



C.D.A.A. Newsletter

No. 128 - JUNE 2014

THIS ISSUE...

*Diving from around the Globe,
including Slovakia, Budapest & Namibia.*

CAVE DIVERS ASSOCIATION OF AUSTRALIA

(Incorporated in South Australia)

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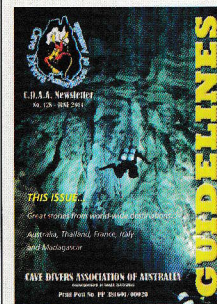
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Cover:

Piccs

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Tom Crisp

CAVE DIVERS ASSOCIATION OF AUSTRALIA

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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
Insurer: Liberty International Underwriters ABN: 61 086 083 605
Level 27, 1 Macquarie Place, Sydney NSW 2000
Name Insured: Cave Divers Association of Australia
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Just 5 minutes drive from the best Cave & Advanced Cave dive sites.

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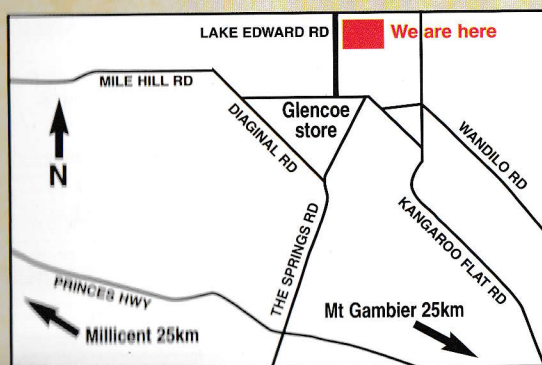
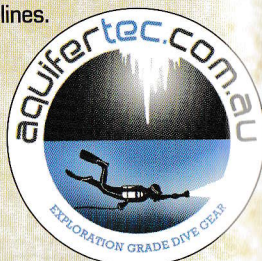
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- Remote fill manifolds.
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- Spools & Reels.
- Narked@90.



Pine Tank Dive Lodge AquiferTec Australasia

Lake Edward Road
Glencoe, South Australia

Phone: 08 8739 4020

Mobile: 0438 833 103

Email: stay@ptdive lodge.on.net

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EDITORIAL

ROWAN STEVENS



Welcome to the June 2014 issue of Guidelines.

AGM 2014 will be held in Mt. Gambier on Saturday 18th October 2014 - refer to page 10 for further information. For this year's AGM will be three Director positions up for voting - Business Director, Site Director and Standards Director. As both Helen and Grant have announced their retirement their positions will be vacant. Nomination details are on page 6 and we would encourage both new and experienced members to put forward their nominations and contribute to the direction and operation of the CDAA.

In this issue Peter Buzzacott makes us Hungary for more and also shares his adventures in a Slovakian Gem, while Pierre Constant explores Namibia's sinkholes. There is also cave diving news from around the world including both Florida and Mexico as well as reviews of Scubapro's side mount harness.

Finishing touches are being made to the new CDAA Regulations, CDAA Course Standards and updated Deep Cavern, Cave and Advanced Cave student notes. All expect to be released shortly.

Don't let your dive gear gather dust - get out there and start diving.
Until next time dive safe ...

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

APOLOGY...

An error in the March 2014 publication of Guidelines was made in the article written by Paul Hosie. A paragraph was deleted by accident on Page 12. The article has since been amended and the PDF of the March 2014 issue has been updated on the website.

Apologies to Paul Hosie,
David Bryant, Guidelines Editor.

NOTICE OF 2014 ANNUAL GENERAL MEETING, ELECTION OF NATIONAL COMMITTEE MEMBERS AND VOTING FOR MEMBER MOTIONS AND CONSTITUTIONAL AMENDMENTS

This notice is issued pursuant to Clause 12 of the Constitution and serves to advise members that the Annual General Meeting of the Cave Divers Association of Australia Inc. will be held on **Saturday October 18, 2014** at the **Main Corner Dress Circle, Mt. Gambier, SA**. The Annual General Meeting will commence at 6:00pm and will conclude no later than 7:00pm.

This notice also serves to call for:

*Nominations for

Business Director, Standards Director and Site Director

*Member motions

*Amendments to the Constitution

The Returning Officer must receive nominations for the National Committee positions no later than the close of business **Friday August 8th, 2014**.

Mail to: Returning Officer, CDAA - PO Box 9286, Mt. Gambier West, SA 5291

The Business Director must receive member motions and proposals for amendments to the Constitution no later than close of business **Friday August 8th, 2014**.

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

Mail to: Business Director - 3 Harris Crescent, Glen Waverley, VIC 3150

Members intending to nominate for a National Committee position must be eligible members of the Association as defined in the Constitution. Nominations should be accompanied by a précis not exceeding two hundred and fifty [250] words detailing skills, experience and achievements relevant to the duties and responsibilities of the nominated position. The responsibilities of National Committee members are contained in the Constitution of the Association. Nominations must be in writing and be signed by the nominee, the proposer and the seconder all of whom must be eligible members of the Association.

The polling date close for the election (if required) is **Monday October 13th, 2014**.

The election of National Committee members and voting on amendments to the Constitution will be conducted entirely by postal ballot.

If you wish to vote you must be an eligible member of the Association and you must only use the ballot papers to be provided in the next issue of Guidelines (#129), on the Association website cavedivers.com.au or by special mail out.

The ballot papers must reach the Returning Officer (Darren Walters #3555) no later than close of business, **Monday October 13th, 2014**.

Detailed voting information will be provided with the ballot papers.

Questions may be directed to the Returning Officer at returningofficer@cavedivers.com.au

Helen Higgins, Business Director - business@cavedivers.com.au



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The experience and engineering expertise of SCUBAPRO has enabled us to offer this premium line of tech BCD's to suit every tech diving ethos without compromising quality, durability, handling or comfort. Our latest edition, Side-mount, developed in coordination with leading side-mount cave divers, provides guaranteed quality and a configuration for every divers needs.

DEEP DOWN YOU WANT THE BEST

NATIONAL COMMITTEE UPDATE

JUNE 2014

Today I am sad to announce the retirement of two of our Directors from the National Committee. Helen Higgins, our Business Director has decided that at the end of her term, she will not be re-standing, instead focusing her indeterminate energy on things other than the CDAA. During her time as Business Director, we have seen a new Constitution and before she finishes, a new set of Regulations. Our finances are in a healthy state and we have seen some fantastic AGM events, the 40th being our best. She will be sadly missed and her shoes hard to fill, but I know that there is another person out there with the passion and energy needed to build on the legacy Helen has left us.

Grant Pearce, our Site Director, has also retired. While not at the end of his term, a change in Grant's employment resulted in him needing to spend considerable amounts of time away from his family. When he is back at home, he would prefer to spend his time with his family and doing those basic chores around the home that are neglected when you travel. Grant was often the unsung hero around Mt. Gambier, frequently turning up at a dive site with his brush cutter and rake, quietly clearing the area to make it safer from fires and snakes. Frequently he would drop everything and make his way to a dive site to act as the Site Access Officer when the planned site access officer was delayed.

With the role of Standards Director also up for cyclic voting this year, we now have a total of 3 Director positions open for nomination. It will be great to see some of our newer members in addition to some of our experienced members who have benefited so much over the years, put their nominations forward.

So outside of voting, what else has been happening over the past 3 months?

The draft version of the new Regulations has been reviewed by members of the Constitution Subcommittee to ensure consistency between the documents both in wording and intent. We are now collating all comments and in the coming months, will produce a final draft for review and release.

Work on the website has continued. We now have new instructor functions live with all instructor records scanned and loaded and instructor renewals. Members can now

electronically upload and view their own scanned documents. With this information loaded electronically, our booking system is improved because the computer can cross check things like applications and indemnities before being waitlisted instead of the Site Booking Officer constantly having to manually cross check paperwork before confirming your booking slot.

On the training front, there have been one non-CDAA Advanced Cave course run over the last quarter, clearly showing that the movement away from CDAA run courses was a good thing. Next we plan to allow these courses to be run by a single instructor, bringing us more in line with the rest of the world. To ensure that our Advanced Cave recognised Instructors remain on the top of their game, we will introduce a form of on-going education and peer review. This means that recognition as Advanced Cave Instructor for the CDAA is not an automatic right once obtained and that our Instructors will need to stay at the top of their game. Updated Course Standards and Student Notes for Deep Cavern, Cave and Advanced Cave are in review and expect to be published in the near future.

On other fronts, there has also been quite a lot of media attention around caves and cave diving over the past 3 months. There was a short story on TV around Sinkholes, in which Ian Lewis was interviewed. Grant assisted the BBC with a documentary featuring sinkholes around Mt Gambier. Tim Featonby helped coordinate the training and safety for the filming of a documentary around free diving and Liz Rogers was engaged by a Japanese film crew to assist with their documentary. Outside of filming, there has been local press coverage and a story in a sports magazine (yet to be published).

All this media attention is well managed and not making out cave diving to be big, scary and dangerous. It's providing a positive image to the sport, in direct contrast to the media coverage of a few years ago. While only a few CDAA member names were mentioned, a lot of other people were involved through things like logistics management, training, safety divers, science advice as well as being both behind and in front of the camera.

With this in mind, members are reminded that any approach by the media must be directed to the National

Director. In doing so, it helps us ensure they maintain a positive view of the sport, ensures that landowners are properly consulted, film crews can get access to undisturbed water, and everyone is properly protected by insurance and as you see from above, definitely does not exclude you from any opportunities.

On the diving front, we have another 1.25 km of passage added to the caves of the Roe Plains and we expect to see the map continue to grow. However, the negative side of the diving in this area is conservation. Members are reminded that the cutting of new vehicle tracks is inappropriate, as too is the wearing of back mounted equipment through the entrance restrictions. To negotiate the entrance restrictions, members should practice and implement the shuttling of back mounted equipment through the entrance restrictions and then gearing up underwater.

The final reporting item is in regard to this year's AGM. Things are looking good around securing a speaker who hopes to be able to come to Australia long enough for us to fly him to several States. Without giving his name away just yet, he is experienced in extreme cave exploration while diving with twin side mount rebreathers. I know a lot of members will be keen to see and hear about this exploration.

Until next time, may your drysuit remain wet on the outside.

John Vanderleest

The National Committee



John Vanderleest,
National Director



Helen Higgins,
Business Director



Linda Claridge,
Standards Director



Grant Pearce,
Site Director



Rowan Stevens,
Publications and
Records Director

Articles for Guidelines Sept 2014 - Deadline is Aug. 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 cameras or scanned from photos must be at least 200-300 dpi at 15cm wide, RGB files, and saved as Maximum Quality JPEG's.

WANTED

ARTICLES 4 GUIDELINES

IF SIGHTED PLEASE E-Mail IMMEDIATELY, TOGETHER WITH ANY PICTURES TO:

The Editor, Dave Bryant
guidelines@cavedivers.com.au

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CAVE DIVERS ASSOCIATION OF AUSTRALIA PRESENTS

AGM & Symposium 2014

This year the members' symposium will be held on
Saturday 18th October

Guest Speakers include:

Thorsten "Toddy" Wälde:
"Cave Diving in Sardinia and beyond"

~~~~~

**Janine McKinnon:** "Tasmanian Caves"

