



Back Cover: Exiting the water at Komati Springs, South Africa. By Meggan Anderson.



C.D.A.A. Newsletter

No. 142 - DECEMBER 2017

- 2017 AGM Photos
- Cave Surveying in Mexico
- South Africa's Komati Springs
- Mexico's Huautla Resurgence
- Madagascar - Beyond the Twilight Zone

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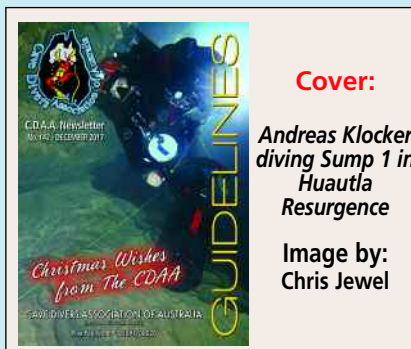
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CAVE DIVERS ASSOCIATION OF AUSTRALIA

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

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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 - Peter Wolf
Email: national@cavedivers.com.au Mobile: 0413 083 644

STANDARDS DIRECTOR - John Dalla-Zuanna Mobile: 0407 887 060
Email: standards@cavedivers.com.au

Quality Control Officer - Vacant, please refer to Standards Director.
Email: quality@cavedivers.com.au

Risk Officer - Andy Rands Mobile: 0403 825 590
Email: risk@cavedivers.com.au

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

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

BUSINESS DIRECTOR - Mathew Rochford
Email: business@cavedivers.com.au Mobile: 0411 529 512

Treasurer - Treasurer - position vacant, refer to Business Director

CDAA Products - Damian Bishop - Mobile: 0433 345 743
Email: business@cavedivers.com.au

SITE DIRECTOR - Kelvyn Ball Mobile: 0428 842 259
Email: site@cavedivers.com.au

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

Shaft Booking Officer - Gary Barclay
Email: shaft@cavedivers.com.au Mobile: 0407 527 921

PUBLICATIONS & RECORDS DIRECTOR - Meggan Anderson
Email: publications@cavedivers.com.au - Mobile: 0415 291 904

Records Officer (Members & Instructors) - Meggan Anderson
Email: records@cavedivers.com.au - Mobile: 0415 291 904

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

Webmaster: Rowan Stevens Email: web@cavedivers.com.au Mobile: 0417 550 509

AREA REPRESENTATIVES

ACT: Alasdair BLAKE. Mob: 0404 823 007 Email: actrep@cavedivers.com.au

NSW: Ryan DUCHATEL. Mob: 0419 268 714 Email: nswrep@cavedivers.com.au

N.T.: Jeffrey SWANN. Mob: 0419 561 515 Email: ntrep@cavedivers.com.au

QLD: Please Contact Site Director. Email: qldrep@cavedivers.com.au

SA: Damian BISHOP. Mob: 0433 345 743 Email: sarep@cavedivers.com.au

S.E. SA: Leon RADEMEYER. Mob: 0467 070 740 Email: sesarep@cavedivers.com.au

WA: Geoff PAYNTER. Mob: 0407 445 112 Email: warep@cavedivers.com.au

VIC: Benn WALTON. Mob: 0412 751 873 Email: vicrep@cavedivers.com.au

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

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Photo by Liz Rogers

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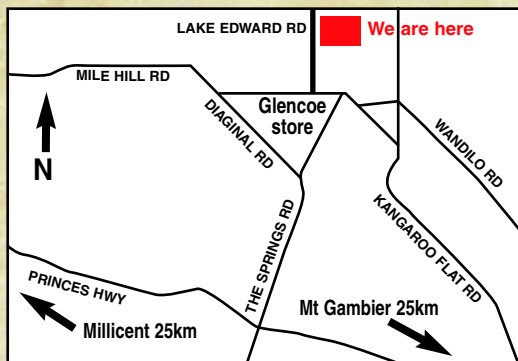
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EDITORIAL MEGGAN ANDERSON



Dear members,

Welcome to my first Guidelines as Publications and Records Director. I hope to fill the very big shoes Rowan Stevens has left behind and would appreciate any input as we start this journey together. I am very grateful to have Dave to assist me with Guidelines, a lot of work goes into each issue and I look forward to seeing contributions from members.

The past month since the AGM has been a rather overwhelming learning curve for me and a lesson in time management. It reminded me of some advice someone once gave me: "Learn to separate the urgent from the important." As an association run by volunteers, most who have full-time jobs and other responsibilities, this particularly rings true. Sometimes you just got to put your phone away and avoid the to-do list for a few hours to retain some sense of sanity. Going for a dive makes this possible!

I would like to wish you all a happy festive season, I hope you all manage to get some dives in and time to relax (with an issue of Guidelines of course).

Meg

*Meggan Anderson #4942 | Publications and Records Director
M: 0415 291 904 | E: publications@cavedivers.com.au*

FROM THE DESIGNERS' DESK...

It's my pleasure to welcome Meggan Anderson as the new Publications & Records Director, as it is the one committee member whom I work closely with in producing Guidelines. I look forward to working with Meggan. The previous female Director was Terri Allen. In welcoming Meggan I asked if she would allow me to add some creativity to the magazine. What I would really like to know, from you the members is, would you like to see Guidelines with more colour, different fonts and layouts. There was a time when I did this in the past and it looked great, but in recent years the publication has been given a simpler design... what I'd like to know is, are you, the members, happy with it, or would you like to see a change.? Please email either myself or Meggan if you want to see Guidelines the way it is, or with more creativity?? I am looking to start the 'new look' as of the March 2018 issue. Guidelines very much relies on two things, great stories and pictures. I hope that as more CDAA members buy cameras, the more articles I might receive for the magazine, At least I hope so. Please, please send me some awesome Cover pictures, or submit a travel story or two. I know it is a task to write a story, but even if it is just a pictorial with captions for each image, that often works really well too. So, all I ask is, if you intend to travel domestically or international for a cave diving holiday (some might call it an expedition) please allow your other CDAA members to read about your experiences, in the hope that they too might follow in your footsteps. I can't wait to see what You can create. Thank you for another great year. Have a wonderful break over Christmas, and here's to an even better 2018.

