



C.D.A.A. Newsletter

No. 127 - MARCH 2014

THIS ISSUE...

Great stories from world-wide destinations...

*Australia, Thailand, France, Italy
and Madagascar*

CAVE DIVERS ASSOCIATION OF AUSTRALIA

(Incorporated in South Australia)

Print Post No. PP 381691/00020

SENTINEL

Tec Training

In Mt Gambier

TDI Advanced Nitrox
TDI Decompression Procedures
TDI Extended Range & Trimix
TDI Sidemount & Cave Sidemount
TDI CCR Cave - All three levels
TDI CCR Courses - Various units
TDI CCR Helitrox & Mixed Gas
PADI Tec 40, 45, 50 & 65 Trimix
PADI Tec Sidemount

If you hold a current CDAA Deep Cavern Certification and are looking to complete one of the above courses, you can now do these courses in Mt Gambier.

Benefits include:

- No boat dives
- No Swell or Current
- No bad weather to stop completion of courses
- Most courses can be completed over a long weekend
- Theory and confined water sessions can all be done in the Mount
- Minimum of two students to run courses
- Flexible dates to suit you and your buddy or group
- Discount for groups of 4

For more information please contact Rubens Monaco on

0413-429-533 or 03 5984-1799

Email: info@idcscuba.com.au Course Information: www.idcscuba.com.au

TECDIVEGEAR

Australia's most competitive technical diving equipment online shop

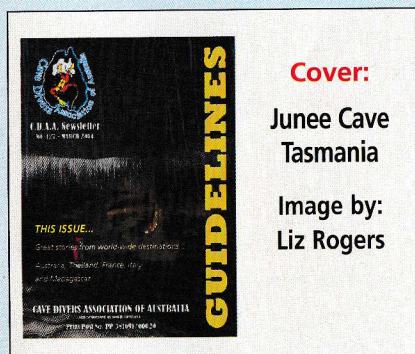
www.tecdivegear.com.au

CONTENTS

Editorial - Rowan Stevens	5
National Committee Update	8-9
Instructor List	44
Site Access	45

Articles...

Olowgin Cave Revisited Part 2 - Paul Hosie	10-15
Cave Diving Thai Style - Linda Claridge	16-20
Sth France & Nth Italy - Peter Buzzacott	22-29
Mahafaly Wonders - Pierre Constant	30-37
A happy Reunion - Peter Buzzacott	38-42



CAVE DIVERS ASSOCIATION OF AUSTRALIA

ABN 65 062 259 956

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

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

All articles and submissions shall automatically constitute an expressed warranty by the contributor that the material is original. We assume no responsibility for unsolicited material. Articles may be reprinted in part or in full in other magazines as determined by the CDAA and authors provide full permission. Private advertising for caving and diving equipment may be advertised free at the discretion of the Editor. Opinions expressed in GUIDELINES are those of the individual authors and are not necessarily those of the C.D.A.A.

CONTACT LIST

Please contact the most relevant person or, if unsure write to:
C.D.A.A. P.O. Box 544 Mt Gambier SA 5291 www.cavedivers.com.au

NATIONAL DIRECTOR - John Vanderleest
Email: national@cavedivers.com.au Mobile: 0419 775 771

STANDARDS DIRECTOR - Linda Claridge Mobile: 0408 052 070
Email: standards@cavedivers.com.au AH: (03) 5565 8793

Quality Control Officer - Position Vacant
Email: quality@cavedivers.com.au

Safety Officer - Vacant

Search & Rescue Officer - Richard Harris
Email: sar@cavedivers.com.au Mobile: 0417 177 830

Instructor Records & Materials - Deb Williams
Ph: 0419 882 800 Fax: 03 5986 3179 Email: instrecords@cavedivers.com.au

BUSINESS DIRECTOR - Helen Higgins
Email: business@cavedivers.com.au Mobile: 0411 720 440

Treasurer - Tammy Beattie Email: treasurer@cavedivers.com.au

CDAA Products - Andrea McIntyre
Email: products@cavedivers.com.au Mobile: 0407 332 306

SITE DIRECTOR - Grant Pearce
Email: site@cavedivers.com.au Mobile: 0438 833 103

Kilsby's Access - Craig Larkin
Email: kilsby@cavedivers.com.au Mobile: 0418 821 191

Tank Cave Access - Noel Dillon
Email: tankcave@cavedivers.com.au Mobile: 0407 530 103

Shaft Access - Peter Horak
Email: shaft@cavedivers.com.au Mobile: 0403 349 122

PUBLICATIONS & RECORDS DIRECTOR - Rowan Stevens
Email: publications@cavedivers.com.au Mobile: 0417 550 509

Records Officer (Membership matters) - Rowan Stevens
Email: records@cavedivers.com.au Mobile: 0417 550 509

Copy Editor - Position Vacant

Guidelines - Graphics & Advertising - David Bryant
Email: guidelines@cavedivers.com.au Mobile: 0417 125 710

Webmaster - Simon Roberts Email: web@cavedivers.com.au Mobile: 0433 069 751

AREA REPRESENTATIVES

ACT: Heike Apps Email: actrep@cavedivers.com.au Ph: 0407 230 108

NSW: Vacant Email: nswrep@cavedivers.com.au

N.T.: Jeff Swann Email: ntrep@cavedivers.com.au Mobile: 0408 819 782

QLD: Vacant Email: qldrep@cavedivers.com.au

SA: Ken Smith Email: sarep@cavedivers.com.au Mobile: 0407 603 118

South-East SA - Grant Pearce Ph: 0438 833 103 Email: sesarep@cavedivers.com.au

WA: Vacant Email: warep@cavedivers.com.au

VIC: Tim Muscat Email: vicrep@cavedivers.com.au Mobile: 0422 127 802

Public Officer - Andrew Seifried Email: publicofficer@cavedivers.com.au
Mobile: 0404 275 637

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
Public Liability \$10,000,000 any one claim. Expiry: 30 September 2014.

Pine Tank Lodge

Just 5 minutes drive from the best Cave & Advanced Cave dive sites.

Lodge Features:

- Accommodates 14 divers in 7 rooms; three double bedrooms and four rooms each with two single beds.
- Two separate socialising areas
- Endless hot rainwater showers in two separate bathrooms.
- Airfills, Nitrox, Trimix, high pressure O₂
- Undercover gear drying
- Barbeque facilities

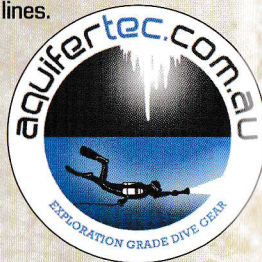
Courses:

- Deep Cavern to Cave
- Approved TDI Facility offering full range of TDI Technical Courses, Nitrox, Trimix, Deco Procedures and Extended Range.
- CCR Training KISS
- Sidemount



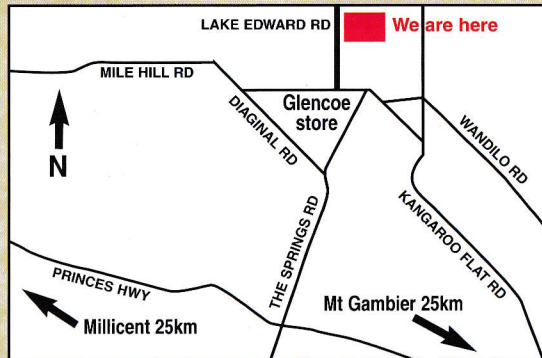
AquiferTec Australasia

- Specialist importers of Technical Cave Diving Gear.
- Bonex Long range Scooters 11-22km
- Shearwater Predator Computers.
- Contour compact video cameras and housings.
- Best prices in Australasia for the range of SANTI drysuits, undergarments and after-dive wear.
- **Sole Australasian importer for SITEC boosters.**
- **Best prices for Light Monkey HID and LED lights.**
- Armadillo Side Mount systems.
- O₂ sensors: Maxtec and Teledyne, Dive Soft trimix analysers and Oxycheq.
- 300mtr high pressure fill lines.
- Fill whips, digital gauges.
- Remote fill manifolds.
- FLEX Side Mount CCR.
- 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
Email: admin@aquifertec.com.au
Web: aquifertec.com.au



EDITORIAL

ROWAN STEVENS



Welcome to the first issue of Guidelines for 2014.

In this issue Paul Hosie concludes his article on Olwogin Cave, Linda Claridge and Gary Barclay share their cave diving experiences in Thailand while Peter Buzzacott explores Southern France, Northern Italy and Volcanic Diving at Teneriffe. Pierre Constant delights us with diving in Madagascar.

On the administrative front AGM 2014 will be held in Mt. Gambier on Saturday 18th October 2014 so lock it in before you forget. Also a number of new capabilities have been added to the web site:

- Members can now upload scanned documents to the web site.
- Instructors can renew online.
- Instructors can make card activation payments online using Direct Deposit.

Over the past 4 weeks all instructor records and tank cave indemnity forms have been scanned into the system. A new one off tank cave application form has been published and all tank cave divers are expected to fill in and upload to the web site.

IMPORTANT

From 1st May 2014 the web site and admin system will be locked down to ensure that all volunteers are complying with CDAA record keeping needs. This will manifest as follows for all members:

- Dive Bookings will only be accepted by the system if the diver has current Site Indemnity and Site application forms loaded.
- Qualification and Membership cards will only be printed if corresponding Record of Training forms are loaded into the system.
- Instructors will only be listed as active if the following current (i.e. expiry date has not passed) forms are loaded into the system: Insurance, CPR, First Aid, O₂, Ethical Conduct, Dive Medical.

You can review what scanned records the CDAA holds after you login to the web site by using the menu function 'My Scanned Records'. And avoid the rush, ensure that each of your correct paperwork is uploaded using 'Upload My Scanned Document'.

Also in this issue Nominations are being called for Life Membership and Hall of Fame – submit your today. Lastly, don't let your dive gear gather dust – get out there and start living. Until next time ...

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

CAVE DIVERS ASSOCIATION OF AUSTRALIA Inc.

Notice of 2014 Call for Nominations for Life Membership and Hall of Fame

This notice is issued pursuant to Clause 4.1.2 and Clause 5 of the Constitution and serves to call for Nominations for:

- * Life Membership
- * Hall of Fame

The Business Director must receive nominations no later than close of business Monday June 30, 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 Cres
GLEN WAVERLEY VIC 3150

Any person who has contributed extraordinary voluntary service consistent with the CDAA's aims and objectives over a number of years may be nominated to become a Life Member. Any such nomination for Life Membership must be supported by a statement detailing the nominee's achievements consistent with the CDAA's aims and objectives over a number of years. The National Committee will consider all such nominations and where a majority of the National Committee agrees that such nomination has sufficient merit, the National Committee will recommend the nomination to the membership as a motion. Such nomination to be included in the annual ballot with votes counted at the next Annual General Meeting. Motions for life membership will be carried provided 70% of votes received from members are in favour of the motion.

The National Committee will establish and maintain a CDAA Hall of Fame, which is a list of noteworthy individuals who have achieved excellence in cave diving in Australia whilst a member of the CDAA and/or contributed high levels of service to the CDAA. Any such nomination for Hall of Fame must be supported by a written statement detailing the nominee's achievements consistent with the CDAA's aims and objectives and must be seconded by no less than five current full members. Such nomination will be included in the annual ballot with votes counted at the next Annual General Meeting. Motions for Hall of Fame status will be carried provided 70% of votes received from members are in favour of the motion.

Questions may be directed to the Business Director at business@cavedivers.com.au.



Introducing the Scubapro Sidemount System

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

MARCH 2014

In this report, the National Committee wishes to start with a word of caution.

Today, we are faced with new challenges in retaining our access to the diveable caves on the Nullarbor.

Historically, access to caves and camping on the Nullarbor has been relatively easy. With sites being on Crown land, their remoteness and that true Aussie spirit of adventure, it was simply a matter of packing up and heading off. The Government was aware but not overly concerned about what and where people went.

Unfortunately, recent legal challenges surrounding the deaths of a few individuals on Crown land, has seen the WA government review their risk position. This has and is continuing to see new requirements for people wanting to access this land.

The most immediate impact to the CDAA was the implementation of a new booking and permit system for the Roe Plains and Weebubbie. Although a bit cumbersome at the moment, it was the result of several months of negotiation involving the WA Crown Solicitor.

With any new system, there is a bedding in time. And with any change that forces more controls, people don't like it. However, its not a choice and we must accept it.

Unfortunately, we still have people who believe that they have a right to access the land without permission. Others believe that they can approach the landowner(s), flash their CDAA qualifications and go direct, claiming they are diving under the umbrella of their local caving club. However, unless your caving club has negotiated access with the WA Government and has in place the risk management process required by the Crown Solicitor, it's likely that you are unwittingly compounding an already delicate situation.

The WA Departments charged with managing access are limited in their resources. The process we have

agreed between the CDAA and the Crown solicitor not only addresses their risk concerns, but minimises the workload on the Departments administering access. Doing this is how we will continue to get access. Remember that they do not only have to deal with cave divers, but all groups who want to use these lands. The more we do to help them manage, the better our chances of retaining access. However, the more work we create for them, the more likely it is that we will lose access.

So members who attempt (and some even demand) to bypass already agreed processes only create additional anxiety and work for the people in Government who are trying to help us.

SO LET US BE CLEAR – THEY ARE NOT HAPPY.

So with those words of caution now said, lets have a look at what else has been going on.

More of our historical records have been scanned and moved onto our computer. Soon you will be able view the key documents held by the CDAA under your name and more importantly, directly upload new forms.

On the training front, we have cleaned up a lot of course material and started piloting the new Cave Course Standards. We have also let go of managing the Advanced Cave Course, allowing instructors to organise their own courses. And already we have had two separate courses run, providing members with a choice of locations and instructors.

For Tank Cave, we have changed access conditions, providing all members with easier access to the site. Members can choose to be oriented with an Instructor or complete four 'Tank Cave like' dives in the past 12 months in order to gain access. And if you have enough experience in the site and an access officer is not available, you can request to become an access officer for your chosen weekend/weekdays.

Regarding the Regulations, the new draft is now in the

hands of the Constitutional Sub-Committee who will provide their feedback to the National Committee in the coming two months. It is our intention to have these Regulations out well in advance of the AGM.

We are also in the closing stages of dealing with the three diving fatalities. While not formally told, we are of the understanding that there will not be a coronial inquest. This news allows families, friends and members who have helped during or after the incidents to get some closure.

Finally, its that time of the year again when members need to decide if its their time to put up their hand to become a member of the National Committee. Doing so has its rewards. The foundational work has been done and over the next couple of years, we will see many of our aspirations come to light. For anyone thinking of standing – I could not think of a better time than now.

As always, may your drysuit remain wet on the outside.

John Vanderleest

The National Committee



John Vanderleest,
National Director



Grant Pearce,
Site Director



Helen Higgins,
Business Director



Rowan Stevens,
Publications and
Records Director



Linda Claridge,
Standards Director

Articles for Guidelines June 2014 - Deadline is May 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.

Compressors For Sale

FULLY OVERHAULED - LIKE NEW!

Models including BAUER Junior, Bauer Utilus, Cultri Sub & more!

Quick Change-over of Petrol to Electric Motors

COMPRESSORS FOR SALE:
Bauer Oceanus 4.9cfm with a 6.5 hp petrol engine, stainless steel frame and p timer.
As new, built in 2008. \$5,250.00

- Clean Air Servicing and High Pressure Compressor Repairs & Maintenance
- Bauer -Trained service Mechanic

Contact **Peter Cronin** (Seaford, VIC)

CLEAN AIR SERVICING

0409 009 149 or 03 9776 9249

Certificate No. 121206/58

Come stay at the Divers Church, Kongorong

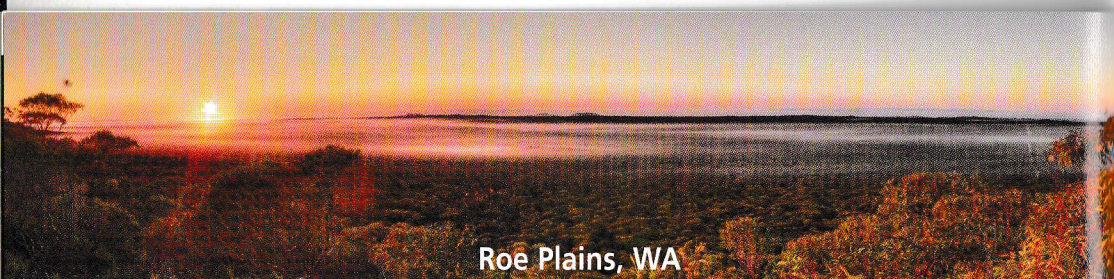
The Huge open plan living room and kitchen is warmed by a wood burning stove with all the cooking appliances you could ever need.