~~~~~

Tim Featonby/Ian Lewis:
"Filming Projects around the Lower South East"

~~~~~

**Liz Rogers:** "Cave Diving Exploration"

The Symposium will be held in the Dress Circle at the Main Corner  
in Mt Gambier, commencing at 9:15am.

The AGM will follow at 6:00pm and dinner will be served  
in City Hall at 7:30pm.

**We hope to see as many members as possible attend this year.**

Dinner bookings can be made via the online store from September.

A FULL PROGRAM OF GUEST SPEAKERS WILL APPEAR  
IN THE SEPTEMBER 2014 ISSUE OF GUIDELINES.

## Why do more than your 'Standard First Aid Course'?

Diving is not only a great activity but is an adventure within its own right. With new dive sites being explored daily, and divers now going deeper longer and more remote than ever before, the underwater world has become even more enticing. Who doesn't want to explore the Solomon Islands, Fiji, PNG, Malaysia or our own shores of Australia?

Not only do dives pose specific medical problems that need to be managed appropriately, but also by the simple nature of where dive sites are; people are exposed to longer response times, and possibly even inadequate medical facilities once a response has been achieved.

Throughout all these adventures there isn't a diver that doesn't take his/her equipment seriously and knows how it could and should help to save their life.

So why then do most just do a standard first aid course?

Within the area of 'First Aid' it is commonly agreed that a "Remote Area" is that which is more than 1 hour from definitive care, and definitive care being a permanent medical facility. The definition of what is "Remote" varies substantially between regions of the world, however essentially it constitutes isolated communities, workplaces or areas of interest that have limited access through transport and communication.

First Aid in a Remote Location is the immediate care given to an injured or suddenly ill person. It does not take the place of definitive medical care; it consists only of giving assistance until a more advanced level of medical care is obtained or until the chance for recovery without medical care is apparent.

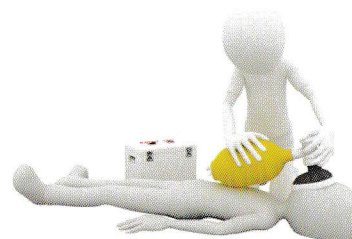
Thoughts such as 'it won't happen to me', or 'I know what I'm doing' are common amongst all adventures but unfortunately so are accidents. How important is your safety?

**Adam Kershaw,**  
(Founder of Survive First Aid)

## REMOTE AREA FIRST AID FOR DIVERS

**Survive**  
First Aid

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ASIA · PACIFIC



Survive First Aid (RTO 40764) in conjunction with the Divers Alert Network (DAN), is offering a unique 'Remote Area First Aid Course' specifically designed for Divers. Combining the best attributes of both companies a custom-designed course will provide you with the skills and knowledge to keep you safe and respond appropriately to an emergency.

When exploring the joys of the underwater world you're often in far-flung 'Remote' dive sites and as such, a relevant first aid course will help to manage the safety of all divers.

The course (\$850) will be delivered over 3 separate weekends throughout August on the Mornington Peninsula (Victoria), and will provide you with the following competencies:

- HLTAID003 Provide First Aid
- SISOOPS305A Provide First Aid in a Remote Location
- SISXEMR201A Respond to Emergency Situations
- SISXEMR402A Coordinate Emergency Responses
- SISXOHS101A Follow OH&S Safety Policies
- 21965VIC Oxygen First Aid for Divers
- Onsite Neurological Assessment for Divers
- Dive Medicine for Divers Part 1

For more information and to book online visit

**[www.survivefirstaid.com.au](http://www.survivefirstaid.com.au)**

Email: [info@survivefirstaid.com.au](mailto:info@survivefirstaid.com.au)

Phone: 0430 020 995



# Hungary for more

By Peter Buzzacott

*The International Karst Hierarchical Flow Systems conference in Budapest had been in full swing for three days when I skipped out to go dive Kobanya limestone mine beneath this wonderful city. The limestone here is soft and easily cut so it was widely used in many of Hungary's finest architecture. The castle and parliament house for example. But, being soft, it is subject to erosion by the elements and so many of the oldest buildings are in constant repair.*

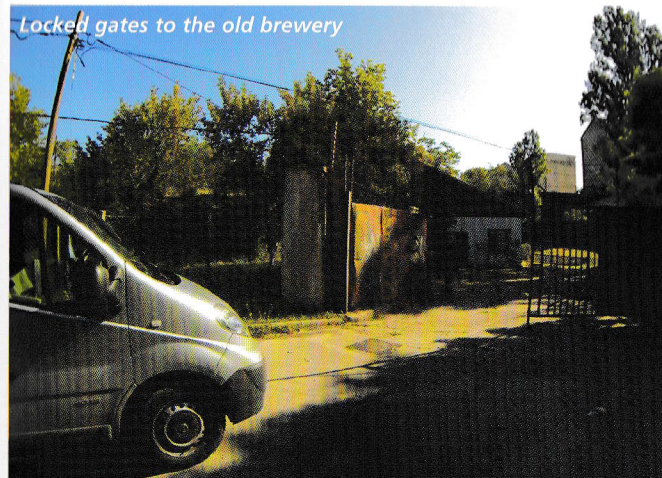
I met my guide Jozsef Spanyol outside the derelict Dreher brewery not far from the city centre. We chatted in the morning sun for half-an-hour before Jozsef unlocked the large iron gates. About a century ago a brickworks had opened and the more expensive limestone blocks fell out of favour so the mine ceased operating, turned off the pumps and locked the doors. Dreher bought the place to store beer and draw water but eventually moved to newer premises. Now the many kilometres of underground roads, complete with overhead lighting, remain largely unused (except for the odd visiting cave diver).

We drove underground for a while, me following Jozsef through the labyrinth, then parked our vans just a short walk from a set of stone stairs down into the water. Jozsef reviewed the history and layout of the mine beside a large schematic on the wall. Then I was treated to a guided tour of two large churches, one catholic and the other a different brand of christianity. Apparently there is a third in here somewhere too. They were white, beautifully carved and either would make a spectacular and novel setting to wed in. Quietly we geared up, Jozsef in backmounted 12s and I in sidemounted 15's, with a stage each. For this dive



Artefacts litter the floor

Locked gates to the old brewery

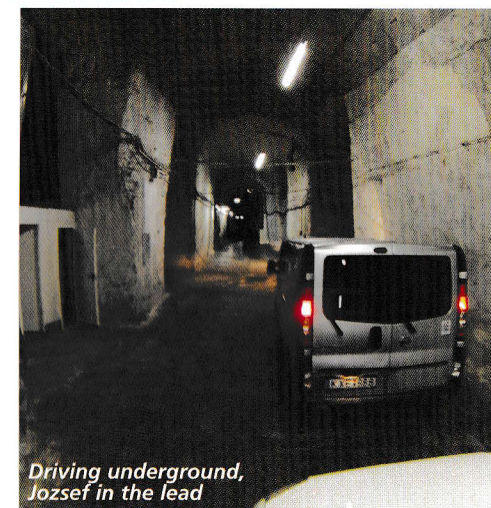


Delicate corroded electrical lights hung dripping with rust as we carefully passed by. A green metal handrail below us reduced our free-swimming path even further and we concentrated on maintaining perfect control. Jozsef particularly impressed me with his rock-solid skill-set.

We rose up into a higher sub-level floored with thick wooden beams. It was darker and the passage smaller but we maintained speed and after 60m or so returned to the main level through another low window.

I was down to my last full stage on my trip around Eastern Europe and it was EANx50 so I resolved to switch to a 15 of air whenever we approached 20m, which we planned to do only once or twice while visiting a lower level. Apparently the water falls to as low as 8°-9°C in places but averages 12°-13°C overall so I wore wet gloves today, and a 7mm Fourth Element hood.

Jozsef led away from the stairs and into a long, narrow corridor, at times not much wider than our fin strokes.



Driving underground, Jozsef in the lead

The corridor took a sweeping bend to the left, straightened and led to a hole in the floor about the size of a car door. Through this we dropped vertically into three large connecting rooms.

We toured the rooms looking at ladders and leftover machinery and then Jozsef signalled the turn. I replied, turned and could not immediately see the line. I saw only one hole in the roof and moved over to it but it looked like an off-mount exit so it wasn't the way we'd come in. To be honest here I shone my light around and for a very brief moment contemplated what it must feel like to realise you're trapped... but then Jozsef indicated the exit which had been hidden from my view. The moment was an enjoyable if unexpected thrill.

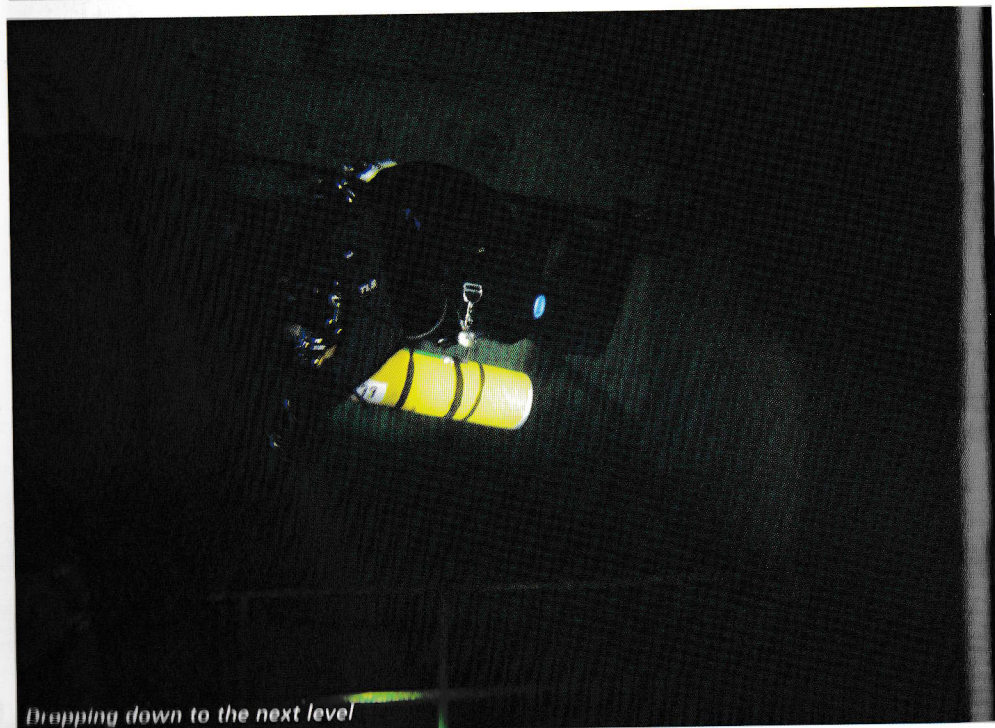


The first church





*close up of the map during the dive brief*



*Dropping down to the next level*



*Old machinery around every corner*

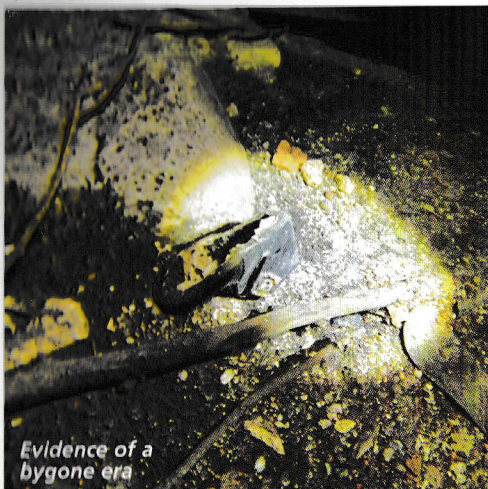


*An old light fitting*



*Perfect control in the narrow passages*





Evidence of a bygone era

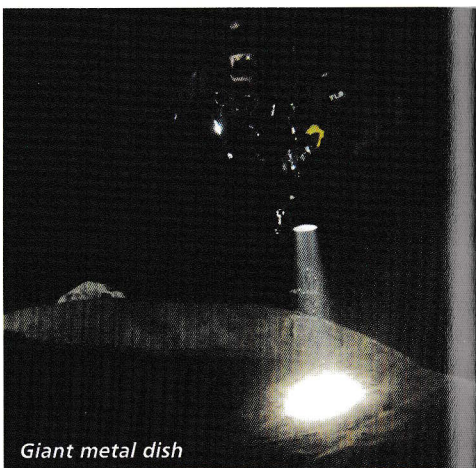
I led out along the passage with the green handrails and the bend, then Jozsef indicated the way on to our last port-of-call, a cavernous room entered from above via an iron spiral staircase. This for me was the highlight; a genuine iron spiral staircase! Wow. I changed onto air again and corkscrewed my way down into the room. Old machines held my focus momentarily and then it was time to leave. We paused for a photo on the way out, beside a massive metal dish that I cannot imagine a use for.

Back at our cars we packed away our gear and resurfaced into sunlight, birdsong and the hustle-bustle of downtown Budapest.

My sincere thanks to Jozsef Spanyol for making it possible to dive Kobanya limestone mine. When Molnar Janos cave re-opens then I will definitely return.



Artefacts litter the floor



Giant metal dish



Post dive jubilation

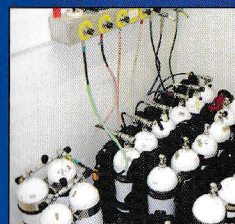
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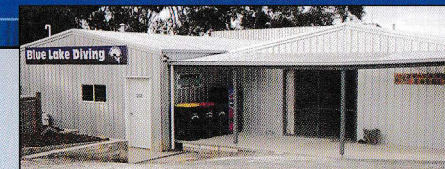
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- 2 individual toilets and a spacious bathroom with instant hot water shower & vanity.
- Barbeque, seating area and provisions for drying of diving equipment if required.

**6 individual bedrooms,**  
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## NEW GEAR

# Scubapro side mount harness

My first impression of the Scuba Pro side mount harness was that it was very comfortable. The padded soft backplate covers a large area of my back and conforms well to my shape. The main advantage of this is that with all the stainless steel eyelets available there is a large area to utilise to configure the setup to your individual needs. With two choices of bladder size (25 and 45) it will suit larger and smaller builds and heavier gear configurations. The way the bladder covers the backplate allows equipment to be mounted under it where they are not line traps. I personally

