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C.D.A.A. Newsletter

No. 118 - DECEMBER 2011



Sweden Mine Diving

PLUS:

- Forrest Wilson - Down Under
- Liz Rogers - Strobe Lighting
- AGM and Symposium pictures

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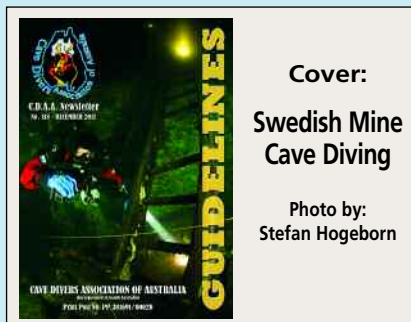
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Cover:

Swedish Mine
Cave Diving

Photo by:
Stefan Hogeborn

CAVE DIVERS ASSOCIATION OF AUSTRALIA

ABN 65 062 259 956

P.O. BOX 544, Mt Gambier, SA 5291

GUIDELINES is a newsletter of the Cave Divers Association of Australia. All articles for the following issue are to be sent to the Publications Director, Email: publications@cavedivers.com.au

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CDAA INSURANCE

Policy Type: Combined Liability Insurance Policy# SY-CAS-08-041140
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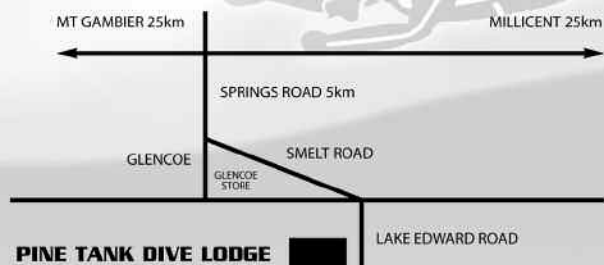
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Welcome to the 118th edition of Guidelines, jam packed full of great stories and adventures from the world of cave diving.

But first, some administrative matters ...

In this issue are nominations for the position of **Business Director** which was vacated after Andrew Cronin tendered his resignation in October. We thank Andrew for his contributions and now open up the position for voting by eligible members. Members are also asked to vote for draft changes to our Constitution. These draft changes were submitted over 18 months ago, but have not been widely socialised and therefore have not been subject to robust feedback/comment before being ratified at the 2011 AGM. The National Committee asks that you vote **NO** to this draft constitution and explain our reasoning behind this in the enclosed ballot. Remember, your vote provides you with a voice in the running of the Association.

Also in this issue ...

There is a single consolidated report from the National Committee, rather than 5 often overlapping ones. Subsequently, this has freed up more space for articles such as Part II of Peter Buzzacott's Swedish Mine Diving. An article on adding depth to underwater photos from Liz Rogers and articles from Forrest Wilson on Cave Diving Down Under and Ian Lewis on Engelbrecht's Cave celebrating 25 years of being open to the public. We have also reprinted (with permission) an article from Mount Gambier's "The Border Watch" on the delight of residents discovering what lies beneath their town. There are great photos, snippets from the AGM 2011 symposium and more.

As another year draws to a close it is important to reflect on what has been and to strive towards our dreams and hopes for the future. It is a time for celebration of achievements, of new friendships and of great diving adventures. It is also a time to pause for friends who are no longer with us...
Vale Agnes Milowka and Vale Tony Morris.

On behalf of the National Committee, I would like to wish you and your loved ones a Merry Christmas. May this festive season be filled with joy and peace. As many of you are going on holiday to enjoy diving pursuits, please do so safely.

May you and the CDAA have a prosperous cave diving year in 2012.

Rowan Stevens #3177 | Publications and Records Director
M: 0417 550 509 | E: publications@cavedivers.com.au

Ads & Articles for Guidelines March 2012 Deadline is Feb. 20th

- Send articles by email to guidelines@cavedivers.com.au
- Text files should be saved as Word files or Simple Text
- Pictures saved from digital camera or scanned from photos must be at least 200-300 dpi at 15cm wide, RGB files, and saved as Maximum Quality JPEG's.

NOTE: Article Contributions should not be sent to seapicsdavebryant@gmail.com

NEWS FLASH!

CDAA Address
has changed to:

PO Box 544,
Mt Gambier
SA 5291

CDAA Address has changed.

Please note, the CDAA Postal Address is now **PO Box 544, Mt Gambier Sth Australia 5291.**

Change of Directors.

Congratulations to the three newly appointed Directors; John Vanderleest (National Director), Grant Pearce (Site Director) and Rowan Stevens (Publications and Records Director) and Helen Higgins as Acting Business Director. Please welcome them to their new roles if you happen to see them over the summer.

New Positions Taken.

We welcome Graeme Roberts to the position of Products Officer. David Fielder has also taken the role as Tank Cave Site Officer. We thank Tara Toone and Noel Dillon for their contributions. Noel was the CDAA's longest running volunteer.

Seeking Volunteers to Apply for Grants

In October 2009 a member was asked to look into the possibility of the CDAA tapping into government grants for various projects. After some research he was able to identify a number of areas where the CDAA could apply for various grants. The National Committee is now seeking interested members who have the skills to write and apply for grants to express their interest in order to explore this possibility further. Successful applicants will be required to work with the National Committee to develop a policy and Terms of Reference before grant writing commences.

To express your interest, please send an email to business@cavedivers.com.au.

Helen Higgins

Business Director (Acting).

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DIRECTOR Operating Principles

As part of working as a Committee and as a team, it is very important that all participants agree on the operating principles by which they will function. Signing up to a set of principles is by its very nature, a moral commitment. It is something that is done voluntarily and not something that requires enforcement.

The National Committee has agreed to operate by the following principles and, in doing so, will operate as a team for the common good of the Association and its members.

The CDAA Directors will be guided by the following principles:

1. All activities and decisions made by the National Committee will be made in sympathy of the Association's Constitutional aims and objectives.
2. Unless specifically voted and accepted by the members, the only mandate the Directors have is to ensure good governance of the affairs of the Association.
3. All volunteers will operate under written and agreed Terms of Reference, and be empowered to make comment or decisions on behalf of the Association within the boundaries defined by the Terms of Reference.
4. Where practical, vacant volunteer roles will be advertised with selection based on skills relevant to the role.
5. A rolling 3 year business plan, with annual reviews, will be developed and presented to the membership. The National Committee will focus on and regularly report to the membership progress to this business plan.
6. The Association's finances will be managed to a budget developed and presented to the membership.
7. Most major decisions are NOT urgent and can wait for appropriate member consultation before a decision is made.
8. Unless forced on the Association, members have a right to a formal vote on any decision that enforces standards that reduces current freedoms when cave diving.
9. No Director will be excluded from the conversa-

tion or right to vote on any item requiring a decision by the National Committee.

10. Any Director with a conflict of interest, no matter how minor, will declare the conflict and excuse themselves from any voting on the item in question.

11. There should be good reason when expert advice or member preference is not followed.

Starting with a new set of Principles sets a solid foundation for the Association. Naturally, some of these principles sound simple in words, but are much more difficult to implement. For example: we do not yet have a rolling business plan. We can't stop running the Association while this is developed, so its difficult to fully adhere to this principle on day one. But the intent is clear. The intent is to develop this plan and once developed, stick to it.

I hope that you will support the National Committee by personally committing to the same principles, and help drive towards these ends.

Endorsed by the National Committee October 2011.

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John, Sharon and Erica.



NATIONAL COMMITTEE UPDATE

DECEMBER 2011

Dear Members

In this issue of Guidelines, there is one unified update from the National Committee, rather than 5 individual and often over lapping reports.

As you will be aware, Tony Morris passed away while diving in Tank Cave. As with the other two recent deaths, the matter is now in the hands of the coroner, so the National Committee is constrained as to what we share.

