships will not be processed and therefore do not become active until everything is sent.

Guide Books



NSS Cavern Diving Manual

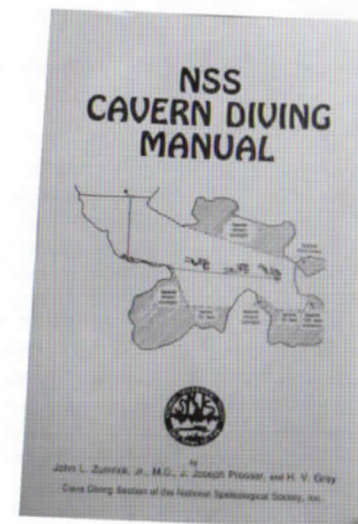
By John L. Zumrick, Jr. MD, J. Joseph Prosser and H.V. Grey
Softcover, 121 pages.

This very informative manual is the standard cavern reference manual for the Cave Diving Section of the National Speleological Society. It covers such topics as cave formation and cave hazards as well as cave diving techniques, equipment, underwater communication, dive planning and emergency procedures. It makes an excellent supplement to CDAA training materials and informative reading for the novice Cavern/Sinkhole diver.

NSS Cave Diving Manual \$55

Edited by Joe Prosser and H. V. Grey
with illustrations by Wayne McKinnon, Bill Dyer, Karen Flens and H. V. Grey
Softcover, 377 pages

This in depth manual is the standard cave reference manual for the Cave Diving Section of the National Speleological Society. This book expands on dive planning for cavern and cave level and covers topics such as equipment, communication, decompression procedures, mixed gases, hypothermia, cave fauna and hydrogeology. With a chapter by John Burge on cave surveying, Sheck Exley on rescue and recovery and history of cave diving and Lamar Hires on equipment, there is not much this excellent reference manual does not offer.



To order either of these books please use the order form in guidelines or download an order form off the web page.

regards, Helen Higgins, CDAA Products.

NATIONAL DIRECTORS REPORT

MARCH 2007

This is my first report for 2007 and there's a lot to tell.

Good news should always come first so I'll begin with that. Kilsby's is now leased by the CDAA under a similar agreement as Tank Cave. This will mean more access as we now can enter the property on a fortnightly basis. Before the new access comes into play though we have a mapping team ready to start and they will be using the new access times until June to produce a new map of the underwater site. Working under Stuart McGregor's guidance the mapping team led by Richard Harris will produce a map equal we hope to the Tank Cave ones. Cost of entry under the "user pays" system is still to be worked out but will be comparable to other sites where a fee is charged.

Barnoolut bookings for "1080" have picked up and it seems the members who didn't want to account for their actions by submitting a dive plan in advance have realised that it really isn't very hard. I have been hearing a bout great dives and fantastic clarity in the site. The threat of fire is always with us and sitting in the middle of hundreds of acres of grass, which is tinder dry, makes anyone nervous so please understand when the Landowner closes the site because of this fear. "Blacks" is now starting to be readied for access and Grant is looking for volunteers to help prepare the site. The Landowner has helped with costs so it's just a matter of getting the job done, so that we can all gain access to this wonderful dive again.

The new "Deep Cavern" course is in Draft 9 and has been read/commented on by 17 of our 21 Instructors. Once the last four have received the latest Draft and their comments if any are noted or acted upon, the new course will be voted on by the Directors to replace the current Cavern/Sinkhole course. New manuals for students, new outline for Instructors, new Power Point presentation and new exams will then be put together so that the Association can move on to the other courses which also scream for updating.

Penetration Course bookings have proven to be popular and Jane Bowman the new Co-ordinator has published the years course dates on the web site. The Association requests that members refrain from diving Gouldens two days prior to a course starting. The site has been "trashed" before the last two courses with either other courses being run there or member

candidates practicing skills before the course starts. We will be advising the DEH not to accept bookings so that the Penetration Course gets priority.

Steve Trewavas has advised that Tri-mix diving is again available in The Shaft. If you are interested please contact Steve his address is on the web or in Guidelines.

It is very frustrating when Instructors don't advertise their courses on the web site, it doesn't cost anything to do this and it might save some of the congestion that takes place at Gouldens and other sites if everyone knew when a course was expected. This applies when the Penetration Program is scheduled as well, Gouldens and other sites used by the Penetration Course must be avoided. Gouldens will be closed two days before any scheduled Penetration Course in future. Remember permission from the DEH is required to dive this site.

Stan Bugg has hung up his teaching fins and has replaced them with slippers. As everyone would or should know Stan has been around for a very long time and his advice on teaching matters and policies has been sought many times. Anyone who has read Stan's numerous articles in Guidelines over the years knows that he is passionate about this sport and will be missed. Hopefully it doesn't mean we won't see Stan at dive sites or contributing articles in fact maybe this will give him more time to get involved in the running of the Association?? I'm sure everyone joins me in wishing Stan the best for the future and thanking him for all the years of dedication to the Association.

Now is the time to get your thinking caps on, you see just around the corner it's election time. The positions held by Terri Allen, Gary Barclay and myself are all up for election. In the next issue of Guidelines nominations will be called for these positions and for any Constitution changes that member's want voted on, which includes "Hall of Fame", Life Membership etc. If you have wanted to contribute to the running of the Association and are prepared to put the time and effort required into the position (don't bother trying if you just have some personal political agenda the members see through these games) then the CDAA needs you. I won't say it's easy having to account to members about everything you do; in fact it may affect your personal and business life as well. Putting up with personal attacks which are usually completely unfounded and getting bogged down in the day to day decisions that have to be made to keep

the Association running smoothly can be a drag, but if it's not some personal bandwagon but your intentions are to help others then I'm sure there's a place for you. Call me or one of the other Directors, we don't bite, well not hard, and get the lowdown of the position. It's all very well to read the description in the Constitution but a lot more goes on and it takes many months in the position until you really get the "feel" for the job.