removed a couple of the loops stitched to the bladders outer shell to remove snag points. I managed to fit six individual weight pockets, my Green Force light canister, and my SMB under the bladder without any problems.

The harness comes with a bungee system with two bars on the butt plate for slinging cylinders and it can easily be adapted to other methods of attachment. Out of the bag it is loosely assembled, it comes with plenty of bungee and webbing to complete your fitting. The only things I added were some D rings and some shoulder pads (for some dives where I had to carry my cylinders a way).

I have personally used this system diving around Mt Gambier with the CDAA when I did my course with Linda Claridge. I found it ideal for the diving I did and loved the fact that it has a much lower profile than some but still offers plenty of scope for customisation. I have also used it wreck diving on the Coolidge. I found it great for travel also as it is lighter than even my travel BCD.

The only thing to consider is if you expect to get the harness out of the bag put it on and go diving, you will be disappointed, this is a great harness and it will adjust to most fits and configurations but you will need to put in a little effort to feel the reward.

Personally it is my favourite way to dive now.

Daniel Ussher CDAA #4871



**Tek Sidemount**  
20kg (45lbs)

Out of the box the Scubapro side mount system looks very attractive sporting the familiar x-tek brandings. The first impression is that the harness itself is very light and almost feels flimsy. But once I started to adjust the straps and started to have a good look at the construction, I found it to be quite robust. With Stainless steel eyelets and double stitched make for a very sturdy foundation.

The Side Mount rig comes standard with bungee straps and butt plate for easy location of bottom tank clips. Like any good technical setup, it all comes down to the ease of adjustment, and the Scuba Side mount system delivers. Giving ample webbing for even the largest of persons to be able to fit comfortably. With most of my dives on this rig being done on the Coolidge, I found with the addition of the shoulder pads a must for comfortable carrying of tanks over longer distance, but also help with the locating of the shoulder clips for the top tank clip. Underwater the unit has a very low profile in both 25lb and 45lb units with the 45lb unit wraps lower around the waist so it keep it low and snug. Clips are easy to reach and overall the unit is extremely comfortable and an extremely good performer.

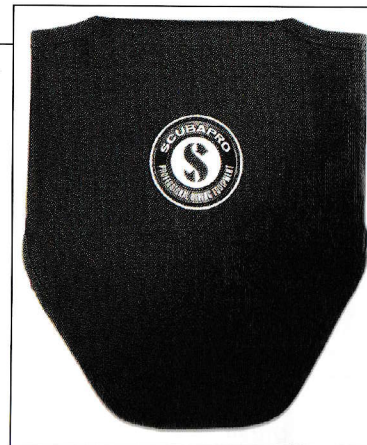
Mark Robertson  
MI282180

*Guidelines asked Scubapro for a gear review from some of their users. We hope you find their opinions informative.*



**Front harness**

**Tek Sidemount cover**

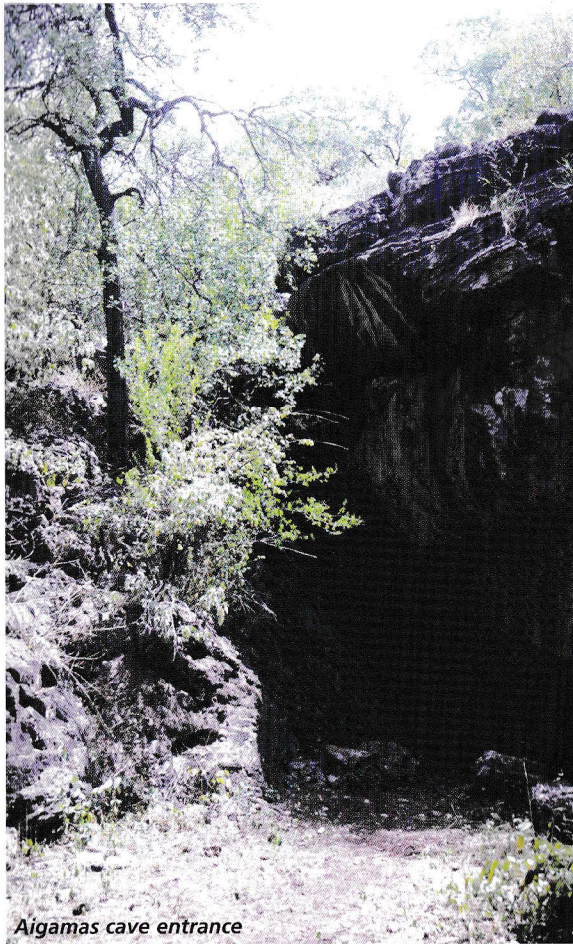




# Namibian sinkholes

By Pierre Constant

Nobody could imagine for a minute that Namibia is a diving destination; and despite its 2000 kms of coastline, this is the mere truth. Born roughly 5 million years ago and originating in Antarctica, the cold Benguella current flows along the coast from south to north creating a coastal desert. The marine temperatures are about 13°C on average with an almost nil visibility resulting from stirred up waters and omnipresent sand. These waters are rich in fish and marine life, due to the upwelling of the Benguella current. 20 species are currently harvested: hake, monkfish, sole, kingklip, snoek... but also horse mackerel « *Scomber japonicus* », pilchards, anchovies, skipjack, tuna, albacora, spadefish and pelagic sharks. Aquaculture is prolific, with a substantial production of oysters in Walvis Bay, Swakopmund and Luderitz (6 million/year), abalone farms, mussels and agar agar in Luderitz, not to forget rock lobsters and deep water crabs.

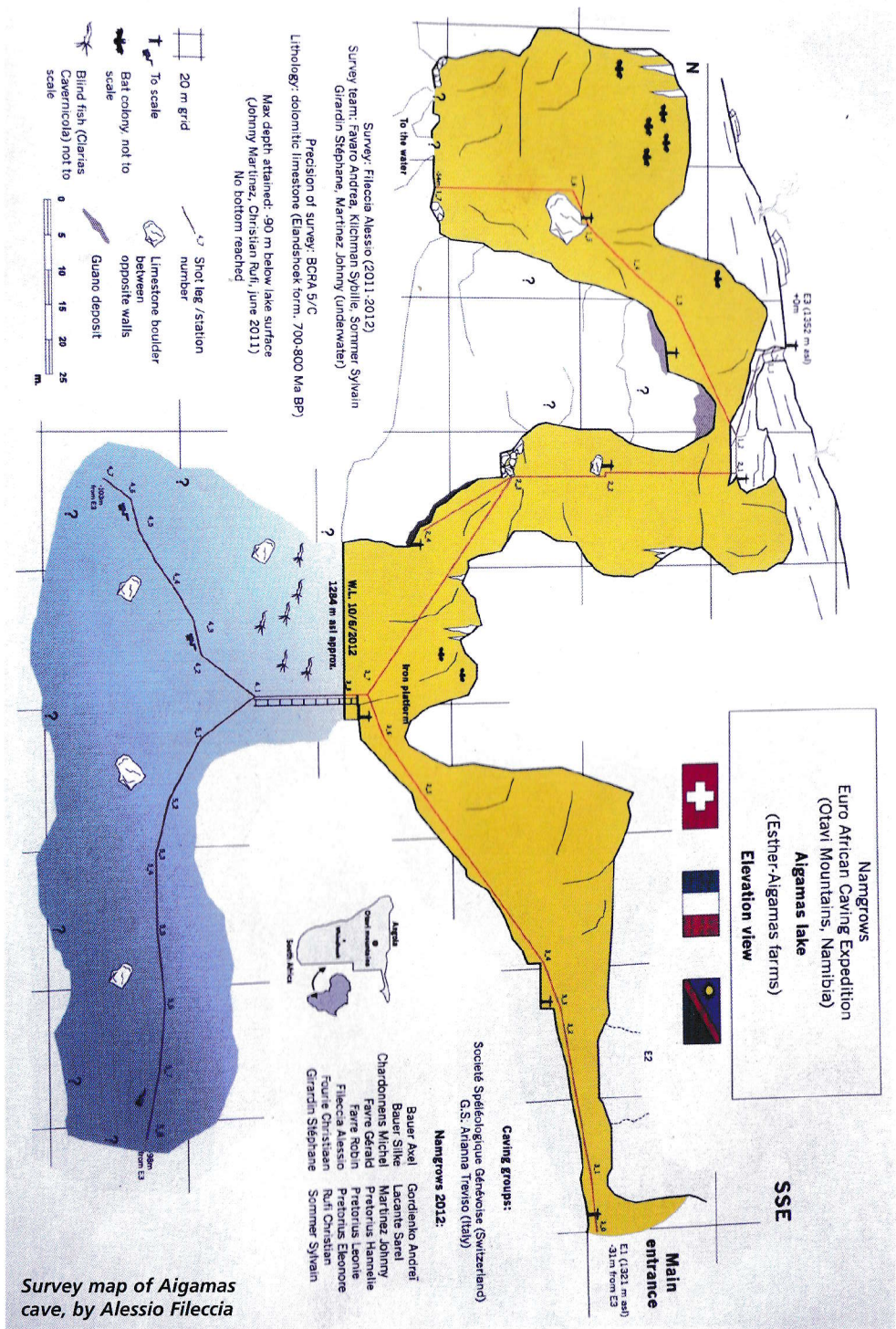


Aigamas cave entrance

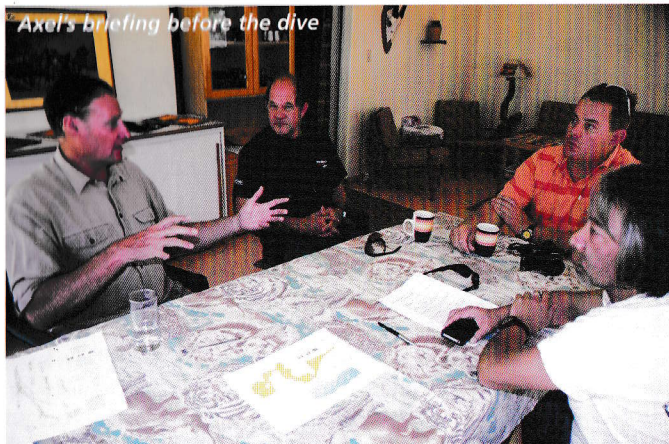
There is hope at the end of the tunnel, though. Some 30 years ago, caves and sinkholes were discovered. In the good old days of the German colony (1890-1915), the farmers of the north east would draw water from these sinkholes with electric pumps, to irrigate their farms. 100,000 years ago, San or Bushmen knew about their existence, these inspired fear and the belief was that whoever fell in would not come out alive!



Once upon a time called Süd-West Afrika by the Germans, the actual territory of Namibia is a very old land, geologically speaking. Well before the creation of Gondwanaland, some 540 million years ago, the Earth was a huge ocean with some isolated 'cratons', which are commonly referred to as the original crust of the planet. 2500 million years ago, southern Africa was made of two cratons: the Congo craton in the north and the Kalahari craton in the south, both separated by a SW-NE extension of the ocean, known







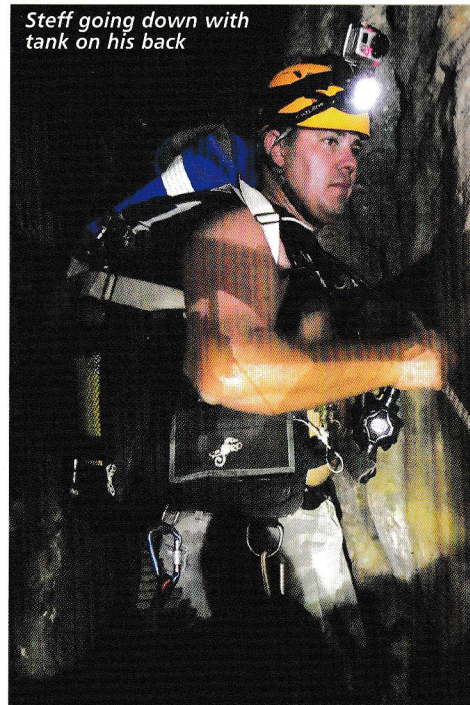
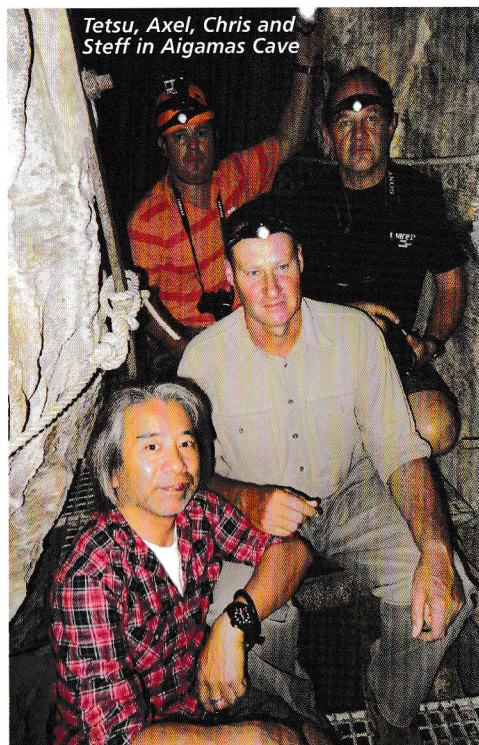
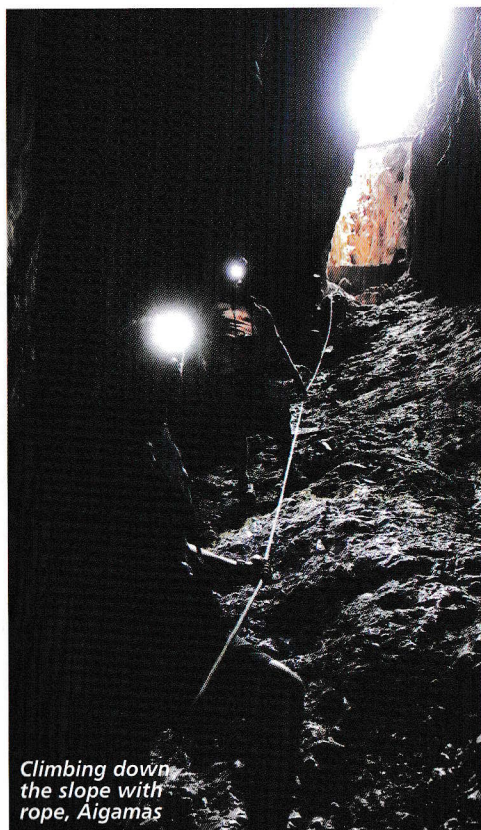
as Damara Sea. Limestone like deposits were then generated, well before the collision of the Kalahari craton with the Congo craton, and the subsequent subduction of the former under the latter. 300 MY ago, Namibia was located near the South Pole and affected

by tremendous glaciations. These ended 280 MY ago, when this part of the continent broke off from Antarctica.

The calcareous reef thus created in the Damara Sea, 750 MY ago, were not made of coral -since it did not exist yet- but were secreted by cyanobacteria, better known as stromatolites. These encrusting algae are the oldest living forms on the planet (3500 MY). Deposited over a period of 100 million years, these sediments formed layers of dolomite  $\text{CaMg}(\text{CO}_3)_2$ , 5000 metres thick.

Mind blowing? The intensive erosion that followed over the next 500 MY, brought about the dissolution of the carbonates, a process known as karstification. Lime or dolomite, are eroded by an acid carbonic solution, related to rainfall.

The "magic triangle" is found in the Otavi Mountains, between Tsumeb, Grootfontein and Otavi. At least 83



caves, chasms or sinkholes have been listed since 1974. A good number of those have been surveyed by Germans, South African, Swiss... speleologists since 1967 and even earlier. During one of my numerous

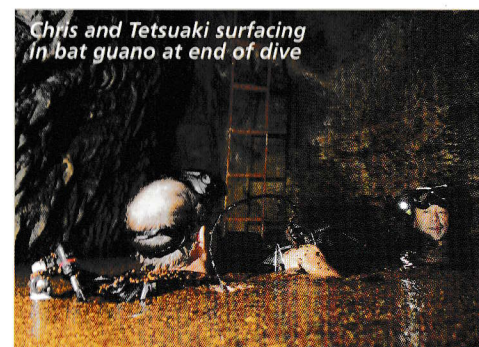


trips to Namibia since 1992 -being myself a cave diver - I decided to find out about this. Accompanied by my friend Tetsuaki Masuda, we show up at Aigamas farm, one morning of April 1st 2013. Cordially welcomed by Axel Bauer, a tall German farmer straight out of the movie « Out of Africa », we also meet Chris and Steff, the technical divers from Namibia, who will be responsible for logistics and security.



In Herero language « Aigamas » means 'Big Water'. We drive up a mountain ridge with the 4x4. The cave has a tent shape, 'tipi like', along a south to north fracture in dolomite limestone. « It's a 120 metres progression in the dark... » explains Axel on a sketch map. The gradual slope is negotiated with a metallic stairway, then we make our way with some ropes on slippery boulders covered with debris, until we reach the platform overlooking the pool of water, 18 metres long. An iron ladder plunges 5 m below, down to the water level.

"An exploration was done by a Swiss-Italian team in 2011-12", starts Axel. Lead by Gerald Favre of the "Société Spéléologique Genevoise", the survey map was done by Alessio Fileccia from Italy. The maximum depth of the dive was 93 metres, but the bottom was not reached. Aigamas is a very narrow fracture that plummets into the void.



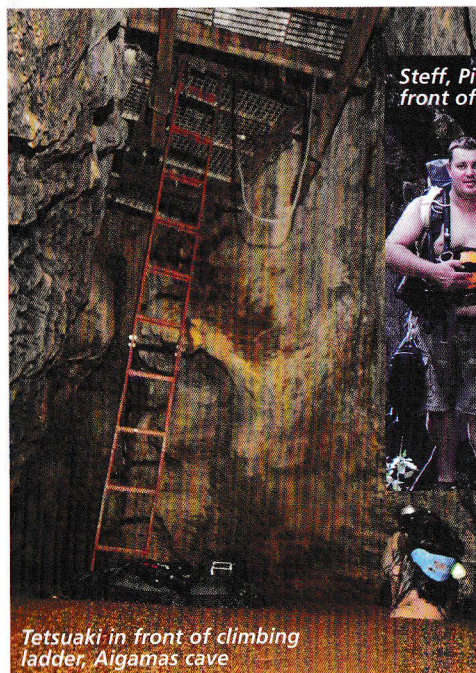




Steff helping Chris up to the platform

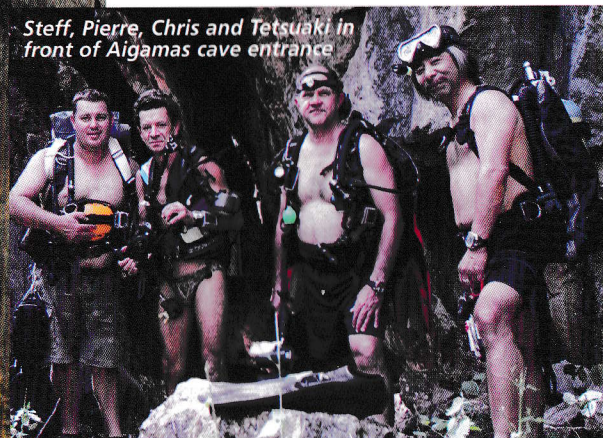
My quest today is stimulated by an encounter with the April fish (from the French saying: 'un poisson d'Avril'). Endemic to the site. '*Clarias cavernicola*' or giant cave catfish, is a very unique species, met at the surface of the water, where it feeds on the floating guano of bats. A priori blind, the fish is about 16 to 25cm long, sulphur yellow in colour, with two tiny pin head like turquoise blue eyes. The rounded head has the shape of a bony helmet, pointed like an arrow behind the nape. Eight conspicuous barbels are found around the mouth, which enable the cave catfish to detect its food or else. A long dorsal fin, two small pectoral fins, two pelvic fins and a long anal fin that ends towards the tail, which is short and straight. Clear chevron markings are visible along the sides. The body is compressed, fusiform and eel like. Some specimen show an atrophy of the eyes, which become globulous and useless. The ancestor of *Clarias cavernicola* is from the Kunene or Okavango River further north, in the time when these rivers were flowing into the Etosha Pan (3 million years ago).

I sink down to a depth of 37 metres. The crack is hardly 2 metres wide. The water temperature is a balmy 25°C. Bat corpses are lying on edges underwater, apparently undisturbed by the catfish above. It is said that the fish has also a cannibalistic behavior on the young individuals. I exit Aigamas as a true cave man, covered in bat guano.