With all 3 recent deaths while cave diving in Mt Gambier, media attention was naturally very high. Rob's passing gained a lot of attention because it was the first in a very long time and at the time, it was considered as a one off event.

With Anges' passing earlier this year, the media had a very large amount of publicly available material to work off, as well as a story line about how difficult a task it was to bring her back home to her parents. The media reported a tragic yet compassionate view of the incident, where the event was considered an accident of a true adventurer.

However, with Tony's passing, the media view shifted toward positioning the sport as highly dangerous, and that Tank Cave was a killer cave and should be permanently closed. Members were approached by the media and fortunately, they did the right thing by diverting all enquiries to the National Director thereby not supporting the media intent, for that, the National Committee says "Thank you". By maintaining a single voice, the media was provided with the consistent message that cave diving in Australia is professionally managed, and the CDAA is the peak agency in this country progressively developing the sport to the

highest possible levels. We were able to get the message out that not only are our members very well trained, but that we carefully manage site access, ensuring people progressively build on their skills over time. As such, these accidents was reported in the media as a statistical anomaly and that the Association would continue to act responsibly by reflecting on and reviewing our standards. This approach helped the media continue to report on the incident, but in a manner that was factual and not defamatory towards our sport.

Over the few days following Tony's passing, the Police found it difficult to locate his next of kin. Regretfully this meant withholding his name from members and keeping the forum closed. This helped ensure that his family was not inadvertently advised of Tony's passing by a member simply wishing to pass on their condolences.

The closure of the forum also meant that any emotionally charged posts could not accidentally enter the hands of the media. To do so would undermine the large amount of effort by the National Committee to portray a positive light of both the sport and our Association. We know that many members were upset at the closure of the forum but the National Committee felt it necessary in order to protect both the family and our sport. We hope that you accept the reason and our apology for the inconvenience.

During this time, the SA Police and in particular the SA Police Recovery Squad commented on the professionalism and very positive cooperation provided by the Association. In this regard we would like to pass on their thanks to those members who assisted, including those not on site yet assisted in other ways. Going forward, we now need to demon-

strate to the landholders, via our landholder liaison committee, that we are reviewing our standards and doing everything in our power to prevent another death.

Over the coming months the National Committee will be conducting an internal review of these incidents. It will be far more reaching into each tragedy, examining not only what we know of the actual event, but all relevant facets of our diving principles, practices and standards. Our focus is on gaining the insights needed to learn and improve the safety of our sport for all of us.

Apart from all members learning from these events, the outcome of the review will best position the National Committee to work with the Coroner's Office should this be required. In this regard, the Coroner will be able to better appreciate how the Association manages its operations.

The death at Tank Cave also brought to members' attention the fact that we are now a land owner and as such, we have much increased accountabilities. These are far reaching and include specific legislative controls on the Association, specifically the National uniform Occupational Health and Safety (OH&S) legislation due to be introduced early in 2012. Our new Business Plan will pay very specific attention to the new OH&S legislation, fire management, public liability, safety, etc.

In order to help address these and other operational needs, a number of sub-committees will be formed. Where relevant, these will borrow from former committees and we invite all members to contribute to help take the Association to the next level. Members have already been invited to participate to the new Tank Cave Management Sub-Committee, with the Business Planning Committee, shortly to be reformed.

For a new National Committee, the first couple of months has been somewhat a 'baptism of fire'. Apart from dealing with the fallout of these recent tragedies, the National Committee has also needed to focus on matters coming out of the AGM.

Firstly, were the changes to our Constitution. You

will find in this edition of Guidelines, two items for voting. Both are a direct result of these new changes.

Secondly is the auditor's report that was not delivered in time for the AGM. In speaking with the Auditors, the reason was very basic in that they had not actually received any of the documentation required to undertake the audit of last year's accounts. Our findings have highlighted some issues of concern that will be changed to ensure compliance with the Association Incorporations Act 1985 SA.

At the time of writing this update, the new National Committee still does not have all the Association's files so still does not have a true understanding of our liabilities and expenditure to date. Without this understanding, we do not have any chance of developing a meaningful finance plan. Hopefully, by the time you receive this issue of Guidelines, we have everything we need to do our planning and will have everything the auditor needs to undertake the audit of last year's accounts.

While we do not have all the details, we do know how much money is in the accounts, and we are comfortable that we are not in financial difficulty.

What we do know is:

- The total cost for the purchase of Tank Cave, including GST, legal fees etc was significantly more than \$300K, with the precise amount yet to be determined;
- We no longer have the interest coming in from our once very healthy bank account. Since the interest on this money was used to subsidize diving at Kilsby's, we need to introduce a user pays system to cover the lease;
- The monthly cost of the web site is extremely high at \$250 per month and growing; and
- After cleaning up members' financial status off the database we are between 10-20% down on membership compared to two years ago.

Another matter stemming from the AGM was the

continued next page ►

realization that the renewal for our Post Office Box in Adelaide had not been paid. As a consequence, we have lost this address and have needed to establish a new one, this time in Mt Gambier. This has caused an issue for the new National Committee because our old address is actually in the Constitution. However, the old address is no longer available, so we have to move forward on this one.

There are many other matters sitting on the plate for the National Committee and more coming in. There is a new spot on the web site titled "Association Issues Log", where members can log issues and ideas. These will then be reviewed at each National Committee meeting and actioned accordingly. Some of these are small, while others will require a lot of consultation.

If you do submit an issue or idea, please put forward a suggestion that includes how you can assist. Please take the view of asking yourself what you can do to help, rather than simply suggesting someone else should do it for you.

To further help the National Committee obtain input on direction from members, we will be doing three things. Firstly, we will set up a series of State or Regional meetings to discuss a number of topics. This will range from ideas for revenue raising to definitions of solo diving. The second, will be changes to the web site so that ALL members can contribute to discussion forums without being denigrated. The third is a way for members to better communicate with the Directors. The forum is not the most effective means of tabling a question to the Directors; i.e. there is a misconception that the Directors spend time reading every post simply to discover a question posted by a member. The most effective means is to email via the contact portal. Until a better option becomes available please use this method.

For the National Committee, we have a few avenues for communication to members. First and foremost is the "National Committee Announcements" on our web site. We encourage you to log in a read this on a regular basis.

Guidelines will also continue to be a very important channel for communication to members, but in this modern world, perhaps it's a little too infrequent. Outside of this, we are looking at how we can better use other forms of electronic communication, ones that do not flood our members nor overtax the National Committee.

Our focus in the coming months will be developing the Terms of Reference for each of our Sub Committees and management roles, to better empower our volunteers; upgrading the web site so members can find information more effectively, and; a business plan properly tied back to a multi-year financial plan, that covers all areas of the Association.

With the right planning, empowered volunteers and good support systems in place, we can achieve much more as an Association and allow all members to better reap the benefits of membership.

The National Committee December 2011.



John Vanderleest,
National Director



Helen Higgins,
Business Director (Acting)



Jane Bowman,
Standards Director



Grant Pearce,
Site Director



Rowan Stevens,
Publications and Records Director

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THE FUTURE OF DIVING IS NOW AT YOUR FINGERS



Peter Buzzacott:

Sala Silvergruva:

Swedish Mine Diving Part II



One of the mine entrances and my trusty i30

Some artifacts are yet to be explained by the experts. There are some theories about this one, but still no one is completely sure.
Photo: Stefan Hogeborn
Diver: Jonas Pavletic

Following Dmitri Gorski's article about Tuna Hastberg in the March 2011 Guidelines I contacted Dmitri to arrange a dive in another famous Swedish mine, in Sala, just one and a half hours from the capital, Stockholm. I'd first read about the Sala Silvergruva in 2008 when Thomas Asp wrote an article for the NACD Journal. He described it as formerly active since at least the 15th century, possibly even as early as the 12th century, with evidence found of ancient mining techniques. What appealed most to me about Sala though, compared with Tuna Hastberg, is the different method of extracting ore. In Tuna the miners used dynamite to blast out iron ore, and from the looks of it probably tons of the stuff, whereas in Sala they heated the silver-bearing walls with fire and then cracked them with water before chipping away ore with hammers. This resulted in passages which are smoother and smaller, more like "naturally" occurring passages. I guess, in the same way that a seam of softer rock gets eroded in some natural cave systems, an ore seam gets mined. Whatever the reason, this mine has a distinct cave appearance but with the benefit of man-sized passages.