- Several sofas, LCD television, DVD, Stereo
- Bunks for 10, 1 double upstairs
- Doonas and pillows supplied
- Drying areas – indoor and out
- Plenty of parking
- Trellis tables for teaching/gear setup
- Large outdoor table and bench seats
- Private double downstairs
- 2 spacious bathrooms
- Compressors welcomed
- Gas BBQ
- Whiteboard

Bring 6 friends and stay for free!

E: deb@bbkk.com.au Ph: 0419 882 800
www.debwilliams.com.au \$30 pp per night.



Roe Plains, WA

OLWOLGIN CAVE - REVISITED (Part 2)

by Paul Hosie, Cave Exploration Group Western Australia (CEGWA).

Photos: Liz Rogers, Richard Harris and Chris Holman

In Part 1, (June 2013 Guidelines) I relayed the excitement of the initial discovery and exploration of 2,700m of virgin cave diving passages in Olwolgin Cave between October 2011 and Easter 2012. In this article I will bring the story up to date (November 2013) and reveal the details of discovery for what is now one of Australia's longest underwater cave systems.

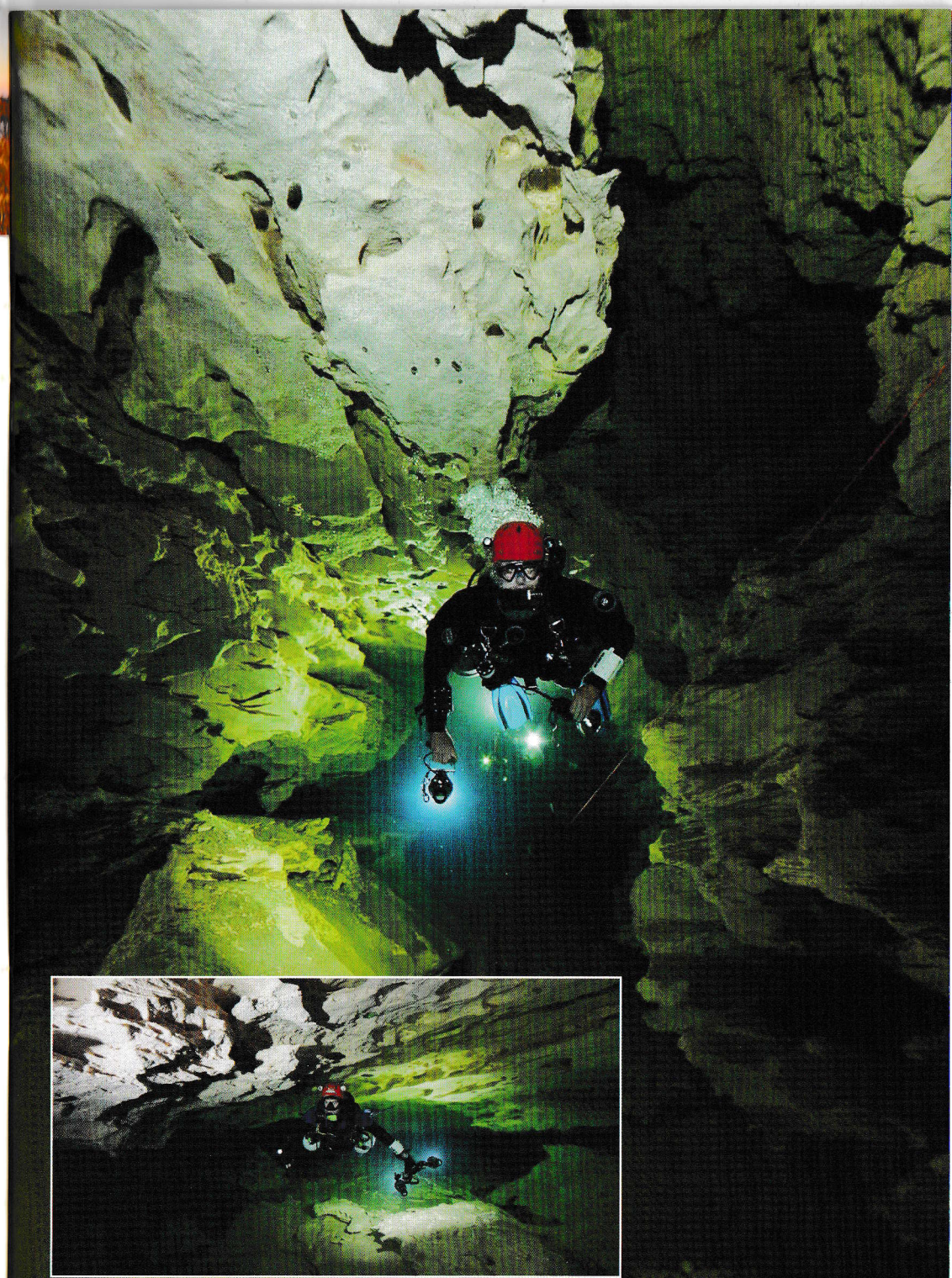
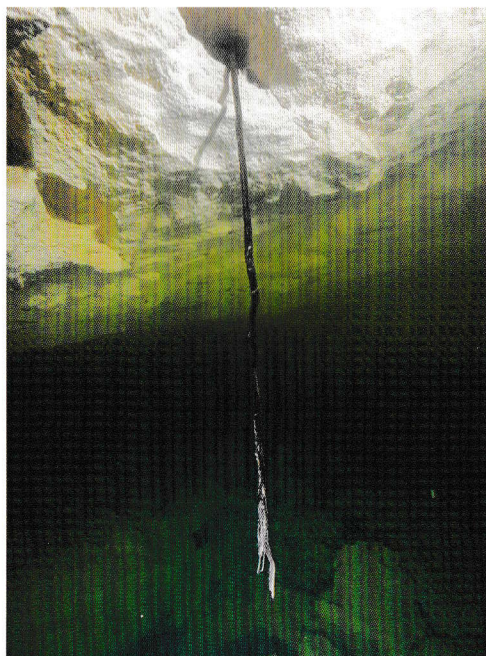
ANZAC Parade

Spurred on by the tantalizing discovery of Grand Central by Chris Edwards and Grant Pearce during the Easter 2012 trip, Alan Polini and I organised another Raid trip for four days later that month. Only an act of God would keep us away from the Nullarbor at this stage and even then, he'd have to make it a pretty good effort! Driving through the night of the 24th April, we arrived on site on Wednesday morning - the 25th ANZAC Day). We immediately wheelbarrowed everything out to the cave - scooters, cylinders, compressors, generator, food and fuel. After a set up dive to stage cylinders and scooters in the cave on the Wednesday afternoon, the cave was set for some serious diving commencing early the next morning. The aim of the first push dive was to explore Grand Central - specifically to the South West in line with the main passage development trends seen so far in the cave.

Breakthrough

We were starting to think that we had exhausted the main exploration of the cave and hopes were low that we would find a continuation to the South West. All the big tunnels at that end of the cave 'terminated' in small, low flat silty areas - generally considered to be uninviting areas for cave divers. Our next major trip was planned for Easter 2013. Once more, Alan and I

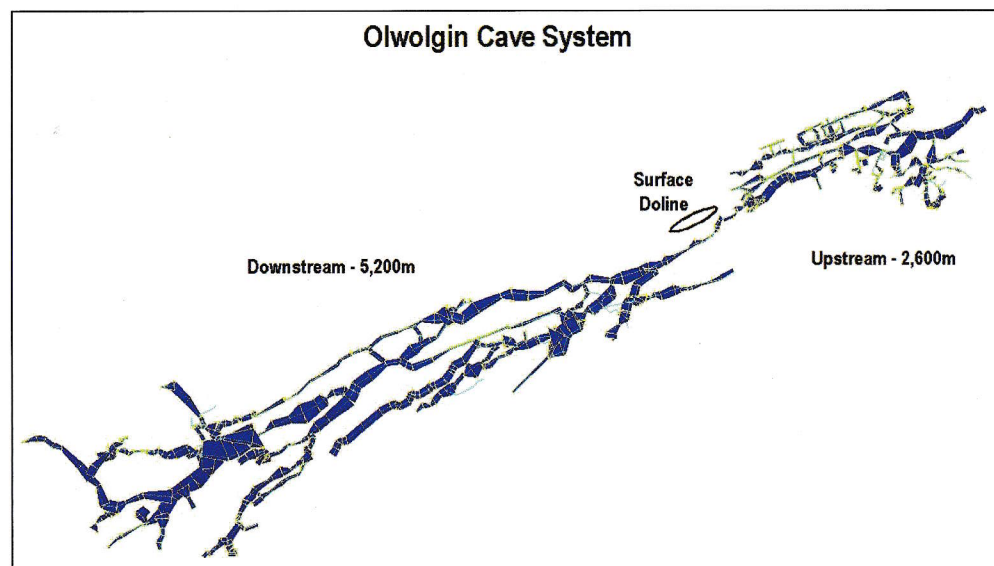
were back but with a continuation of the cave now being highly doubtful, we turned our attention to surveying the remaining line in the cave, pushing small leads and bushwalking the surrounding area for new caves to dive! The surveying helped fix some errors in the survey and a few small leads added 500m to the map. The bushwalking revealed a couple of new karst features but no new caves to dive. As Alan went back to work after four days of diving, brothers Ryan and Michael Kaczowski joined me in his place and began familiarising themselves with the cave system - Upstream and then Downstream Olwolgin.



During the course of surveying some small and silty tunnels near the end of the cave, I noted some fascinating patterns of speleogenesis that were repeated in areas of the cave separated by many hundreds of metres. These patterns helped me to re-appraise my understanding of the cave's structure and development and gave me new hope of finding a continuation to the South West. With the possibility of the cave's continuation firmly in mind, I set off on a dive to the end of the cave. Before I left, Ryan asked: "so, are you going to look at some new holes or areas to try to find an extension?" – "No, I'm going to look at old areas, but with a new attitude!" The first two hours of this dive was spent exploring & surveying 200m of small new passages near the end of ANZAC Parade which matched the expected profile but were

Mullamullang Cave. Ryan spotted a skull and full skeleton of a dingo amongst the rocks at the intersection tie off (Dingo Junction) – no doubt washed in from the surface feature we were now in the vicinity of. A large room full of thick brown silt and incredibly dense drapes of bacterial matting was briefly surveyed and checked for a surface connecting hole before being left from further disturbance. Signage has since been placed in this area asking that only divers on closed circuit rebreathers enter it as in the author's experience this room is unequalled in the bacterial deposits it contains and is an amazing but fragile spectacle worthy of future preservation.

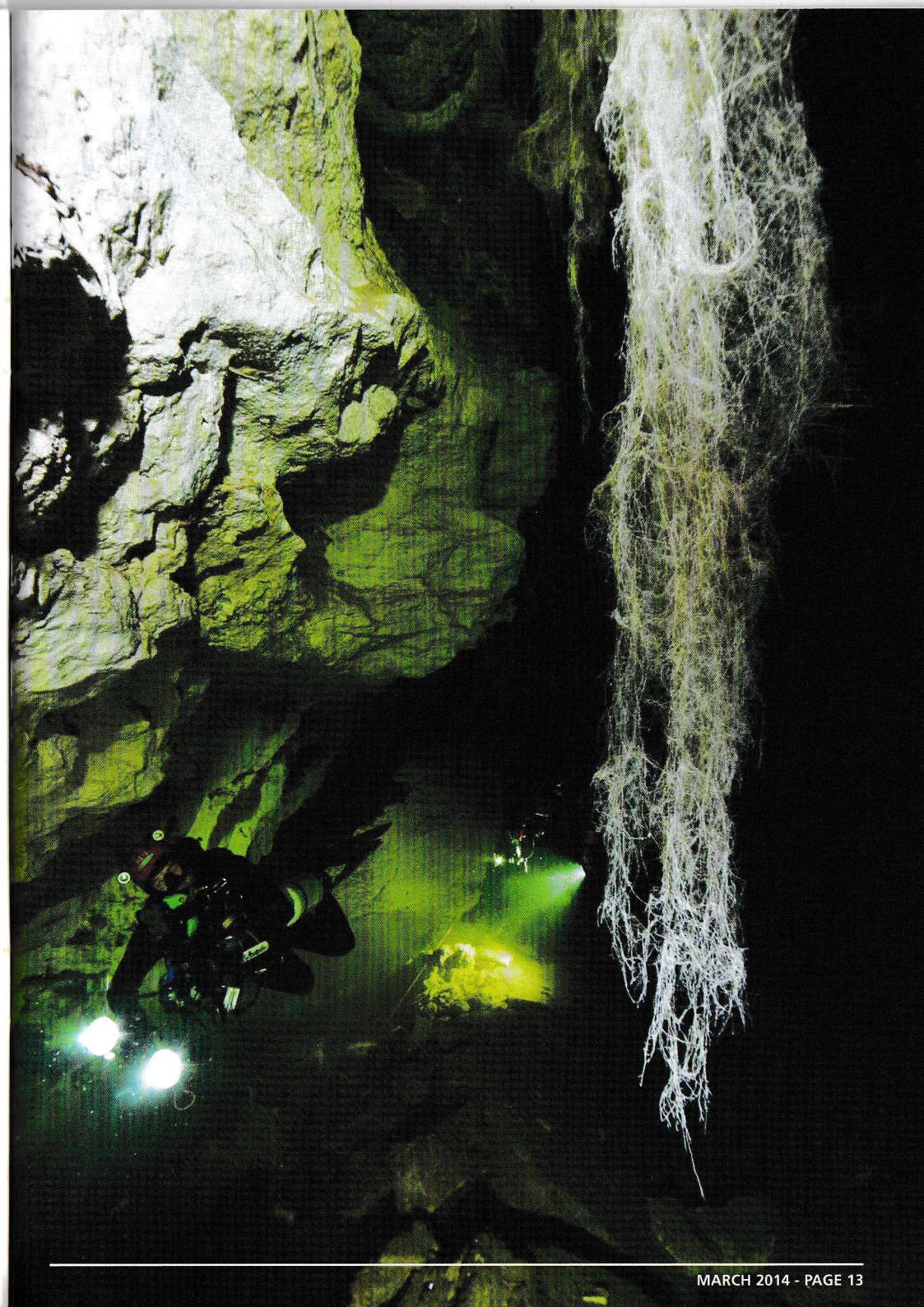
Ryan provided the following impressions of the cave after a week of diving: "I found the cave impressively large considering the crappy little entrance hole!



not the hoped for extension. The breakthrough came when a low flat silty room (it was in fact the very first place Alan and I looked at when we were exploring 12 months before) was re-visited and traversed straight through for 50m before it opened up into a large conduit heading directly to the South West – the continuation had been found! A further 100m on, my thirds gas limit was reached and the line was tied off on a boulder pile in the middle of a large intersecting passage with no end in sight either to the left or right. This was an absolutely perfect way to wrap up the dive and survey out.

Ryan and I spent the next two dives exploring and surveying over 500m of passages in this new area named the Easter Extension after a similarly named section of

Especially remarkable are the large rooms toward the back of the cave (Grand Central and ANZAC Parade) where the dark cave walls and distortive water seem to swallow up light from even the brightest torches. It's amazing to dive through a number of large tunnels which are all connected through excellent side-mount passages. The new section once again was impressive to arrive at after traversing through a much smaller cave tunnel and then popping up to a large junction with yet another tunnel seeming to boom off left and right with small low rooms branching off its sides. While diving Olwolgjin cave you get to experience very different characteristics compared to other Nullarbor sites and the varying size and length of the passages can't help but make you wonder what's





happening under your feet right throughout the Roe Plains."

The Easter 2013 trip added another 1,700m of surveyed passages to the cave bringing to total 6,300m for Downstream Olwolgin and 9,200m for the total system. The maximum diving penetrations were now at about 1,300m.

The Adventure Continues

Discussions were had with an experienced group of cave divers from the CDAA in late 2012 regarding access to and protection of the cave for suitably experienced and qualified CDAA members. It was agreed that the line in a number of areas would need to be cleared up or removed, more signs placed and that clear junction marking (with tags) similar to the system used in Tank Cave would be needed. In July 2013, a lot of this work was done by Ken Smith and Neville Skinner in both Upstream and Downstream Olwolgin. Grant Pearce & I utilized sidemount rebreathers to continue exploring the Easter Extension area and added another 300m of small maze like passages there but found no major continuation. When we left, there were only two leads identified by Grant and I that had any promise of finding a way through and they were strictly sidemount access as well as very long diving penetrations to get there (and back!).