Under the "Bad News" banner we once again have taken action against two members who entered Piccaninnie Ponds outside of their booked access time. This is not the first time that the Association has needed to suspend some of its members for a violation of access privileges at this site. Hopefully it will be the last time. Six months loss of access and a "suspended Member" status is a reminder to all of us that the Landowner access rules must be obeyed. These rules are covered under our Constitution and Regulations. If a member witnesses a rule being broken they have the right to ask another member for an explanation and have a responsibility to report the alleged violation to the Directorate. When the Directorate receives an allegation it is looked into by

the National Director, who may ask the Standards Director to investigate or in some cases other Directors as it may fall within their area of responsibility. If any bias could be claimed the Director concerned may not wish to take part. Once enough evidence is gathered to convince the Director that a violation has taken place it is then handed to the National Director who writes to the member/s and advises of a hearing, time and place. The member/s may at this time just plead guilty and let the outcome lie with the Directors. In this case a decision is made and the member/s advised of the punishment if applicable. If the member/s attend the hearing the Directors will hear their argument and a decision made. Even after a finding by the Directors a member has the right of appeal as laid out in our Constitution and Regulations. In my time as National Director and previously as Business Director I have only attended one hearing as most members basically "fall on their sword" which results in less cost to the Association because we don't have to pay to get all the Directors together for a hearing. Obviously the Directors accept a plea of guilty as contrition and adjust their punishment to suit.

Instructor fees have been raised and currently the maximum number of Victorian Instructors has been reached. The Association only appoints Instructors on a "need" basis and although we do need Instructors in other States, Victoria is at a peak. We don't want to discourage new applicants though, so just put your application in and when a position is available, providing your application is OK, we will advise you.



Warrick McDonald.
CDAA National Director

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CDAA INSTRUCTORS

NAME	Cavern	S'hole	Cave	Penetr
A.C.T.				
APPS, Heike (CDAA 2776) BH 02 6249 9170 AH 02 6291 0566 E: heike.apps@ga.gov.au	Yes	Yes	Yes	Yes
N.S.W.				
FEATONBY, Tim (CDAA 3372) Mob: 0402 129 253 E: tim.featonby@defence.gov.au	Yes	Yes		
GRILLS, Peter (CDAA 1780) AH 02 4955 4497 Mobile 0419 820 920 E: peter_grills@hotmail.com	Yes	Yes	Yes	Yes
WALTERS, DESMOND BH 02 6041 1405 AH 02 6025 3506 dive@descend.com.au	Yes	Yes	Yes	
SOUTH AUSTRALIA				
YARRA, George (CDAA 3356) Mob: 0418 847 889 E: gyarra@adam.com.au	Yes	Yes	Yes	Yes
MARRIOTT, Max (CDAA 1268) Mob: 0428 897 897 E: dive69@chariot.com.au	Yes	Yes	Yes	Yes
TAYLOR, Ian (CDAA 3568) Phone: 0411 118 134 E: ian.taylor4@defence.gov.au	Yes	Yes		
VICTORIA				
ALLEN, Terri (CDAA 3483) Mob: 0419 176 633 E: terri.allen@baker.edu.au	Yes	Yes		
AXTON, Paul (CDAA 2826) Phone: 0419 346 442 E: PALdiving@people.net.au	Yes	Yes	Yes	

NAME	Cavern	S'hole	Cave	Penetr
VICTORIA. cont.				
BARCLAY, Gary (CDAA 1735) AH (03) 5565 8793 E: garinda@tpgi.com.au	Yes	Yes	Yes	Yes
BOWMAN, Jane (CDAA 1880) BH: (03) 5979 2600 E: info@abocean.com.au www.abocean.com.au	Yes	Yes		
CLARIDGE, Linda (CDAA 2214) Mobile 0408 052 070 E: garinda@tpgi.com.au AH (03) 5565 8793	Yes	Yes	Yes	Yes
HARDMAN, Lorraine (CDAA 2824) Mob: 0418 304 120 E: PALdiving@people.net.au	Yes	Yes		
HIGGINS, Andrew (CDAA 3329) Mobile: 0413 569164 E: ahhiggins@optusnet.com.au	Yes	Yes		
MCDONALD, Warrick (CDAA 1882) BH: (03) 5979 2600 E: info@abocean.com.au Mobile 0408 374 112 www.abocean.com.au	Yes	Yes	Yes	Yes
MONACO, Rubens (CDAA 1731) BH 03 5984-1799 E: info@idcscuba.com.au Mobile: 0413-429-533	Yes	Yes	Yes	
WALTERS, Des (CDAA 687) Location: Albury Phone: (02) 6041 1405 Email: dive@descend.com.au www.descend.com.au	Yes	Yes	Yes	
WEALTHY, Bob (CDAA 464) Mob: 0417 524 005 Email: someterset@iimetro.com.au	Yes	Yes	Yes	

SITE DIRECTOR'S REPORT

We are into another new year and I am sure there will be lots more challenges ahead. We are moving along fine at the moment although the steady drop in the water table is causing some access problems. The ladder problem at Kilsbys has been rectified with a new ladder now in place. This has been manufactured with the thought of a constantly fluctuating water table in mind and the new ladder can be adjusted to compensate for any water level changes, either up or down. See Photos.

Thanks must go out to Kelynn Ball from Horsham who put this together for us. Also to all of the people who helped put it into place, Brett Moore, Andrew Lockwood, JDZ, Dr. Harry and any others who helped out on the day. We are now looking at other sites where access is being adversely affected by the drop in the water table – Allendale and One Tree to name a couple. Care must be taken on the ramp at Little Blue also due to the extreme steepness of it and I am talking to the Council about a solution at present.