Every 5-10 meters a new level starts, all the way from the ground level to -318 meters with water level at -155 meters. This side of the passage has access to a surface air pocket.
Photo: Stefan Hogeborn
Diver: Tor Jorgensborg



Dmitri hooked me up with Jonas and Oskar from the Sala diving group who then sent me the rules and we organised a visit. My CDAA certification was fine. This year's European Underwater Baromedical Society (EUBS) scientific meeting was in nearby Gdansk, Poland, which was close enough to make the trip business-related. I had some research to present and had already registered, so next I booked return flights to Stockholm *before* the conference, an Avis Hyundai I30 station wagon to collect at the airport and on-flights to Gdansk.

Driving north from Stockholm Oskar kept up the banter while my wife kept a keen eye out for wild moose. Oskar has worked in Australia, spoke excellent English and we spoke of our cave diving experiences in preparation for diving together. First impressions: he struck me as a capable diver. The countryside was great for driving: gentle hills covered in Scandinavian pine, the sky pale due to a higher latitude than we are used to in Australia, the air cool now summer was ending. After an hour Cheryl called out next to me, pointing out through her window; "THERE'S ONE" and, sure enough, there he was, a young moose crossing a field, big head lolling about. Moose sure are funny-looking



A pair of shoes that was left by the owner for some reason.
Photo: Stefan Hogeborn
Diver: Jonas Pavletic

when they run. We pulled into the mining community not far from the town of Sala itself and loaded the gear onto trolleys. A lone bat watched us wheel our gear into the building. Oskar fired-up the elevators, made some phone-calls to see if more divers would be coming later for a second dive and we boarded for our descent down to the water 155m underground. When the industrial lift doors opened we towed the gear through a narrow, carved passage till we reached a lit area with gearing-up benches. Cheryl made herself comfortable in the relatively warm Great Hall while Oskar and I geared up outside with our standby divers watching on. Inside the hall there were large tables and lights and heaters and so on, perfect for wedding receptions and other functions. As soon as we achieved readiness we waddled down to the entry dock wearing doubles and a stage each, and hopped in.

It is hard to describe the leap from walking around with three tanks, sweating bullets in three layers of under garments, to landing in 2-degree water. Yup, my Sensus Ultra loggers recorded 2.1 degrees Celsius in there. Thanks to the extra wool socks I'd bought an hour before collecting Oskar my feet were actually okay. My dry gloves were holding a good seal, only my head was a tad cool, dressed in just a 5mm Adrenalin hood. I flushed my mask a few times to prepare my face, in case the mask flooded later on, we turned to each other, checked for dangles, signalled okay and Oskar led away. We then checked our regs, on the fly. Apparently it's best not to test-breathe them in the dry section because it is often below freezing in some mines in Sweden, and best not to change back and fore too often in the water so we just checked the gauges, waited for the regs to equalise at 2-degrees and tested them on the fly. Maybe not really essential today, Oskar reassured me he has never had a freeze-up in Sala, but I am quite sure it would be good practice in other mines when the air temperature is below zero, and if something is ever essential then I reckon it is probably a good SOP.

Thomas had written about the "Barrel Room" and I really wanted to see this so Oskar led around a huge slope of tailings, then we entered a narrow passage and I was finally diving Sala. Wow! We meandered along dark, smooth passages, I spotted something

RIGHT:
The area where most dives are taking place was excavated during the 17th century and artifacts are very well preserved. Image contain an "ore stretcher", i.e. a stretcher used to carry the ore as opposed to a wheel barrow.

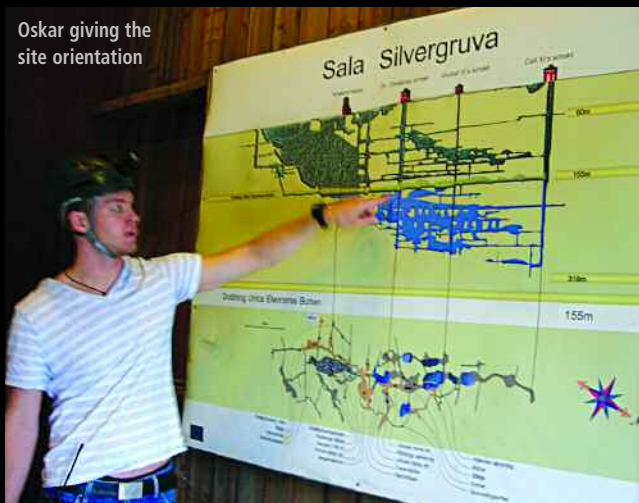
Photo: Stefan Hogeborn
Diver: Thomas Haggqvist



BELOW:
Exiting the barrel room via one of the ladders
Photo: Stefan Hogeborn
Divers: Unknown



10metres below the dry area, light used during the guided tours in dry area is visible on top.
Photo: Stefan Hogeborn
Diver: Jonas Pavletic



obviously man-made in a pile of tailings, then we entered the barrel room. The barrels are massive, water tanks basically, and current theory holds that water pumps were less efficient in days gone so large barrels were placed as intermediate holding vessels, so water could be pumped up to the surface in stages. Today modern pumps hold the water down at 155m below ground but it was far deeper when the mine

passage. I was having the time of my life so I signalled "Okay" and nodded, we turned and Oskar led me deeper into the mine. The passage got smaller, and more oval too, like people had worked the passage between hip and shoulder height more than lower down or higher up. In terms of size it felt sort of like the Peanut Tunnel in Peacock Springs.

was in full-swing. At one point the reigning King visited and unveiled a plaque at 250m depth (but that hasn't been located yet).

I took photographs, floating around the room, and then we moved on to see a wheel-barrow. Approaching the wheel barrow I assessed the space I was in and decided I could float around without smashing it, so I hovered around it carefully, like when I was in Iddlebidy. Then, we moved away and Oskar asked me how I was holding-up temperature-wise. It had been over half-an-hour and he wanted to show me a halocline in another

RIGHT:

The Swedish term for this kind of passage is "Bockort". As the mine grew deeper, the effort of transporting the scrap ore to the surface was too big and miners began to move the waste material sideways to already "completed" areas.

Sometimes they had to be able to transport people and/or ore through these re-filled areas, and this created a need to construct "wood/log supported tunnels", kind of like crawling through a tunnel that has been dug in the snow. Tunnels are extremely fragile in terms of risk for collapsing, simply moving one rock could result in a diver being buried by collapsing stone. When we initially dived OC in these areas rocks were raining down on us simply from the exhaust bubbles. No open circuit diving is allowed in these areas and even CCR usage is extremely limited and only for exploration purposes. Photo: Anders Engman Diver: Jonas Pavletic



We moved carefully along, me happy to follow, then Oskar waved me forwards and I spotted the halocline ahead. Holy smoke, literally, it was thick and white and I couldn't see up through it. I reached up and put my hand through it to see if the roof was low above it, my bubbles disturbed it, my head rose up through it and all was white for a second or two before I could see above it, and then wisps of white curled up and away in front of me, just like a hot-air balloon coming up through a thick mist in a valley. I wondered if it was a true halocline. I couldn't feel any temperature difference.