With the rest of us committed to work and family, brothers Ryan and Michael Kaczowski together with Sam Vermey took up the challenge in the first week of November 2013. Grant and I received very excited phone calls from Ryan as he was passing back through Eucla on his way home from the trip – Great Success! Ryan describes their experiences: "Sam loved the cave and we spent the first few days getting him familiarized with the passages. I was very eager to get out the back though of course. Once we got out the back we quickly got onto Grant's reel. We passed through two close-tight restrictions then it pops out into nice big passage which runs NE and SW. Great! Ran about 110m in a straight line and surveyed it out."

Ryan continues: "Next dive we looked for leads. Sam reeled out into a couple of offshoot passages which (we surveyed). I saw a hole dropping off to the SW on my way out which I had missed and the next dive had a look and yep it just took off. It is a really beautiful section of the cave - like a maze or forest of limestone. Plenty of leads so just headed SW and it kept going. After I reeled through a lower silty section I started following larger passage . . . I am sure it keeps going but had no time to push it. Must return with scooters. Long swim. Ha!"

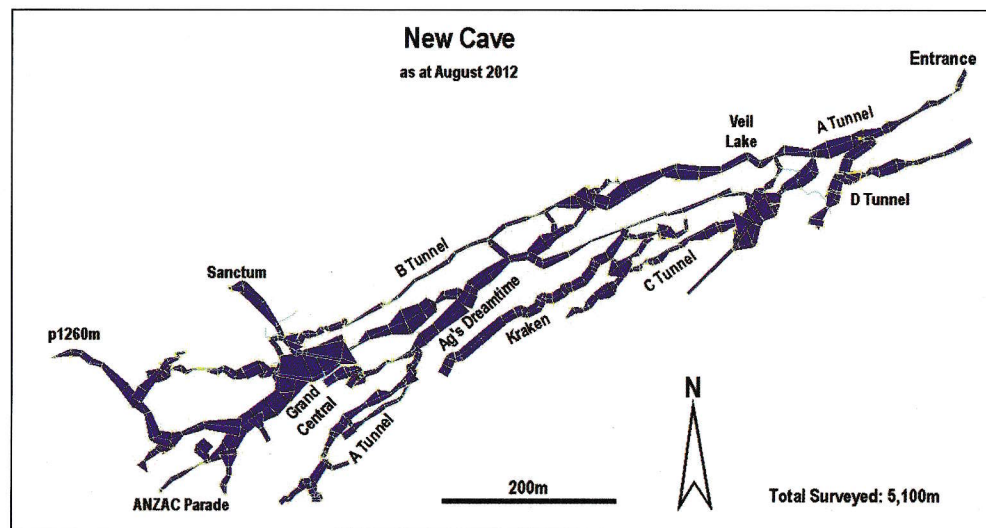
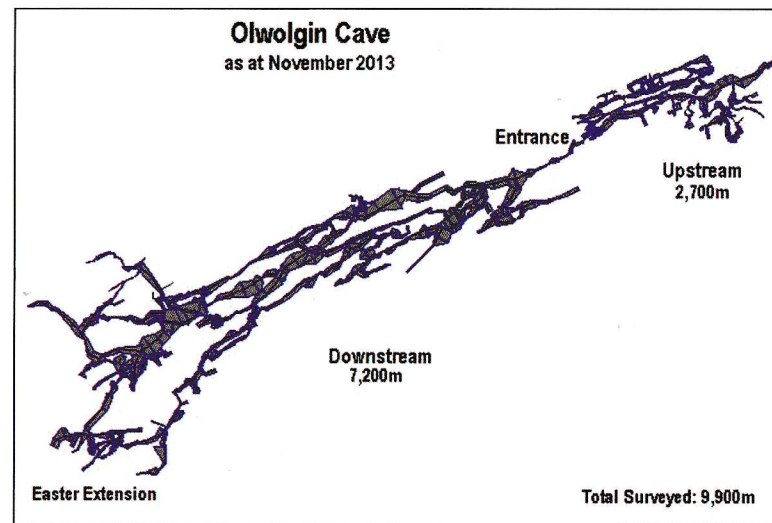
Congratulations were in order - together, Ryan and Sam explored and surveyed 300m of passages in the new 'Stone Forest' section, extending the maximum penetration distance to approximately 1,500m and best of all, still going! We are hopeful that this new section will enable continuation into main conduit to the South West beyond the collapse doline and cave that is clearly obstructing

the main passage near Dingo Junction. Pinger data obtained in July 2013 showed this area to be only 50m short of the surface doline and cave where the dingo skeleton was most likely washed into the cave from.

In two short but intensive years of exploration, Downstream Olwolgin has revealed over 7,000m of new passages and provided all those involved with some amazing and unforgettable experiences. Exploration of the whole cave system over the past ten years has involved a lot of work as well, with over 900 survey stations, 33 pinger points and the placement of numerous underwater conservation signage,

reflectors, dozens of junction markers and line arrows. Olwolgin Cave Currently has 9,900m of surveyed passages placing it amongst Australia's longest underwater cave systems such as Panniken Plains, Tank and Cocklebird Caves.

The author would like to thank all those that helped and contributed to the exploration of this magnificent cave system. The magnificent underwater photos taken by Richard Harris, Liz Rogers and Chris Holman have helped convey the stunning beauty and fragility of the Roe Plains Caves – Thanks guys!



Cave Diving - Thai style.

By Linda Claridge. Photos by Gary Barclay.

*After a week of diving in the South China Seas we looked forward to a week of cave diving in Thailand – not just to experience the caves there but to sleep in a bed that didn't move!
So where was our first night's accommodation – in a tree house!*

We had been picked up earlier in the day by Sandy and Hiro of BlueLabel Diving who were to be our very able guides for the next 5 days. The first challenge was to find room in the back of their already heavily packed Hilux for another two rebreather cave divers. After a few minutes of very fancy shuffling (think - rubics cube) we slipped into the back seat with anything that either wouldn't fit in the boot or shouldn't live back there and headed north towards the Kaosok National Park. The Tree House accommodation was about 2hrs drive from Phuket and would be a pleasant break from the rocking of The Ark (liveaboard) that we had experienced over the past week. Although I would swear that our tree house also offered the same rocking motion I think it may simply have been our vestibular centre still being in ocean mode. Here we repacked all of our dive gear and separated the 'must haves' from the 'don't really needs' prior to the next leg of our journey. Early the next day we drove the final hour to the Kaosok

National Park. We loaded our 'must have' equipment, the rebreathers, some clothing, the compressor and multiple cylinders into a Thai long tail boat and motored up to our new home for the next few days. We would be staying in floating bungalows on the lake here – groan – looks like my vestibular centre won't be able to rest for a few days yet.

In the Kaosok National Park a valley was flooded about 25 years ago forming a lake that was used to power a hydro dam. As the lake rose it flooded existing limestone caves in the cliff faces turning them into heavily decorated cave diving sites. The hydro dam ceased to operate a few years ago and now many of the locals operate boats or floating accommodation on the lake and assist dive operators to access the caves.

Travelling up to the lodgings was one of the most amazing boat rides I had ever taken. The Thai long tail boat is quite narrow but very long and rides very smoothly in the water. The compressor was set up on

the bow of the boat and possible offset the weight of the car engine that sat on the stern and powered this unusual dive boat! We had been warned that rain was likely during the 30-40 min ride but fortunately this didn't eventuate – well not until later in the afternoon at least.

We arrived at the Praiwan Raft House accommodation and settled into our very basic but very functional room. There was a communal dining room central to all the individual rooms and the bathroom could be found on shore, at the end of a 50m hill climb and shrouded in jungle (mental note – don't drink too much before going to bed). We were advised that the generator would operate between 1800 and 2300 hrs so we had to make sure that all charging was done during this time.



The boat ride took us between cliffs that started out life as mountains bordering a valley.

After a great lunch prepared by the locals we prepared the rebreathers and headed out for our first dive – a check out dive in Cat Fish Cave. It absolutely pelted down on our ride down but unlike here at home this made no difference to the air temp – it maintained the 30 degrees that it was before the rain. A step entry off the side of the boat at Cat Fish cave confirmed to me just how stable these local boats were.

We followed Sandy down through the 30 degree milky water enjoying the sight of the structures that decorated this cave. As we descended the temperature dropped by a couple of degrees and the visibility increased a little. The water darkened at depth and we then realised that we had actually exited the cave and were out amongst the skeletons of long time dead trees that originally made up the jungle to the bottom of the valley. Many of these wooden skeletons still stood upright but were so fragile that a way wood fin would have them silently explode in a cloud of rotten timber and algae. Most of the cave dives here are shallower than 20m but much deeper depths can be achieved if you exit the cave and head to the drowned forest below.



Long tail boat parked alongside our lodgings at Praiwan Raft house pre dive.



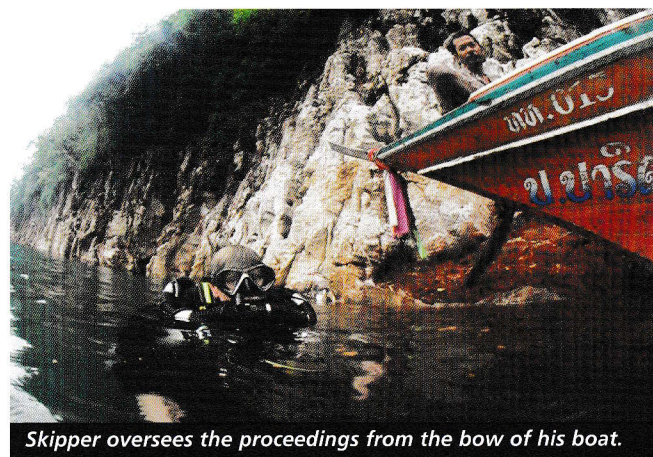
Cat-fish from Cat Fish Cave.

Peters Cave is one of the shallow caves but it also surfaces in an area that must have access to the external world as this hidden gem had a healthy population of tiny bats decorating the roof.

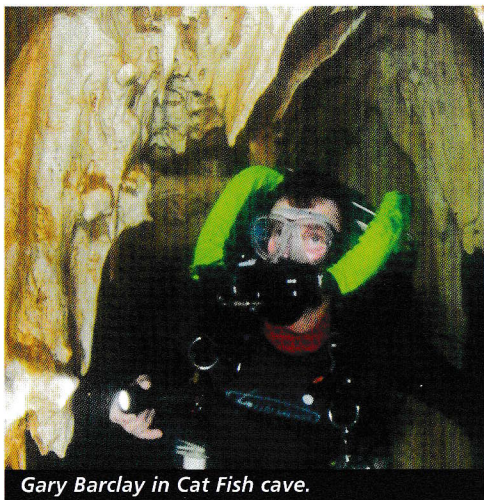
Andrews cave was another cave that we dived in this valley. Our guides had never dived here and knew of no-one who had actually found the supposed tunnels that lay beyond the entrance. Our skipper indicated he knew where

the entrance was and we knew that underwater this entrance had been tagged with a blue wrist band so we excitedly headed south and having located the blue band began our exploration. A

few false leads later we located a tunnel that continued into the cliff gently descending as it went. As the depth reached 36m we knew it had to be close to the level of the forest and a thick layer of heavy silt confirmed this. A virgin tunnel is always pretty exciting - until you spot a fluoro green torch peeking out from the silt! I guess it wasn't quite as virgin as it claimed to be. We did 5 dives in Khaosok with the highlight being a dive called Temple cave. I thought it was pretty special when I saw that the rock here was a marbled red and white lime-



Skipper oversees the proceedings from the bow of his boat.



Gary Barclay in Cat Fish cave.

stone but as I rounded another corner I encountered stalactites, stalacmites, flowstone, shawls and teeth – this was one of the prettiest cave dives that I had done. Like all of the others the visibility was still only a couple of meters but the amazing array of cave decoration within this 2m was very impressive.



I didn't touch it!... Algae covered tree in Khaosok National Park.

The next day we packed up early and motored back to the mainland to repack everything back into the Hilux for the next leg of the journey. Amazingly the gear all fitted back into the vehicle again.

A further 2 hour drive to the Trang Province had us arriving at Song Hong in time for some local fare and a couple of afternoon dives. Song Hong is a sinkhole with two lakes (Song Hong means Two Rooms in the Thai language) and drops away in excess of 155m. The main lake spans about 150m in diameter and is surrounded by jungle. The water temp is a very pleasant 30 degrees in the shallows and equally pleasant 26 degrees at depth. Vis is about 3m in the shallows and up to 30m at depth. The lake drops quickly to 100m off the shore and on both sides of the lake a large tunnel drops down, starting at 60m depth. Early expeditions here have laid two lines stretching in as far as 800m inside the cave. These long penetrations and extreme depths have made the logistics of decompression a real challenge and as such a permanent habitat has been set up between 6m with further resting stations at 9m and 12m. Doing deco in 30degree water in 5mm wettie didn't seem to pose too many difficulties for me though – the biggest

problem was boredom -(and I was happy to be bored in 30degree water) a cheeky catfish trying to sneak in tiny nibbles of your fingers offered welcome diversion to the boredom.

A nice surprise we had here was finding a personal arrow of a Deep Cavern student we had taught back in Feb 1999 who at the time had flown in from Thailand to do a CDAA course with us – it was nice to find out that he was still diving.

That evening we attended a 'restaurant' that specialised in Korean BBQ – nothing like the BBQ's that we have here but very tasty all the same. With the rain letting up for a while, a mass of bugs started to be attracted to the lights which in turn brought out about a dozen toads that proceeded to entertain us with their bug catching techniques!

The following day we did another



Linda prepares to squeeze into the habitat in Song Hong at 6m. The seat in her right hand actually swings back to allow a larger entry space.

couple of dives here – doing a traverse between the two lake surfaces on one dive and a circuit of the larger lake at around 54m on the other. The larger lake reminded us both of The Shaft – with the lid taken off. While there, Sandy and Hiro told us of their plans to be married here in Sept. Not around Son Hong but at a white sandy area at 130m depth. Naturally most of the guests won't be attending the actual wedding ceremony but will get to view the proceeding after the event and help the couple celebrate their special day later – after they have spent some quality time together fulfilling their immediate priority – deco. The next day, after turning the local motel into a temporary filling station and preparing our mixes it was time to leave the beautiful Song Hong (and its blood thirsty mossies) and head to our next

and final location about 2hrs drive away - Sra Keow, the deepest cave diving site in Thailand. We arrived here moments after a torrential downpour and prepared to set up for the dive. Nearby some locals were busy pushing a ute heavily laden (as in a couple of metres higher than the cab) with wood from the forest. The vis looked very ordinary from the surface with small rivulets of orange water noted to be running into the site at a couple of places around the edge.

Hiro assured us that although the site was known for its poor vis in shallows it would clear up at about 40-ish meters. Sra Keow, in the Krabi province became famous a few years ago when after 10 years of exploration, it bottomed out at 240m. Two small lakes descend down and then link together at 60m prior to continuing the descent down to 240m. Using the last of our helium our plan was to dive to 60m, take a few pictures and have a look at the traverse between

the two lakes. After delivering the dive plan Hiro dropped down to locate the fixed line for us and then, due to the really low vis, decided to run a jump reel from the surface to this fixed line. We descended down with the fixed line held firmly in our right hand; at various times I would see a flash of fin from Hiro in front of me or would feel Gary gently bumping into me from behind. Occasionally I would get a glimpse of rock to my left. I tried to visualise what I was feel-



Intersecting lines in Song Hong.



Setting up at Song Hong.

ing around me and looked forward to the visibility improving around 40m. 40m came and went but the bad vis remained, ditto at 50m. At 60m Hiro's face appeared in front of me and indicated that we had reached the traverse but that the vis wasn't improving. I turned to relay the info to Gary who looked at me wisely and gave me the 'turn-around' signal. Yep, that probably is a pretty smart idea I thought as I relayed this back to Hiro. He quickly grinned and nodded and we started our ascent. Gary and I



Kitting up at Sra Keow with Sandy and Hiro – the vis we encountered on the surface never got any better at depth.

exchanged line tugs on the ascent which I transferred back to Hiro, when I didn't receive any response I paused and waited and could see the dull glow from his torch. A quick light OK between us assured me that all was well. In discussion post dive we learnt that line communication was not a form of communication that had been taught during their training. He wondered what was catching on the line! A quick impromptu 'in service' and sharing of info was then conducted!