Some good news is Bakers Cave is now back on track so follow the access pages in Guidelines for info on this.

The Kilsbys lease is about to be renewed and this will result in greater access for all – more on this later.

The Shaft has been going well with a few trimix dives being done here. Contact Steve Trewavas for more details.

If you haven't been out to Mud Hole or Nettle Bed Cave for a while it is worth a visit! Green Corps and Forestry SA have done a great job in creating steps and installing an excellent boardwalk between the two sites. The stinging nettles, hidden rabbit burrows and threat of cleverly disguised snakes has been eliminated (for a while at least) but this structure. Thanks to Forestry SA and Green Corps for their continued support of the CDAA.

Ten Eighty is now seeing a few divers accessing this great site so check out the access on the CDAA website or give Grant a call to arrange a dive. Mr. Scott is reportedly pleased with how the access is going at this stage. A big thank you to him and his managers for their assistance here.

Black Hole, another sinkhole on Barnoolut is now being looked at for future access. We may need to make a few changes at this site but Grant will call

for member's assistance with this when the time comes. Please respond to his call and we should soon be diving here.

I have set aside the June 30 weekend as a Clean Up Some Sites weekend in Mount Gambier. This will culminate on the Sunday (July 1st) at Hells Hole with a clean up to be staged here also. If you have never dived Hells this would be the prime time – but you have to help clean as well!

If you can help we will meet on Saturday June 30 at 0900 SA time at the car park at Lady Nelson Tourist Info centre. Please come equipped with gloves and work attire. There will be a BBQ supplied on the Saturday evening. Please contact me on 0407 527 921 or email site@cavedivers.com.au or garinda@tpgi.com.au if you want to help out.

Reminder...

On a disappointing note there are still divers having problems remembering access conditions! You are responsible for checking and adhering to the current access requirements – if unsure call me at any time to check – this could save you a lot of embarrassment later. Please check your time slots at Picaninnie ponds and stay within the allotted hour, the ponds NEED the 2 hour rest time in order for the next group of divers to enjoy the clear water found here.

Remember also if you are booked into The Shaft, Kilsby's or Tank cave to please let the guide/booking person know if you need to cancel out. This will free up places for those that may be waiting and assist guides with the dive planning.

We are an access based organisation, without the continued access to these sites we wouldn't have an organisation. The continued access to these sites relies on the continued good will of a lot of people so continue to be courteous and polite to all landowner/managers.

So that's all for me now, I hope to see some of you at the CDAA stand at Oz Tek in Sydney or diving in Mount Gambier.

**Happy Diving,
Gary Barclay
#1735**



Alarm over Ewens decline

By Gerard Carmody

Colour pictures on page 38.

Ewens Ponds, one of Australia's natural wonders, may not be here for us to enjoy in the years to come. The rapid decline of the series of ponds, one of Australia's best and iconic freshwater dive sites located in the South East of South Australia, is alarming conservationists, divers and its community.

Ewens Ponds are set to be one of many environmental casualties caused by global warming and our current drought. With rainfall in the past ten years at its lowest on record in the water catchments feeding Ewens Ponds, an outbreak of blue-green algae has occurred causing a massive dieback of aquatic plants. These plants are essential to ecological balance of the ponds and their reduction has caused a significant decrease in populations of slower moving aquatic fish and invertebrate species.

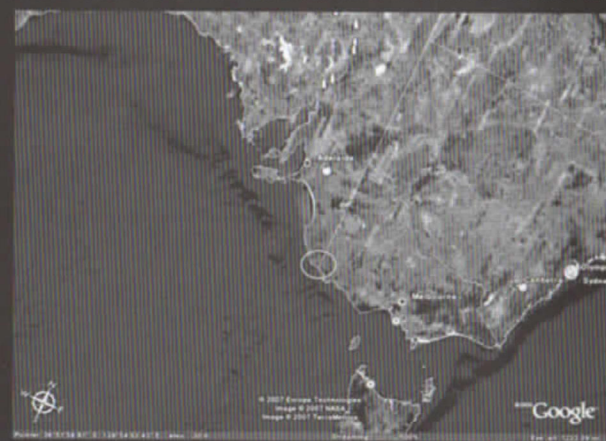
The water problem for Ewens is magnified by relevant management authorities continuing to allocate too much water to local irrigators trying to drought-proof their farms and timber plantations. Ewens, a freshwater ground-dependent ecosystem, is suffering as a result of this miscalculation of water allocation and the failure to address the problem.

A recent public outcry over the decline of Ewens has seen the establishment of a technical reference group. Comprised of various government representatives the group will investigate and determine management strategies to improve its condition. Hopefully the recommendations and implementations of this group will not be too late for this precious ecosystem. We can only hope irreversible damage has not already occurred.

Underwater experts, Ron and Valerie Taylor, have joined the public outcry over Ewens. Familiar with the unique dive spot since 1962, the creators of two documentaries about Ewens are dedicated to saving this pristine freshwater site.

'We are extremely concerned by the rapid decline of these wetlands due to lack of understanding and

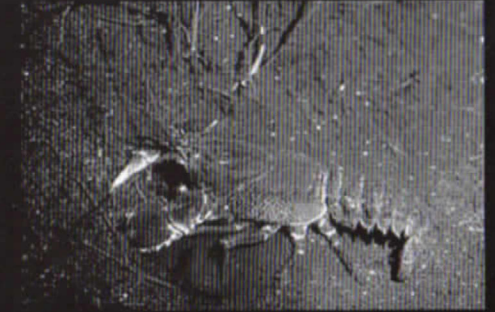
Near the South Australia and Victoria border...



Ewen Ponds Conservation Park



...so what's their future?