Dave Bryant.

Articles for Guidelines March 2018 - Deadline is Feb. 15th

- Send articles and jpeg images by email to guidelines@cavedivers.com.au

NATIONAL COMMITTEE UPDATE

DECEMBER 2017

Dear Members,

As my first Guidelines update as National Director, I will keep this short and sweet.

Firstly, I'd like to thank all the members, the outgoing directors, and anyone that was involved in the running of the AGM and symposium. It was a great event, and the plans for the next (which will mark the CDAA's 45th anniversary) are already underway.

The last month has been pretty hectic. The newly elected directors; Meg Anderson (Publications), Kelvyn Ball (Site) and myself (National) have all been busy getting up to speed on the action behind the scenes. We sincerely appreciate your patience over the coming weeks as we get through the handover process with the assistance of the on-going directors; John Dalla-Zuanna (Standards) and Mat Rochford (Business), following our first National Committee meeting at the end of November.

It is natural that after each election the dynamic of the National Committee changes significantly. Already there have been a number of great ideas put forward, so 2018 is shaping up to be an exciting year for the CDAA. It is my aspiration that, over the next 12 months, we can tackle enduring issues with fresh eyes and renewed enthusiasm, as well as implement many new ideas and strategies to keep the CDAA moving forward.

To make this happen, I encourage all members to share your thoughts, ideas, and desires for the CDAA. It is, after all, an "Association", and I firmly believe that the way forward will be through greater collaboration and engagement with, and amongst, the membership. It doesn't need to be formal, or overly structured, but I encourage all members to get involved. Support CDAA social events organised by your State Reps, go diving as frequently as you can, share stories and information, and keep your passion for cave diving alive!

I look forward to catching up with many of you at one of the future CDAA events, or even better – at one of our amazing dive sites.



Pete Wolf #4419
CDAA National Director

On behalf of the National Committee



Mathew Rochford,
Business Director



Kelvyn Ball,
Site Director



John Dalla-Zuanna,
Standards Director



Meggan Anderson,
Publications and
Records Director

From the STANDARDS desk....

As outlined in the last Guidelines and announced at the recent CDAA Symposium, the Deep Cavern course has had a name change to Basic Cave (see page 22 for more info), and the ability to add endorsements to your certification cards has been developed via the website. Further, there is now an ability to do an Advanced Cave Equivalency course overseas with certain aligned instructors, which will greatly assist members who wish to crossover these qualifications back into the CDAA upon their return to Australia. These details are in a subsequent article in this edition of Guidelines and further explained in the updated Regulations & Training Standards found in the Members library.

Also, we expect to roll out the Vertical Access Program within the next few weeks, so stay tuned to your email inbox and the CDAA website for details & dates.



SITE REPORT

KELVYN BALL



A very short quick report, sorry it's harvest season for this farmer.

I would like to thank Leon Rademeyer for his work as my predecessor and hope we can keep the communications going forward. I would like to thank all members that voted me in to this position and I appreciate all information from members about sites and improvements that I have already received and I will endeavour to start the ball rolling.

A few housekeeping items: Good and Bad

Shaft- Gary Barclay is now the Shaft Co-Ordinator. We hope numbers will increase as it hasn't been supported as much as I thought it would in the last couple of years. I believe it is a

wonderful site and has a lot to offer.

Ela Elap- having issues with key returns. Please can all members make sure the key is definitely returned and sign in and out as it will help to keep track.

Gates- Just a reminder for all gates to all properties to be closed at all times.

Tri Mix- Note: Just because the CDAA has signed divers off as Tri Mix rated this does not give you the rights to dive deeper than landowners permit. Respect for their wishes is needed at all times to ensure the ongoing access to the sites.

Wishing everyone a wonderful Christmas and Happy New Year and safe diving!

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2017 CDAA AGM and Symposium

Story and photos by Meg Anderson

Around 60 members descended on Mount Gambier the last weekend of October for our annual AGM and symposium. The day kicked off with a welcome from the City Of Mount Gambier CEO Mark McShane, who thanked members for visiting and supporting the town. He also made sure to leave some local Coonawarra wines as prizes. We were then introduced to the wonderful world of cave diving in the Yucatan Peninsula, Mexico by our international guest speaker, Michel Robles Vazquez. Mexico is a popular cave diving destination and judging from the photos I can understand why. Prior to arriving to the AGM, Michel had already delivered a presentation to members in Perth and enjoyed some diving in the Nullarbor. Later on in the day, Michel spoke about some exploratory dives

he has done in other parts of Mexico. Michel's talks also focussed on cave conservation which complemented the main theme of Dr. Stefan Eberhard's talk on cave ecology in the Nullarbor – for me this was interesting as while I often am mindful of cave conservation, I've never really thought of the impacts of walking in a certain part of a cave or plonking my gear in a certain spot may have on the creatures that inhabit the cave. Other speakers included Steve Fordyce who spoke about his adventures in the Elk River caves in Victoria, Bruce Clulow who spoke about cave exploration in the Cook Islands, Standards Director, John Dalla-Zuanna who gave a training standards update (the main change being the Deep Cavern course is now the Basic Cave course) and Ryan Kaczkowski, who spoke about the psychological make up required for exploration and what drives him in that area. A big thank you to all our speakers for making it a very interesting and informative day and keeping the audience engaged.

The AGM portion of the day covered the business side of things and thanks to our Public Officer Andrew Seifried for running it once again. Probably one of the most disappointing things was that the member voting percentage did not meet the required 25%, which meant that proposed constitutional changes could not go ahead or we could not accurately gauge members' views on the proposed changes. It is evident that more work needs to be done in this area in getting people to vote. However, a big thank you must go to Returning Officer Darren Walters for running a tight ship with regards to voting administration and for those scrutineers and counters who helped on the day. The AGM was also a time for outgoing directors John



Stephen Fordyce was happy to relax and enjoy some food after presenting earlier in the day.