We turned, Oskar led out and now I knew this was it I soaked up the view. Dark, dark walls, smooth, oval,

by now getting cold but still happy, shooting off snaps, man-made stuff here and there. We rounded the tailings again, made safety stops in the entry lake and surfaced to find a squad of Swedish Navy Divers gearing up. Jonas, the Sala Diving Group coordinator had arrived and as I climbed out of the water he asked me how it was but my face was almost inoperably numb by now so I jabbered "uurrt wus fabulugga". We staggered over to the gearing up benches, gratefully sank down onto them and unclipped our rigs. Oskar stood and gave a signal to the next pair and in they went. Standby divers must be ready if needed before anyone enters the water in Sala. Actually, just expressing a personal opinion here: both

Tuna Hastberg and Sala are the most professionally run mines I've dived. If the water temperature doesn't scare you off then, if you're anywhere near Sweden for whatever reason, I heartily recommend interested CDAA divers arrange a visit.

Given the history of early massive "cave-inns" in the mine, seeing a tiny pillar like this makes you question the evolution theories. Someone obviously thought that leaving only a small part of rock to carry a huge part was a good idea. Photo: Stefan Hogeborn



Above: The wheelbarrow, (unsmashed).

Left: A barrel, in the barrel room

Photos: Peter Buzzacott



Oskar offered me a second dive but we were flying out to the EUBS conference from south Sweden the next morning and needed to return to Stockholm, hang-up the gear in the hotel bathroom and start packing whatever was dry. Cheryl and I wheeled our trolley full of wet, cold dive gear back to the elevator. Leaving behind the Sala Diving Group and Swedish Navy divers we closed the massive doors and the industrial lift whirled into action, rapidly lifting us 155m in a single ascent. We swung the big doors open, sunlight filled the lift and we stepped out to the sound of birds, cars in the distance and a breeze through the trees. Is there any moment in life as contemplative, satisfying or just plain "Man, I am glad to be alive" as surfacing from a fantastic cave dive? Sala certainly did that for me.



Stairs & other man-made artifacts
Photo Peter Buzzacott

Thank you Jonas and Oskar for guiding me, and thank you Dmitri for setting this up.



Diver hovering above one of the barrels in the 'Barrel room' at 25m. Barrels served as a temporary storage facility when pumping water to keep the mine free from water.
Photo: Stefan Hogeborn

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Toys for the Boys!



rEvo rebreather crossover course



knowledge of a different rebreather.

Thank you to Damien and Helen for the use of their units, Kilsby's and the Mt Gambier Aquatic centre for use of their facilities and Marc for terrific instruction and insights into the units.

Following the completion of our course, we took Marc to Tank Cave to show him our cave, Marc has worked as a guide in Mexico and many places around the world, but had not yet been to Tank.

On the last week or November 2011 Geoff and I completed our "rEvo" rebreather crossover course under the guidance and direction of Marc Crane.

Thanks to Gary Barclay with his trusty camera at the ready, Steve and Geoff for extra lighting.

Deb Williams #3092

Theory and gear configuration was conducted at the Church at Kongorong as well as the Mt.

Gambier pool, before heading to Kilsby's sinkhole for 4 dives over 2 days. Marc put us through our paces on the units, simulating all possible problem/failure scenarios, too much/too little and total loss of O2, loss of DIL, flooding of units, no mask drills, bailing out, running in SCR mode, swapping bailouts, shooting bags, you name it he threw it at us. It was a great experience and good to gain hands on



Photo Gary Barclay

[Photo 1]
JDZ and Jurgen Gehrer
before the off camera
strobes were turned on for
the dive in Tank Cave

Liz Rogers:

Adding depth to photos: off camera strobe lighting

One of the greatest differences when moving from ocean diving photography to cave diving photography is that the background sunlight has been taken out of the picture. Unlike the movies and unless you're playing in the daylight zone, the only light underground is what you bring with you. The darkness provides great opportunities to try new lighting techniques, and off camera strobe use is accelerating at the moment. I'm going to briefly outline the tricks I use to get my favourite cave diving photos.

As underwater photographers already know, strobe light doesn't travel very far from the source. In caves, if your only strobes are the ones attached to your camera, this limits you to lighting things within approximately 3 metres. The distance here depends heavily on strobe power and silt levels. Practically speaking, and with the increasing favouritism for all black ninja dive gear, it means the second diver in the shot is a pair of eyeballs floating in the blackness [Photo 1].

Strobes attached to the camera are convenient and necessary but usually not sufficient for great cave photos. In particular, using only on camera strobes means that all of the light in your picture is coming from one direction. This makes for flat photos with a blue colour cast as people try to improve the light levels on the computer afterwards. In my experience, non-cave diving friends will much prefer cave diving photos with an additional light source, even if they can't explain quite why.

In addition to this, extra light sources in the water give rise to all kinds of exciting opportunities for photographic experimentation. Adding off camera lighting to your shot is easier than it used to be with several manufacturers making remote slave sensors. Ikelite has proprietary ones for their strobes, and I use the triggerfish sensors. Heinrichs-Weikamp also sell the RSU-N which works well in complete darkness (less well in Pics or with too many primary torches around). These sensors are connected to the off camera strobe with the same cable you would use to connect that strobe to the camera. The flash from your on-camera strobes is detected by the sensor, which triggers the off camera strobe and lights your picture. [Photos 2 & 3].



[Photo 3]
Triggerfish sensor
attached to an inon Z240 strobe

This system works reliably for me without requiring a physical connection between the strobes and the camera. As long as the sensor can "see" the camera flash, and isn't overwhelmed by being too close to a primary dive light or ambient daylight light, the off camera strobe fires. Once you've got your set-up working, the next step is thinking about placement of the strobe, and direction and power of the light it produces.

Adding more strobes to your picture does increase the difficulty level. A strobe pointed at the camera, or one that is too close to a diver or wall and creates a giant hotspot can ruin a potentially perfect picture. [Photo 4].

Strobes that point straight down the middle of really large tunnels with black walls don't hit anything, and



[Photo 2] Slave sensors from left to right: homemade for an Ikelite wet connector, Heinrichs Weikamp RSU-N, triggerfish

might as well not have gone off. Getting the right amount of strobe light in the background of your shots is half of the battle, and that's where your buddy comes into the picture.

For larger caves and careful buddies, backmounted twin tanks or the back of sidemount harnesses are the perfect place for extra strobes. By running the cable over your model's shoulder and hooking it into the front of their harness arrangement, no extra hands are required. This does require some careful sensor placement to ensure wing inflators or secondary regs aren't going to hang in front of the sensor once underwater. [Photo 5].

Once you've perfected the setup, looking at which direction your diver is facing tells you that light will be coming out the other end. Depending on the trim of the diver and angle of the camera the strobe may well be entirely hidden in your photos [Photo 6], providing the magically lit Hollywood cave effect.

Unfortunately taking photos from above and behind

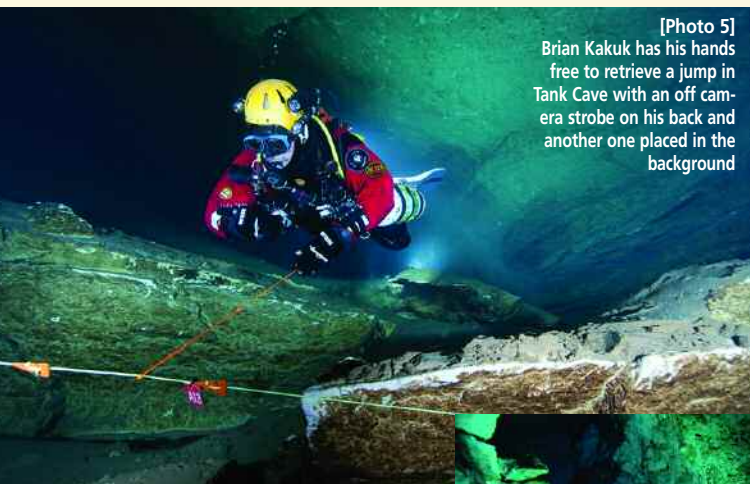


[Photo 4]
Backmounted
strobes firing into
the camera as the
diver swims away



[Photo 8]
Off camera strobes firing reliably as Steve T and Nick
Touissant swim towards the camera in Tank Cave.