Ewens Pygmy Perch (*Nannoperca variegata*) and the Glenelg Spiny Crayfish (*Euastacus bispinosus*) endangered and under threat in Ewens Pond
Photographs: Rudie Kuiter.

serious mismanagement. Australian has only one Ewens Ponds. It is our duty to care for and preserve this magnificent gift of nature that belongs to us all equally and to not bleed it dry for the short term benefit of a few.'

Ewens Pond deserves to be fully protected and preserved for future generations. Its long-term future will depend on the critical decisions we make.

Our suffering ecosystem...

- More than 50% decline of water flow from Ewens Pond to the ocean in the last 15 years, coinciding with an exponential growth in centre pivot use in the south east.

- Nutrient concentration more than 5 times safe environmental limits (ref EPA)
- Major decline in aquatic plant and fish life from the pond system
- Evidence of hybridization of endangered fish species, possibly due to environmental stress.

If you are interested in becoming involved or require further information please contact:

Gerard Carmody (mob) 0405 178 959.

Your support is needed.

More information about the public outcry at www.angfa.org.au/ftp/Save_Ewens_Pond_low_res.pdf

Period	Location	Nitrogen mg/L	Phosphorus mg/L
Late 1970s through to early 1980s (DEH)	Ewens Ponds system, Eight Mile Creek mouth	NOX 3.8-5.0 average 4.72 TKN 0.17 (organic + NH4+)	Not tested
1994-95 (DEH)	Ewens Ponds system, Eight Mile Creek mouth	NOX 4.9-5.2 TKN 0.3-0.1	0.008-0.02
2000 (Hammer et al, 2000)	Ewens Pond	NOX 5.45 TKN 0.30	< 0.005
April 2006 (MUWSC)	Ewens Ponds system, Eight Mile Creek above Spencers drain # 5	Total 5.80	Total 0.01
April 2006 (MUWSC)	Piccaninnie Ponds jetty	Total 2.70	Total < 0.01

Changing Rainfall: The ten year history of rainfall in South Australia. The Mount Gambier region (encompassing Ewens Ponds) has received below average rainfall. The rainfall of the catchment just to the north is very much below average during this past decade. Courtesy of Australian Bureau of Meteorology

UP COMING COURSES

Cavern / Sinkhole Courses

April 6 - 9, 2007 in Mount Gambier

Instructor: Linda Claridge or Gary Barclay 03 5565 8793 E: garinda@tpgi.com.au

May 12 - 15, 2007 in Mount Gambier

Instructor: Linda CLARIDGE 03 5565 8793 E: garinda@tpgi.com.au

21 May-June 3 2007 in Melbourne and Mt Gambier

Instructor: Jane Bowman - 03 9579 2600 - info@abocean.com.au

June 4 - June 17, 2007 in Melbourne and Mt Gambier

Instructor: Terri ALLEN 0419 176633 E: terri.allen@baker.edu.au www.muuc.org.au

Cave Courses

19-25 March 2007 - in Melbourne and Mt Gambier

Instructor: Jane Bowman - 03 9579 2600, info@abocean.com.au

March 24-26 to be run in Mt Gambier.

Instructor: Ian Taylor, 0411-118134. E: ian.taylor4@defence.gov.au.

2-8 July 2007 - in Melbourne and Mt Gambier

Instructor: Warrick McDonald - 03 9579 2600, 0408 374112 info@abocean.com.au

CDAA Penetration Courses

April 25 - 29, 2007 in Mount Gambier. Full time (5 day) program April 25th (ANZAC Day) through to the 29th (inclusive).

May 7 - 11, 2007 in Mount Gambier. Full time (5 day) program May 7th through to the 11th (inclusive). Please download latest application form.

June 9 - 17, 2007 in Mount Gambier. Part time program June 9th, 10th, 11th (Queens Birthday) and 16th, 17th.

Please download the latest application form off the webpage www.cavedivers.com.au

KILSBY'S DATES FOR 2007 (Sat. & Sundays)

• April 7 & 8 (Easter Sat & Sun) • May 5 & 6 • June 2 & 3 • July 7 & 8

July to december dates to be released once lease is finalised!

TANK CAVE

~ DATES FOR 2007 ~

REMINDER TO ALL TANK CAVE DIVERS...

A Tank Cave returning diver application form and the annual \$110 fee will be required before any bookings can be accepted.

2007 DATES

April 6 - 9

(Easter) Jane Bowman

April 21 - 22

Linda Claridge

May 5 - 6

(Mapping) John Dalla-Zuanna

May 19 - 21

(Adelaide Cup) Warrick McDonald

June 2 - 3

June 9 - 11

June 14 - 17

July 21 - 22

Barrie Heard (also check website!)

(Queens Birthday) - Barrie Heard

(Extended weekend for non

Vic/S.A. Divers) Warrick McDonald

Robert Brennan

INSTRUCTOR MATERIAL ORDERS:

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.

CONTACT:

IAN TAYLOR - 0411 118 134,
48 ONE AND ALL DRIVE, NORTH HAVEN, SA 5018.

~ Articles for Guidelines ~

- Send articles & photos via post, or preferably by email to:
Terri Allen, PO Box 7592, Melbourne 8004.
- Email to publications@cavedivers.com.au **and** seapics@alphalink.com.au
- Text files should be saved as Word files and pictures as separate jpeg files.
If mailing please send pics and text on CD.
- Pictures saved from digital camera or scanned from photos must be at least 200 ppi at 15cm wide or equivalent, and saved as Greyscale as JPEG's.