Pat Fitzgerald, Peter Wolf, Benn Walton and Michael Mallis at the evening function.

Annie Rademeyer, Leon Rademeyer and Grant Moyle at the evening function.



Many prizes were given out during the day. Here James Manna is presented with a prize from Rob Main.



Outgoing National Director John Vanderleest hands over to Peter Wolf, our new National Director.

Vanderleest (National Director) and Rowan Stevens (Publications and Records Director) to reflect on their achievements and challenges during their many years on the National Committee. Thank you to them for the time they have devoted to the association as well as to Leon Rademeyer, the outgoing Site Director. Peter Wolf (National Director), Kelvyn Ball (Site Director) and Meggan Anderson (yes that's me – Publications and Records Director) are the new members to the National Committee. Mathew Rochford (Business Director) and John Dalla Zuanna (Standards Director) remain in their positions, which were not up for election.

This year we were very lucky to also have some fantastic sponsors who donated generous door prizes. Thank you to Hollis, Halcyon, Reef 2 Ridge, City of Mount Gambier, Deep Dive Gear, Scubapro, TFM Engineering and the City of Mount Gambier. At the end of a very successful AGM and symposium, prize sponsor and CDAA instructor Rob Main invited all members for drinks at his new Reef 2 Ridge facility at 11 Caldwell Street. Next time you're in town, make sure to pop in and have a look. From there, it was time for the cock-

tail evening event, which resulted in some sore heads the next day. Our international guest Michel enjoyed some dives on the Sunday (including in the Shaft) and then explored Tank Cave on Monday. Prior to his departure from Australia, he also delivered talks to members in Queensland and New South Wales. A big thank you to Business Director Mathew Rochford, who drove the organisation of the AGM and symposium and to James Manna, the MC who did a lot behind the scenes on the lead up to the day as well. Other thanks go to Damian Bishop, Leon Rademeyer, Rob Main and Mary Anne McLeod who helped behind the scenes (and to Ashley Hemraj, who sorted out all the entries for the door prizes on the day). We would like to also thank all those state reps and members who helped organise state events and speakers and to those members who assisted with transporting Michel and volunteering their time to take him and his



Our special guest Michel Vazquez enjoyed a dive in the Shaft over the AGM weekend.



Many interesting talks were presented throughout the day, including a presentation on cave ecology by Dr. Stefan Eberhard.

wife Paloma on trips and diving. The association would be nothing without its volunteers and I strongly encourage members to put their hand up for tasks big and small, as it really does make a difference.

Now that the dust has settled and it's all over, it's time for the National Committee (especially the new grasshoppers) to settle into their roles and start the hard work. The ball has already started rolling for the 2018 AGM and I'd like to encourage all members to consider travelling to Mount Gambier for the next one – the town needs our support and it creates goodwill with locals and landowners alike, who appreciate the business we bring in. While the date and the destination can't accommodate everyone, it would be great for those that can to come along next year and make our 45th anniversary AGM and symposium bigger and better than ever.

The CDAA wishes to sincerely thank these sponsors for their support of prizes at the 2017 AGM:



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DEEP DIVE GEAR



Beyond the sump: Exploration of the Huautla Resurgence

by Andreas Klocker

Sistema Huautla is an approximately 75 kilometre long, 1560 metres deep, cave system located in the Mexican state of Oaxaca. It is currently the deepest cave in the Western Hemisphere and the 8th deepest cave in the world. One of the great mysteries of Sistema Huautla is the connection to the active resurgence some 10 kilometres away in the remote Santo Domingo canyon.

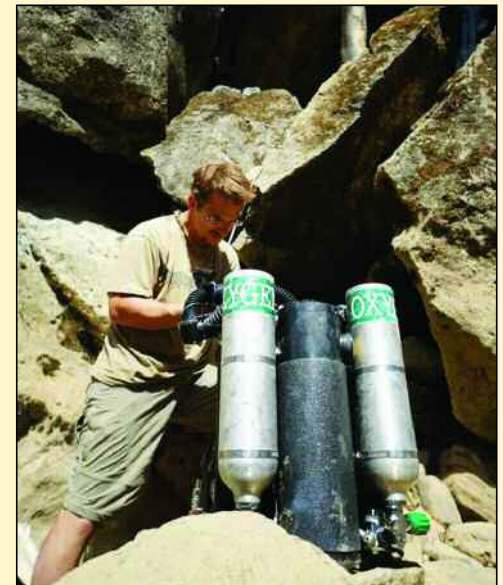
The resurgence has been confirmed by dye tracing, resulting in it being the subject of several expeditions. Each of these has increased the known length of the cave and closed the gap to Sistema Huautla's furthest downstream sump, known as the "The Mother of all Sumps", found during Bill Stone's epic 1994 expedition (Stone and Am Ende, 2002).

The year after this expedition, Bill Stone returned with US cave divers Paul and Jill Heinerth who pushed the resurgence on open circuit to a depth of 55 metres in the second sump. In 2001, Brits Jason Mallinson and Rick Stanton continued exploration, again on an expedition organised by Bill Stone, and explored and surveyed the resurgence to just over 1 kilometre distance, past an elbow at 65 metres depth, to an air bell where a passage was seen heading off 10 vertical metres above water level (Shade and Stone, 2002). Nevertheless, the upstream continuation of the underwater river remained a mystery. This was 15 years ago, and no one had returned since.