As we re-entered the lake for the last of our deco we were rewarded with a 'clean-up' of any dry skin on our hands by the resident shrimps in the lake. This was quite pleasant but the gentle nibbling at the skin on my face and neck by some other unseen shrimps was a little more disconcerting!

Sandy and Hiro both noted that they had never seen the vis as low as we had encountered on this dive and we all decided that we didn't really need to do another dive here today. Now it was time for some serious surface interval and sightseeing before heading back to Phuket the following day.

After 5 days of diving and 10 cave dives our trip was nearly over. We had dived and explored 3 different regions and loved every experience we encountered. Different techniques, access arrangements and characteristics helped make this an amazing and rewarding week. Visibility in the caves was lower than we sometimes get back here but it was still good enough to enjoy the dives – well, maybe not so much at Sra Keow!

Our week in Phuket had been arranged by Simone from Bluelabel Diving in Phuket Thailand www.bluelabeldiving.com.au They had arranged everything including sorb, RB cylinders and bail out cylinders. Hiro and Sandy – instructors with Bluelabel Diving – were our drivers, our guides and our dive buddies, they looked after all of the logistics, the cylinder filling and they ensured that we had everything that we needed for the week. They knew the best places to eat – whether you wanted local or western fare – and more importantly knew where not to eat and we found them very friendly, competent and knowledgeable.

After 5 days of diving and 10 cave dives our trip was nearly over. We had dived and explored 3 different regions and loved every experience we encountered. Different techniques, access arrangements and characteristics helped make this an amazing and rewarding week. Visibility in the caves was lower than we sometimes get back here but it was still good enough to enjoy the dives – well, maybe not so much at Sra Keow!

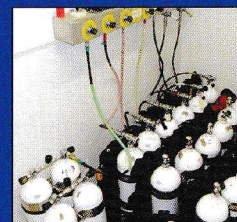
Blue Lake Diving & Just a Bed Lodge

- Air Fills • Nitrox Fills • Minor Repairs
- Overnight Scuba Cylinder Testing*

(*Prior arrangement required)

Trimix and High Pressure O2 available

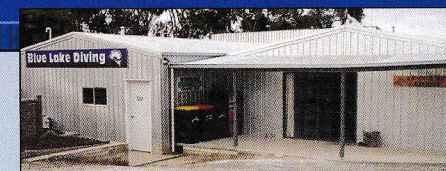
Guaranteed o'night Air / Nitrox fills...
drop off before 8pm, filled by 7am next morning!



All enquiries:

Darren Walters - 0408 845 511

Email: darren@justabedlodge.com.au



ACCOMMODATION

\$32pp per night

Linen Included!

- Linen consists of fitted bottom sheet, top sheet, doona, pillow & pillow case, quilt and a towel..
- Each bedroom is individually lockable allowing for a secure area for personal effects.
- Spacious room with kitchenette (sink, refrigerator, two microwaves, crockery & cutlery, toaster and kettle), kitchen table, lounge area, TV & DVD/video.
- 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,
All with two single beds & linen.



Contact Suzanne on 0427 884 729 or Email: suzanne@justabedlodge.com.au

www.justabedlodge.com.au

280 Cafpirc Rd, Mt. Gambier 5290

PO Box 9286, Mount Gambier West, S.A. 5291

Southern France and Northern Italy

By Peter Buzzacott

I finished work at 7pm and, finally, left the motorway shortly before midnight. Quietly I pulled into a country lane, killed the lights and climbed into bed in the back. I've got the van perfectly sorted now for weekends away, with camping kit and all the creature comforts. By 8am I was at the dive centre in the Lot, for gas and a quick dive in Marche Pied. This cave has been shut over recent years due firstly to a farmer who didn't welcome cave divers and then to the local authority over fears the walls were about to collapse. This year it has new stone retaining walls and has reopened.

I carried my gear to the water, geared up by the river in the summer sunshine and headed down into the cool and dark. Descent is via a low and/or narrow restriction about 15m long, during which there is no opportunity to turn around. I was head-down and pressed here and there to the rock, negotiating my cylinders along and content I wasn't between a diver ahead of me and with another behind. Soon enough I escaped the cave's clutches and the passage opened up for easier going. I was only here for a short dive

though, to assess how feasible getting a scooter in might be. This was my second dive here; the first sump ends after 510m and I'm keen to see the second. I refilled my bottles back in the Lot, collected 200bar of O2 and headed south towards another French cave diving mecca; the Ardeche. This region is spectacular and thousands of tourists arrive in July and August, during the European holiday period. Gorges carve apart steep mountains, and rivers wind their way towards the coast, 150 km to the south. There is rapid



Gearing up in Goul de Pont



rafting and quad-bike tours a-plenty. I arrived in the morning and parked in the centre of Bourg Saint-Andéol, an ancient town on the bank of the Rhone. The area is famous for Cotes de Rhone wine, a nuclear power plant is an important employer and the town is home to the Institut National des Arts du Clown, the national institute of clownery.

I carried three tanks over to the Goul de Tannerie before dressing in the car park. From the entry pond I looked around at one of the prettiest cave-diving sites in the world; baskets of petunias filling the air with their sweet fragrance and the sound of water bubbling into what looks like a Roman wash-house. I put the reg in my mouth and slipped away unobtrusively, leaving behind me the green algae in the entry pond as I entered the dark zone. I re-checked everything on the fly while looking around at the features of the rock, the lay of the line, feeling my buoyancy, suit nicely inflated, everything was perfect and in no time I was cruising along at 20m/min, mentally calculating how far I

could reach based on my gas consumption and speed. I was hoping for 500m, which would leave another few hundred to explore next visit, not to mention the six or seven jumps I passed along the way. One in particular came to within about 1m of the main-line. I noted the distance, in case the cave started looking unfamiliar on the way out. I was working on fifths again, a system I like when swimming into springs alone. Scootering, siphons, deco, these things change the plan again but I can see plenty on fifths so that was my plan today.

I spotted something in the floor – crystals. Wow, I don't remember seeing crystals during a cave dive before. Then I saw more, in the floor, like those rocks that gemstone shops sell cut in half. Cool, and they haven't been souvenired either, even cooler. I took a photo and kept going. It was going to be close, making the 500, and I mentally played the "what if..." game. What if I get to 450m, would I keep going and dip into my reserves? Fifths is pretty conservative. But, no, I held my resolve to





Beautiful Valstagna

turn as planned. I passed the small 400m dorf-tape marker, checked my gas, tried to breath less and kept going. Then, out of the blue, there was a massive rock in the middle of the passage and it was shaped hydrodynamically, just like a battleship, wide and flat at the top and then with steep, smooth sides. The roof was flat – where on earth did this come from? I kept going, through an easy restriction and there it was, the 500m mark. Checking my gas I decided I could afford a photo. Must be a common benchmark I figured, looking at the size of the marker. I looked on... then

turned and finned out, initially at 20m/min, same as on the way in, but after a couple of hundred metres I slowed right down and enjoyed taking my time. I usually do this, unless there's a deco obligation, because turn pressure should be based on the worst happening at the worst pos-



Goul de Tannerie and historic wash-house

sible time, IE, during the turn. Once you've gone 200m along the way out and nothing has gone wrong then you've got even more gas in reserve, so I slow down and enjoy myself. Why not? I don't know when I'll be back next and the conditions today were absolutely perfect. Duck and port pate for lunch, in the park, on a fresh bagette. The sky

darkened and I suspected a shower. Couples strolled passed, teenagers hung-out, dads watched their kids play in the stream. I could live here. I carried my side-mounted alys over to the second pond, also built in stone, this one under a railway bridge. "Pont" is French for bridge and this cave is called Goul de Pont. I was doing this dive second because my English buddy back in the Lot said it only went in a short way before "going really deep, really quick", and I hadn't brought trimix with me for these check out dives. I was planning to collect it in Italy for the return trip home, if

needed. I left the camera at 6m set up for deco and ducked under a lip to enter the cave, my chest moving a few loose rocks further down the sloping pile. That's not a problem; when it flows here they will be thrown back up out of the cave.

The corridor is elliptical and easily passed through. Conditions today were about as perfect as they ever get and I was enjoying myself again. Though the two caves are in the same small park, they are quite different. The passage gradually morphed from an ellipse into a rounder form, like a tunnel, and then it turned 90° and dropped straight down to 75m. If I spread out like a sea-star my hands and fin tips might have just touched the walls while I descended to 45m for a bit of a look. This shaft is large, smooth and obviously conduits a lot of water. I hovered, gazing down at 75m. Not today. Next dive here I will drop to 75m and follow the passage along till, once again, it drops vertically, this time to 110m, which appeals to me also. Less than two weeks later Polish cave diver Krzysztof Starnawski dived here to 192m depth, adding 37m of new line to the end. The cave still goes.

I arrived in Italy at the house of my guide, Nick



Tousaint, whom many will remember from either visiting Mexico where he ran a large dive centre or from OZTeK or seeing him at a recent CDAA AGM. Nick owns White Arrow which produce modular rebreathers and other cave diving equipment. After coffee he graciously showed me around his product

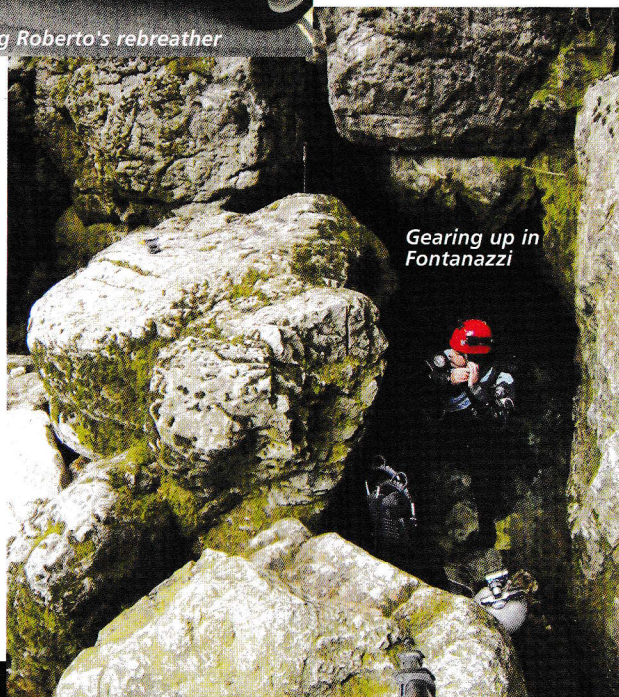


Roberto entering Fontanazzi

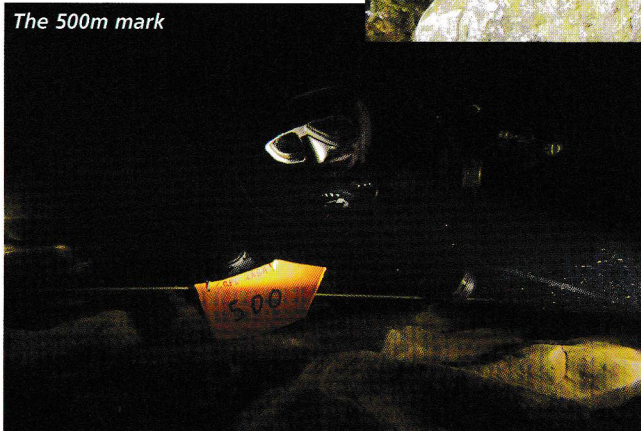


least have a look-see. First, Grotte di Oliero, a popular tourist cave that also permits cave diving after a few formalities. Today the water level looked a little high so we looked around and then Nick suggested we move on to the next. At Elephanti, Bianco a backmounted solo diver was packing up and re-reeling his line. We exchanged pleasantries and discovered we're both in the Lot

range and we discussed technicalities. No trade secrets here but this guy has some original and (I think) potentially game-changing ideas regarding decompression using rebreathers. We packed our cars and set off for the caves. There are five in the region but only three are easily accessible, and then only when it has been dry for a spell. High above us, on top of the mountains, there is a plateau the local farmers take their livestock to each summer to graze. The cheese they then make is renowned for its unique flavour. But, when it rains heavily up there and the aquifer fills, the flow can be awesome and totally undiveable. We'd had plenty of rain in Europe recently so both of us were hopeful the aquifer had receded sufficiently to at



Gearing up in Fontanazzi




again in a month so we swapped contact details and promised to dive at the same site one day. Nick and I carried our gear up between a few houses and across someone's vineyard, then down a track to the lake below. A sign beside the track advised that diving together is banned here and that divers must dive alone, with three lights on their helmet and independent tanks. Sounds perfect to me!


After the dive we briefly visited the

third cave in this area, Fontanazzi. This is different again and entry is via private land where the owner maintains the path, then down between boulders into a small pool at the head of a stream. Not much room in here for more than one or two divers and today there was an Italian cave recovery exercise in full swing. I took photos and then the star of the show, Roberto Rinaldi, arrived to some acclaim. And, no wonder, this guy owns the record here, reaching further than anyone else, down to 190m.


A week later I was back at Fontanazzi, this time alone, save for a couple of fishermen in the nearby river. I took my time gearing up and looked around in case there was a line. There didn't appear to be so I considered a narrow rift and had some fun trying to descend down it with chest and back firmly gripped. I decided it was possible, but probably easier no-mounting, and I moved on. Next I found a very small room, about the size of the third chamber in Mud-Hole. Hmm, that didn't go anywhere, so I moved further in. And, there it was, a brand-new shiny white line down a 5m chimney to the



PROTECTIVE HELMET
WITH 3 LIGHTS




NO DIVING WITH
OTHER PEOPLE




EMERGENCY
EQUIPMENT

THE "ELEFANTE BIANCO" CAVE



FINS WITH SAFE



SEPARATE
TWIN CYLINDERS

WARNING !

THIS IS FLOODED CAVE WITHOUT ANY ESCAPE ROUTES.
BEWARE: THE CAVE IS WIDE AND
IT'S VERY EASY TO GET LOST.

WATER BECOMES MUDDY AFTER MOUNTAINS RAINS:
DO CHECK THE WEATHER-FORECAST!


At least ten days before in advance, confirm by fax your personal details and the diving schedule of every scuba-diver to:

- Don't dive if you don't have any "cave diving" preparation with a specific certificate and a strong diving experience in caves, to prevent to risk your life
- Consider your real experience and be conscious of your limits, if you are really expert and you have decided to dive, during your diving session someone must monitor you, outside the cave
- You should avoid to dive together with other people or while someone else is diving


BEFORE DIVING, CHECK YOUR EQUIPMENT: IT MUST BE IN PERFECT CONDITION

- You must always use separate oxygen cylinders with separate regulators and submersible pressure gauge
- Don't exceed the third of the consumptions, as a rule
- Put always your diving-helmet, with at the least three head lamps
- **You must always use the line-guide and NEVER LEAVE IT!**
- **DON'T TRUST OLD LINES, THAT YOU MAY FIND IN THE CAVE !**
- Bring some leaf blades shears with you, (NOT A KNIFE !), and the line delivery spool in case of emergency
- Don't dive if you can't comply with these safety rules

BEWARE: MANY PEOPLE DIED IN THIS CAVE !