CDAА SITE ACCESS - www.cavedivers.com.au

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
MOUNT GAMBIER - SOUTH AUSTRALIA			
DEH SITES			
Ewens Ponds	Nil	DEH P.O. Box 1046 Mt Gambier 5290 (08) 8735 1177	Groups of 6 or more, phone/mail to Dept. for Environment & Heritage (DEH) Smaller groups, no need. Fax: (08) 8735 1135
Gouldens	CN	DEH	General Diving: Divers to contact DEH and notify of date and site to be dived. Please make requests by phone or fax only.
2 Sisters	CN	P.O. Box 1046	Divers must have the correct CDAА diving endorsement for the site and carry current
Fossil	C	Mt Gambier 5290 Ph: (08) 8735 1177 Fax: (08) 8735 1135	financial CDAА membership card. The diver must have signed an indemnity with DEH before access is permitted. Training: The Instructor is to notify DEH of the date the sites are needed and to forward signed indemnities from each student and their temporary card number/ membership number. Permit holders by phone or fax. Be aware of delicate vegetation. \$22/dive or annual Permit \$52. NOTE: Indemnity form to be completed with membership renewal.
Piccaninnie Ponds	S	as above	By phone or mail, 1 week prior. Ph: (08) 8738 4003.
Horse & Cart	CN	Peter Cunningham	
Tea Tree	CN	PO Box 2168, Mt Gambier 5290	
Little Blue	S	District Council of Grant	Little Blue - permission not required - must carry card.
Allendale	C	District Council of Grant	Obtain key from Lady Nelson Tourist Information Centre.
Ela Elap	S	Mr. Peter Norman	Visit the house before diving.
One Tree	S		If no one home - no dive!

FORESTRY SA SITES

Dave's Cave	C	Maximum 3 divers all weekends between May & November inclusive (check and update on CDAА website).
Hells Hole	S	At least 4 divers in group - 1 with previous site experience.
Pines	C/P	Unrestricted days or numbers - Cave rated divers must not enter Penetration sections
Mud Hole	C	Unrestricted days or numbers.
Nettle Bed	P	Open every weekend. Maximum of 4 divers per weekend undertaking 1 dive only (check an update on CDAА website)
Stinging Nettle Cave	P	Open every weekend max 3 divers per day undertaking 1 dive per day (check an update on CDAА website).
Iddlebidy	P	Open every Saturday max 4 divers, 1 dive only (check an update on CDAА website)

Owner: Contact Forestry SA by email: forestrysa@forestrysa.gov.au. Fax: (08) 8724 2885 or Phone: (08) 8724 2876 or book on-line via the CDAА website to arrange permit. Collect permits from the Forestry Office, RHS of driveway to Carter Holt, Jubilee Hwy, Mt Gambier.

IMPORTANT:

- No diving on Total Fire Ban Days.
- Permit also required to run compressors during fire danger season.
- Keys for Hells Hole, Nettle Bed, Iddlebidy and Stinging Nettle Cave can be obtained from Lady Nelson Visitor Centre on presentation of Forestry SA permits.

Kilsby's	S	Landowner leased to CDAА	Access - Open first weekend of the month. Refer to CDAА website. Twin Tanks - Maximum depth of 40 metres. Meet at gate of property at 8.55am or 12.55pm. Book on-line at www.cavedivers.com or contact Craig at kilsbys@cavedivers.com.au
		No Visitors	No animals, visitors or mid-week diving allowed.

CDAА SITE ACCESS

SITE	LEVEL	OWNER	ACCESS DETAILS
MOUNT GAMBIER - SOUTH AUSTRALIA (continued)			
BARNOOLUT SITES			
Ten Eighty	S	Scotts Agencies P/L	Access: Grant Sommer ph. 0412 266 826. Mail - 147 Kenihans Road, Happy Valley, SA 5159 Download indemnity and book online at www.cavedivers.com.au. DATES OPEN: Saturday 7th April, Saturday 19th May, Saturday 9th June 2007
Blacks Hole	S	Scotts Agencies P/L	Site undergoing development...Watch this space for information!
Shaft	S	Generally open one weekend a month. Trevor Ashby	For access dates refer to Guidelines or the CDAА webpage. Nitrox as a diving mix is not allowed in the Shaft unless a trimix endorsement is held but deco mixes attached to the shot line are permissible. Refer to Shaft access bulletin within CDAА Regulations. Divers applying to dive in the Shaft for the first time must document dive experience with twin tanks Download form off website. Email: shaft@cavedivers.com.au (Linda Claridge, 0408 052 070)
Hann's cave	P	P & A Lasslett Manager: Mike Haze	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.
Engelbrechts - East - West	C P	Mt Gambier Council Lessee Ph: (08) 8723 2299	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. Diving should be avoided after heavy rain due to possible water contamination. Diving hours are now restricted to 8am to 8pm CST.
Three Sisters	P	Millicent Council	Download Indemnity from Web Page. 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.
McKay's Shaft	S		Contact Email: site@cavedivers.com.au.
Tank Cave	P	Mr. DYCE	Access Manager: Noel Dillon. Email: noel.dillon@macquarie.com
Baker's Cave	C	Manager: Brad Dibble E: site@cavedivers.com.au	Please write to the Site Access Director to dive in Baker's Cave. Include stamped self-addressed envelope. Climbing equipment required. Only open October to April.
NULLARBOR - WESTERN AUSTRALIA			
Cocklebidy	C/P		Apply in writing for permission to dive at least 4 weeks in advance of trip to: District Manager, Department of Environment and Conservation (DEC), PO Box 234, Esperance, W.A. 6450.
Murra El Elevyn	P/C		Phone: (08) 9083 2100 Fax: (08) 9071 3657.
Tommy Grahams	C		
Weebubbie	S/C	DPI	The Department for Planning and Infrastructure, Midland, State Land Services South East. PO Box 1575, Midland 6936. Contact Bob Hamilton, Email: bob.hamilton@dpi.wa.gov.au Phone (08) 9347 5047 Fax (08) 9347 5004
N.S.W. - WELLINGTON CAVES			
Limekiln (McCavity)	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.
Water (Anticline)	C		Affected by high CO ₂ levels during Summer/Autumn. Access is co-ordinated with the Wellington Caves management by Greg Ryan - gregr@cs.usyd.edu.au. Phone (02)97434157
Rum Jungle Lake	S		Unrestricted access currently exists - Please refer advice Guidelines #68 or check CDAА website.
Burrinjuck	S/C/P		This is a tri rated site. Please see details in issue No. 73. There are no specific access arrangements.