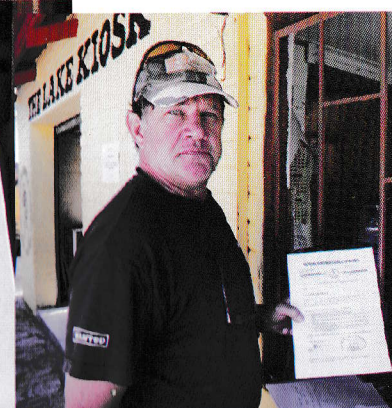
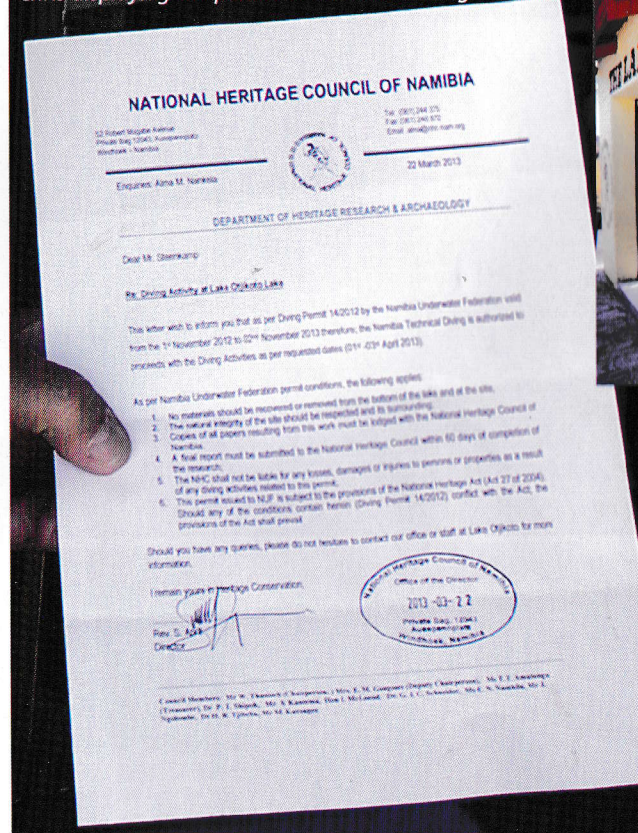
Tetsuaki in front of climbing ladder, Aigamas cave

Steff, Pierre, Chris and Tetsuaki in front of Aigamas cave entrance



Some 20 minutes north of Tsumeb, Otjikoto Lake is an historical site that depends on the 'National Heritage Council of Namibia', which rules research and archeology. A diving permit is compulsory. After Chris shows our papers, and we each pay the N\$25 entry fee, we are welcome to proceed.

Chris displaying the permit of National Heritage Council



Steff in full gear with rebreather



Otjikoto dive platform and pumping station



Originating from the Otjiherero language, the name Otjikoto means: 'a place too deep for cattle to drink'. The San called the site 'Gaisis' or very ugly, as it inspired fear to the bushmen. Before the arrival of the first Europeans, the site was a trading post; later on, the surrounding hills were guarded by armed men to prevent any exploitation of the copper ore which was plentiful there. Otjikoto was discovered by Charles Anderson and Francis Galton, in May 1851. For the geologists, this is a perfectly circular dolomitic sinkhole in the karst of the Damara Belt. Shaped like a calabash, the lake has a diameter of 102m and a surface of



Chris and Steff entering the water in full gear



Stairway down to the water level, Otjikoto

7075m2. If the depth at the centre has been evaluated at 71m, the max depth on the sides goes well beyond 145m, and to this day remains unknown.

- "Come on, I'll show you the dive plan!...", shouts Chris with excitement, as we near the edge of the cliff for a panoramic view. "Our first dive is 'The Reef', an acclimatization dive at 40 m on the southern part of the sinkhole". Carrying the 15litres steel tank, we access the water by a small metallic stairway. "The level of the water has never been so high, since last year's heavy rainfall...", comments Steff. Finning on our back, we cross the lake.

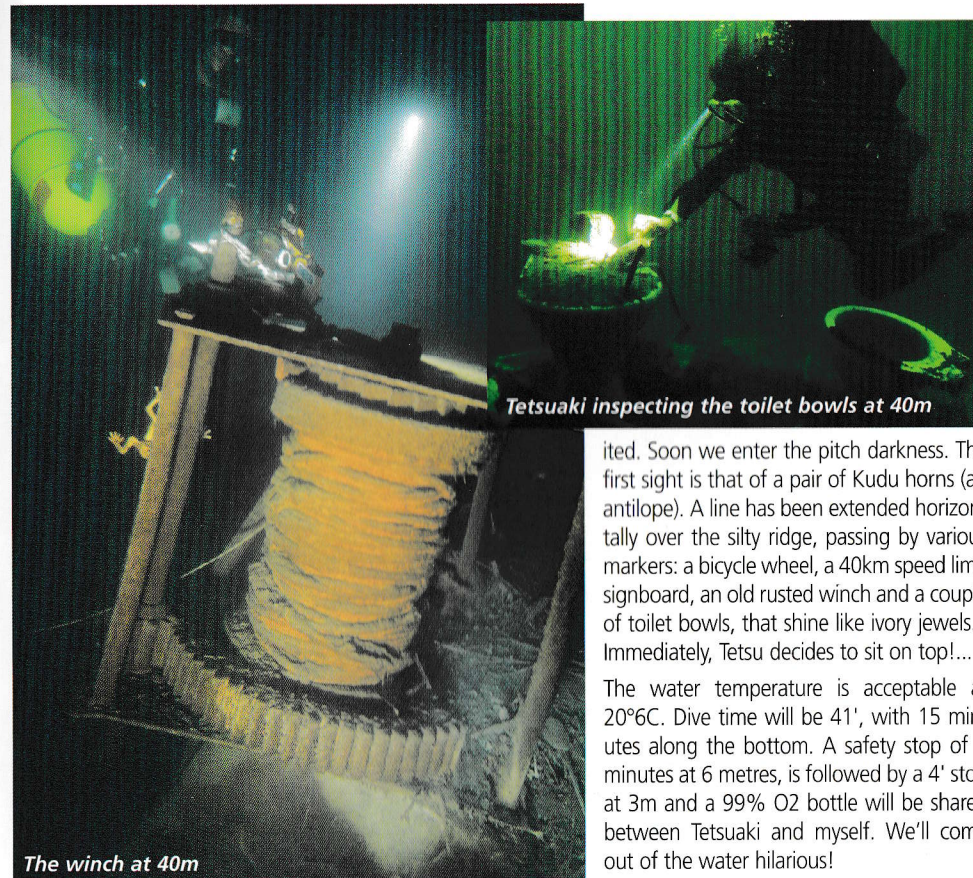


Tetsuaki showing the oxygen bottles for decompression

Hovering above The Reef, we ease ourselves down with the help of a chain anchored to the bottom. The colour of the water being a psychedelic apple green, the visibility is rather lim-



Chris and Tetsuaki swimming to the entry point over "The Reef"



The winch at 40m

Tetsuaki inspecting the toilet bowls at 40m

ited. Soon we enter the pitch darkness. The first sight is that of a pair of Kudu horns (an antelope). A line has been extended horizontally over the silty ridge, passing by various markers: a bicycle wheel, a 40km speed limit signboard, an old rusted winch and a couple of toilet bowls, that shine like ivory jewels... Immediately, Tetsu decides to sit on top!...

The water temperature is acceptable at 20°C. Dive time will be 41', with 15 minutes along the bottom. A safety stop of 3 minutes at 6 metres, is followed by a 4' stop at 3m and a 99% O2 bottle will be shared between Tetsuaki and myself. We'll come out of the water hilarious!

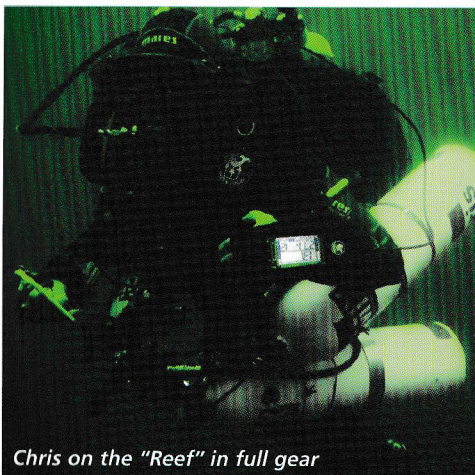




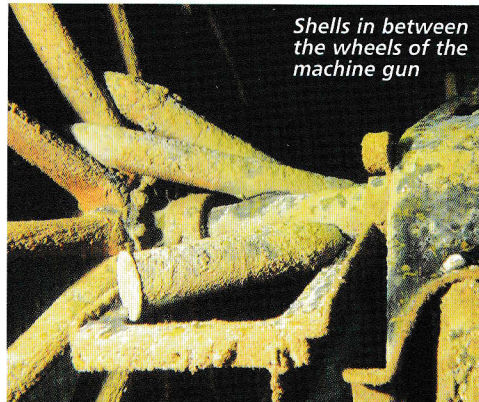
Return to Otjikoto base after dive 1

After a 3 hours interval time, the afternoon dive is to be serious stuff. Twin tanks are used this time, with a mix of 19% O<sub>2</sub> and 30% Helium. During WWI, the 'Deutsche Schutztruppe' of the German colony was attacked by the forces of the Union of South Africa. Pushed north as far as Tsumeb, the army of the Reich capitulated. To prevent their weapons to fall in

enemy's hands, the Germans dumped all their canons, ammunitions and guns, late June 1915 at Otjikoto.



Chris on the "Reef" in full gear



Shells in between the wheels of the machine gun



The WWI German 3.7cm machine gun upside down at 57 metres, Otjikoto

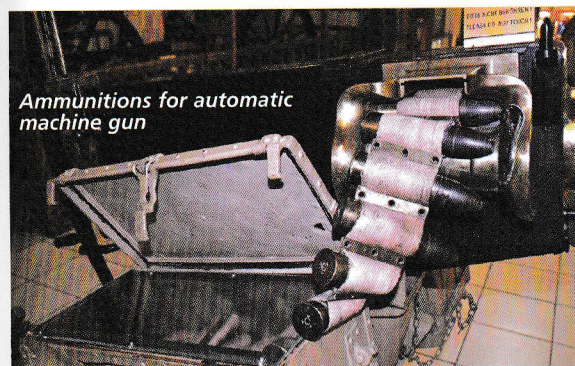
A number of these war relics have been salvaged in the 1960's and 1980's by intrepid recreational divers from Tsumeb and are exposed today at the small Tsumeb Museum.

The dive at 57m is done over a highly volatile sedimentary bottom. There lies upside down the 'Cannon' and its two wooden wheels. Built by the company Friedrich Krupp in

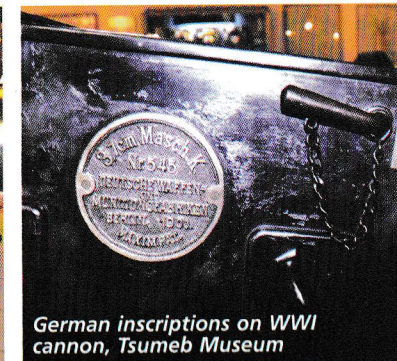


The Tsumeb Museum

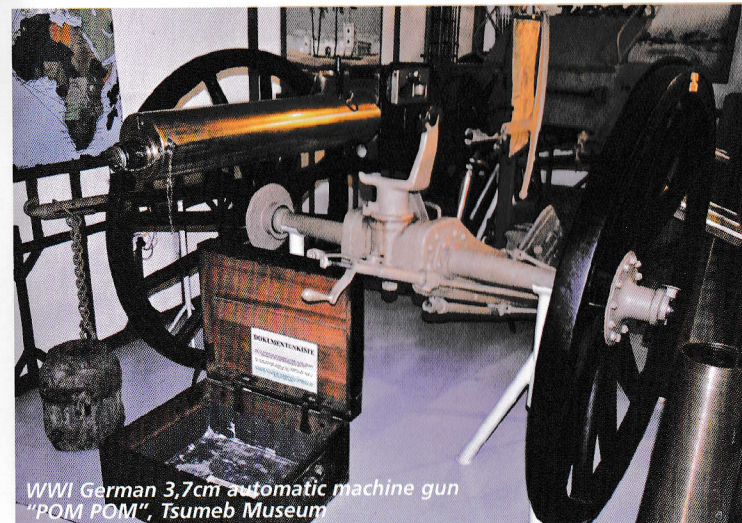
1903, the 3,7cm automatic machine gun (POM-POM) shot projectiles of 1 pound (450grams), with a maximum range of 2750 metres. A perfectly restored specimen can be admired at the Tsumeb Museum. The Germans have thrown 300 to 400 wagons of ammunitions, 24 cannons and 85725 Mausers. The stay at 57m depth is rather short. The visibility is soon disturbed by the presence of divers. A few boxes of ammunitions lay about, and a few live shells. The return to the surface needs 3 deco stops: at 9m, 6m and 3 metres, the latter two on pure oxygen.



Ammunitions for automatic machine gun



German inscriptions on WWI cannon, Tsumeb Museum



WWI German 3.7cm automatic machine gun "POM POM", Tsumeb Museum

- "How about some 'Fire Water'?!"... suggests Steff jokingly, to celebrate the event. After a polite refusal, Tetsu agrees and ends up tipsy, as expected!

A bird's flight away in the direction of Etosha National Park, Guinas Lake is an elliptic sink-hole, 140m by 70m. We pay a visit to the new owners, Nyck and Ludye of Cando Farming, producers of onions and potatoes, a farm of 700 hectares. "The access to



"the sinkhole belongs today to 3 different partners, each one has his own pumping station", explains Chris. "In the old days, the best entry point was on the side of an angry farmer, who used to shoot at any diver who attempted to cross his territory secretly...", laments Steff. Twenty years have elapsed, and thanks heaven, the angry bird is no more!

Guinas Lake is crystal clear. The water has a cobalt blue colour to dream for. The underwater visibility is optimal. We drive the 4x4 to the bottom of a rocky slope, near an old pump station in a scenery of aloe and spiny shrubs. Chris has the 15 litres tanks ready with a 26% O<sub>2</sub> mix. We access the water with a rusty staircase, missing each and every step.

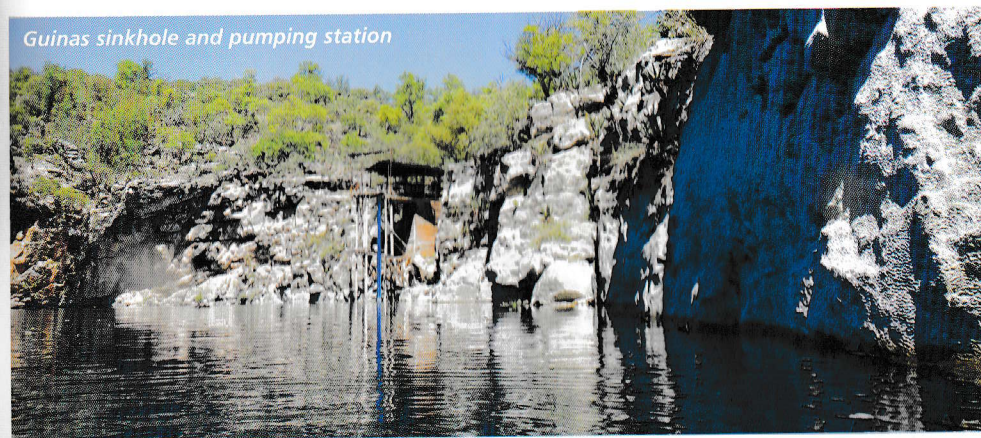
Chris and Steff decide to dive with their own rebreathers, and give us a free ticket to have our own dive. Impressive, the walls of the sinkhole drop vertically into the abyss. From hearsay, the maximum depth - superior to 120m - is still beyond human reach. Carved into dolomite 700 million years ago, the typical karst environment of Guinas reveals the spreading of various caves underground. According to geologists, Guinas would be the 12th largest cave in the world. An endemic species of Cichlidae fish was discovered here: '*Tilapia guinasana*', about 10cm long, with a colour variation from white to almond green, yellowish, brown, grey to black.



Guinas sinkhole and entry ladder



Tetsuaki upon entry, Guinas



Guinas sinkhole and pumping station

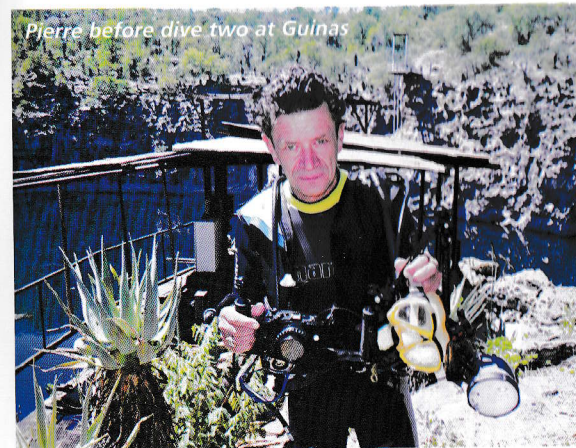


Endemic cichlid fish in school at Guinas



Entry ladder underwater, Guinas 2013

A cave catches my attention at 31 metres, with a slope of sediments coming down to 40m in darkness. Baffled, I gaze upon a long bone lying on the cave floor (oryx?), then I fall upon the blackened skull, upside down, of an old warthog. The tunnel continues at depth, blowing away any illusions to venture inside. The curiosity killed the bird...

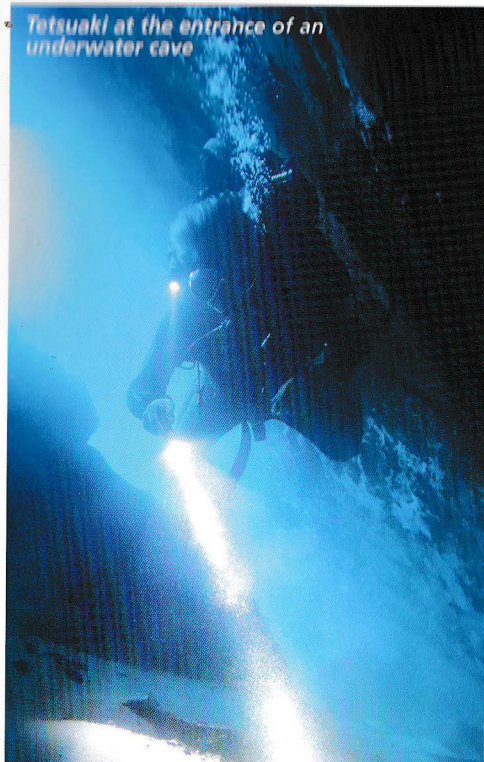


Pierre before dive two at Guinas

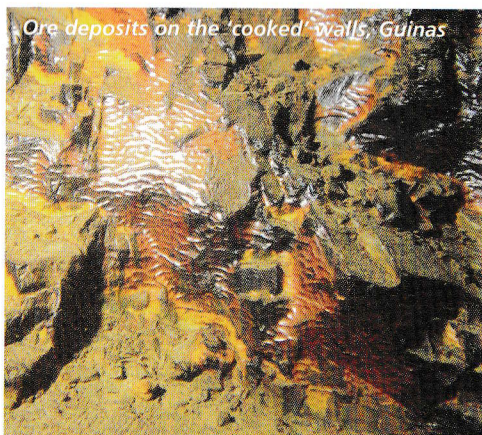
The second dive at Guinas will be done clockwise. There, the cliff is carved into a vast cavern, where I observe some stalactites on the roof. Another tunnel disappears underground at 40 metres.. To my bewilderment, the walls of the cavern are covered by a metallic dark silver sheen that reminds me of galena (PbS or lead sulfur), with a conspicuous 'cooked aspect'. Considering



Tetsuaki at the entrance of an underwater cave



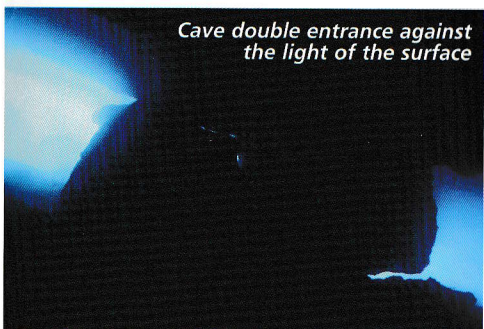
Ore deposits on the 'cooked' walls, Guinas



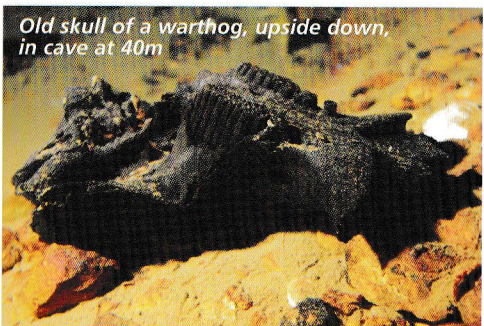
Bones of an oryx in cave at 40m



Cave double entrance against the light of the surface



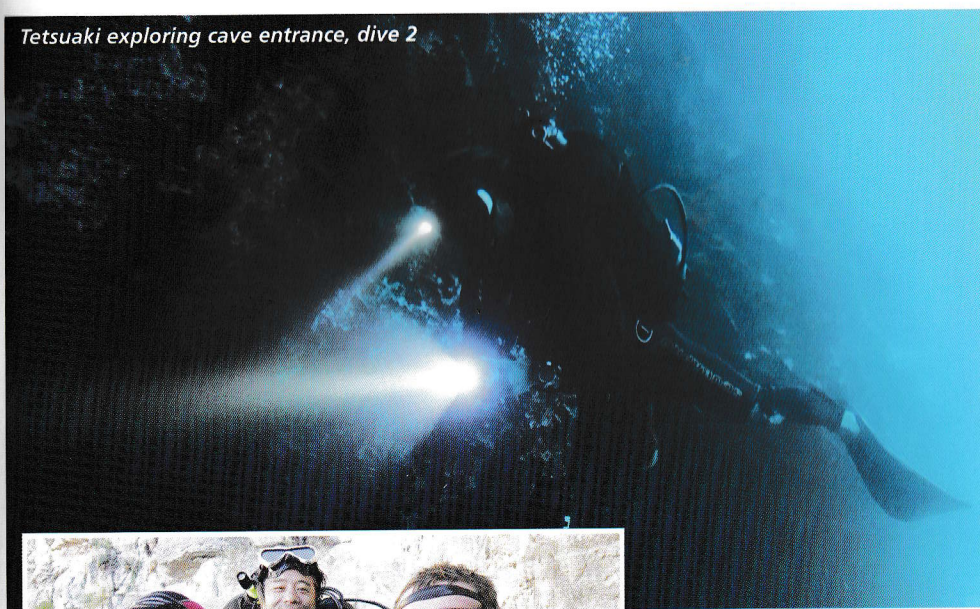
Old skull of a warthog, upside down, in cave at 40m



Stalactites in cavern, with metallic sheen



Tetsuaki exploring cave entrance, dive 2



Chris, Steff and Tetsuaki after second dive

region of Tsumeb, already famous for its copper mines, zinc, lead, silver, nickel... - "Time for 'Fire Water'!...", jokes Steff, as he hands a drink to Tetsu. "Oh no, I will be drunk again...!" he moans and laughs at the same time. Tonight, is our

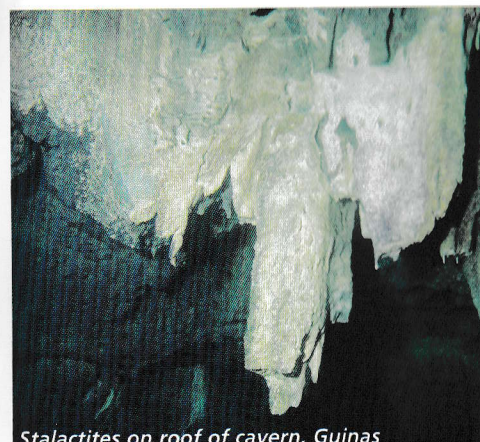
farewell dinner at the 'Drus campsite' restaurant. that the temperature of the water is abnormally high at 27°C, I come to the conclusion that the sinkhole is an active hydrothermal vent, related to some ancient volcanic activity. Ore deposits occur from a solution of hot water, which source remains to this day uncertain... A visit to the Geological Survey Museum in Windhoek, confirms the occurrence of galena in the

farewell dinner at the 'Drus campsite' restaurant.

Striking ore deposits of galena on walls



Stalactites on roof of cavern, Guinas



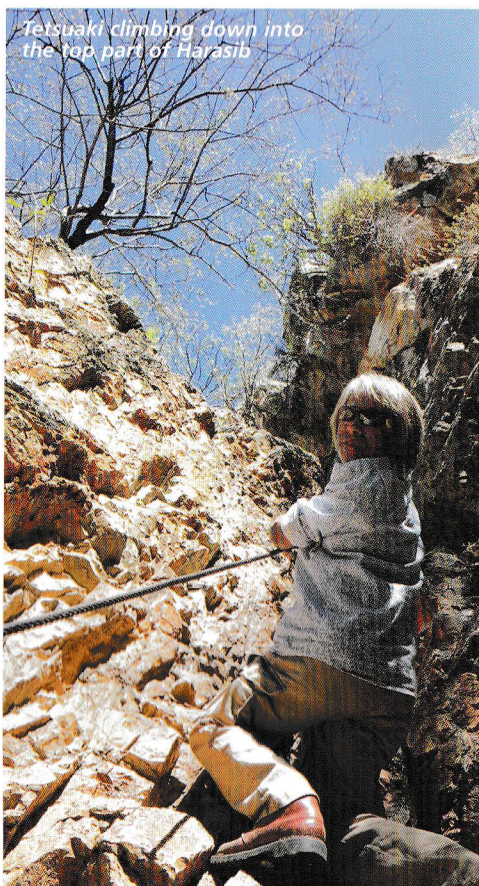