Canon 5D MkII at ISO400, 1/100th and f11. In the caves the
shutter speed really only determines how the torch light is
rendered which is the only available light. This is a fairly
small tunnel with lots of strobes and light bounce, so I had a
bit of leeway with the f stop which helps the depth of field.



[Photo 5]
Brian Kakuk has his hands free to retrieve a jump in Tank Cave with an off camera strobe on his back and another one placed in the background



[Photo 9]
JDZ with a hand held strobe, and another placed in the foreground highlighting his fins in Tank Cave

the diver becomes impossible with back-mounted strobes, as most have a light sensor built in to the face of the unit that will trigger a flash. While reliable, this method reduces the available angles and creative options. Once you've experimented with sticking strobes on different parts of your buddy, the next option for greater flexibility in camera angles is to give the strobe to your buddy to hold. This reduces the chance of your strobe impacting the roof in low areas, but introduces a whole new set of challenges for your model. They now need to co-ordinate the direction of the sensor towards you and the direction of the strobe away from you. When diving with well-trained, knowledgeable and patient underwater cave models (not that I'm asking for much!), hand held off camera strobes give great

results. You have the flexibility to light specific features of the cave, to take photos of your divers from any angle, and to take advantage of opportunities for great backlighting. [Photo 7]. On the other hand, you've just increased the task loading on your buddy and reduced the number of hands they have available for dealing with routine cave diving tasks, like talking to you.

To get successful photos from these dives, patience, co-operation and understanding is required on both sides. Discuss the aims of your day to determine if your buddy really wants to commit to a photographic dive, or if they'd prefer to swim around and enjoy the cave. Once you're both on the same page, discussing the shots you'd like to get and working out the essential (one-handed) signals in advance will make a big difference to your results. [Photo 8].

From here, of course, there are lots of variations for achieving interesting lighting effects [Photo 9].

Have fun and experiment, and remember not to ignore your gauges in search of the perfect shot.

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[Photo 7]
Grant Pearce enters a tunnel in Engelbrecht's West, with off camera strobes backlighting the cave behind him

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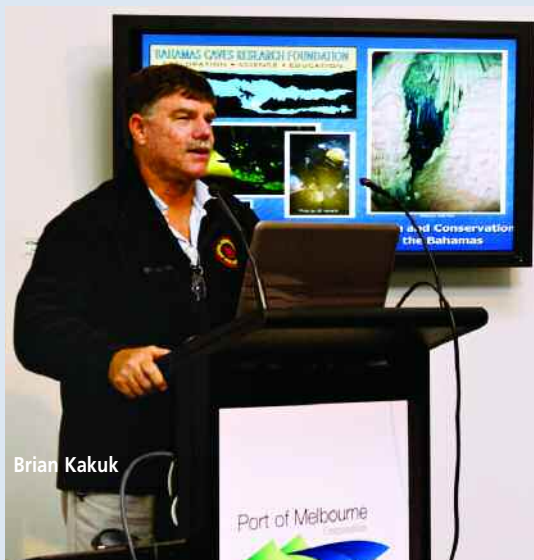
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2011 CDAA Symposium

This year we were treated to some fabulous presentations from our local and overseas guest presenters - Brian Kakuk, Greg Ryan, Keir Vaughan-Taylor, and Nick Toussaint. Topics included Cave Diving in the Kosciuszko Ranges; Italian cave diving; Exploration, Research and Conservation of Blue Holes in the Bahamas; NSW Cave Diving at Jenolan and Wellington.

Article by Deb Williams. Photos by David Scarlett



Brian Kakuk



Saturday evening saw many venturing into the city for a lovely Italian meal @ Rosati.

Sunday saw a large focus on rebreathers with an open forum where members were able to view a selection of rebreathers including "Inspiration", "O2ptima", "rEvo", "Kiss", and Nick's O2 bailout breather. The rebreather workshop was very informative

and it was terrific to see so many O/C divers attending and gaining some knowledge. The sidemount workshop gave an insight into different configurations and setups, Brian was

Listening to the stories and looking at the amazing photographs was a privilege and certainly whets the appetite to travel and explore other cave diving areas in Australia and Overseas. The early days of cave diving in NSW was quite amazing, the exploration that was achieved with much less sophisticated equipment than we use these days was inspirational... they really were some of our pioneers of cave diving.

Jane and Mischa put on a great BBQ lunch which provided an opportunity to catch up with new and old friends -over 40 members attended the AGM and about 90 people attended the various sessions on Sat and Sunday (quote Mischa "69 people on Saturday and 54 people on Sunday").



then off to Mt Gambier to conduct some sidemount training, much of the exploration in Bahamas is side mount territory.

It was great event that was very well supported by members from all over the country.

Thanks to the outgoing executive for their contribution and best wishes to the new team.

A big thank you to Mischa Temple for organising the venue and logistics for the Melbourne AGM & Symposium, held at the Port Education Centre in Port Melbourne.



Above:
Nick Toussaint



Left:
Andy Higgins



Right:
Damien Grigg



Below:
Warrick McDonald

More pictures over the page!



Left:
Keir Vaughan-Taylor
SUSS Sydney uni
speleology society.



Right:
Brian Kakuk



Right:
JDZ talks up
his preferred
Rebreather



Left:
Wayne Johnson
CDAA



Left:
Greg Ryan CDAA



Right:
Andrew Fock and
Mischa Temple
talk Rebreathers

Forrest Wilson: **Australia** **The Down Under** **Diary**

Photos Ken Smith

The plans for this trip actually started in the fall of 1977.

I met an Australian cave diver named Ian Lewis. He gave a talk at the old Steamboat motel restaurant in Branford, Florida. After his talk, I invited him to go sump diving in West Virginia, and he accepted. He ended up staying several months, because he met a girl. A few years after Ian returned to Australia and gave my name to another Australian cave diver, Ken Smith. Ken's job sent him to the US often, and we dove together a dozen or so times over the next couple of decades. Ken invited me to speak at the annual meeting of the CDAA. The following are excerpts of my diary from this trip.

composite image:
ABOVE, Abrakurrie Cave
BELOW, Weebubbie Cave

Monday (9-27-2010) - I got into Sydney. Ian Lewis met me at baggage claim and he took me to where Ken Smith was parked.

We went to Glenelg, where the colony of South Australia was established in 1836. Then we went to a nature preserve, Cleland Park, and saw kangaroos, koalas, dingoes, shore birds, heard a kookaburra and saw some small marsupials.

Tuesday (9-28) - I woke up early, but not much before my regular time. I am pretty sure I heard a Koala during the night, they sound like pigs grunting. Then we packed a truck Ken had borrowed, and we headed towards Mount Gambier, the local version of Branford. We stopped in Naracoorte, and Ian Lewis took us through some small tourist caves. One is known worldwide for the discovery of a large fossil area. There were things I had never heard of, such as the marsupial lion (Thylacoleo Carnifax). We also got to view bats through a new infrared camera. It is too messy to go into the cave, because the guano is really deep. They can zoom the camera in enough to see insects crawling in the guano. That night, we stayed in an old church near Mount Gambier. It is owned by cave diver Deb Williams, and there are several bunk beds in the choir loft. The caretaker had come by, and left a fire burning for us.