In 2013, after more than a decade hiatus in the exploration of Sistema Huautla, Brits Chris Jewell and Jason Mallinson planned an expedition to dive "The Mother of all Sumps" and continue exploration where Bill Stone and his team left off in 1994. On this trip Jason dived to 81 metres depth where he had to turn due to the depth limits of the gas mix he was using, but he could see the tunnel barrelling off to probably beyond 100 metres depth... 2014 then randomly happened to be my first trip to Mexico. By recommendation of

a Yorkshire friend of mine, Andy Chapman, I ended up on an American-led expedition to Sistema Huautla which immediately resulted in my addiction to the exploration of this cave system. It was not long into this expedition that I met Zeb Lilly, a caver and cave diver from Virginia (US), who was as fascinated by this cave as me. It then did not take long until we made the plan to organise annual expeditions to work towards the connection of Sistema Huautla with its resurgence, which would make this cave the deepest and most spectacular through-trip on the planet. Our first objective, for 2016, was to continue exploration from the downstream end of Sistema Huautla, the Huautla Resurgence, beyond the point where Jason had to turn in 2001. We put together a team of cavers who were all very capable in both dry caving and rebreather diving, which included Chris Jewell (UK), David Bardi and Sandy Varin (AUS), Zeb and myself, and our great support team Alejandra "Alex" Mendoza (MEX) and Ernie Garza (USA). The year leading to this expedition was a wild ride, trying to figure out how to get all the technical dive gear, including compressor, boosters, 40+ tanks and several

rebreathers from around the planet to Mexico via Trump's soon-to-be wall and many corrupt government officials and cops. And then five days before leaving we found out the mayor from Santa Ana Cuauhtémoc, the town we were planning to use as expedition base, got shot Narco-style. Luckily his cousin was in charge soon after. After a year of planning and a long drive for Ernie and myself from Texas in the US to Mexico (the others took the plane and bus and joined us later), we finally arrived in Santa Ana Cuauhtémoc, a small and amazingly scenic village on the south side of the Santo Domingo Canyon. In this village we rented the upper level of a double story house in the village with three rooms for gear, cooking, and sleeping, which Ernie had organised for us on a reconnaissance trip several months back. We quickly settled in and set up our gear to get started with the exploration which we all came here for. Finally the time arrived and we went for our first trip into the Santo Domingo canyon. This involved an hour drive down a steep serpentine road, which proved to be quite a challenge in the long wheelbase Ford F-350 we were driving, and a 40 minute hike in the stunning Santo Domingo



Andreas Klocker preparing his KISS rebreather in front of the entrance to the Huautla Resurgence.
Photo by Chris Jewell



Zeb Lilly in front of a huge flowstone curtain in the upper levels above the Passage of the Cheeky Monkey. Photo by Matt Vinzant



Funky formations in the Dead Sea cave passage.
Photo by Maxwell Fisher

canyon, involving several river crossings and amazing views of limestone walls several hundreds metres tall. This place was even nicer than we expected from previous reports and photos! Once we found the cave entrance (and stared for a while at its inviting sump pool) we did many laps between the car and the cave entrance to move all the necessary dive gear to the cave, and then finally started our first dive. As expected, after many flood events since the last trip in 2001, the old dive line was fully shredded, with only a few remaining bits of line giving us confidence that we were swimming the correct way. Nevertheless, with Chris and myself laying line as a team we made it through the first sump, about 400 metres long and up to 25 metres deep, in one dive. Beyond the first sump, we surfaced below a small water fall which caused a very disorienting situation in the shallows due to the large amount of water hitting the surface of the sump pool creating strong currents. In 2001, Rick and Jason were lucky to find water levels high enough to be able to swim over this obstacle, but we, similar to Paul and Jill Heinerth during the 1995 expedition, had to climb this water fall with all our dive gear. Once we made it into the second sump, we spent several days relining the passage. Due to an average visibility of approx. 7 metres,



Maxwell Fisher looking at the exit of sump 2. Camp 1 is just up the sand slope on the opposite side.
Photo by Chris Jewell

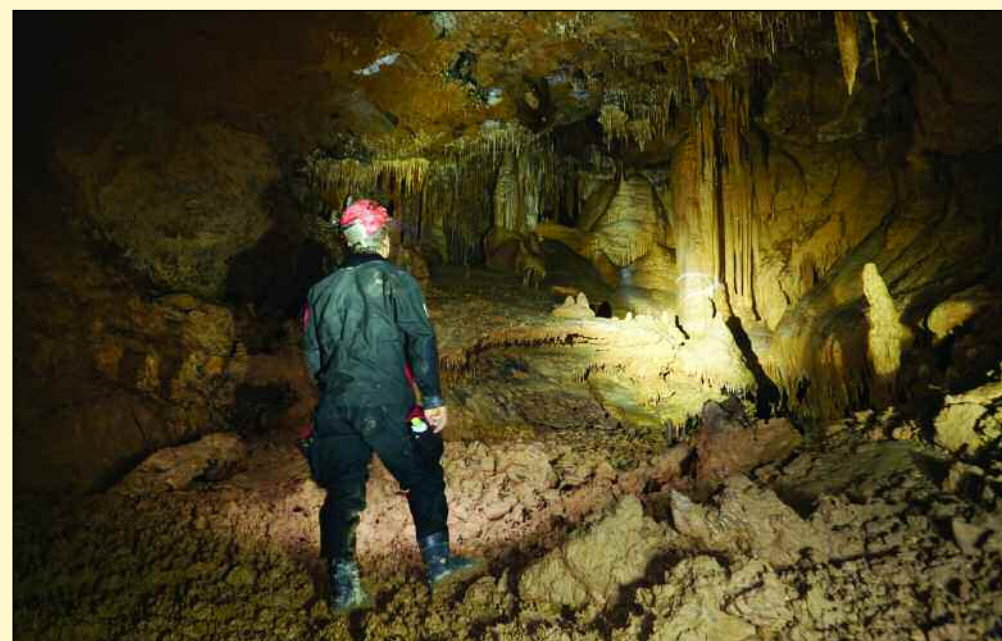
and the cave passage often exceeding this distance, there were many occasions when we thought we might have missed a junction, and so we spent a substantial amount of time to check all those leads. Finally we made it to the elbow at 65 metres, after which in 2001 Jason ascended almost vertically to an air bell. On the next dive, when we planned to push beyond this point to find the upstream continuation of the underground river beyond Jason's limit of exploration, my dive light sadly flooded and