FALLING ROCKS



RESPECT
THE ENVIRONMENT



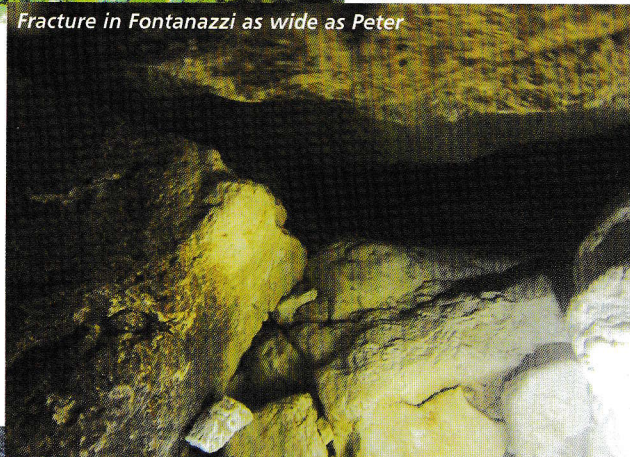
Exiting Goul de Pont



the route for a better equipped visit, next time. I had beer and hot chips for dinner in a pub, watching Italy lose a football match and then slept in my van in the car park. It was a perfect way to celebrate the dive. When dawn broke I set off for Elephanti Bianco, buying warm marmalade croissants for breakfast in a small village. I started hauling the gear up and by the third load another couple of divers arrived and, loe-and-

base of the crack I had been playing in. Fantastic. I descended, checked out the cave a little way in, decided I could get my scooter through here next time and called it a day. To be honest my hands were really suffering. I'd left my dry gloves at home and had only brought a pair of 4mm neoprene gloves, and the water was about 8 degrees, so after 30-40 minutes I'd had enough. The main passage starts at depth 30m and goes way back so I was mainly scoping out

Fracture in Fontanazzi as wide as Peter



Entry pond in Goul de Tannerie



behold, it was Roberto from the week before. We chatted and then got back on with our respective preparations. Finally, I was ready so I slipped away, tied a primary to a rock and a secondary to a tree-trunk, staged my O2 and headed in. I staged my spare tank at the entrance, depth 20m, then continued on. This is a grand cave, a lot

bigger than Fontanazzi. No wonder Nick had been so happy conditions were good enough to bring me here the week before. I followed the main route, laying line, the plastic-coated steel washing line beneath me broken into sections. The force of the flow here is apparently astonishing. When I reached the largest chamber and looked down into the vertical shaft

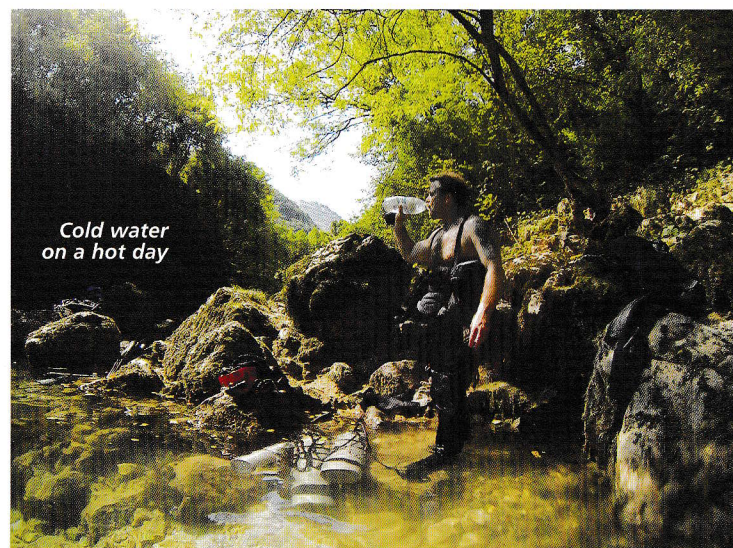
that starts at 50m, above me there was a blind shaft carved by the flow. Previously divers have ascended through this shaft, passed through the main room where I was now and gone up into the blind shaft above me, before eventually running out of gas. Where the washing line goes over the lip is a point of friction and today the guideline was broken. That is most likely why divers must dive alone here. The cave shape is treacherous and, tragically, it is better for a single diver to die than to have multiple fatalities. But,



Taking a minute to chill after the dive at Eliphanti Bianco

today I was running my own line, like a properly trained CDAA diver. I considered repairing the washing line but then spotted another line, this one nylon and stained a dark colour. Unsure now which line was the primary I left well enough alone for the locals to sort out, exited uneventfully, completed deco and surfaced. What a surprise, there was a group of recreational divers gearing up. I asked "Are you speleo trained?" and the sort-of leader said "No, but this is the only place we can reach 50m". Now, the entry

lake was just 20m deep, and I only found 50m well inside the cave, below the blind shaft. But, that's Europe for you. You're free to do what you want here. It's your life afterall, if you don't feel like voting, or you want to ride your bike with no helmet, or talk on the phone while driving,... It's wonderful!



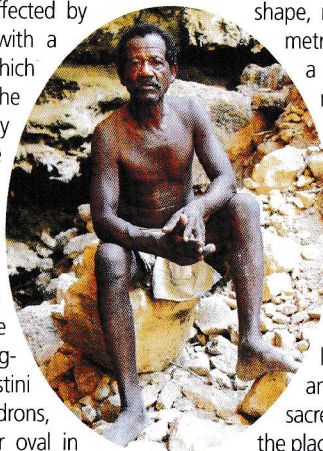
Cold water on a hot day

Mahafaly wonders

By Pierre Constant

Stretching west and north of the Isalo Ranges, the Mahafaly Plateau runs like a dragon's tongue to the very tip of Madagascar's south west coast. In the Great South of the island, this is a remote country where numerous historical shipwrecks lay below the waves since the 16th century. Created in the geological Eocene times, the limestone table is rather conspicuous when seen in Saint Agustin, south of Tulear. It conceals an extensive run off of underground water, judging by the numerous springs encountered in the lower valley of the mighty Onilahy River.

The Mahafaly Plateau has been affected by post-Eocene tectonic movements with a north-west south-east distension, which tops an older tectonic event on the underlying substrate. Seismic activity is a common occurrence, there. The karstification process is intense in the lower Eocene with very deep caving systems, whereas in the mid-Eocene sinkholes are only visible. A number of these 'avens', as they are locally known in the French language, were brought to light by the aerial photography realized by the French (Battestini 1964, IGN 1966). Looking like cauldrons, these collapsed sinkholes, round or oval in

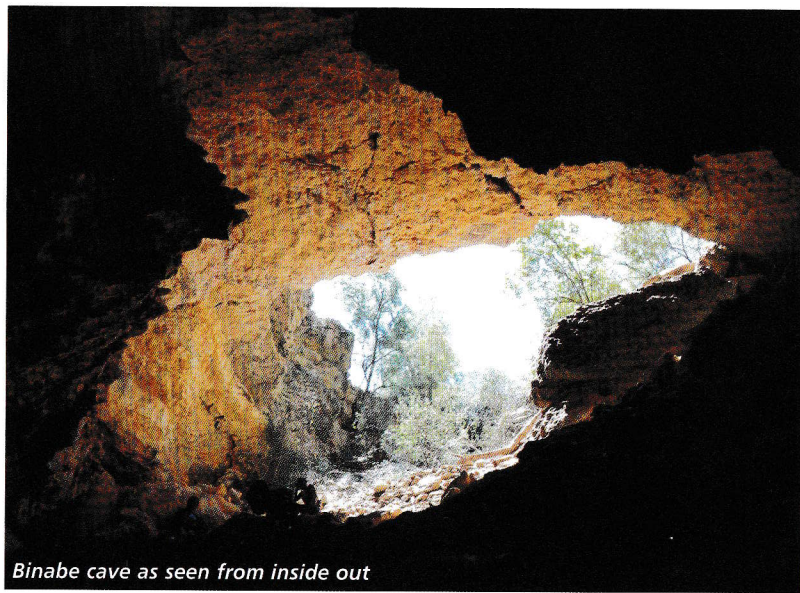


shape, measure anything from a few dozen metres up to 500 metres in diameter, and a depth ranging from 40m to over 100 metres. A natural wonder that makes you hold your breath for a minute.

June 2012

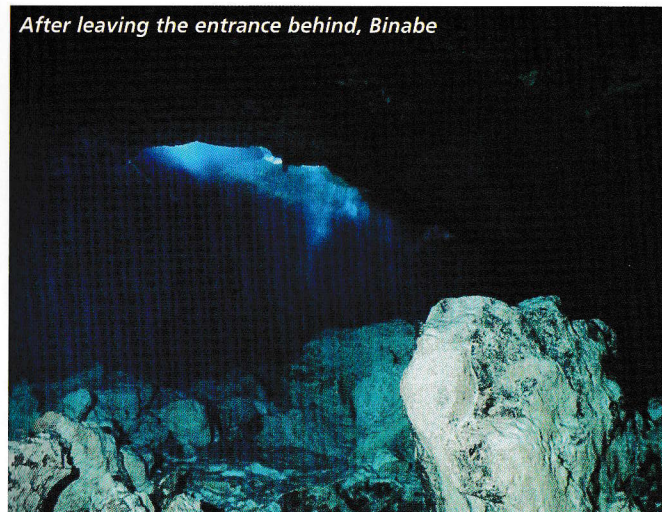
The sun is at its apex when I leave Tulear in a wrecked taxi, which holds together by the operation of the Holly Spirit. Shortly before we sight Sarudrano Spring, one hour later, a white signboard indicates with an arrow: "Binabe, grotte sacrée", a sacred cave it is. This is where, in search of the place a few months ago, I had climbed on

top of the Mahafaly Plateau and almost got lost. An old local guide pops out of the blue, as if by enchantment, from the nearby village. "5000 Ariary for the two of you...", he demands at once. Tank on my back, camera bag strapped across the shoulder, Nikonos V at arm's length and dive bag at the other shoulder, I follow in his footsteps for



Binabe cave as seen from inside out

After leaving the entrance behind, Binabe



fish, 15cm to 20cm long, with two dorsal fins, and a rounded caudal fin with a pointed tip. Just like a flame at the back of a rocket. My attempt to approach it is vain, and it flees in a flash! This one is certainly not blind. Sinking in, I observe tiny crabs -1cm long- in the water column, then large shrimps 5cm to 10cm long, on the guano slope, quite intrigued by my otherworldly appearance. The bottom plummets gradually east, opening into a vast chamber about 20 metres wide. I come to a dead end at the depth of 33 metres. The wall is soft and crumbles easily. The cave floor is like a

a 10 minute walk into the bush, with Christina in tow with my fins and knapsack.

Impressive, the cliff appears 20 metres tall, looming forward and reflecting a yellowish white light. I am already sweating profusely. The trail snakes its way down a rubble slope with scattered rocks, into the shade of the hole. I distinguish a pool of freshwater, with a few sunbeams striking through, creating an attractive jewel blue aura. However, I am filled with a bit of fear at the thought of venturing into the dark unknown. The penetration into the water is very spongy, stirring up black sediment at once: bat guano. Great caution will have to be used to avoid disturbing the visibility.

Under the surface, some small blindfish, dark brown, move about shyly. Some time later, I notice a bigger

Complete skeleton of a dwarf horned crocodile with jaws, Vintany

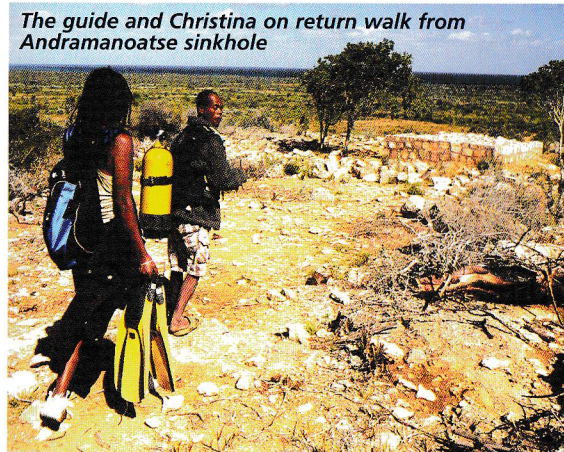


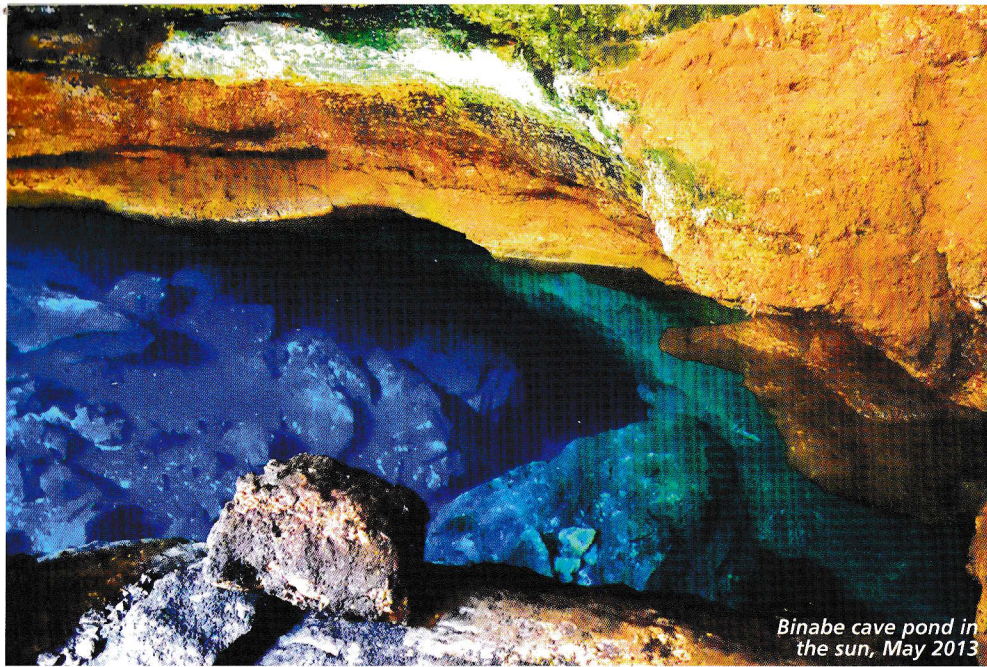
dark desert, salt and pepper, crisscrossed by tiny tracks of mysterious critters. Isolated specimen of blind fish cruise by at random, over the guano landscape. Making my way up along the north side, I gaze upon

what looks like a blackened fossil cast into the wall. I shoot a photo for memory. The dive into Binabe cave lasts for 30 minutes, and the water temperature is 26°C. At all times, I could locate light from the surface.

A few months later, I return for another exploratory dive, and find, at a depth of 25 metres, the femur of an extinct species of dwarf hippopotamus, "*Hippopotamus lemerlei*". from southwest Madagascar, identified as such by JR Boisserie, it will be carbon dated by Dr. Antoine Zazzo of the Museum of Natural History in Paris. It turns out that the femur was 1394 years old, and that the dwarf hippopotamus had died in the 7th century, between year 595 and 677.

The guide and Christina on return walk from Andramanoatse sinkhole

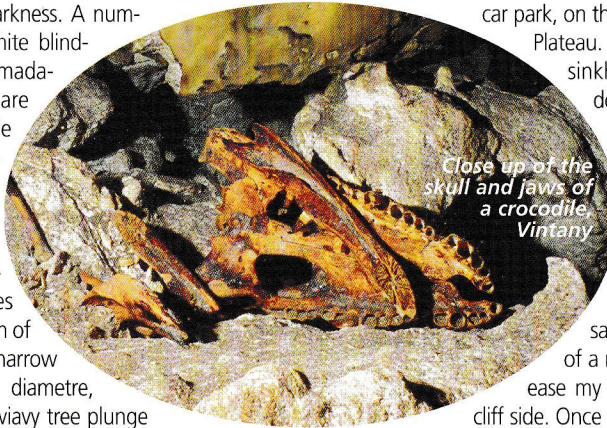




Binabe cave pond in the sun, May 2013

Vintany

A few days later, I return to Tsimanampetsotse National Park, in search of new 'avens' or sinkholes. On the Andranalamalaika circuit, Malagasy guide Nicolas takes me to the collapsed sinkhole of Andrianamaniloky. There, at the bottom of a treacherous slope of slippery boulders, a pool of clear water lays in the darkness. A number of pink and white blind-fish, "Typhleotris madagascariensis", are swimming upside down at the surface, as if they are trying to breathe. "Impossible to dive here, the site is forbidden". A stones throw away, the aven of Filomeni is like a narrow pit, maybe 2m in diameter, where roots of an aviavy tree plunge down vertically to an unknown depth. The penetration is risky and impossible without the proper gear. A fortiori, "the site is inhabited by spirits", explains Nicolas, pale as the specter of death. The morning after, I am back with Ryan, the Australian



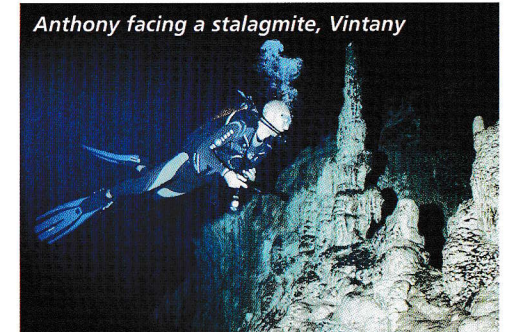
Close up of the skull and jaws of a crocodile, Vintany

and his mate Anthony, from a dive centre in Anakao. The aven of Vintany has been explored by the latter two, in May 2012, 16 years after Jean Michel Cousteau went in with his team. The Park newly grants permission to dive Vintany, following an agreement with "Le Relais d'Ambola" hotel, in Ambola. The site is a mere 10 minutes walk from the Mitoho car park, on the top of the Mahafaly Plateau. Visually attractive, the sinkhole is 10 metres deep. Ropes and harness are recommended to climb down into it, as well as to lower tanks and gear down. Nonetheless, with helmet on for extra safety, I shall make use of a root of the banyan, to ease my way down along the cliff side. Once into the pit, I can only marvel at the waterfall of roots, cascading down like a curtain of white stems. Quite a sight, indeed! White and pink, blind fish are skimming at the surface. We jump in. A feeling of 'déjà vu', the floor sediment is again bat guano, highly volatile. Anthony leads me