Wednesday (9-29) - We went to Pines Cave; it was nice. It was a sinkhole with a way through the breakdown into another chamber, called CCR (Crazy Czechs Room). The water is colder than Florida, closer to north Georgia. We got down to 129' and were in for about an hour, so we had to deco for about 15 minutes (diving on air). My dry-suit started leaking right at turnaround, so I was pretty cold on deco. We were sharing a single O2 bottle, so I couldn't leave when my computer cleared. The dive was 129' for 69 minutes, including deco.

Thursday (9-30) - We went back into Mount Gambier to Englebrecht's Cave, a commercial cave. This side is called Englebrecht's West and is the longer dive. About a hundred yards inside, there is a sump. We hauled our gear down to the sump. Ken said the water level was way down from his last visit. Now there is only space for one diver to gear up in the small head pool, so I went in first and waited. The cave was much like Tennessee; black silt on the floor, about

Piccs



30' of viz, and cold. Around 600' in, we came out of the sump. When we got to the end of the breakdown, there was no way to swim into the second sump. The water was too low, so we turned back. Of course we had to haul the gear back, and that was uphill. The computer logged it as two dives. Dive #1 was 28' for 17 minutes, and dive #2 was 30' for 17 minutes.

Friday (10-1) - We went to Piccaninnie Ponds today. It is more like a cavern dive, but goes pretty deep (over 300'). Divers are limited to 120 feet, unless they have a special



Piccs

research permit. It was a deep canyon in the floor of a big pond and reminded me of Little Devil's cave, but much larger. You can pretty much see the entrance from anywhere above 120 feet. There are two parts to the canyon, separated by breakdown. Coming back through the breakdown and looking back up was spectacular. It has a limit of how many divers can be in the water, and teams get assigned a start, and stop time. It is worse than Manatee. The dive was 122' for 30 minutes.

The second dive was in Ewens Ponds. There are 3 ponds, connected by shallow runs, a little like Peacock, but wider, and full of interesting plants. No overhead at all, unless you stick your head into some small holes. The floor of the ponds has sand, and water is boiling up through it, making little "dust devils." My computer showed 31 feet for 35 minutes, I guess it didn't have time to reset between dives.

Saturday (10-2-2010) – The day of the CDAA Annual Meeting. The first thing on the agenda was concurrent talks by Christophe Le Maillot and Ian Lewis. I went to Ian's talk about his Ph. D. thesis on the formation of sinkholes around the Mount Gambier (extinct) volcano.

I was up next, and then Christophe, who talked about cave diving in Bosnia/Herzegovina. There were talks on a new movie coming out, called "Sanctum", and after "tea," Christophe was back talking about exploration in Mexico and giving a sales pitch for DIR/GUE.

Sunday (10-3) - We packed up and headed for Tank Cave, the best cave in the Mount Gambier area. It used to be hidden under an old water tank to keep cows from falling in. The entrance is only about three feet by three feet, and there is a ladder going down about ten feet. It is about 50' from the base of the ladder to the water. They have dug out the floor, and cut steps into the rock. At one time you had to crawl to the water.

We dove with Martyn Winston, and the cave is very nice, reminding me a lot of Florida. The passages ranged from about five feet by five feet to fifteen by thirty. The limestone is relatively soft, and there is white clay in some areas. Silting isn't a huge problem, and doesn't totally obscure vision. However, once it does silt, it stays suspended for a long time, due to very little, if any, flow.

Our first dive went up the A line, to the C line, to the end, which was about 1000'. We put in a jump reel, and looked for a new line that Agnes Milowka had put in last year, but it was pretty small getting to it, and we gave up. On the way out, we went up a couple of side leads; at C7 we looked at the R section, & at C1 we looked at the D tunnel. The dive was 44' for 83 minutes. We ate lunch between dives, and for the second dive, we did a circuit following the A and B lines. We did a bypass (SC1) around the shallow section we had done on the first dive. The halfway point was about 1300', and we did a couple of side leads

along the way, B7 High White Room, and B14 H tunnel to a no name tunnel and turned at the F line. We stopped to poke our heads in an air bell that was 16' deep. We also looked up a well bore, all the way to the surface. The dive was 44' for 86 minutes.

Monday (10-4) - Ken repacked the truck with stuff we needed on the Nullarbor. There are no stores, so we had to take everything we needed for ten days.

Tuesday (10-5) - Warbla Cave is in a national park, and requires a permit. Ken's friend Peter Rogers has a permit, and had put our names on it before I arrived. We arrived at the cave about an hour before dark, and set up camp. After supper, the other cavers showed up; Peter Rogers, Cheryl Bass, and Grant Pearce.

Wednesday (10-6) - The entrance is a big sinkhole, and you have to rappel part way to get in. They are just about to lower a long compressor hose, so they can fill right in the cave. They set up a metal frame over the edge of the sinkhole to lower tanks since it is hard to rappel/climb with.

Thursday (10-7) - I decided not to dive (UTI) and helped move gear to the lowering point, which is on the high side of the sinkhole. I gave some pointers on SRT and rigging, as these guys are more divers than cavers. I went for a trek and took a nap. Park rangers stopped by and I told them

Peter was in the cave. They knew we would be there, so there was no problem. I am glad we did this legally, as Agnes got caught sneak diving it, and was banned from diving CDAA-controlled sites for a year.

Friday (10-8) – I felt a lot better this morning, but I was still not great, so I planned to stay out of the cave today. Ken had placed one of his "pingers" (radio cave location devices) and stayed up looking for it last night, and went back this morning to recheck. One of the plans today is to mark the line with reference points for further research. They really needed cave cookies, but settled for arrows. They just barely had enough, so rather than have them diving without enough, I donated three of mine to the project. Harry Harris arrived with Liz, Roger's daughter. They had been out on the Roe Plain in Western Australia diving the recently discovered Olwogin and Burnabbie Caves.

Saturday (10-9) – I helped lower my gear, along with Harry's camera gear. After we did that, we all started 'abseiling' into the sinkhole. The entrance is very large, and it is several hundred feet to the sump, mostly sloping downward. The cave remains very large (like Camp's Gulf) until you get to the water, then it is pretty crowded with gear for seven divers. There is no flat spot anywhere, and when I set Ken's Transpac down, it slid right into the water. Ken arrived soon after, and he had left the rest of my gear ►



Forrest Wilson in Tank Cave



Warbla Gear lowering



Weebubbie
Entrance

back in a larger area so I had room to put on my drysuit. Liz went in first solo; she is fast becoming another Agnes. Harry, Peter, and Grant went in next, and took the camera gear. Ken and I had more space to gear up then. By the time we were ready, Liz was back.

Ken's job on that dive was to move the pinger to a new location, in a side-mount passage that was a left jump off the mainline, just above the "bathtub" formation. It was pretty far into the cave, so I got a good feel for the size. It is pretty shallow, around 50' max, and only 30' or so a lot of the time. There is a thermo/halocline at around 35', and that is where the bacteria grow that Peter had a permit to study. They seem to form in pockets, and actually "eat" the cave. Since fresh water with high CO2 content is rare here, the bacteria are doing most of the cave enlargement at the present time. We passed a couple of these pockets today, and I hope to see more on a different dive tomorrow.

The passages are generally large, 20' to 40' wide, and 10'



to 20' high, except for the side passage we were in which ended in an air chamber, which they call a "lake." We passed the camera crew on their way out, and ended up as part of the documentary. The computer logged it as two dives. Dive 1 was 49' for 31 mins, & Dive 2 was 49' for 49.

Sunday (10-10) - The dive plan today was taking still photos and to retrieve the pinger. Ken, Harry, and Grant went



Pictures this page:
Weebubbie Cave



Tank Cave

to do that, and I went with Liz, Peter, and Cheryl. We just stayed on the line into the lower tunnel.