Chris continued on solo. On this dive he spotted a smallish rift in this very complex and confusing part of the cave, heading upwards, which he followed to a depth of 12 metres where he turned due to a combination of decompression obligations and being solo in a very remote place. On the following day, Dave and Sandy continued along this passage and surfaced soon after. What they then found can simply be described as absolutely incredible! Still wearing their drysuits, they walked along a huge fossil passage, with

multiple sumps and plenty of formations along its way, for over half a kilometre - a passage now called the Passage of the Cheeky Monkey. As one would expect, the evening was spent with lots of stories about the cave and some well-earned beer. Chris and myself returned the next day to have a look ourselves, survey this new part of the cave, and take photos. This part of the cave was so amazing and pleasant that even surveying felt tolerable! Nevertheless, these exploration trips also started to become very long and tiring, with trips beyond sump 2



The view from the accommodation in Santa Ana, and the expedition truck. Photo by Andreas Klocker.



Andreas Klocker looking into the newly discovered Passage of the Cheeky Monkey. Photo by Chris Jewell

involving ~4 hours of commuting between Santa Ana and the cave entrance, and ~4 hours of diving (including both swim time and decompression), without even counting the time spent exploring beyond the sumps. And then we would finish off these big dives by driving up the canyon for 1000 vertical metres...something generally not recommended by any dive doctor.

Once Zeb arrived, who had to work in the US a bit longer and hence joined us later into the expedition, both of us made one more trip to the Passage of the Cheeky Monkey. Our objective was to continue the survey from last trip, and have another good look for remaining leads. Our main concern was that the Passage of the Cheeky Monkey was a fossil streamway, and similar to Jason in 2001, we could not find the upstream continuation of the active streamway. At the most northern/upstream part of the cave we had a look at a flowstone restriction which had a substantial amount of water coming out of it. However, it seemed unlikely that this amount of water was enough to make up for the main conduit of the cave, and we could not believe that it would be possible to get enough water through this restriction during floods to destroy all the cave line placed during previous expeditions. Sadly though

we did not find any other way on, and so we returned after finishing the survey. At this point we also came to the end of our expedition, and we knew it was going to take us several days to get all the staged bailout cylinders out of the cave and carry them to our vehicle. So while we found stunning cave passage during this expedition, the continuation of the main river towards Sistema Huautla still remains elusive, and we will have to return to keep searching.

As soon as we arrived back in our respective home countries we started planning for a return in 2017. For this trip a few things changed. In 2017 Sandy and Dave did not return, but instead we had Connor Roe and Maxwell Fisher from the UK, and Matt Vinzant and Gilly Elor from the US, join us. The logistics for exploration changed a bit as well. Since the push trips to the end of the Passage of the Cheeky Monkey became very long, we planned to return to the Huautla Resurgence with small Lithium-powered scooters and dry tubes, with the intention of camping beyond sump 2 to increase the amount of time we have for exploration. This time Ernie, Gilly and myself drove the truck from the US to Mexico, and everyone else arrived at varying times via public transport. Luckily this year no local politi-

cians (we know of) were shot, but instead we "enjoyed" Mexican corruption at its finest. This was particularly exciting on the US-Mexico border when we were told by the senior border official that our truck is too heavy to be allowed into the country, but it would not be Mexico if not suddenly a Mexican turned up next to us with the words (in pretty good English) "I have heard you guys got a problem - I can fix it!". So several hours later, with additional US dollars in the pockets of both Mr Fix It and the border official, we continued on and finally made it back to Santa Ana.

Since we knew the logistics from the previous year, we set up and re-lined the cave relatively quickly. The objective now was to do two 3-day camping trips beyond sump 2 to find the way on. The first team in the cave was Chris, Max, and myself. Since we only had two scooters on this trip, but three divers, we enjoyed quite an entertaining trip through sump 2, with each of us being loaded with two large bailout tanks and one dry tube, and me towing Max through the deep part of the cave to avoid unnecessary long decompression. The trip became even more exciting when Chris was about to finish laying the line

through the rift in sump 2, and accidentally pushed the trigger on his scooter, resulting in the scooter wrapping up lots of the line and pinning him against the cave wall. Luckily we sorted out that mess without any further issues and exited into the Passage of the Cheeky Monkey. After exiting the sump, we stored our dive gear and set up camp which was just a few metres up a sandy slope above where we exited the water. Once this was done we started exploring a passage starting above a climb over the sump pools, which seemed to head further downstream. After a sketchy climb we found ourselves in a large fossil passage, which was probably the downstream continuation of the Passage of the Cheeky Monkey, and then after a few hundred metres stopped 10 metres above two sump pools. From Jason's explanations of where he surfaced in 2001, it was clear that this was where he surfaced previously, and looking at the muddy steep walls around the sump pools we were happy that we did not have to exit the sump this way. The next day, after a good night of sleep, Chris and I dived part of sump 2 again to see if we have missed any upstream leads following the main river. Most of our leads either ended or surfaced in a dif-



Zeb Lilly getting ready to dive.
Photo by Chris Jewell



Maxwell Fisher entering survey data.
Photo by Chris Jewell



David Bardi getting ready to dive. Photo by Chris Jewell.