CDAA PRODUCTS ORDER FORM

Please send to: Helen Higgins
CDAA, 3 Harris Crescent,
Glen Waverley, VIC 3150.

QTY / COL/SIZE	ITEM	UNIT PRICE	TOTAL
BOOKS	An Introduction to Technical Diving. By Rob Palmer. Explains clearly and simply the advanced techniques & technology used to undertake Technical Diving, and what is done to overcome problems arising with nitrox & mixed gases.	\$45.00	
	Basic Underwater Cave Surveying. The standard publication for anyone remotely interested in research and survey techniques used in water filled caves.	\$30.00	
	Cave Diving Communications. A manual from NSS - CDS dealing exclusively with all underwater communications used in cave diving. Including touch, torch and line signals, and use of line arrows and jump reels.	\$25.00	
	Cave Diving - A Blueprint for Survival. A book by the world-renowned cave diver, the late Sheek Exley, this is a case study of a number of accidents that have occurred in the USA and how to avoid them.	\$20.00	
	Caverns Measureless to Man. The story of the passion for cave diving of the late Sheek Exley who spent his life exploring underwater caves. Publications Directors pick. Amazing book you can't put down once you start, a must read!	\$50.00	
	CDAA Occasional Paper No. 2. From National Conference 1981. Includes topics such as Fossil Cave, Belay Techniques and Cocklebidly 1979.	\$2.00	
	Deep Into Blue Holes. By Rob Palmer. This is the project manual written about his trips to the Bahamas, diving some of the most advanced and spectacular caves in the world.	\$55.00	
	Diving in Darkness By Martin Farr. Personally signed by the author. Provides a clear, concise and modern overview of the essential equipment, skills and techniques required to dive in caves, mines, wrecks and beneath ice. Published in softback Diving in Darkness is packed with 170 photographs and diagrams throughout its 128 pages.	\$65.00	
	Hidden Splendours of the Yucatan Hidden Splendours of the Yucatan is photographer/author Lalo Fiorelli's story of exploration, teaching, and photography in the caves of Mexico's Yucatan Peninsula. His stunning photography is complemented by the lively, down to earth writing style that brings the experience of exploration to the reader. A must read for those planning a Mexico trip or at least dreaming of one!	\$49.00	
	NSS Cave Diving Manual. The standard reference manual in cave diving covering just about every conceivable topic. New Edition.	\$55.00	
VIDEOS/DVD's	NSS Cavern Divers' Manual. The standard reference manual in cavern diving covering almost every conceivable topic. Also most principles behind safe sinkhole and cave diving.	\$30.00	
	New Edition of Peter Horne's Lower South East Cave Reference. An illustrated catalogue of the Lower South East Region of South Australia. CURRENTLY UNAVAILABLE	\$130.00	
	The Darkness Beckons. By Martyn Farr. The history and development of cave diving.	\$75.00	
	The Cave Divers. By Robert Burgess. Paperback 352 pages. Full history of cave diving in the States and further afield. An interesting mix of adventure and archaeology. Robert Burgess has been diving for over 50 years. He lives in Chattahoochee, Florida.	\$40.00	
	The Taming of The Slough. This is Sheek Exley's exciting story of the discovery and mapping of the Peacock Springs Cave System - at the time the world's longest underwater cave.	\$45.00	
	Australian Cave Diving - A Contrast. By Tony Carlisle. Four short documentary type videos on Warbla Cave, Three Sisters Cave, The Road to Toad Hall and Tank Cave.	\$25.00	
	Australia "Nullarbor Dreaming". During November 1988, a team of Australian cave divers set out on an amazing adventure to explore the mysterious subterranean waters of the Pannikin Plains Cave. This epic underwater exploration nearly ended in tragedy when a freak cyclonic storm hit the area and the cave collapsed trapping the expedition below.	\$29.95	
	"Facing Darkness". Following some of the greatest cave divers in north Florida, Facing Darkness invites you to discover the underwater caves and how divers safely explore them. About the geology, the danger and the passion.	\$35.00	
	Florida "Window to a Hidden World". The ultimate cave diving adventure. Andrew and Liz with fellow cave diver-explorer Wes Skiles, take us on a journey to discover the beauty and danger of the Florida aquifer. Beneath the surface of Florida lies one of the planet's largest freshwater reserves. Producers: Andrew & Liz Wight.	\$29.95	
	Mexico "Water of the Gods". Under the dense jungle of Mexico's Yucatan Peninsula lies a vast freshwater source relied upon by the ancient Mayas - a mysterious and complex people who built and occupied complex limestone cities in this region for over two thousand years. Andrew and Liz Wight explore their hidden caves, uncovering their beauty and mystery, and providing a link to the past.	\$29.95	
CLOTHING	Cuba "Beneath the Surface". This documentary explores the role water has played throughout time in the history of Cuba. It reveals some of the many beautiful aspects of this magical Caribbean island, explores the bizarre subterranean caverns and provides unexpected contrasts with Cuba's turbulent history. This is an expose of a Cuba we believe we know.	\$29.95	
	SIZE - Please Advise		
	• 30th Anniversary Embroidered Crew Neck T-shirts. Burg., White, Royal blue or Blk - M, L, XL, XXL	\$25.00	
	• 30th Anniversary Polo Shirts. Grey with black trim or black with red trim. Looks very smart!	\$35.00	
	• Polar Fleece Jumpers. Colours: Blue, Black. Original logo. Keeps you toasty warm and smart!	\$60.00	
	• Polar Fleece Vests. Colours: Blue, Black. Original logo. Great to wear as extra layer under the drysuit!	\$40.00	
	• Blue Crew Neck T-Shirts - Royal Blue, Regular logo Sizes S, M, L	\$25.00	
	• Ladies' Crew Neck - Smaller white t-shirts with shorter sleeves and "female" cut. Royal Blue, CDAA regular logo on front. Sizes 8, 10, 12	\$22.00	
	• Beanies. Black only.	\$20.00	
	• Caps. Black only.	\$20.00	
MISC.	• CDAA Key Rings. Blue with gold motif. CDAA P.O. Box on back.	\$5.00	
	• CDAA 25th Anniversary Stickers. Yellow. Include stamped self addressed envelope for delivery.	\$1.00	
	• Tank Cave Poster. Full Colour 14.5" x 25" poster of Tank Cave by Peter Rogers. Price includes p&h.	\$8.00	
	• Tank Cave Map. Premium matt or gloss 120g paper \$96.00 (laminated \$22.00 extra, silver back \$132.00)		
	• CD of Guidelians 1-91 All Guidelians as searchable pdfs on CD.	\$10.00	
	• DVD of Sidemount Workshops	\$10.00	