The Otavi Mountains form parallel ridges extending east to west. A mine of karstic treasures, and some, like Ghaub Cave, have been classified as 'National Monument'. At 1643m above sea level, Harasib Chasm on top of a limestone ridge is truly impressive. A vertical pit of more than a 100 metres, it is only accessible for highly confirmed speleologists. In June 2012, Gerald Favre and his team have led an exploratory mission, with a technical dive to a depth of 147m underwater... still bottomless. Not far from here, another marvel of nature is hiding in the darkness of Dragon's Breath Hole. Back in 1986, the cavers of the South African Speleological Association (SASA), discovered a gigantic underground lake of 19,000m<sup>2</sup>, ie 200m by 145m. The entry hole is a chimney only 1m in diameter. An horizontal progression of 10 metres, leads us to a crack and a dead end. "From here, it is a 120m vertical drop, abseiling to the level of the lake...", confirms Chris with a smile.

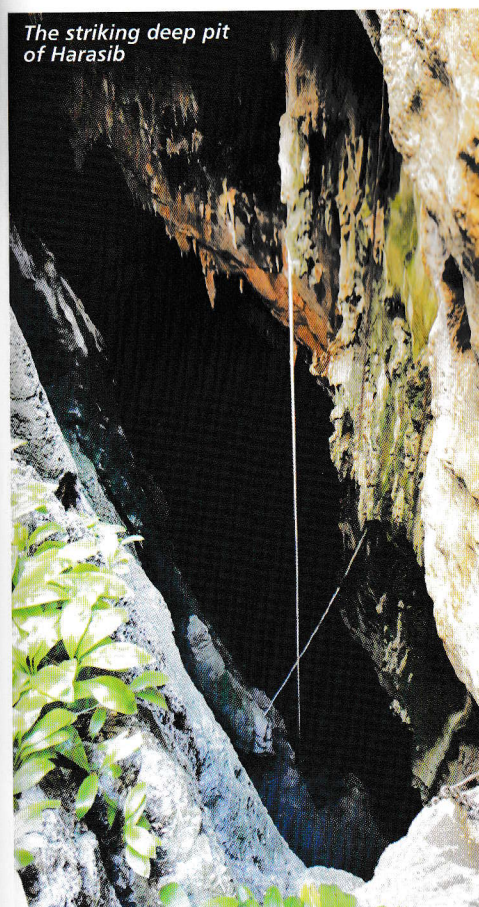
Our exploration chapter of Namibian caves and sink-holes is closed for now. Back to Ghaub Guestfarm, we recover from our emotions. A dip in the cool waters of the swimming pool and a cold beer on the lawn, will do the trick!

**Pierre Constant has been leading trips to Namibia for over 20 years. He will organize a dive trip there in October 2014.**

Contact: [calaolife@yahoo.com](mailto:calaolife@yahoo.com)  
[www.calaolife.com](http://www.calaolife.com)



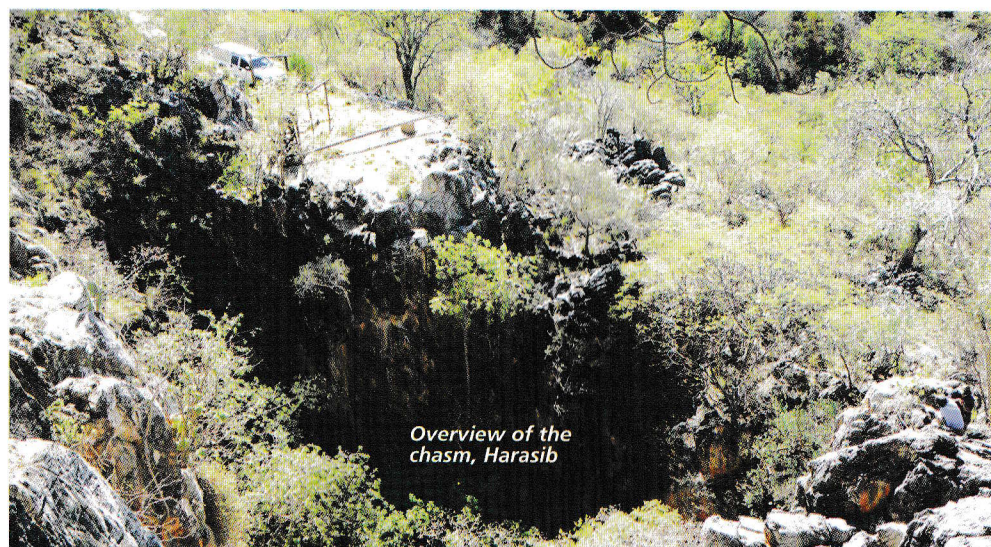
*Tetsuaki climbing down into the top part of Harasib*



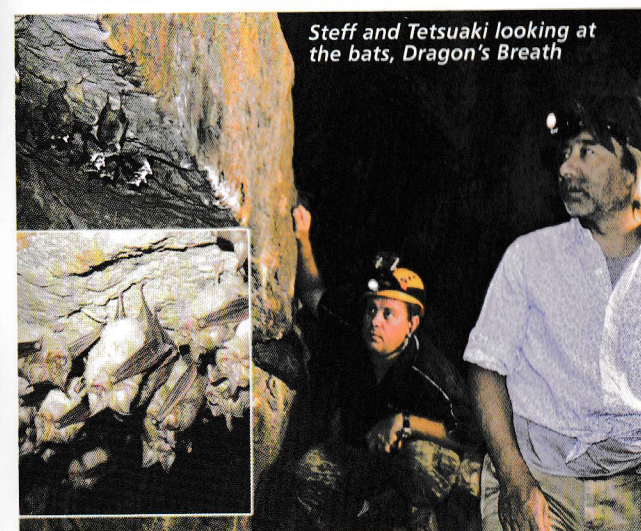
*The striking deep pit of Harasib*



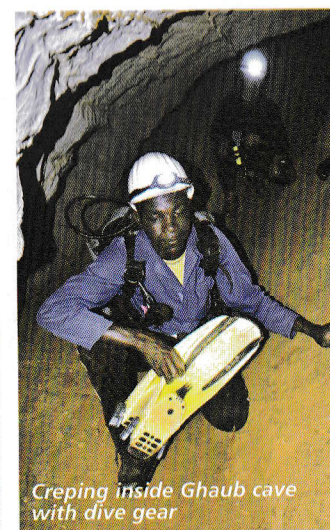
*Ladder down into Dragon's Breath entrance*



*Overview of the chasm, Harasib*



*Steff and Tetsuaki looking at the bats, Dragon's Breath*



*Creeping inside Ghaub cave with dive gear*



# a Slovakian Gem

By Peter Buzzacott

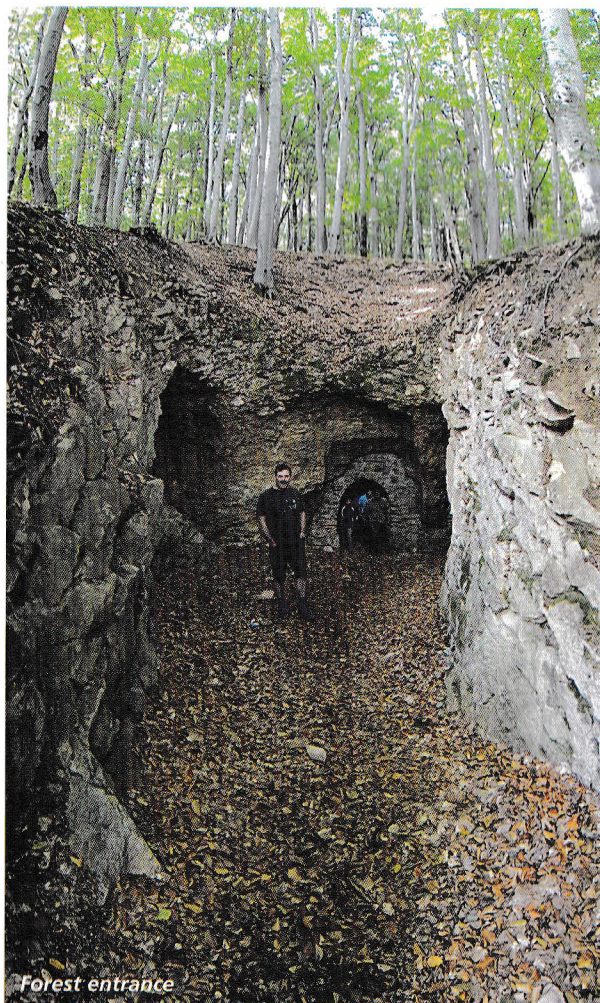
***When I asked a mate about diving underground in Slovakia he suggested a road trip spanning the country, starting with a talk about diving science and Australian cave diving near the capital, Bratislava.***

We met near the venue in time for Miro to give us a guided tour of the city. Though not as famous as Vienna it was nonetheless where Mozart played as a child and Habsburg Kings were crowned in days

gone by. Both the castle and the cathedral in the centre reflect this. Coincidentally there was a Slovakian cultural festival taking place so we were bathed in lively Slovakian folk music and surrounded by people in traditional costume. In the evening around 20 local technical divers gathered in a former wine cellar beneath a popular restaurant, we set up the projector and I spoke about a few diving medicine experiments I've taken part in, followed by a slideshow on the Nullarbor. Miro then spoke about the current direction of decompression research and, in particular, the three and a half million euro series of diving experiments we are both engaged in at European universities.

The next morning began with a leisurely breakfast and by 10am our road-trip started. Open, rural countryside gave way to forests, we passed through small and picturesque villages beneath the Tatra mountains and by the end of the day we had arrived at our mountain lodge. This was a highlight for me as I'd dived caves in this range two years ago from the Polish side and now it felt as though I was continuing my cave diving odyssey across Eastern Europe. We ate traditional Slovakian meals in the nearby tavern (I had the deer, it was perfect), hit the hay early and rendezvoused at dawn. Our first dive, the Dubnik Opal Mine, was not far away.

Located in the foothills this traditionally hand-carved mine is rumoured to be one of the oldest in Europe. Around the entrance there are countless large mounds of tailings which local Gypsies



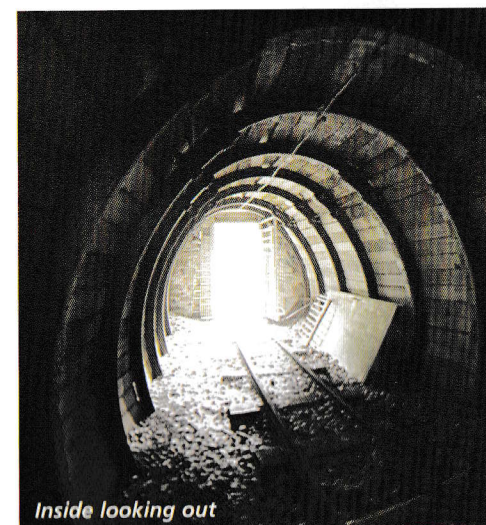
Forest entrance



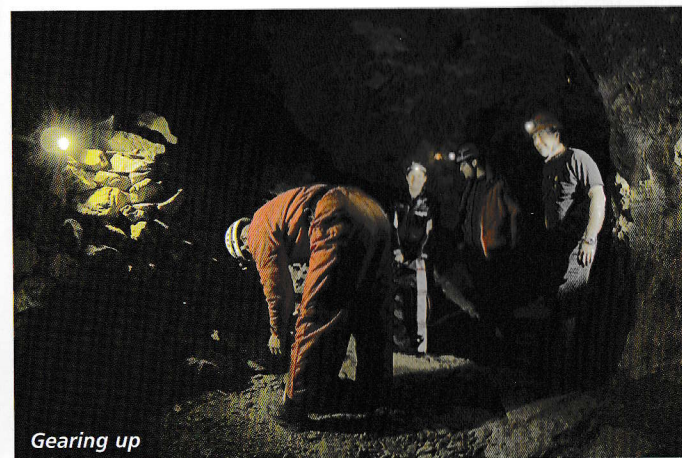
Tailings

are known to pick through in search of missed gems. We carried our kit through 600m of classical intimate passage and deposited it by the wooden stairs leading down into the water. Four oil-filled miner's lamps completed the scene beautifully, it was like a Hollywood movie set. Quietly we geared up. The crew I was a guest of are highly active in DIR Slovakia so we were all diving Hogarthian, although I was actually using a Dive Rite Nomad instead of a metal backplate because I would be sidemounting in Budapest next.

Our plans were clear and we'd pored over a map after dinner the night before. We stepped down into the four degree water, clipped our stages on and then it was time to go. From the very start this cave is special. Large carved pillars of stone support the roof and our lights refract around them in the lighter places. Elsewhere the rock is so dark even



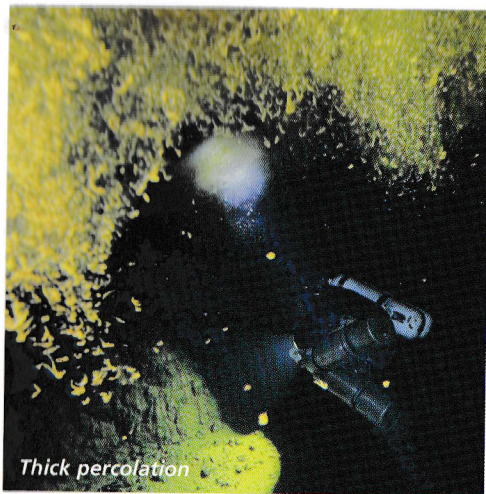
Inside looking out



Gearing up

our most powerful lamps fade to nothing in a surprisingly short distance. In one particular passage we had discussed over dinner, large flakes of orange silt began raining down on me as I followed Peter Kubicka, his exhaled bubbles scouring the ceiling above us. I knew it must be even worse for Fero who was last in our single file, so I picked up the pace and closed the gap behind Peter K. This immediately improved the visibility, (for me anyway). We



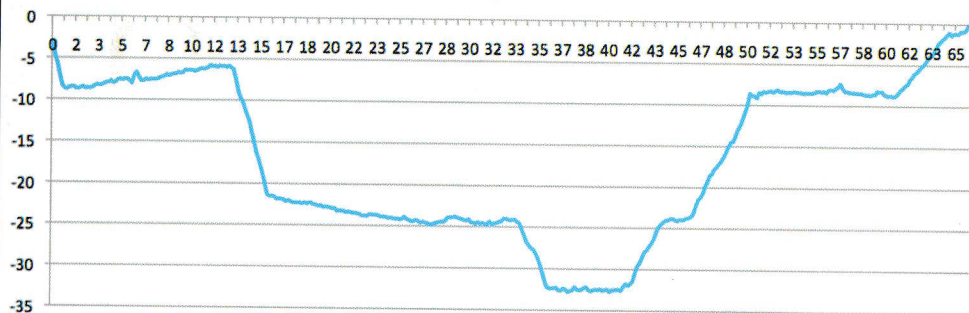


visited the top of a large elevator shaft before gliding weightless down flights of carved stone stairs. Down and down we slowly flew, perfectly poised in the midst of each passage and once again I mentally patted myself on the back for having the skills it takes to relax and really enjoy this experience. My

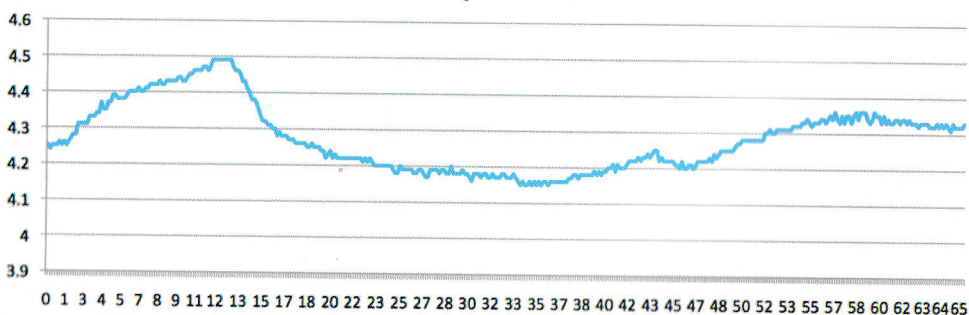
trim was fine, breathing easy and, although by now we had been swimming for around 45 minutes, I was happy with the world. Peter indicated the bottom of the elevator shaft and at a little over 30m deep I was starting to earn some deco. I'd finished my first stage of EANx32 and had switched to my second so we signalled our status to each other, agreed the turn, then we circled a large stone pillar and Fero led us out. Knowing these may be my last minutes in this particular mine I burned the view into my brain. My eyes and nasal passage were also finding the acidity in here a refreshing experience.

I'd described my Nullarbor water temperature research to the guys and as a pilot trial we were all wearing a logger each during this dive. Interestingly the temperature rose steadily to 4.5°C as we started the dive along an upper level before levelling off at 4.1°C in deeper water, but this climbed +0.1°C at around the elevator shaft so it is possible that groundwater is entering the mine somewhere around here. This is where I would start looking anyway, there and definitely at the end of the first passage.

Depth

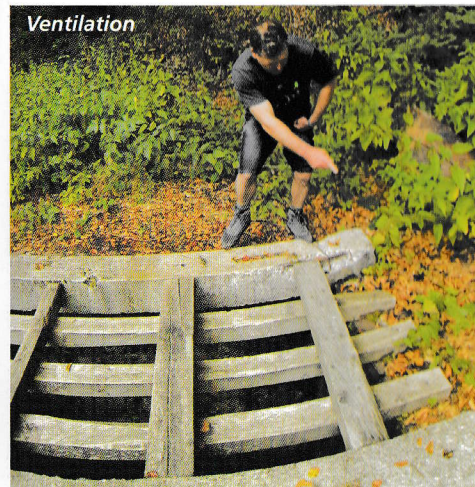


Temperature

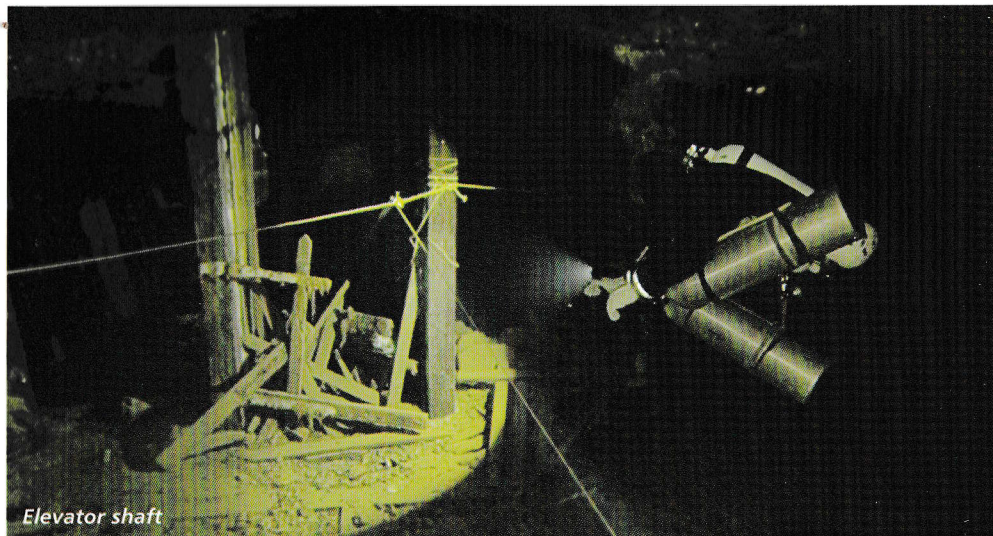


We ascended the stone stairs and approached a T. The way out was marked to the left but Peter led us straight on into it regardless. I was feeling cool by

now and shot Fero a "Question?" signal but he just replied with a "watch Peter" so I did and soon we reached the end of this blind passage. Peter had described this to me during the briefing but only now I recalled what was happening. I was glad he wasn't taking me on another 45 minute tour, that's for sure. Fero led us out, then we surfaced inside the







Elevator shaft

half-air half-water part of the mine with still maybe 100m to go before reaching the stairs out of the water, but the line continued on right till the exit, not just to the nearest air. A small point but, in my opinion, a potentially important one if there is the possibility that a diver might surface disoriented while still underground and waste precious heat reserves searching for the exit, such as you find in other mines.

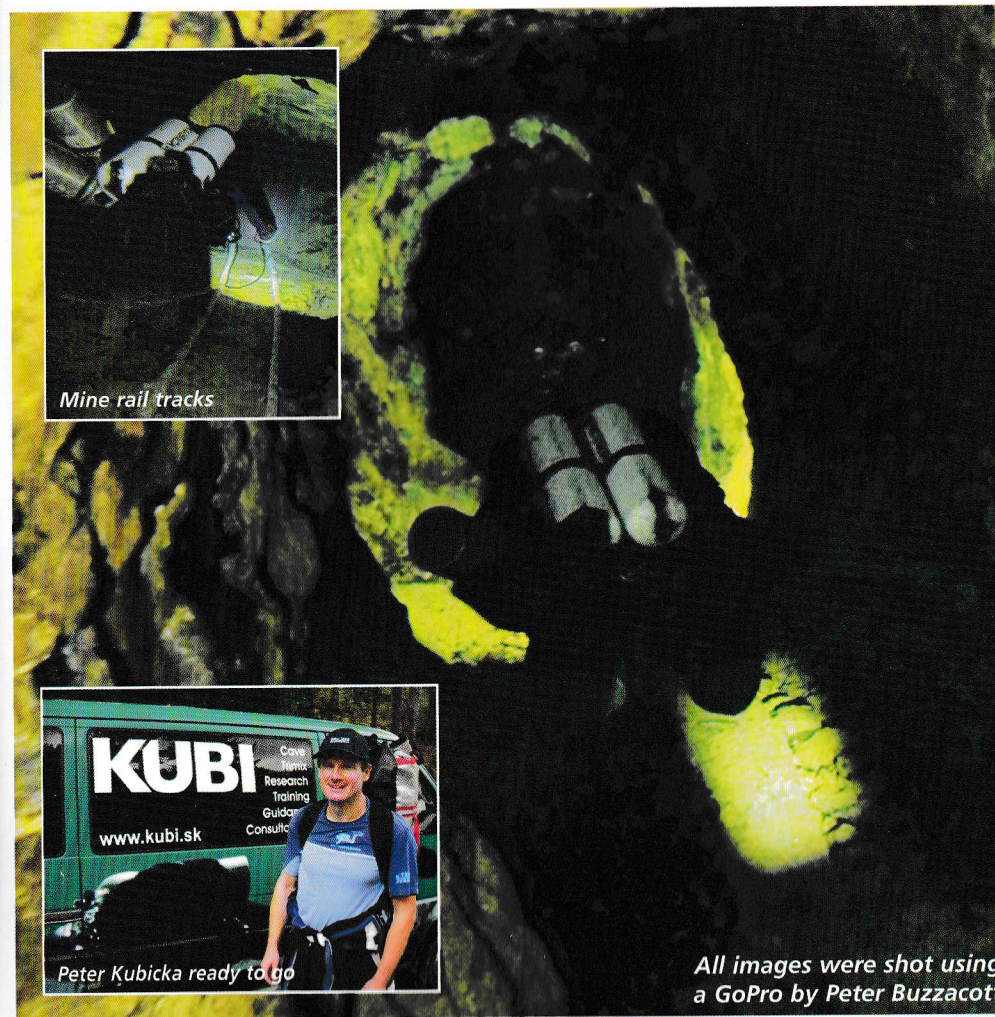
We humped our gear the 600m out to sunlight, where I discovered that all my brass was shiny. Outside we met some local gypsies and they were kind enough to discuss the history of the various interconnected mines that form this extensive and complex system. We saw foundations of centuries old miner's huts, big ventilation shafts in the forest floor and we wondered aloud if it would be possible to access the water via one in particular and to head back towards the end of the line. The DIR team in Slovakia have an enviable playground here. I wish we had an opal mine like this in West Australia.

We re-packed the cars and headed west, towards the Hungarian

border and a thermal-spring cavern called Tornala, but that in itself is a story for another day. I shook hands goodbye with my new and dear Slovakian friends. I do not think I could have snagged more hospitable hosts and I sincerely hope one day I can repay their unfettered generosity by showing them our Australian caves. Slovakia, you rock!



DEDIČNÁ STÓLNA VILIAM  
Banské pole Libanica  
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Odišlené pri príležitosti 10. výročia obnovenia banského diela  
organizáciou Opákové bare Dubník a.s.  
Sponzorovaný venoval  
Peter Semrad



Mine rail tracks



Peter Kubicka ready to go

All images were shot using a GoPro by Peter Buzzacott