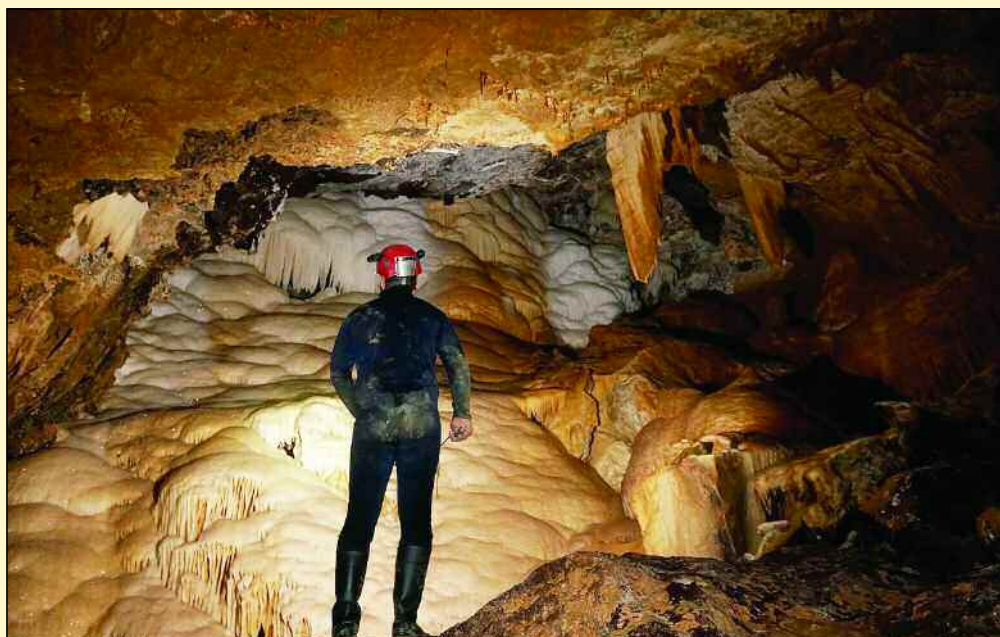
Laura Trowbridge and Gavin Newman building dry tubes in preparation for the expedition. Photo by Chris Jewell.



Andreas Klocker diving through sump 1 in the Huautla Resurgence. Note the golden dry tube full of camping gear. Photo by Chris Jewell



Andreas Klocker (with chestmount rebreather) and Chris Jewell at sump 2 of the Cueva de la Peña Colorada on a reconnaissance trip for the planned 2018 expedition. Photo by Matt Vinzant



Andreas Klocker in front of a huge flowstone curtain in the upper levels above the Passage of the Cheeky Monkey. Photo by Chris Jewell.

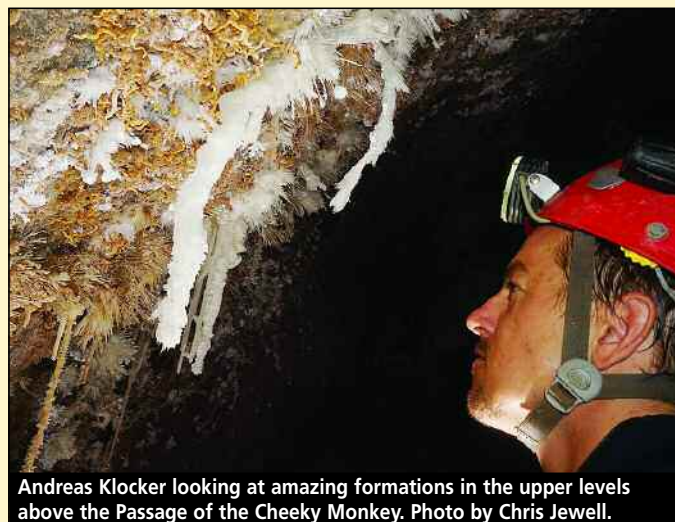


Andreas Klocker and Connor Roe in the air bell between sump 1 and sump 2 in the Huautla Resurgence. Photo by Chris Jewell

ferent place close to camp, but one lead at ~11 metres depth had flow coming out of it and continued, but sadly at this point the reel jammed badly and we could not continue. We then changed our focus back on the dry cave. While climbing around close to the upstream flowstone restriction, Chris suddenly called out that he found a way on. What followed was some of the most amazing cave exploration I have been involved in – large fossil passages full of the funk-iest flowstone decorations I have ever seen. In some parts the passage walls were covered all the way around, and in the furthest reaches of the main passage we found we discovered a large



Andreas Klocker diving through sump 1 in the Huautla Resurgence. Note the golden dry tube full of camping gear. Photo by Chris Jewell



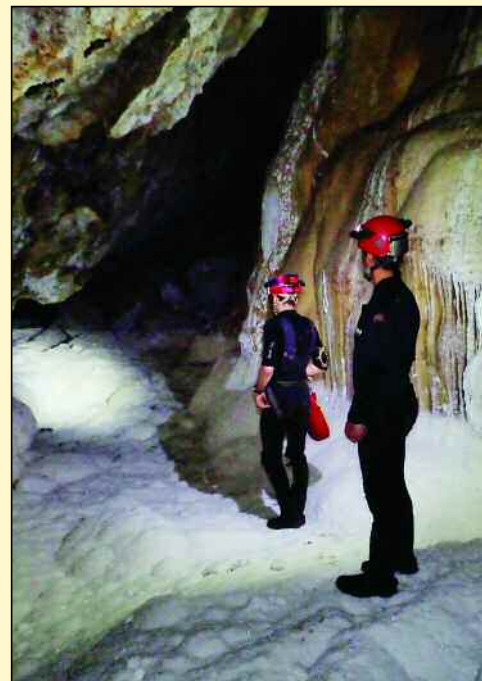
Andreas Klocker looking at amazing formations in the upper levels above the Passage of the Cheeky Monkey. Photo by Chris Jewell.

amount of dead scorpions which would have been resting there for a very long time. After surveying all of this, and marking the remaining leads for the next camping team, we returned to camp and after another night of sleep dived back. While the dive back went smoothly, our ride up the canyon to Santa Ana did not appear and we finished off this big trip walking several hour up the steep canyon, meeting some funky snakes, scorpions and spiders on the way. Short after reaching the top, the truck with everyone else came towards us, and we found out about several technical vehicle issues the others had to deal with.