I carried a slave flash to light up the cave wall behind me and Liz shot a lot of pictures. We got all the way to the end of the line and I saw some small tunnels; but it would have been no-mount to continue, so I left them for when Agnes' sentence is suspended. The camera flash quit working on the way out, so we got a break from posing. The dive was 66' for 75 minutes.

Monday (10-11) - Most are going back home, but Ken wanted me to see Weebubbie. Harry called me over to see a giant centipede, but killed it before I could get a photo. We arrived at Weebubbie and unpacked, and hauled some gear to the water. The entrance is smaller than Warbla, but the cave is bigger. The path is well-worn, since it is very popular. We got to the lake, and set our gear down. I was looking for a way in, and Ken put his hand in to show me the surface was 3" below the huge rock we were standing on. I got both my tanks and regs to the water, so I only had to bring down my drysuit, etc. tomorrow.

Tuesday (10-12) - I got up at first light, and Ken not too

long after. We hauled the last of our dive gear the 1000' (and 300' deep) back to the water. This place is a lot cleaner and clearer than Warbla at the entry point. The lake is 200 yards long, and 10-20 feet deep in the middle, but up to 100' at the undercut edges. We swam on our backs to the end, to conserve air. Ken went to the bottom to leave the O2 bottle, and I soon followed. The passage is even bigger than Warbla, and slowly slopes down to 132' at the end. The passage size also gets smaller, and seems more like Florida at the end. We had considered doing deco, and going into a side lead to another air dome, but both of us were cold at the end of deco, so we opted to swim out at the bottom of the entry lake. It in itself is a nice dive. The dive ran 76 minutes with deco.

Wednesday (10-13) - Abrakurrie Cave is another sink-hole, but is longer than the others I have seen here, and has no water. We set up slave strobes and got a couple of decent pictures. It is pretty hard since the rooms are so big. Ken's strobes are for underwater, so they are pretty bright, and at least we got enough to show the size. We ended up at Nullarbor Hotel Motel (sic). We got the

"backpacker's" room, with the toilets a couple hundred feet away over a gravel road. Still better than a tent, and a shovel.

Thursday (10-14) - Up at 5am, headed back to Adelaide.

Friday (10-15) - There was a barbeque at Adrian's this evening, and we stayed there because it is closer to the airport. The BBQ was nice and there were a lot of famous CDAA cave divers there. Dave Warnes, Phil Prust, Adrian Richards, Peter Horn, Chris Brown, Glen Harrison, and Greg Bulling were there.

Saturday (10-16) - We got to the airport pretty quickly, but the plane was delayed an hour due to bad weather in Sydney. A fellow pilot took me to the Zoo; it was nice. I stayed at his place overnight.

Sunday (10-17) - We got up and got to the airport 2 hours before the flight. It almost wasn't enough, because the Sydney airport is very disorganised. It was a long day because we crossed the dateline and it stayed the same day for about 36 hours. I switched to LAX time as soon as I got on the plane, hoping to reduce jet lag.

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CDAA Member Profile ~ Scott Flack #4531 ~

I first began Cave diving back in early 2009 during a trip to the Yucatan peninsula after convincing the guides that I had an obscure training card from some Scandinavian agency. After that first drift up through a halocline I was hooked.



As soon as I got back to Australia I was hooked, and booked into the closest Deep Cavern course, which was being held that December. For my configuration, I use a halcyon backplate and Dive Rite wing with twin manifolded 12litre tanks and dive an Otter Brittanica Drysuit. I have also recently been sidemount diving using a Dive Rite Nomad, however since I am planning to do advanced cave in the near future I have had to shelve them to get my practice up.

I am very loosely affiliated with Academy of Scuba, am what you would call a rank amateur underwater photographer and have an Olympus MJU. My main dive buddy is an excellent photographer though, so my camera is currently gathering dust in a cupboard somewhere. My last dive was in Pines, in Mount Gambier, and the last trip was to the Red Sea in Egypt. Next trip is back to Mexico now that I'm actually qualified properly.

For work I occasionally teach scuba, work in a family business (bakery) and do a bit of finance broking. Thankfully I'm not married, but the girl I spend most of my time with doesn't dive and she thinks anyone who wants to crawl into a cave is insane. Add a cave full of water to the mix and she is thinking pure madness.



Submit YOUR Profile to Guidelines!

Tell us about you and your Cave Diving...

- When did you begin cave diving?
- What gear do you use?
- What dive store are you affiliated with?
- Are you an U.W. Photographer?
- What Camera do you use?
- Where was your last dive or dive trip?
- Where would you like to dive overseas?

Tell us a bit about yourself...

- What do you do for work?
 - Married?, does your partner dive too?
- ...or what ever else you can think of!

Email a 250 word Profile, a pic of you & your favourite underwater shot to seapicsdavebryant@gmail.com

Contributors will receive a **FREE Oceanic Hollis Mask, Value \$129.00**



Engelbrecht's Cave Open to Public for 25 years

To those of us in the CDAA who have been around for quite a while, it almost comes as a surprise that Engelbrecht's Cave has been open to the public now for a quarter of a century. Some of the display photos show the condition of the cave entrance in the 1970's when it was half full of rubbish and overgrown with weeds and ivy. I remember my own first visit to the cave in 1966 as a teenager when we had to clamber over heaps of old fuel drums and rolls of rusty fencing wire to get to the dark zone which was then full of broken bottles. Pretty nasty.

Then the Mount Gambier Apex club decided to clean out Engelbrecht's Cave as a community project. They recognised its significance to local history. Lifeline later took it over to open it up for the public. At about the same time, Umpherston's Sinkhole was being cleaned out by the Social Club of the Forestry Department and its Sawmilling staff (using company equipment!). On a wider scale at that time, sinkholes and caves were finally being recognised as important for their natural features, uniqueness, enjoyment, and their role in local health through water quality awareness. The CDAA can take credit along with local cavers for contributing to water sampling and logging of badly-polluted entrances across the countryside onto a register. This provided evidence from our own expertise and knowledge of the underground water which was directly utilised and changed laws for a better environment for the future.

So there's been an important community link across 3-4 decades now in the Mount Gambier district as the local communities began to view and treat caves and sinkholes very differently from our parents' generation and several generations before that. Not before time, either. The environmental movement can be very controversial but in the case of Mount Gambier district caves and sinkholes it could not have arrived later or terrible permanent damage would have been done and great work has resulted since. As it is, there is still plenty of regional evidence for destruction of cave environments in the past. Even a recent case in the last few years was found of a multiple-entrance slit cave being plugged up. This was actually a significant bat hibernation site, its blockage trapping that hibernating colony inside forever and denying others access to hibernate.

That's why I take a great deal of enjoyment looking at this recent local newspaper article on the 25th anniversary celebrations at Engelbrecht's Cave which Brenton and Kemelee set up a couple of weekends ago. It wasn't a high-profile cave diving event with DVD's and equipment displays but an enjoyable local Farmer's Market day for families to sample the produce and sample the cave as well. Perhaps it's a reminder that although we are all experts in cave div-

ing and really know our environment with great familiarity, the rest of the "normal" community who live above ground do not always realise what they are living on, or its value.

This is evident from some of the comments from the visitors interviewed by Sam the reporter. Some locals barely even knew of the cave, let alone what it contains.

When I look at the photos of some of the kids who visited it, I think of the future and wonder if that visit might stick in their memories enough to emerge later in life when future cave preservation and conservation issues arise. Kids learn enough about the environment nowadays even at an early age to begin understanding how everything is linked in some way. It is very reassuring to see the newspaper reporting a sense of wonder about the cave, particularly in an age of hypercommunication and flashy screen gimmickry on endless satellite channels, drawing kids away increasingly from the natural world that actually sustains them.