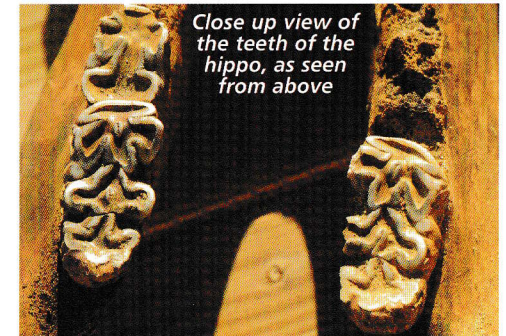


Femur out dwarf "Hippopotamus lemerlei" from Binabe

above a field of rocks and boulders resulting from the collapse of the roof. For a while, he seems to be searching for something. When suddenly, his arm points towards a collection of bones. With stupor, I stare at the skull and jaws of a crocodile, in brownish golden colour, with an easily recognizable tooth. Dreadful. The specimen was probably 1,5 metres long. A short distance away, I discover another jaw of a younger specimen, with all its teeth. A thrill runs up my spine at the thought that 1000 years ago, or even



Anthony facing a stalagmite, Vintany



Close up view of the teeth of the hippo, as seen from above



Pierre climbing down the roots of the aviavy tree

10000 of years, the site was a crocodile haven. By all means, there would have been fish as well, otherwise how could the monsters survive? Further down the slope, small lemur skulls lay here and there, once prey of the reptiles. The most visually striking piece will be the almost complete skeleton of a croc, with dorsal spine intact. The vertebra rings are just massive. Majestically, the cave wonders reveal themselves at depth, as the cavern descends in various balconies. Clusters of stalactites come down from the roof, with truncated stalagmites underneath. A conspicuous evidence that the aven was once a dry cave, at least for 20,000 years, judging by the fact that some stalagmites are 2 metres tall. Not to mention about the bat guano. Other broken stalagmites attest to the occurrence of ancient earthquakes. "Elementary, my dear Watson!". At a depth of 28 metres, I marvel at shawls of calcite, which ornate gracefully the walls on a height of 2-3m. The gin clear visibility is a definite plus to appreciate these geological wonders, preserved in their timeless shroud. The progressive return to the surface is a vision of fairyland. The wide angle vision of the curtain of roots, outlined against the backlight, is breathtaking. One comes out of the water with a sensation of bliss. "Vintany", the magical aven. A dive of 55 minutes, at

Anthony inspects the crocodile skull, Vintany



Anthony under the roof of stalactites, Vintany



and explore some more. Meanwhile, I have brought the old bone to a research lab at the Museum of Natural History in Paris, and was fortunate enough to meet Antoine Zazzo and his colleague Olivier Tombret, who agreed to help in the C14 datation. One sunny morning, on my way to Itampolo again with José's 4x4, we stop at various villages in the heart of the bush, as I am trying to locate a new sinkhole far inland. The driver is helpful in translating my questions to a local man named Arrivé, who seems to have a clue to what I am talking about... "Yes, yes, big hole... clear water, good to drink, no cattle access". That sounds good. However, it is a bit far, he does not know how long we'll have to walk on top of the Mahafaly Plateau. But he is willing to guide me and help carrying the scuba tank, for a reasonable fee. We

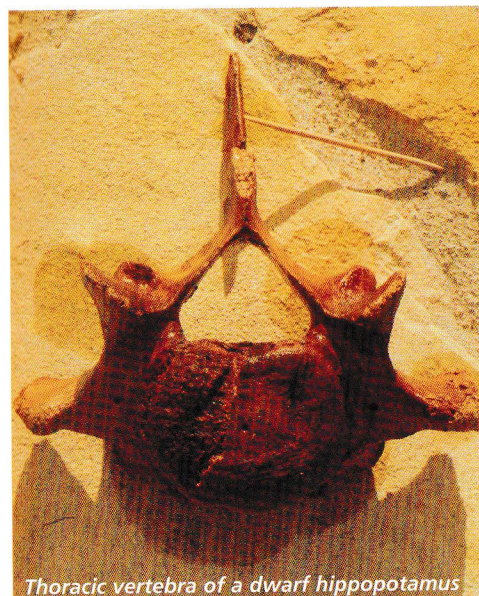
a bath temperature of 29°C. Unbelievable, but true!

Upon exit from the sinkhole, I notice a family of ringtail lemurs or 'makis' frolicking joyfully in the foliage of the banyan. Curious of the day visitors, they feed actively on the capsules of the giant ficus. Oblivious to my presence, they give me a roguish eye glance, and hop swiftly from branch to branch, as if everything was going for the better in the best of the worlds. "By Jove!", when the crocs are gone, the makis dance.

May 2013

After my discovery of the femur of a dwarf hippopotamus at Binabe Cave, in November 2012, I am keen to return again

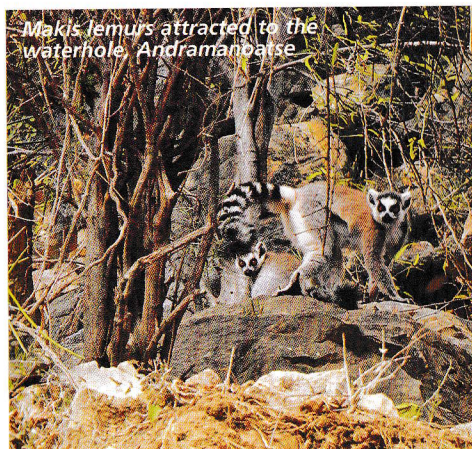
Binabe cave entrance at bottom of cliff



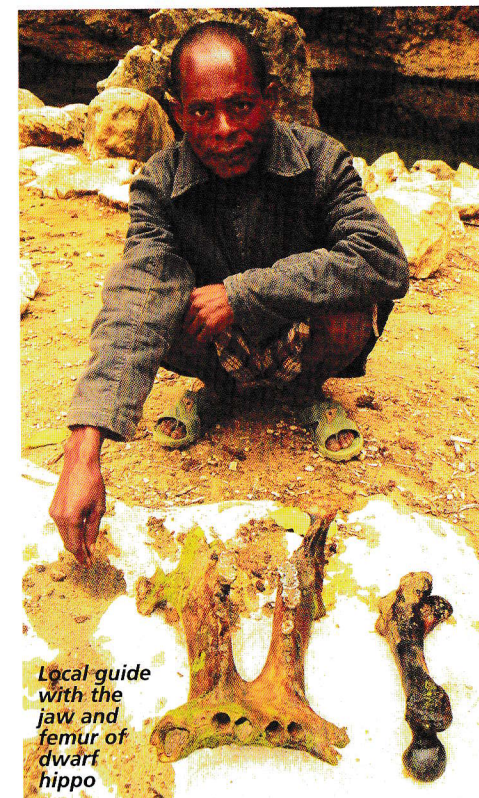
Thoracic vertebra of a dwarf hippopotamus

make an appointment two days later, early morning, because I guess the sun will be a killer. And we find him, as promised, sitting under a tree, in the core of Kuristy village, a cluster of wooden huts that look like shanty town.

We are off to Andramanoatse sinkhole. I follow our guide who carries the 15 litres steel tank attached to the BCD, on his back. Christina comes along with the fins and some water, and I take the rest of the dive equipment in a yellow mesh bag, in addition to a knapsack with the camera. 15 minutes later, we climb up to the Mahafaly Plateau. We progress along a clear trail, that somehow divides into other trails, across the



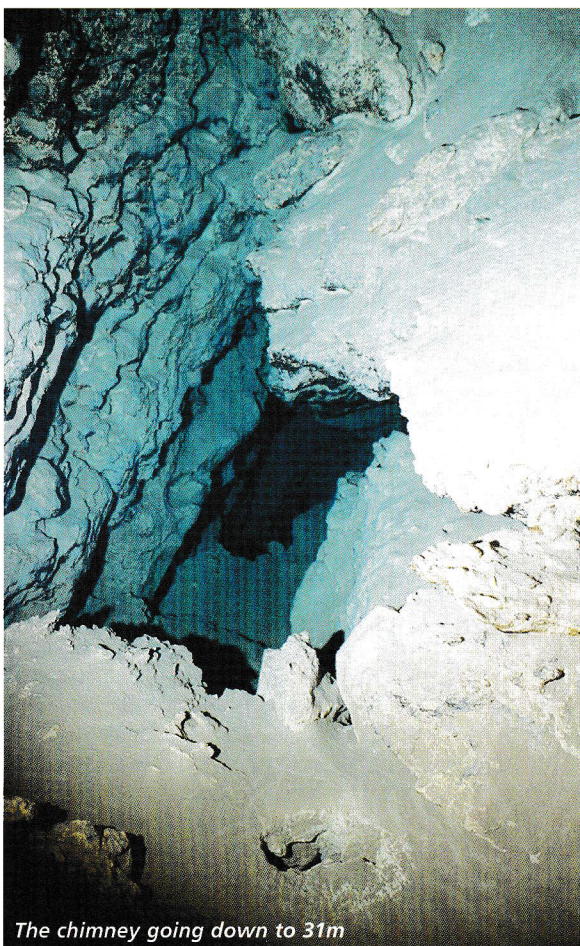
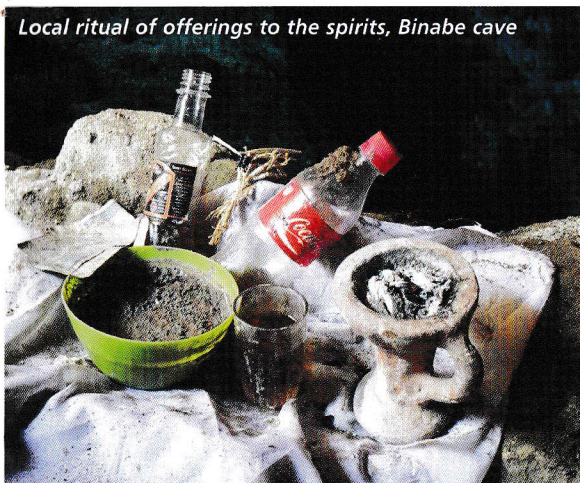
Makis lemurs attracted to the waterhole, Andramanoatse



Local guide with the jaw and femur of dwarf hippo

"Alluaudia procera" and "Didieracea" forest, the so called 'octopus trees' for their weird shape that resemble cacti. Isolated bottle baobabs dot the landscape like giants. Blue couas endemic birds with long tail hop across the trail once in a while, adding a touch of life to this apparent no man's land. One hour has elapsed when we start going down into a valley, stepping over slabs of hard white limestone. Suddenly, the guide turns around stretching his arm with a smile, we are here. The collapsed sinkhole is about 100 metres in diameter. Facing east, the cliff is 50 m high, awesome. Climbing down the slope of rubble and boulders among trees and shrubs, we come to a small lake covered by a film of green algae, at the base of the massive wall, broken by some slanting fractures. The place looks definitely prehistoric. Big banyan like 'aviavy' trees with tentacular roots, border the sinkhole inside the pit. Judging by the number of dungs and other droppings scattered around, cattle and goats come drinking here, no doubt and not only humans! After I throw a stone in the pool, I notice clear water below and that is encouraging, at last. Venturing around the

Local ritual of offerings to the spirits, Binabe cave



The chimney going down to 31m

sides and the top of the 'aven', for photographic opportunities, I spot some makis and black 'vasa' parrots in the area. Getting ready for the dive, I enter the water cautiously. The first hole on the left plunges deep under the rocky overhang, but the silt on the slope is very thick and fine, troubling the visibility at once. After I secure a tie-off to the roof of the cave, I reel my way in down to 20 metres but soon find myself into a silt storm. It does not make sense to continue into this madness alone, for the passage is too narrow. I turn around and try the second hole, to the left as I exit. Funnel like, same story and I give up after a while. At the third hole, I understand that I will have no luck there either, silting out all the same. But just as I make my way back to the surface through a cloud of pastel green yellowish silt, I come to what looks like dead branches sticking out of the mud eerily. Instinctively my hand grabs a rounded knob popping out awkwardly, and I pull out the lower jaw of a dwarf hippopotamus... Not that I had ever come across that sort of curiosity before! But I recognize at once the forking truncated end of the jaw with 4 tooth holes in the middle and the two conspicuous outer holes of the tusks, with one still in place, albeit broken... Soon after my other hand pulls a femur blackened by age. I return to the surface with my prize, and call Arrivé to help me with the bones.

After a 22 minutes dive at 20,7m, I start shivering in my Lycra suit, although the water temperature was a comfortable 26°C. A few local people suddenly come out of thin air and down into the sinkhole to collect some water for their onward journey. They gaze at us with inquisitive glances and I decide to move on swiftly.... Back to Kuristky, a group of villager gathers around the Toyota, staring wild at the jaws. I tell José to remain discreet about this find. "Very old zebu bones, from your ancestors... ", he comments to the crowd, eyes wide open, with his great sense of humour. But Arrivé knows already. " I shall be back for some more explorations elsewhere next time!...", I tell him, as we shake hands heartily. We

leave in a cloud of dust, bound for Ambola where we shall spend the night. I already plan for another exploration dive at the isolated Andrianamaniloka (sinkhole) cave, in the Tsimanampetsotse National Park. Paying a visit to some old 'vazaha' friends, I am very excited to give them the surprise of my latest discovery. "Don't even imagine that you could take that out of the country! They would catch you and throw you in prison straight away...", warns Philippe. "The situation is in crisis now, the government has no money, they are desperate and the next presidential elections are on the 24th of July this year...". And just to give me an idea, he tells me the story of his brother, who has been arrested at the airport, because he was concealing in his luggage an ashtray made of dinosaur bone; he ended up in prison at once and went through serious trouble to get out. Nodding in deep reflection, I take the advice for gold. Proof of my good intentions, I am fully aware that it is just too big a piece to bring back, and I was only considering to bring the find to the Paleontology Museum in Tana.... "Even that is enough for them to put their hands on you!..."

Looking back, I think I made the right decision. The lower jaws of the dwarf hippopotamus, "Hippopotamus lemerlei", with a set of teeth still attached, are in a safe place, for now. "Take photos, leave only foot prints" ... and wait for the wind of change to blow on Madagascar.

The mouth of the Onilahy river and Mahafaly Plateau in St Augustin



"Voay robustus" identification (Box)

Research made by Christopher Brochu in 2006 show that fossil specimen identified by Grandidier & Vaillant (1872), belong to a distinct species. "Voay robustus" is indeed an extinct species of horned crocodile from the Quaternary -ranging from Pleistocene (20000 years) to Holocene- related to the living African dwarf crocodile "Osteolaemus tetraspis". One of the smallest and least aquatic crocodilians.

Besides their small size, morphological characteristics include prominent triangular horns behind squamosals, dorso-ventrally deep snout and near exclusion of the nasals from external naris.

The ancestor of Voay must have rafted or swum across from mainland Africa, long after the separation of the big island from the continent in the Jurassic times. An endemic radiation occurred in Australasia at the same time. "Osteolaemus" were commonly found in forested settings, avoiding saline and brackish water.

Their absence in marginal marine habitats reflects competitive exclusion by larger "Crocodylus niloticus".

Here is the \$10,000 question: "Was the extinction of Voay robustus related to the arrival of humans 2000 years ago? or was it due to predation from larger Crocodylus niloticus?"



A Happy Reunion

By Peter Buzzacott

Since the first time I read Shek Exley's near-miss tale of volcanic diving at Teneriffe I've wanted to dive a lava tube. Of course, we all learn they exist in the Deep Cavern course theory but does anyone actually dive them?