## Come stay at the Divers Church, Kongorong

The Huge open plan living room and kitchen is warmed by a wood burning stove with all the cooking appliances you could ever need.



- Several sofas, LCD television, DVD, Stereo
- Bunks for 10, 1 double upstairs
- Private double downstairs
- Doonas and pillows supplied
- 2 spacious bathrooms
- Drying areas - indoor and out
- Compressors welcomed
- Plenty of parking
- Gas BBQ
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www.debwilliams.com.au \$30 pp per night.



## Naia: 12,500-Year-Old Skeleton Sheds Light on First Americans

The well-preserved, genetically intact skeleton of a teenage girl who lived about 13,000-12,000 years ago in what is now Mexico is helping resolve a long-standing question of the link between first Americans (Paleoamericans) and modern Native Americans.

A team of science divers led by Alberto Nava Blank from Proyecto de Espeleología de Tulum discovered the skeleton along with remains of giant ground sloths, gomphotheres, saber-toothed cats and many other extinct animals deep inside a submerged chamber in the Sac Actun cave system in the eastern Yucatan Peninsula, Mexico, in 2007. They named the girl Naia and the location 'Hoyo Negro' (Black Hole) because of the hole's vast impenetrable darkness. The pit, described as a deep, massive chamber 61 meters in diameter, was so vast it absorbed all visible light from powerful underwater lights that could not see the other side of the chamber.

Now, a team of scientists led by Dr Thomas Stafford Jr. from Aarhus University has accurately determined the Naia's age. "Individuals from 9,000 or more years ago have morphological attributes distinctive from later Native American peoples. What we have here is the unique combination of an adolescent Paleoamerican skeleton with a Native American DNA haplotype," said Prof Douglas Kennett of Pennsylvania State University, a co-author of the paper published in the journal Science.

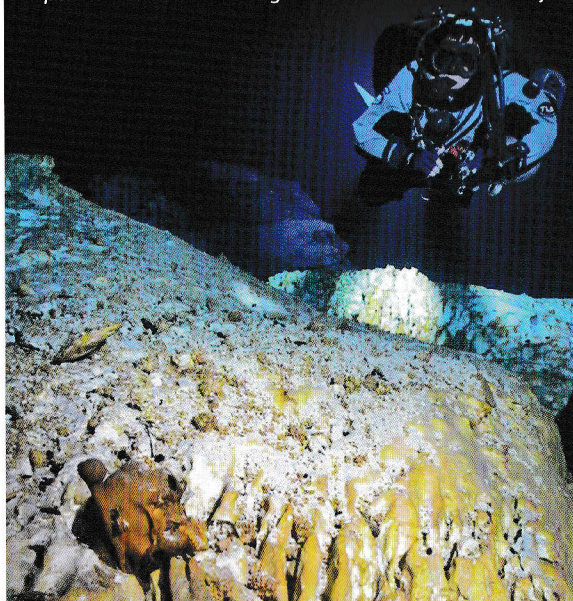
"The challenge, to date, has been finding a fossil of an adult complete enough to do the morphology work, preserved enough to have mitochondrial DNA, while at the same time having appropriate material for dating. Naia, the most complete human skeleton found, meets those requirements," said co-author Dr Yemane Asmerom from the University of New Mexico.

After traditional and well accepted direct-dating methods failed because the bones were mineralized from long emersion in warm salty water within this limestone cave system, the scientists built a geochronological framework for Naia using a unique combination of techniques.

They used global sea level rise data to determine when the cave system, which at the time Naia and the extinct animals entered was dry, filled with water. The site is now 40 meters below sea level and sea level rise would have raised the groundwater level in the cave system and submerged everything between 9,700 and 10,200 years ago. So initial estimates of the latest that animals and humans could have walked into the cave system was 9,700 years ago.

Naia was found deep below today's ground surface in a collapsed chamber connected to the surface via a web of now

Cave diver inspects the skull of Naia, a 12,500-year-old teenage girl discovered in a submerged cave on the Yucatan peninsula of Mexico. Image credit: Daniel Riordan Araujo.



flooded tunnels. Because the caves are limestone, mineral deposits continued to form while the cave was largely dry. The researchers noticed accumulations of calcium carbonate which could be accurately dated using the uranium thorium method. Because these drip water deposits formed on top of Naia's bones, their date must occur after she fell in the cave. The oldest one dated so far is 12,000 years old.

The radiocarbon dating of the DNA tooth enamel yielded a maximum age for Naia of 12,900 years ago.

"Unfortunately, we can't rule out that the tooth enamel is contaminated with secondary carbonates from the cave system, but we removed potential contaminants using standard techniques," Prof Kennett said.

"We consider this a maximum age and when combined with the uranium thorium dates from the adhering speleothems, we argue that the skeleton dates between 12,000 and 13,000 years ago. Well placed as a Paleoamerican."

Naia's skull shape does not look like those of Native Americans, but the Beringian-derived mitochondrial DNA D1 haplogroup directly links her to the modern Native peoples of the Americas.

This is consistent with the hypothesis that her ancestors' origins were in Beringia, a now partially submerged landmass including parts of Siberia, Alaska and the Yukon.

Early humans moved into this area from elsewhere in Asia and remained there for quite some time.

During that time they developed a unique haplotype that persists today in Native Americans. Genetically, Paleoamericans have similar attributes as modern Native Americans even if their morphology appears different.

Source: [cavingnews.com/cave-diving](http://cavingnews.com/cave-diving)

## Phantom Springs Cave Becomes Deepest Underwater Cave in the U.S.

An early January expedition to explore Phantom Springs Cave in Texas saw divers hit a depth of 140.8 meters (462 feet), making it the deepest underwater cave system known in the United States.

Following the success of the 2012 expedition, which unexpectedly extended the maximum depth of Phantom Springs Cave from 24 meters (79 feet) to 72 meters (237 feet), a hand-picked group of the United States' best underwater cave explorers assembled in the Texas desert from January 5-11, 2013 with a goal to push it even further and deeper.

The team, composed of members who specialize cave survey, underwater high-definition videography and photography, and cave biology and science, was organized into groups, each with specific tasks.

The survey team, whose goal was to improve and update the old Grade 3 survey, spent a total of 37.7 man-hours of diving and managed re-survey and sketch a total of 1758 meters (5,769 feet) to Grade 4 survey. They also were successful in adding some 329 meters (1,080 feet) of dry survey.

Other teams kept busy setting up sediment traps, collecting water quality data, and shooting hours of high definition video and still photos both above ground and underwater.

Meanwhile, the exploration team continued from where they left off in 2012, when the cave passage rapidly dropped to the new depth of 72 meters (237 feet).

Following the steeply sloping passage, the team quickly dropped to a depth of 98 meters (320 feet) before entering horizontal tunnel at a depth of 104 meters (340 feet). After only about 61 meters (200 feet), the tunnel opened at the top of a large, deep, rectangular fracture which ran perpendicular to the passage. Although it was hard to make out the floor, it was estimated that the bottom of the fracture would be over 122 meters (400 feet) deep. A subsequent dive on January 8th revisited of the fracture and found an outgoing passage at the bottom, at a record depth of 140.8 meters (462 feet), which continued horizontally as far as their lights could penetrate. Unfortunately, encountering these extreme depths meant that continued exploration would go beyond their planned safety measures and reluctantly the divers had to return to the surface.

With the maximum depth at the bottom of the fracture reaching 140.8 meters (462 feet), Phantom Springs Cave has surpassed Florida's Weeki Wachee Springs as the deepest naturally formed underwater cave in the USA.

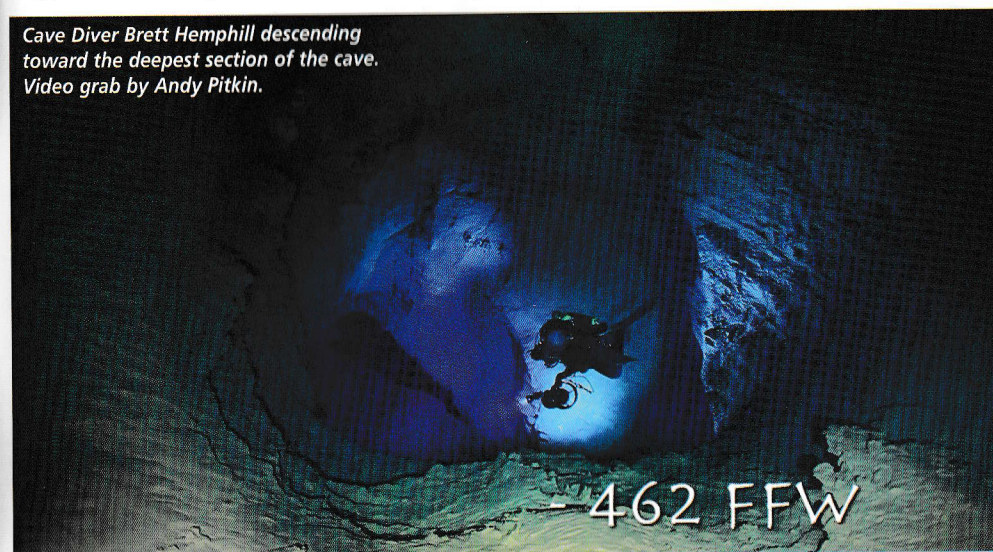
Plans are already in the works for a return expedition to push the cave further, however due to the extreme depth and distance, future exploration will require bailout rebreathers and a potentially a decompression habitat placed over 6,000 feet into the cave.

Furthermore, as Phantom Springs Cave is home to the endangered Comanche Springs Pupfish and Pecos Gambusia, access to the cave is extremely restricted and only two permits are ever concurrently issued, both of which are currently assigned until at least 2015.

For the complete Phantom Springs Cave 2013 expedition report, visit the ADM Exploration Team website.

Source: [cavingnews.com/cave-diving](http://cavingnews.com/cave-diving)

Cave Diver Brett Hemphill descending toward the deepest section of the cave. Video grab by Andy Pitkin.





# 'The Church' Accommodation

*In February 2002 while cruising around the district looking at real estate I stumbled across St. Michaels's Catholic Church in Kongorong with a "For Sale" sign out the front. A few quick phone calls, inspections, meetings with the Council and with local plumber an offer to purchase was accepted by the local Church committee and the journey to create the Cave Diving Accommodation in Kongorong was underway. The final church service was conducted, the pews were removed and at Easter 2012 the renovations commenced.*

We opened for business on 1 July 2002 and since then many new and experienced divers have made this their accommodation of choice while visiting the South East Caves, Caverns and Sinkholes.

Kongorong is a small township approximately 30 minutes out of Mt Gambier – close to most of the sinkholes and only a short drive from Pines, Fossil and Tank Caves. The huge open plan area is a warm and cosy place to relax after diving or whilst undertaking the theory components of the many courses conducted each year.