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Cenotes

A WINDOW IN TIME

The slow passage of rainwater through soft porous limestone slowly dissolves the stone and creates passageways and sinkholes. In the Yucatan Peninsula of Mexico these processes have created extensive cave systems.

Through geological time these caves have filled with water and emptied several times. The dry periods occurred during the ice ages when thick layers of ice covered much of Europe and north America and sea levels were as much as 120 m lower than the sea level today. During these long dry periods, the slow dripping of the calcium laden water over thousands of years created stalagmites and stalactites. Each dry period allowed new formations to form often on those already

existing from a previous dry period. The Mexican caves were probably last flooded about 18000 years ago providing cave divers with the unique opportunity of being able to observe these spectacular cave formations "under water".

Above ground in Mexico and Guatemala, the Mayans built lime-

stone temples and astronomic observatories. This ancient civilisation, celebrated for its advanced knowledge of astronomy and mathematics, reached a peak in 500 to 800 AD, then went into rapid and mysterious decline around 900 AD. The great Mayan civilisation just faded out. The reasons are not clear. To the Mayan people who inhabited the area, the cenotes were windows to the underground aquifer that supplied water for life but also a window to a feared world of the gods. To cave divers these cenotes are an entrance to another

world of natural geological temples below the limestone surface. A world not to be feared but one to be observed in awe.

In some caves, huge pillars lie broken as if some giant has demolished the solid structures with a sweeping blow. In others, fine columns have domes or flat structures at the base that reflect where the floor of the cave must have once been and then in another geological time the floor has been eroded away by flowing waters



and new stalactites have formed underneath the dome or shelf. In some cases, two sets of dome shelves are apparent. And then in other caves there is no evidence of massive forces or changes in the level of the floor. Nature does not always behave consistently.

The colour of the water seeping through the limestone, sometimes rich in organic material at other times less so, slowly deposited small amounts of brown tannins giving the cave formations a huge variety of shades from stark white through pale yellow to caramels and deep chestnut. Close examination of broken formations reveals concentric rings rather like the growth rings of a tree, which are often quite different in colour. Brown rings suggest increased organic matter in the water from the decay of forest vegetation. Clear rings reflect periods where water col-

lected little organic matter as it seeped through to the limestone layer. Shaws illuminated with a bright light show similar layers of light and dark, reflecting different conditions on the earth's surface.

The Yucatan Peninsula borders the Caribbean sea. Salt water penetrates inland as it does through many rock strata. In the cenote systems, this unique situation results in layers of water separated by their density and temperature. Fresh water lies atop the salt water, creating the wonder of the halocline. The fresh water is around 24 degrees while the salt is around 25 degrees and can offer chilled divers a pleasant warm up as they pass into the salt. Emerging from the warmer salt water into the cooler fresh water, the fixed guide line seems suspended in air above the rippling surface of the water and the temptation to take your reg out at the "surface" is quite strong. Passing through the interface, the diver is enveloped in shaws of "syrup" as the denser salt layer becomes partially mixed with the fresh water. Pure spectacle to watch. In areas where salt water has been present for long periods, the limestone is eroded to form complex eroded forms known as "Swiss cheese", bright, white, intricate natural carvings in the limestone.

The cave systems vary from narrow stark white passages with surface straws and long thin white formations, to huge tunnels (herd of elephants size) with dark silts and massive white formations, to deep oblong tunnels in the salt water where the brightness of the coloured formations is startling, enhanced by the sheer clarity of the salt water.

The systems are vast. While it is tempting to explore beckoning side passages and caverns, one has to trust that the original explorers have laid line through the best and continuous parts of the system. Cave etiquette requires divers to stay on the line to limit the erosion of roof formations above the line by exhaled bubbles and to minimise the damage that poorly controlled buoyancy might cause. In one relatively new cave, disrupted material from the roof (percolation) still rains down, clear indication that very few divers have passed this way before. As a consequence of this percolation, the water is less clear on the return journey, a small price

to pay for the privilege of entering a new cave.

Names like, Sac Aktun, Cuzan Na, La Boca, Chun Hol, Tux Kupaxa, Xunan Ha and Calimba beckon. Twin 90's allow more than adequate dive times and penetration to thoroughly waterlog a diver after two dives per day. The average depth is around 10 to 14 m. With reasonable air consumption, most dives are from 90 to 120 minutes duration, and in some cases require considerable deco. While extended dives with stages are possible, the sheer variety of caves available to the average visitor makes diving in many different systems the preferred option. In an average visit to this area, you will not pass the same way twice and still only see a fraction of what is to be seen.

While it is not essential, a good guide is recommended. The guide will ensure that you visit the most spectacular areas according to your interests and abilities.