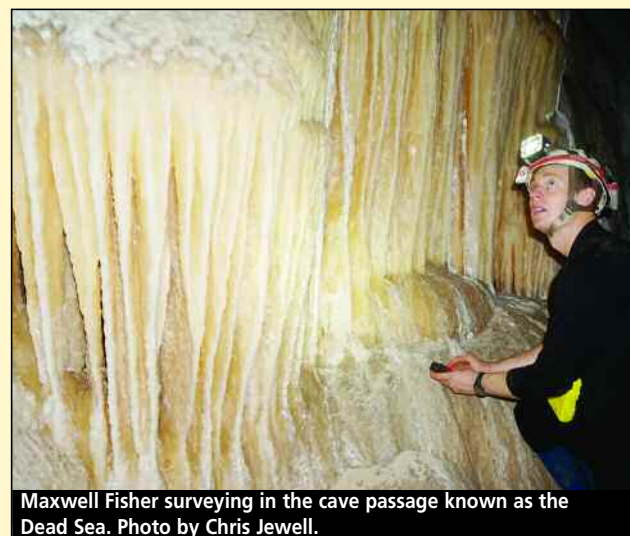
A few days after the next team was going to head into the cave for another camping trip. On this trip the team was going to be Zeb, Matt and Connor. Unfortunately on the way in Connor flooded his rebreather between the two sumps and had to bail, and so it was only Zeb and Matt making it to camp. Their trip went smoothly up to the last part of sump 2, close to the surface, where Zeb managed to make contact with the sharp cave ceiling, resulting in a punctured breathing hose. Luckily they were close to surfacing, and a bit of remote field repair resulted in a working rebreather. Zeb and Matt then spent their trip exploring and surveying more of the newly found dry cave. Towards the end of that camping trip, Matt also checked out one of the other sumps in the Passage of the Cheeky Monkey which we thought might bypass the flowstone restriction, but since he had only carried a 3l cylinder with him for this dive he decided it needs a closer look with more gas.

Since the expedition was coming closer to the end, and we wanted to have another look at the sump close to the flowstone restriction, we decided to have a team go to the end on a day trip, carry dive gear

through the dry passage, and dive the sump. This was going to be done by Matt, Zeb and Connor, but Zeb had difficulties equalising and so Matt and Connor continued on. Connor then pushed the sump at the end, using his experience with



Chris Jewell and Andreas Klocker in the newly discovered cave passage now known as the Dead Sea. Photo by Maxwell Fisher.



Maxwell Fisher surveying in the cave passage known as the Dead Sea. Photo by Chris Jewell.

tight caves gained in the UK, but even for him the sump became too small to continue. This was the end of this year's exploration, and we spent another few days cleaning up, but we all felt like we have missed something in this cave and there must be more of an underwater continuation than the flowstone restriction at the northern end of the cave. This cave definitely does not give up its secrets easily, and I guess we will have to plan another return to find the way on.

Since we struggle to find the way on in the Huautla resurgence, in 2018 we now plan to shift our focus to the Cueva de la Pena Colorada. This cave is hypothesised to be the overflow resurgence to Sistema Huautla, and therefore should connect into the main underwater river somewhere along its path from Sistema Huautla to the Huautla Resurgence. If we were to find this hypothesised junction, we could then explore both upstream towards Sistema Huautla, and downstream towards the Huautla Resurgence. Nevertheless, the current end of exploration is in sump 7, at a water depth of 55 metres, with the sump starting at the bottom of a 55 metre deep shaft with no land at the bottom to gear up. The last expedition into this cave was in 1984, led by Bill Stone, where the team had to turn due to the logistical limits of open circuit gear. Now, 34 years later, we will return with rebreathers and mixed gases to push further towards Sistema Huautla. These trips would not have been possible without our great support by Alex and Ernie who helped out with language barriers, local politics and great cooking, and Bill Stone and the U. S. Deep Caving

Team for lending us gear and helping with logistics. We were also supported by Damien Grigg from DKG drysuits, Shearwater Research, Otter drysuits, Stephen Fordyce from TFM Engineering, Highline ropes and Submerge Scooters. Thanks also to the National Speleological Society and the Ghar Parau Foundation for supporting us with grants! If you want to know more about our expeditions, past and future, follow us on

www.beyondthesump.org
or
www.facebook.com/CaveDive.

Deep Cavern Course Gets a Facelift

By John Dalla-Zuanna, Standards Director

Announced at the 2017 CDAA Symposium weekend, three changes were introduced to the structure of training within the CDAA system. Firstly, the CDAA Deep Cavern program has changed in name. The **Deep Cavern** program will now become the **Basic Cave** program and will have the depth requirement of 40m removed so as the course can be conducted in other parts of Australia which has difficulty in meeting the depth.

The course taught is essentially the same as it is now, only the depth requirements have been removed. The number of training dives stay the same.

The trained diver is now limited to their depth training and certification.

This means that if the diver is already trained in deep tech diving (30 metres plus) and does a Basic Cave program, say in Perth or Brisbane, they will be issued a Basic Cave card with a depth endorsement. No deep tech diving cert... no Deep endorsement.

Of course, if the depth is available during the course like if the course is conducted in Mt Gambier, then the diver will receive their Basic Cave cert with the Deep endorsement.

This change will assist in the development of the CDAA in other States outside of SA & Victoria.

Secondly, this creates the need for an Endorsement structure to our CDAA certifications. We already have Nitrox, Trimix & Rebreather endorsements, however, we are now finding that some cave diving locations around the world, predominantly, Florida, Mexico and some European sites, want to see some qualifications in the area of sidemount, scooter, stage tank use etc...

Therefore, a structure whereby you can have Endorsements placed on your CDAA certification cards has been developed. By accessing the **Public Documents** section of the CDAA website, you will find a document called "**Membership Cards Endorsement Symbols**" and this is a legend of endorsements available. It is your choice if you wish to have these symbols placed on your card and any person can therefore cross reference your certifications by accessing this legend. (Of course, you can carry two or more cards if you wish.) Just submit your certifications as per your normal documents upload and your card will be endorsed (card processing fee applies) or it will be endorsed on your next membership renewal card.