There is a large table outside which makes an ideal gear configuration spot. Rebreathers are often assembled in this area while relaxing and enjoying a barbeque or meal. Being surrounded by paddocks you are welcome to run compressors in the car parking area without fear of disturbing the neighbours. There is plenty of room to park cars and trailers on the property.

With a mixture of bunkroom and a couple of double rooms up to 14 people can easily be accommodated.

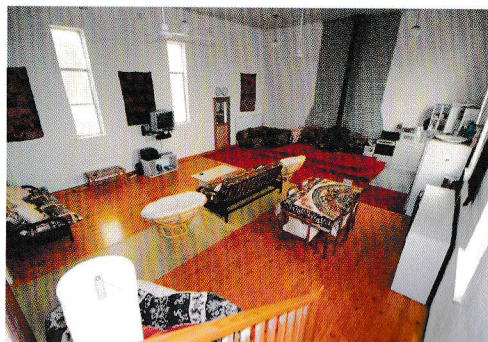
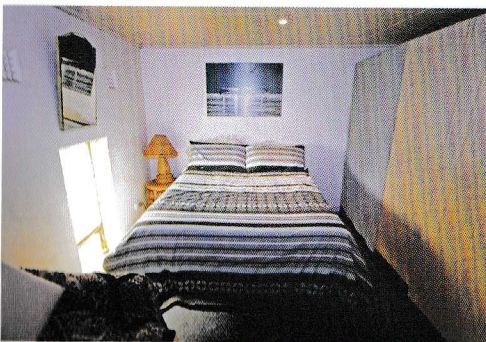


All beds have pillows and doonas supplied – you need to bring your own sheets or sleeping bag and towels. The upstairs sleeping area is very warm in winter. The Church is heated by a wood burning heater and also has reverse cycle heating and cooling. The small kitchen area is well equipped and there is a large gas BBQ also.

The local footy club a short walk down the road has meals and bar facilities on home footy games – no need to drive to the pub, and a good chance to say hi to some of the locals. You'll probably find our good mate Normie manning the bar.

## For information or to make a booking:

Deb Williams 0419 882 800  
deb@bbkk.com.au  
www.debwilliams.com.au



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Deep Cavern Cave Adv. Cave

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Yes Yes



# CDAA SITE ACCESS - [www.cavedivers.com.au](http://www.cavedivers.com.au)

Remember: Access is a privilege, not a right. Please be considerate of landowners wishes.  
CN = CAVERN S = SINKHOLE C = CAVE AC = ADVANCED CAVE

| SITE                    | LEVEL     | OWNER                                                                                                               | ACCESS DETAILS                                                                                                                                                                                                                                                                                                                                |
|-------------------------|-----------|---------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>MT. GAMBIER - SA</b> |           |                                                                                                                     |                                                                                                                                                                                                                                                                                                                                               |
| Ewens Ponds             | Nil       | DEWNR -<br>P.O. Box 1046<br>Mt Gambier 5290                                                                         | Groups of 6 or more, phone/mail to Dept. for Environment, Water & Natural Resources (DEWNR). Smaller groups, no need. (08) 8735 1177 Fax: (08) 8735 1135                                                                                                                                                                                      |
| Gouldens                | CN        | DEWNR                                                                                                               | <b>General Diving:</b> Divers to contact DEWNR and notify of date and site to be dived.<br>Please make requests by phone or fax only.                                                                                                                                                                                                         |
| 2 Sisters               | CN        | DEWNR                                                                                                               | Divers must have the correct CDAA diving endorsement for the site and carry current financial CDAA membership card.                                                                                                                                                                                                                           |
| Fossil                  | C         |                                                                                                                     | The diver must have signed an indemnity with DEWNR before access is permitted and original copy must be received by DEWNR prior to diving.<br><b>Training:</b> The Instructor is to notify DEWNR of the date the sites are needed and to forward signed indemnities from each student and their temporary card number/ membership number.     |
| Piccaninnie Ponds       | S         | DEWNR                                                                                                               | Permit holders by phone or fax. Be aware of delicate vegetation. NOTE: Members can login to <a href="http://www.cavedivers.com.au">www.cavedivers.com.au</a> and download pre-populated indemnity forms.<br><b>NOTE: Divers should renew their Piccaninnie Ponds indemnities at least 2 weeks prior to the intended dive date.</b>            |
| Horse & Cart Tea Tree   | CN        | Dale & Heather Perkins                                                                                              | At least 1 week prior by email: <a href="mailto:dhperkins@bigpond.com">dhperkins@bigpond.com</a> or phone (08) 8738 4083.                                                                                                                                                                                                                     |
| Little Blue             | S         | District Council of Grant                                                                                           | Permission not required - must carry card.                                                                                                                                                                                                                                                                                                    |
| Allendale               | C         | District Council of Grant                                                                                           | Obtain key from Lady Nelson Tourist Information Centre.                                                                                                                                                                                                                                                                                       |
| Ela Elap                | S         | Dean & Carol Edwards                                                                                                | Key available from Simon Livingstone at the Bellum Hotel.                                                                                                                                                                                                                                                                                     |
| One Tree                | S         | Mr. Peter Norman                                                                                                    | Visit the house before diving. If no one is home - no dive!                                                                                                                                                                                                                                                                                   |
| Dave's Cave             | C         | <b>Forestry Sth. Australia</b><br>Phone: (08) 8724 2876<br>Fax: (08) 8724 2870                                      | Maximum 3 divers all weekends between May & November inclusive (check and update on CDAA website).                                                                                                                                                                                                                                            |
| Hells Hole Pines        | S<br>C/AC | or book on-line via the CDAA website to arrange permit.                                                             | At least 4 divers in group - 1 with previous site experience.<br>Unrestricted days or numbers - Cave rated divers must not enter Penetration sections (stop signs)                                                                                                                                                                            |
| Mud Hole                | C         | email: <a href="mailto:conservationandrecreation@forestrysa.com.au">conservationandrecreation@forestrysa.com.au</a> | Unrestricted days or numbers.                                                                                                                                                                                                                                                                                                                 |
| Nettle Bed              | AC        |                                                                                                                     | Open every weekend. Maximum of 4 divers per weekend undertaking 1 dive only (check an update on CDAA site).                                                                                                                                                                                                                                   |