Demonstrate buoyancy control, an appreciation for the natural wonders that geological time have created and reasonable air consumption and the Mayan underworld is yours to explore.

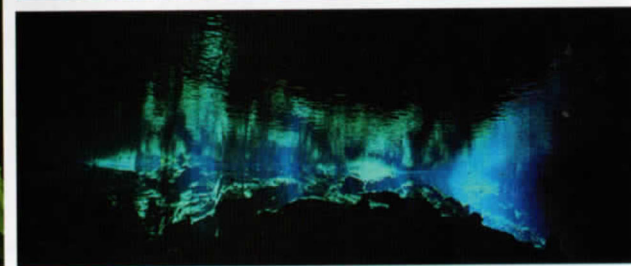
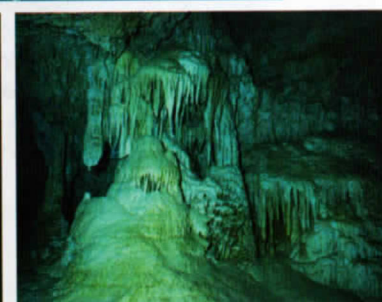
Not far away the Mayan ruins offer another dimension. Like the growth rings of the cave formations, the Mayan temples were constructed progressively, one

layer on top of another. Every 50 years or so a new temple was built over the previous temple, thus just as the cave formations grew so too did the temples. At one site, the king's palace became the king's tomb and was then completely "bricked over" with limestone blocks. As archaeologists were slowly exposing the temple from the jungle covered rock pile, plans to remove a very large tree growing on top of the temple pile showed large roots penetrating into a space. Excavation revealed the wonder of the Ek Balam site, the king's tomb!

Add Mexico to your list of must do cave diving. The Mexicans are friendly and there are some cool Mexican towns in the region with exquisite and inexpensive Mexican cuisine. Immerse yourself in water, in another culture, in human history and view what geological time and nature have crafted for those of us lucky enough to "blow bubbles".



Cenotes



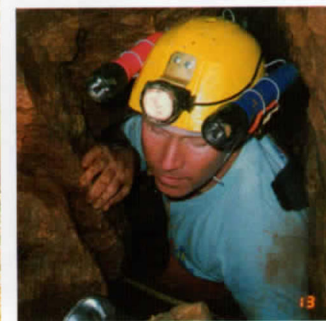
YUCATAN PENINSULA MEXICO By Peter Mosse

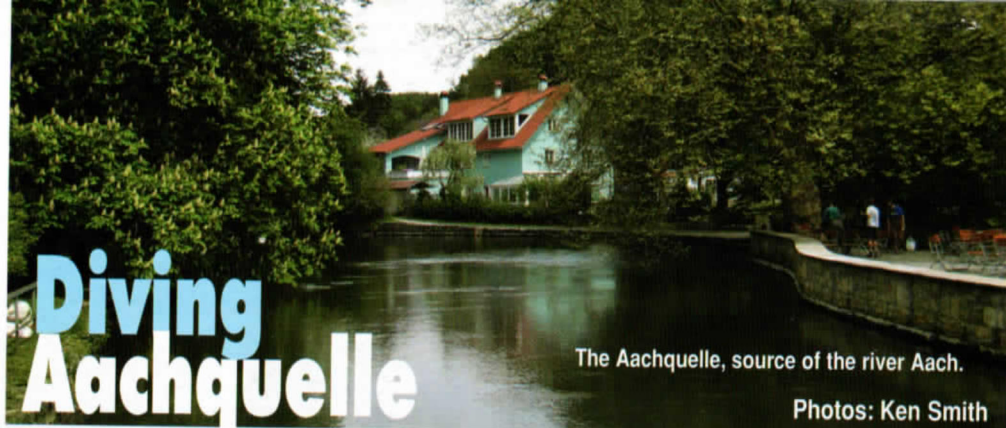
Below (above water):
Tulum ruins

Other photos;
Yucatan at its best!

STAN BUGG IN HIS PRIME.

Photos courtesy
John Lippmann





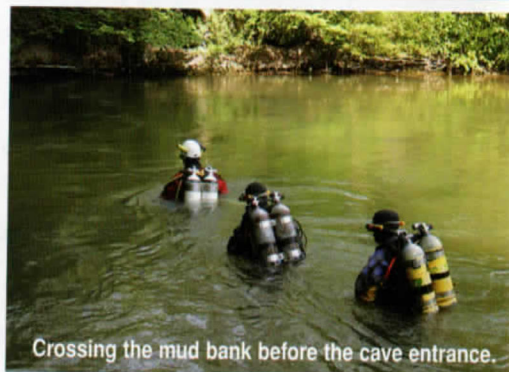
Diving Aachquelle

The Aachquelle, source of the river Aach.

Photos: Ken Smith



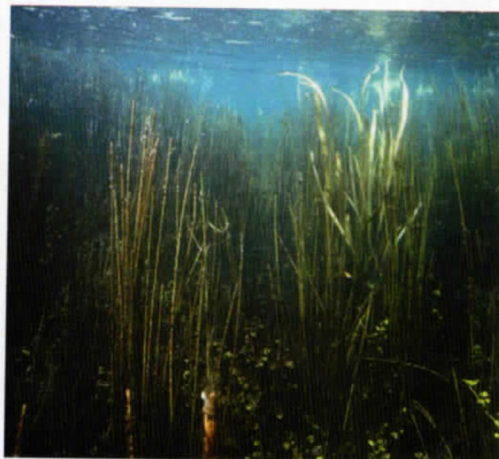
Petra, David and Bernd before their first dive.



Crossing the mud bank before the cave entrance.

EWENS PONDS

These photos show the depletion of growth over only the last 3 years. Left side photographed in October 2002 and right side photographed January 2006. Photos Neville Skinner.



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