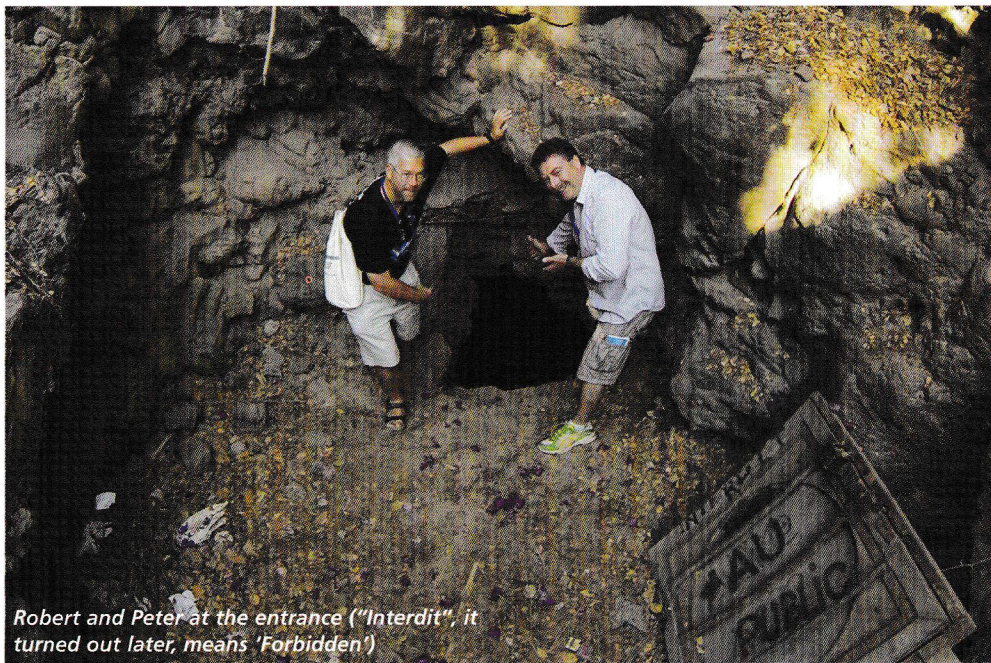
It had been a year since I'd met CDAA member Robert Cook at the NSS-CDS annual cave diving workshop in Florida and we'd gotten on from the word go, even discovering we'd learned to dive with the same instructor many years before. So when I heard Robert was planning to attend the joint EUBS and SPUMS diving and hyperbaric medicine conference on La Reunion, a French island near South Africa, I looked forward to seeing him once again. Immediately I wrote and asked if he knew of any caves on the island and, in one of those strokes of good fortune, he replied saying not really, but he'd heard rumours of a lava tube. These exist in the Canary Islands, Hawaii, maybe Iceland too, so this was a potentially unique opportunity for us.

We started gathering intel straight away, months in advance, but there wasn't much available on the inter-

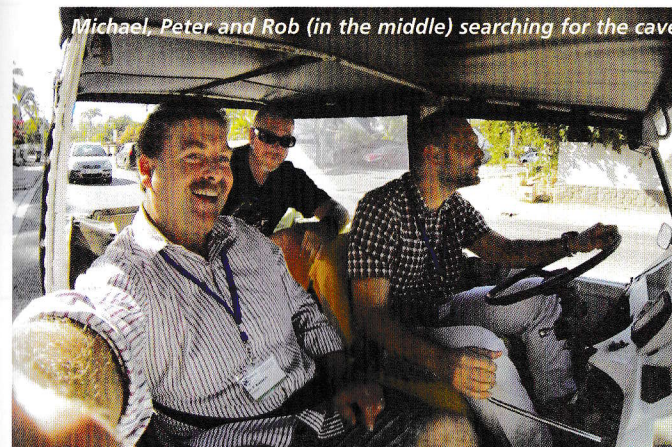
net. We sent e-mails requesting information, all to no avail, then I found a reference to an article in a French caving magazine from 1985. My local speleo club president (in France) told me he had a collection of these going back decades, in boxes, and bless his cotton socks he found it and sent me a pdf (in French, of course).

Another key to our success was that the decompression modelling professor in my lab was also coming to present his latest research and he, coincidentally, has family on La Reunion. Cavers and cave divers have long known the value of local knowledge so this was an ace in the hole. Rob and I sent e-mails back and forth describing our gear preparations, like two girls discussion what to wear at the school ball, and then it was time to meet halfway around the world.

Rob and I met at the welcome drinks function and



Robert and Peter at the entrance ("Interdit", it turned out later, means 'Forbidden')



Michael, Peter and Rob (in the middle) searching for the cave

caught up on the intervening year. Over the next couple of days we questioned everyone we met; "Do you know any lava caves full of water?". Then, a breakthrough, the deco guy said he'd heard of a hole in the ground next to a car-park at a beach bar not far from the conference. We piled into his totally dodgy soft-top, (Rob had to sit in the centre of the back seat otherwise the car would tilt over), and within ten minutes we were standing there looking down into a small, steep entry, like a large man-hole. Hmmm, it looked full of water; looked pretty clear too. We'd need a ladder, maybe a short rope to lower down the gear, and some tanks, lead weights ... We had one spare day

during our conference program so the plan was set – we would dive the fantastic lava cave on Friday.

Back in town renting tanks was not as straight forward as one might expect. Even with the highest French diving qualifications and insurance up to the eyeballs (French sport diving insurance and DAN Europe) no-one would take my money, even when I didn't mention the caves.

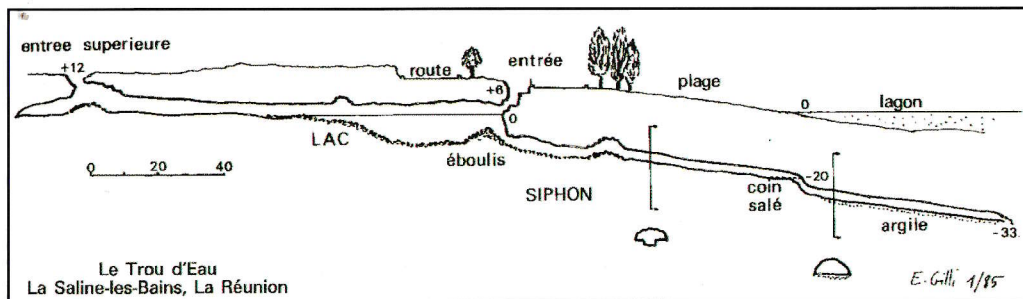
"Oh hi, my friend wants to take me out on his boat for a double dive, I just want to rent four

tanks". Nope, no-one rented out tanks for private dives, they only supply their own charter customers. I enlisted the help of my hotel staff who were absolutely wonderful, not to mention the hotel was as cheap as chips. If I ever go back then I will definitely stay at La Vacoa again. Anyway, they got me four tanks, and weights, and we found a ladder around the back of the hotel which they said I could borrow, etc. You get the picture – they were magic!

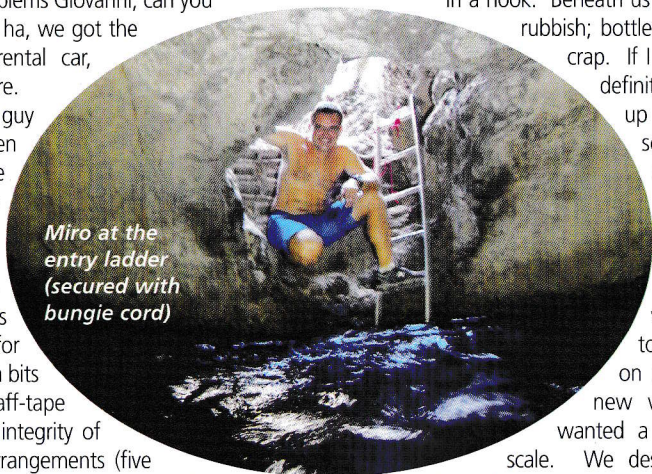
Friday arrived and the head of Mares dive computer research and production (Giovanni) came by with my Slovakian cave diving buddy Miro, a trained cave diver and head of a CMAS dive school. Giovanni wanted



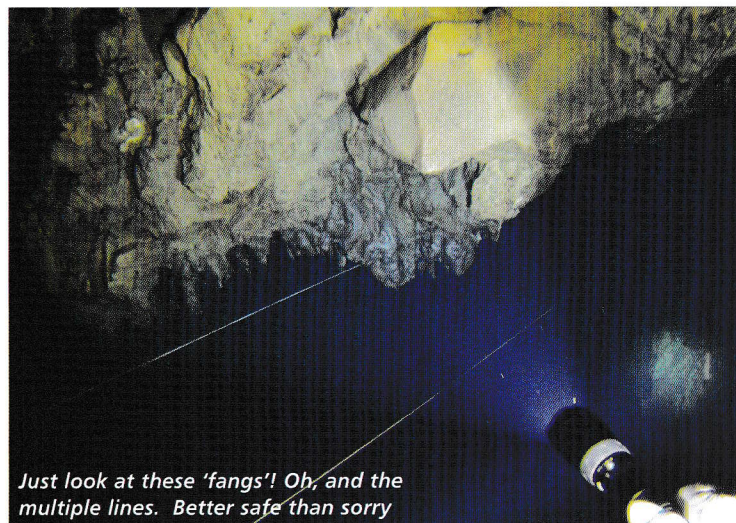
Robert and Miro return from their dive



me to test some new dive computer functions in total darkness for an experiment Miro had been working on for a year. No problems Giovanni, can you give us a lift? Ha ha, we got the ladder into his rental car, with only cms spare. Being the super guy he is Giovanni even helped us get the gear down into the staging area, then we secured the ladder and kitted up. Our bottles were all rigged for sidemounting with bits of string and gaff-tape then I tested the integrity of our scaffolding arrangements (five euro worth of bungee cord) and then Rob and I kitted up in-water, beneath the opening. The lake



Miro at the entry ladder (secured with bungee cord)

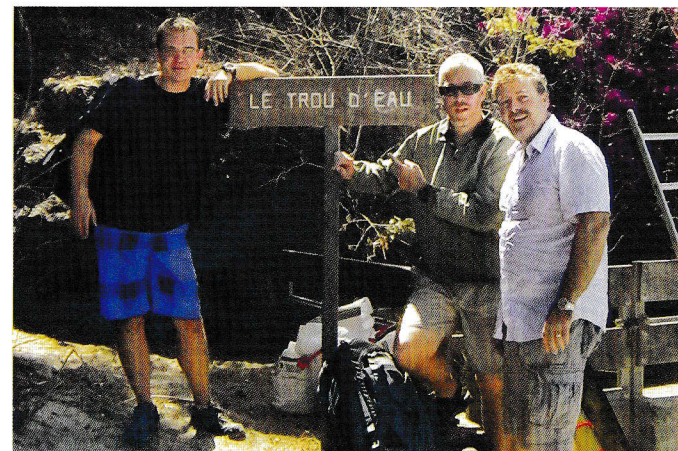


Just look at these 'fangs'! Oh, and the multiple lines. Better safe than sorry

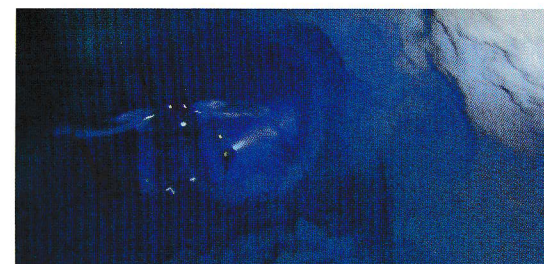
was surprisingly large, maybe 50m long but only 4m wide. There was even a boat in there, cooched away in a nook. Beneath us there was a ton of rubbish; bottles, cans, all sorts of crap. If I lived here then I'd definitely clean this mess up regularly. Maybe someone already does – sigh. Ready to go we could see a line heading in so I invited Rob to lead while I took photos. I had the GoPro on my helmet with a new video light and I wanted a diver in shot for scale. We descended and, gee whizz, this was a special dive right from the start. Everything was totally black. No matter where you shone your light it was black. It was black and smooth, or black and lumpy but, above all, it was black. Wonderful! We started cruising along, taking our time and I began to notice the salient features of the cave. It is shaped like a huge ball of lava barrelled on slowly down the hill, solidified on the outside while the rest kept going, leaving behind a big hollow tube about the size of a bus, (give or take). I took my reg out and tasted the water at

roughly 50m seaward of the entry, at depth 12m. Yup, it was fresh. Then at 16m Rob started to shimmer and I almost lost sight of him as he became a blur of red and yellow colours. This was exciting, we were going through a serious halocline, a difference in density due to salinity. I dropped below it and craned my neck upwards to photograph Rob drop through this layer, and to go from an apparition back to a clear view, and he didn't disappoint me either; fabulous.

Soon after I tasted the water again and it was distinctly salty seawater. The height of the cave started to diminish along with its width and by depth 31m, 150m from the entry, the cave started to shrink before ending in a collapse. We had crossed under the car-park, under the beach and were now in a black lava tube underneath the sea. Rob signalled something while I was fiddling with something so I didn't exactly catch on but I assumed he was signalling the turn because the line obviously ended just before the collapse. I nodded or signalled "yes, yes, okay" and kept on adjusting whatever it was that was occupying me at the time and then when I turned my focus back to Rob he had already deployed a reel from the end of the line and was waist-deep into a gap digging like one of those machines in the Matrix. A cloud of

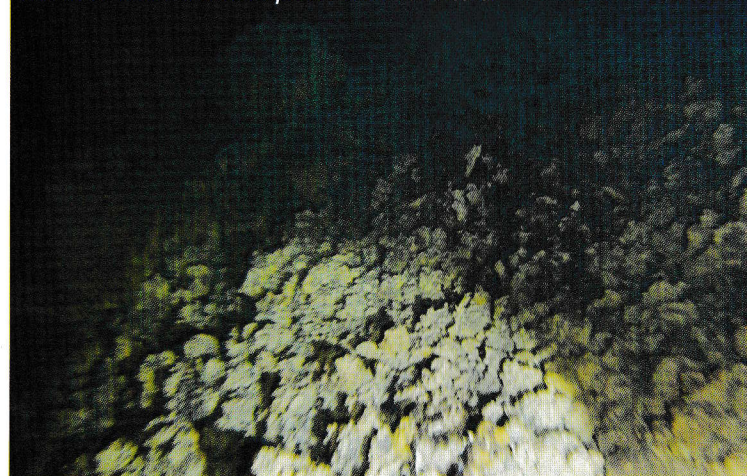


black silt slowly and ominously billowed out behind him. Two streams of thought crossed my mind at once, probably at the same time on either side of my



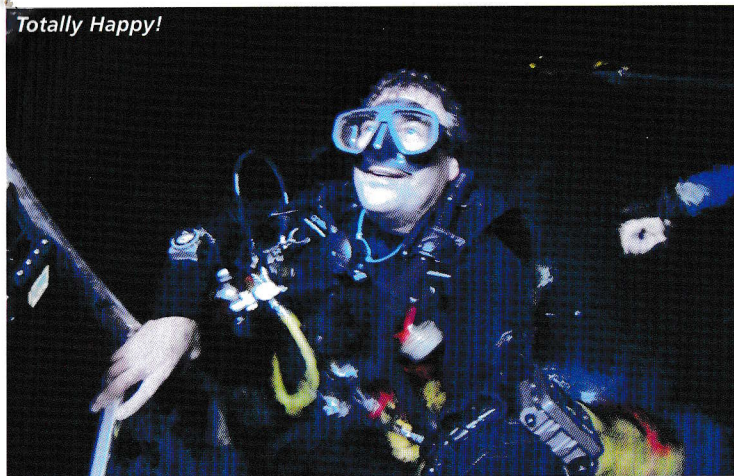
brain since they were opposing. Firstly; "o-oh, this could get uncomfortable pretty quick" and, secondly," wow, I wonder if he's spotted a way on, this could be

The floor was covered in places with 'lava coral'

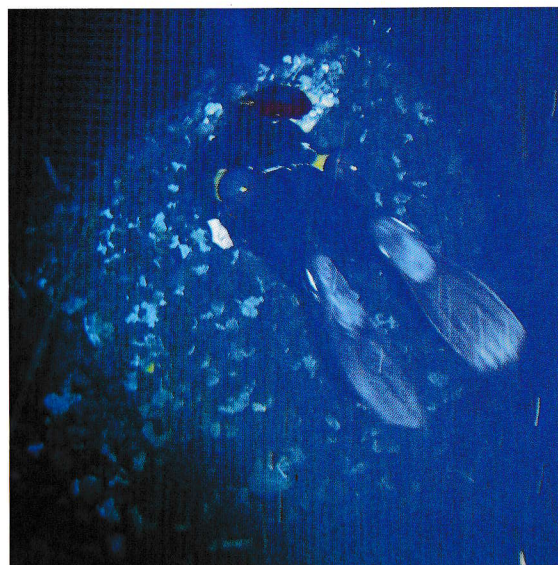
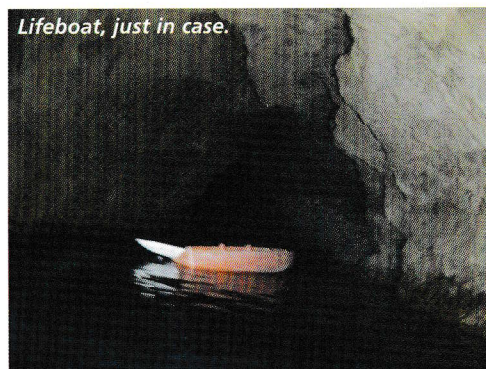


totally super". Remember, Sheck went a full kilometre in Tenerife so this could have been just a localised cave-in. The roof was still fairly high so it probably actually is. Anyway, I tapped his leg and Rob wriggled out backwards, nodded and reeled his line in, then I led out. Along the way I photographed some beautiful features like hanging incisors up to a foot long and shiny metallic black. Swimming through this

Totally Happy!