| Stinging Nettle Cave    | AC        | <b>Forestry Sth. Australia</b>                                                                                      | Open every w'end max 3 divers per day undertaking 1 dive per day (check updates on CDAA website).                                                                                                                                                                                                                                             |
| Iddlebidy               | AC        | <b>Forestry Sth. Australia</b>                                                                                      | Open every Saturday max 4 divers, 1 dive only (check an update on CDAA website)                                                                                                                                                                                                                                                               |
|                         |           |                                                                                                                     | <b>IMPORTANT:</b> Divers must advise Forestry SA of their online booking. Collect permits from the Forestry Office, RHS of driveway to Carter Holt, Jubilee Hwy, Mt Gambier.                                                                                                                                                                  |
|                         |           |                                                                                                                     | <ul style="list-style-type: none"> <li>No diving on Total Fire Ban Days.</li> <li>Permit also required to run compressors during fire danger season.</li> <li>Keys for Hells Hole, Nettle Bed, Iddlebidy and Stinging Nettle Cave can be obtained from Lady Nelson Visitor Ctr on presentation of Forestry SA permits.</li> </ul>             |
| Kilsby's                | S         | Landowner leased to CDAA                                                                                            | Refer to CDAA website. Twin Tanks - Maximum depth of 40 metres on Air. Meet at gate of property at 8.55am or 12.55pm. Book on-line at <a href="http://www.cavedivers.com.au">www.cavedivers.com.au</a> or contact Craig at <a href="mailto:kilsby@cavedivers.com.au">kilsby@cavedivers.com.au</a><br><b>No diving on Total Fire Ban Days.</b> |

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| SITE                                | LEVEL   | OWNER                                                                       | ACCESS DETAILS                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------------|---------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>MT. GAMBIER - SA (continued)</b> |         |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                |
| Shaft                               | S/C     | Generally open one weekend a month.<br>Trevor Ashby                         | For access dates go to the CDAA web page. 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 CDAA Regulations. Divers applying to dive in the Shaft for the first time must document dive experience with twin tanks.<br><b>Download form off website.</b> |
| Engelbrechts - East - West          | C<br>AC | Mt Gambier Council<br>Lessee: Ph: 08 8723 5552<br>Owner: John & Sue Douglas | 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                       | AC      | Millicent Council                                                           | Download Indemnity from Web Page. Access available for experienced Penetration divers only. Access agreement must be signed prior to diving. Allow 4 wks for indemnity process.                                                                                                                                                                                                                |
| Tank Cave                           | AC      | CDAA                                                                        | Access Manager: David Fielder.<br>Email: <a href="mailto:tankcave@cavedivers.com.au">tankcave@cavedivers.com.au</a>                                                                                                                                                                                                                                                                            |
| Baker's Cave                        | C       | Janet & Bruce Saffin                                                        | Access Manager: Matthew Skinner.<br>Email: <a href="mailto:bakerscave@cavedivers.com.au">bakerscave@cavedivers.com.au</a><br>Climbing equipment required.<br>One member must have previous dive experience at site.                                                                                                                                                                            |
| <b>NULLARBOR - WA</b>               |         |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                |
| Cocklebidy                          | C/AC    | DEC                                                                         | 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.<br>Phone: (08) 9083 2100 Fax: (08) 9071 3657.                                                                                                                                                            |
| Murra El Elevyn                     | C/AC    | DEC                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                |
| Tommy Grahams                       | C       | DEC                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                |
| Burnabee                            | AC      | Department of Lands, WA                                                     | Apply in writing or email for permission to dive at least four weeks in advance of trip.                                                                                                                                                                                                                                                                                                       |
| Olwolgin Cave                       | AC      | Department of Lands, WA                                                     | Miss Shannon Alford,<br>Email: <a href="mailto:Shannon.alford@lands.wa.gov.au">Shannon.alford@lands.wa.gov.au</a><br>Phone: (08) 6552 4661 Fax: (08) 6552 4417<br>P.O. Box 1143, West Perth WA 6872.                                                                                                                                                                                           |
| Weebubbie                           | S/C     | Department of Lands, WA                                                     | A site indemnity form must be filled out for each visit to the site. Diving permission acknowledged by official letter from Land Owner.                                                                                                                                                                                                                                                        |
| <b>WELLINGTON CAVES - NSW</b>       |         |                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                |
| Limekiln (McKavity) cave            | C/AC    | Wellington Caves                                                            | Both Penetration and Cave Level are being accepted for this cave depending on its water level at the time.<br>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) cave              | C       | Wellington Caves                                                            | Affected by high CO <sub>2</sub> levels during Summer/Autumn. Access is co-ordinated with the Wellington Caves management by Greg Ryan - Email: <a href="mailto:gjryan@gmail.com">gjryan@gmail.com</a> . Phone (02) 9743 4157.                                                                                                                                                                 |
| Rum Jungle Lake                     | S       | Coomalie Community Govt Council                                             | Unrestricted access currently exists - Please refer to website.                                                                                                                                                                                                                                                                                                                                |
| Burrinjuck Dam                      | S/C/AC  | NSW Parks & Wildlife                                                        | Please refer to website.<br>There are no specific access arrangements.                                                                                                                                                                                                                                                                                                                         |





*Roger Taylor silhouetted in Kilsby's*  
*Photo by Toby Passauer*