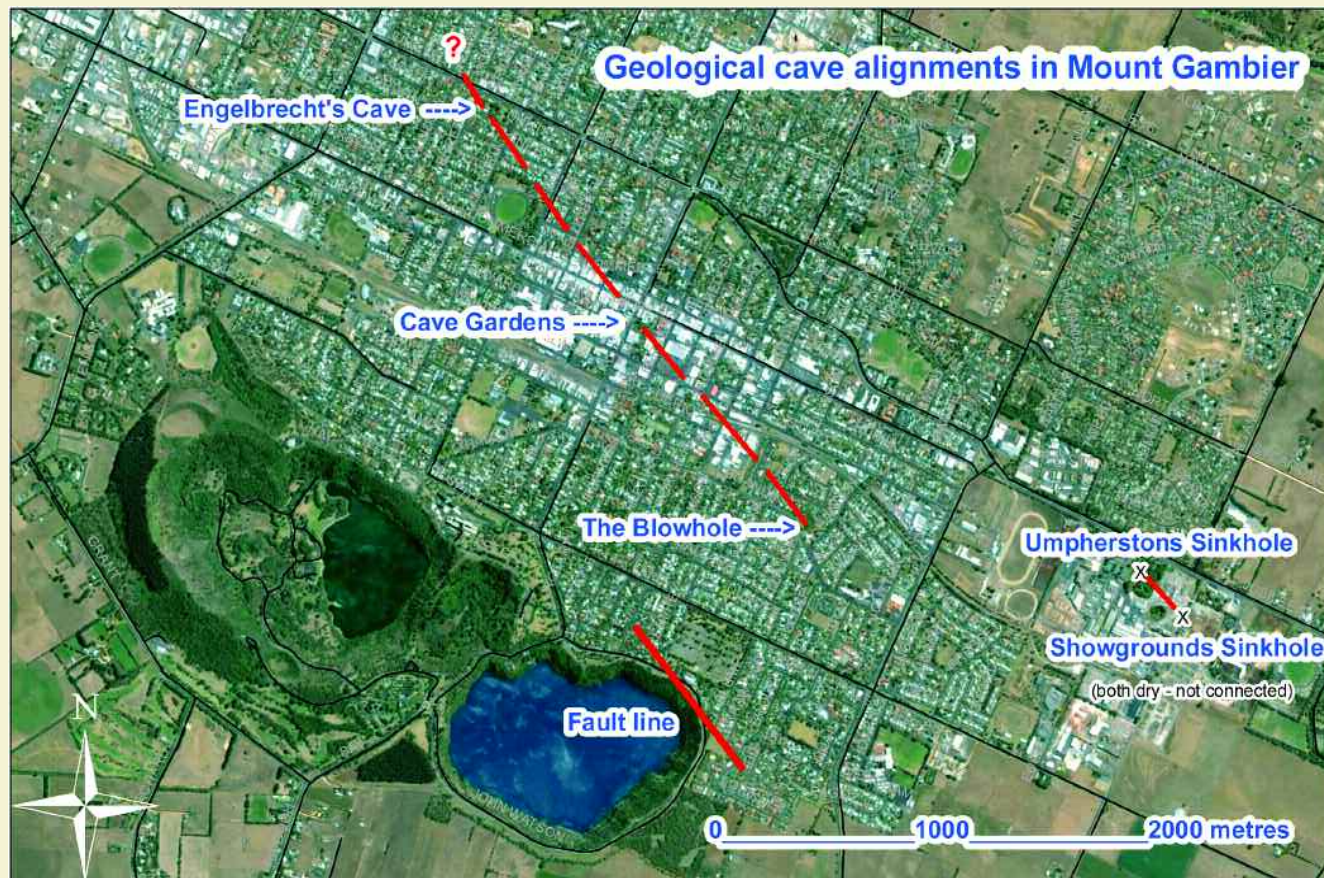
My first Karst Science article for Guidelines a few years ago was written about Engelbrecht's Cave and used interpretation of the limestone geology and fracture patterns to predict where further passages and rooms may exist. I'm still confident and the geology's good! In 1976, I wrote a Cave Reference Book for South Australia and to some extent

regretted it for several years afterwards because I thought I'd pretty well listed everything that could be discovered in dry caves and under water and there was no more fun left for future explorers. WRONG! I am amazed that 35 years later, caves and tunnels are still being discovered by keen speleologists and cave divers with better equipment but with the same enthusiasm as has always been in this sport all over the world. I am delighted that caves such as Engelbrechts (and all the others) are available for us to enjoy and that some of our specialised discoveries and knowledge can be passed on to the public by people such as Brenton and Kemerlee to entertain and educate them and their children.

Special thanks to Brenton and Kemerlee for running the day. Special thanks also to two long time cavers and friends of mine - Fred Aslin and Kevin Mott, for stationing themselves in the cave for the day to explain the interesting stories to the visiting community. And although some people (including some divers) think "Diver Dave" hanging up there on the ceiling in the Western cave is a bit corny and tired-looking, he is the only cave diver most of the visiting

public will ever see. Think about that - "Diver Dave" illustrates our safety principles and is actually far more of an ambassador for our sport than we ever realise! He's been doing it for 25 years! Yes, he needs updated gear but his message is so important for the CDAA and shows our respect for the cave diving environment. It is through community understanding and interest that cave diving can continue to be supported and the caves will continue to be valued.

And don't forget - the underwater passages of Engelbrecht's Cave lead directly south-east towards the Cave Gardens Sinkhole in the centre of the City in the rose gardens, 1200 metres away, and on the same line as the "Blowhole" on Boandik Terrace, another 1,200 meters south east from the Cave Gardens. Not likely, you say? Hey, only 30 years ago, well after the CDAA formed, we didn't even suspect that an underwater Engelbrecht's West passage even existed! Geology says these three caves are part of the same system. There's plenty of space yet to be found under the land of limestone!



Residents discover natural wonder beneath their feet

Article and Photos By Sam Dowdy

Hundreds of South East residents were surprised on Sunday to discover what has always been beneath their feet in Mount Gambier. Even some long-term residents of the city had not yet wandered into the depths of Engelbrecht Cave for a look until the weekend's open day.

More than 500 people took up the opportunity to enter the historic cave when tour operators Brenton and Kemelee Lynch-Rhodes hosted the event.

About 1000 people flocked to the site to enjoy the farmer's market, children's activities, tours, entertainment and café treats that were on offer in celebration of the 25th anniversary since public tours of the cave began.

It is believed only 10pc of the crowd was tourists.

Mrs Lynch-Rhodes said a lot of locals had not ventured into the cave before.

"People said it was nice and interesting, but some said they just couldn't believe it was all down there when they had lived here their whole lives and hadn't seen it," she said.

"It was a day for us to embrace the cave and share it with the community – support for the event was overwhelming."

This week marked the anniversary of

the first tour in the east cave.

During summer, Mrs Lynch-Rhodes is looking forward to hosting evenings on the balcony with entertainment on Friday nights and local wineries showcasing their products.

Other future plans include the possibility of concerts inside the cave.

(Thanks to Jason Wallace, Editor of The Border Watch for assistance and permission to reprint this article)



GREAT DAY: Tour operators Brenton and Kemelee Lynch-Rhodes were thrilled at the amount of public support the community provided for the 25th anniversary of Engelbrecht Cave public tours.



FAMILY DAY: The Turley family thought the Engelbrecht Cave 25th anniversary celebrations were a great opportunity for a family day out. Pictured are Laura, Neal, Joanne, Emily and Liam (front).



TOURIST DESTINATION: Visitors from Queensland, Anne and John King, were thrilled to have the opportunity to enter Engelbrecht Cave to view the natural features and installations as the attraction celebrated 25 years of public tours on Sunday.

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