Lifeboat, just in case.



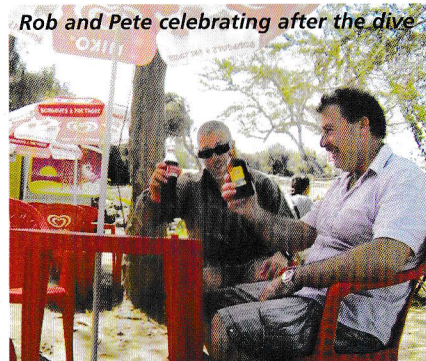
decorated section was like swimming out of a mouthful of jet black metallic fangs! Well, maybe not that dramatic, but it was pretty neat anyway

We arrived at the entry lake and I moved away to conduct the experiment in the dark for Mares, then Rob followed me and helpfully illuminated the dive computer with his primary light so now, while we still do not know how it looks in total darkness, we can be sure it works in direct

sunlight. Then it was Miro's turn to dive the tube. Miro had gone to such lengths to ensure my visit to Slovakia had been a success that I was quite keen to help him experience something unique too, while we had the chance. He was dressed in his own wetty and we quickly handed over my rig and got him squared away. Rob then led him back down to about 29m, whereupon it got a bit silty so they turned back (ha ha, onya Rob), then we all climbed up and out and celebrated with a drink at the beach bar, (except Miro, who carried the ladder 2kms back to the hotel).

In short, this was one of the most memorable dives of my life. Overall this was a rare privilege and my sincere thanks go to Michael Theron, Giovanni Distefano, the family at La Vacoa and the owner at Le Dodo Palmè (the dive centre). By some miracle and/or sheer will Rob and I managed to dive a lava tube – yay!

Rob and Pete celebrating after the dive



40th Anniversary Merchandise

Limited Stock Remaining!



Polo Shirts

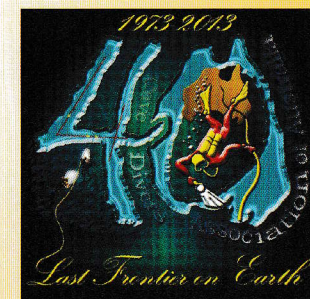
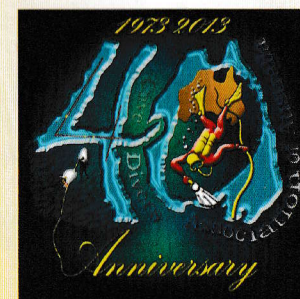
\$35.00

Stylish anniversary polo shirts now available in men's and ladies cut. Gold embroidery '40th anniversary' on sleeve and '1973-2013' below breast logo.

Stickers

\$1.00

Available in two designs.
'40th Anniversary'
and
'Last Frontier on Earth'



Cookies & Line Arrows

\$3.00

Engraved with
'Cave Divers of Australia 40th Anniversary 1973 to 2013'



To view or order any of these new CDAA Products, please visit the Online Store or send an email to products@cavedivers.com.au

CDAА INSTRUCTORS

NAME Deep Cave Adv.
Cavern Cave Cave

A.C.T.



APPS, Heike (CDAА 2776)
Mob: 0407 230 108
E: appsclan@tpg.com.au
Yes Yes Yes

NEW SOUTH WALES



FEATONBY, Tim (CDAА 3327)
Worworing Heights, NSW
Mob: 0402 129 253
E: tim.featonby@hotmail.com
Yes Yes

SOUTH AUSTRALIA



PAYNE, Timothy (CDAА 2640)
Mob: 0448 147 927
E: Tim@diveessentials.com
Yes Yes

VICTORIA



ALLEN, Terri (CDAА 3483)
Mob: 0419 176 633
E: terri.allen@bakeridi.edu.au
Yes Yes



BARCLAY, Gary (CDAА 1735)
Mob: 0407 527 921
E: garinda@bigpond.com
Yes Yes Yes



BOWMAN, Jane (CDAА 1880)
Mob: 0407 566 455
E: janelbowman@hotmail.com
Yes Yes Yes



CLARIDGE, Linda (CDAА 2214)
Mob: 0408 052 070
E: garinda@tpgi.com.au
Yes Yes Yes

NAME Deep Cave Adv.
Cavern Cave Cave

VICTORIA Continued



DALLA-ZUANNA, John (CDAА 236)
Mob: 0407 877 060
E: jdz@paintandcustom.com.au
Yes Yes Yes



EDWARDS, Chris (CDAА 2247)
Mob: 0417 116 372
Email: cedwards@aanet.com.au
Yes



HIGGINS, Andrew (CDAА 3329)
Mob: 0413 569 164
E: ah3329@gmail.com
Yes Yes Yes



McDONALD, Warrick (CDAА 1882)
Mob: 0408 374 112
E: info@oceandivers.com.au
Yes Yes Yes



MONACO, Rubens (CDAА 1731)
Mob: 0413 429 533
E: info@idscuba.com.au
Yes Yes

WESTERN AUSTRALIA



PAYNTER, Geoff (CDAА 3784)
Mob: 0407 445 112
E: gpaynter60@bigpond.com
Yes Yes

CDAА SITE ACCESS - www.cavedivers.com.au

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

SITE	LEVEL	OWNER	ACCESS DETAILS
MT. GAMBIER - SA			
EWENS Ponds	Nil	DEWNR - P.O. Box 1046 Mt Gambier 5290 (08) 8735 1177 DEWNR	Groups of 6 or more, phone/mail to Dept. for Environment, Water & Natural Resources (DEWNR) Smaller groups, no need. Fax: (08) 8735 1135 General Diving: Divers to contact DEWNR and notify of date and site to be dived. Please make requests by phone or fax only. Divers must have the correct CDAА diving endorsement for the site and carry current financial CDAА membership card. The diver must have signed an indemnity with DEWNR before access is permitted and original copy must be received by DEWNR prior to diving. Training: 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. Permit holders by phone or fax. Be aware of delicate vegetation. \$26/dive or annual Permit \$60. NOTE: Members can login to www.cavedivers.com.au and download pre-populated indemnity forms and these must be submitted to DEWNR at least 2 weeks prior to the intended dive date. NOTE: Divers should renew their Piccaninnie Ponds indemnities at least 2 weeks prior to their intended dive date.
Gouldens	CN	DEWNR	At least 1 week prior by email: dhperkins@bigpond.com or phone (08) 8738 4083. At least 1 week prior by email: dhperkins@bigpond.com or phone (08) 8738 4083. Permission not required - must carry card. Obtain key from Lady Nelson Tourist Information Centre. Key available from Simon Livingstone at the Bellum Hotel. Visit the house before diving. If no one is home - no dive!
2 Sisters Fossil	CN C	DEWNR	Maximum 3 divers all weekends between May & November inclusive (check and update on CDAА website). At least 4 divers in group - 1 with previous site experience. Unrestricted days or numbers - Cave rated divers must not enter Penetration sections (stop signs) Unrestricted days or numbers. Open every weekend. Maximum of 4 divers per weekend undertaking 1 dive only (check an update on CDAА site). Open every w/end max 3 divers per day undertaking 1 dive per day (check updates on CDAА website). Open every Saturday max 4 divers, 1 dive only (check an update on CDAА website)
Piccaninnie Ponds	S	DEWNR	IMPORTANT: Divers must advise Forestry SA of their online booking. Collect permits from the Forestry Office, RHS of driveway to Carter Holt, Jubilee Hwy, Mt G. • No diving on Total Fire Ban Days. • Permit also required to run compressors during fire danger season. • Keys for Hells Hole, Nettle Bed, Idlebiddy and Stinging Nettle Cave can be obtained from Lady Nelson Visitor Ctr on presentation of Forestry SA permits.
Horse & Cart Tea Tree Little Blue Allendale Ela Elap One Tree	CN CN S C S S	Dale & Heather Perkins District Council of Grant District Council of Grant Dean & Carol Edwards Mr. Peter Norman	Refer to CDAА 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 www.cavedivers.com or contact Craig at kilsby@cavedivers.com.au No animals, visitors or mid-week diving allowed. No diving on Total Fire Ban Days.
Dave's Cave Hells Hole Pines Mud Hole Nettle Bed Stinging Nettle Cave Idlebiddy	C C C/P P P P P	Forestry South Australia Fax: (08) 8724 2870 Phone: (08) 8724 2876 C or book on-line via the CDAА website to arrange permit. email: conservationandrecreation@forestry.sa.gov.au	For access dates go to the CDAА 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 CDAА Regulations. Divers applying to dive in the Shaft for the first time must document dive experience with twin tanks. Download form off website.
Kilsby's	S	Landowner leased to CDAА	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.
Shaft	S/C	Generally open one weekend a month. Trevor Ashby	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. Access Manager: David Fielder. Email: tankcave@cavedivers.com.au Access Manager: Matthew Skinner. Email: bakers@cavedivers.com.au Climbing equipment required. One member must have previous dive experience at site.
Engelbrechts - East - West	C P	Mt Gambier Council Lessee Ph: 08 8723 5552 Owner: John & Sue Douglas	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. Phone: (08) 9083 2100 Fax: (08) 9071 3657.
Three Sisters	P	Millicent Council	Apply in writing or email for permission to dive at least four weeks in advance of trip. Miss Shannon Alford, Email: Shannon.alford@lands.wa.gov.au Phone: (08) 6552 4661 Department of Lands, P.O. Box 1143, West Perth WA 6872. Fax: (08) 6552 4417 A site indemnity form must be filled out for each visit to the site. Diving permission acknowledged by official letter from Land Owner.
Tank Cave Baker's Cave	P C	CDAА Janet & Bruce Saffin	Both Penetration and Cave Level are being accepted for this cave depending on its water level at the time. The cave has a restriction at the entrance which is underwater making it a Penetration Dive. During drought, the water level drops to form a small lake below the restriction allowing experienced Cave Divers access to this delicate cave. Affected by high CO ₂ levels during Summer/Autumn. Access is co-ordinated with the Wellington Caves management by Greg Ryan - Email: gjryan@gmail.com . Phone (02) 9743 4157. Unrestricted access currently exists - Please refer to website.
NULLARBOR - WA			
Cocklebirdy Murra El Elevyn Tommy Grahams	C/P C C	DEC DEC DEC	Please refer to website. There are no specific access arrangements.
Burnabee Olwolgina Cave Weebubbie	P P S/C	Department of Lands, WA Department of Lands, WA Department of Lands, WA	
WELLINGTON CAVES - NSW			
Limekiln (McKavity) cave	P/C	Wellington Caves	
Water (Anticline) cave	C	Wellington Caves	
Rum Jungle Lake	S	Coomalie Community Govt Council	
Burrinjuck Dam	S/C/P	NSW Parks & Wildlife	

Sinkholes: what lies beneath the Limestone Coast

By Kate Hill, ABC.

Huge sinkholes may be swallowing houses and making headlines in Florida, but here in the Limestone Coast, the rare occurrences are simply part of the geological fabric. We visit them, dive in them and wonder at their origins, their history stretching back for countless thousands of years. While Engelbrecht and Umpherston Caves are familiar names, the smaller and more secretive ones are known about by just a select few. Sometimes, there have been witnesses to the tale, like the time the ground opened up under a football match in Glencoe, or the Yahl farmer who nearly lost a tractor. But more often than not, the earth opens when no one is watching.

"Sinkholes are certainly not a weekly event," said Ian Lewis, Director of the Kanawinka Geopark.

Mr Lewis's many interests, both professional and personal, range from cave diving to geology which makes him a perfect storyteller to when it comes what lies beneath the Limestone Coast. "I used to wag school in the 60s and go and sit in Engelbrecht Cave and count bats," he said, reluctantly divulging his age. "My interest in science started very early."

For four decades, Mr Lewis has been studying the geological significance of the South East, saying the region has over 1000 documented caves, but not all belong to the rare sinkhole family.

"We have about 50 sinkholes and around 20 with water in them," he said.

"Our particular sinkholes have a special name 'cenote', an ancient Mayan word used to describe a natural well in the ground."

"To get that shape, you have to certain types of limestone, climate conditions and you have to have water for it to fall into."

Mr Lewis said most varieties of limestone were formed at the bottom of the sea over thousands of years, by a motley collection of corals, fish and bones compacting together on the sea bed. A high water table fills the cavities in the limestone, but when the table drops due to construction or intensive farming, cracks or

fissures can appear.

Even rain is a predator to the soft stone, the drops forming a weak carbonic acid as they fall through the atmosphere which reacts with the limestone.

Limestones other uses...

Curiously, the stone is famous for its building qualities, being easy to cut, lightweight and a nice creamy colour.

"It's a beautiful building material," said Mr Lewis. "As long as you don't get a block with a cave or hole in the middle of it, you've got a perfectly good stone to build your house with."

There are only two or three regions in the world with the same underground structure as the Limestone Coast, namely the Yucatan Peninsula in Mexico and the state of Florida in the United States.

In recent years, the world has watched with fascination as Florida's increasing sinkhole activity saw houses, caryards and even portions of neighbourhoods lost to the strange phenomenon. Even people have fallen victim.

In March, 2013, a nightmare scenario came true for one man soundly asleep in his bed, when it disappeared into the depths of a giant sinkhole

that opened up under the house in a quiet suburb of Tampa, Florida. Jeff Bush was never found.

His brother Jeremy told American news organisation CNN of his futile efforts to find him, hearing Jeff call out for help as he fell into the reportedly 40-foot deep hole.

Could it happen here?...

Mr Lewis said there were two reasons why the Limestone Coast wasn't sharing in the headlines.

"Florida's water is flowing so there's movement constantly eroding the limestone, whereas our water moves very, very slowly through the rock," he said.

Mr Lewis said a vast amount of water goes into Florida's large capital cities such as Miami and Jackson, and is also being used by the state's burgeoning citrus industry.

"Intensive agriculture uses vast amounts of water," he said.

"They've been pumping huge amounts of water out of their aquifers for decades and decades and that lowers the water table."

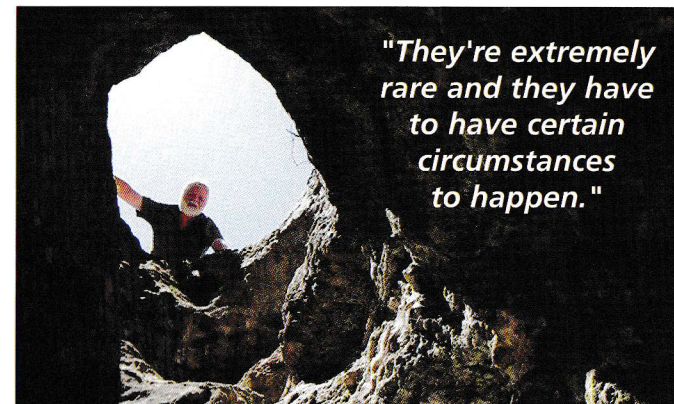
Mr Lewis said the current scientific belief was that the fragile limestone collapsed without the water's buoyancy to sustain it.

He said it was interesting to look at the situation in Florida and propose what could happen here in Australia.

"If the city of Mt Gambier became 1 or 2 million instead of the size that it is and started pumping out water at a heck of a rate, that could be the future view," he said.

"But I don't think it would ever happen here in Australia."

Mr Lewis said he's been privy to a lot of amazing stories about Florida sinkholes. One he finds particularly fascinating was that of the 'disappearing lake' that happened around the late 1960s.



"They're extremely rare and they have to have certain circumstances to happen."

"There was a lake about 10 kilometres long with three little villages along its banks and a ferry that used to go from one to the other," he said. "One night, everyone heard this weird noise and when they all rushed out, they found the entire lake had disappeared down a series of sinkholes."

"Out in the middle of the lake was sitting the ferry in the mud."

"The lake never returned."

Mr Lewis pauses for effect.

"That's big."

WANTED!

Do you have a spectacular photo we could use on the Cover of Guidelines?

The image needs to be portrait and high res.

If so, Send it today!...
publications@cavedivers.com.au