Thirdly, should you choose to do an Advanced Cave Equivalent course overseas, this will be available to you through several approved overseas Instructors who have partnered with the CDAA. A list of these Instructors will be available shortly. These instructors have dived Australian caves and are familiar with some additional requirements to bridge their course with the CDAA. This will greatly assist in a crossover of qualifications when returning to Australia. They will need to complete an "Record of Training - Advanced Cave Equivalency" form, also found in Public Documents of the CDAA website.

I encourage all members to view the new material in the updated website and the above changes can be seen in the Regulations & Training Standards Manuals in the **Members Library**.

I would also be happy to answer questions, email standards@cavedivers.com.au



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The Sounds of Silence: Experiencing Komati Springs in South Africa

by Meg Anderson. Photos by Meg, unless otherwise stated.

My late grandfather was an artist and spent most of his life on his cattle ranch in Zimbabwe. Here he would paint the landscapes, his palettes focused on the earthy tones of the bushveld – various shades of orange, red, brown, grey, black, purple and green. When he lost his farm, he moved down to the Eastern Cape province of South Africa, where I was born and raised – and suddenly after decades, his palette had to change. Here he was faced with coastal bush and forests rather than savannah grasses and thorn trees and with oceans and rolling green hills instead of plains and koppies. He was painting out of his comfort zone and it took a few years to adjust. I tell this story about my grandfather because on my recent trip “home” to South Africa, I decided to visit the northeastern part of the country, where I had not been to before – a completely different palette from what I was used to. Here, in the province of Mpumalanga, you will find Komati Springs, one of the Big Five of cave diving in southern Africa.

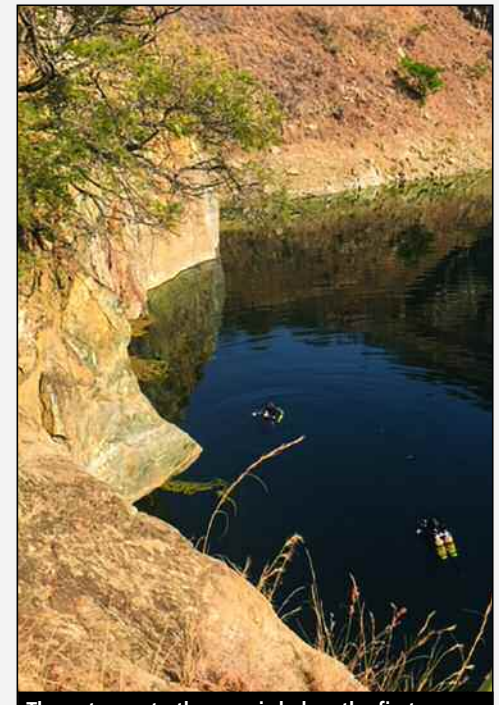
I lived in South Africa until my early twenties. I still visit every few years, as my family still live there. I tend to be apprehensive before a trip “home” as I can never predict how much has changed in my absence. I worry that Australia has made me too soft and polite and that I am no longer streetwise. My accent doesn’t sound local anymore and it takes me a good week to get my Afrikaans back on track so that I am recognized as a citizen. I spent nearly five weeks in the country on this trip and by the end of it I felt like I was South African again, particularly when I was back in my home



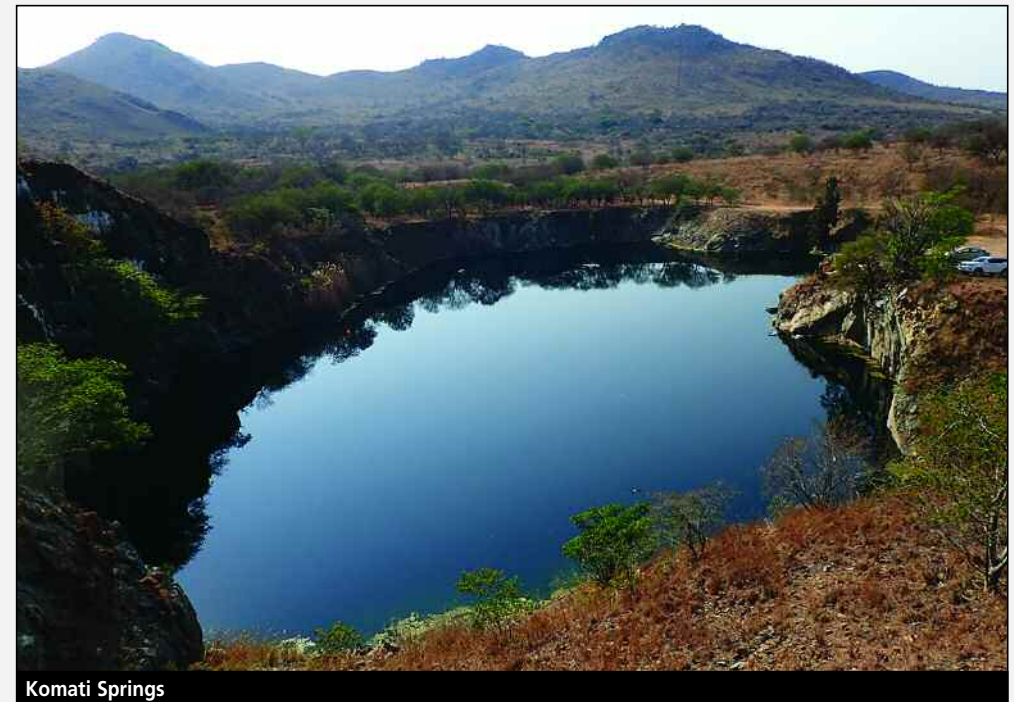
province and realized I still had some idea of the lay of the land. Myself, my boyfriend Damian Bishop and our friend Mark Williams travelled together on this occasion. This was Damian’s second visit to South Africa and Mark’s first, he was joining us for the first two weeks for the diving portion.

We landed in Johannesburg at Africa’s largest airport, OR Tambo, shortly before 5am on 4 September 2017. Once we had cleared immigration and customs, collected our baggage, had something to eat, sorted out our SIM cards, withdrawn some cash and collected our hire cars, it was time to face the adventure of

driving in Joburg. This was the part of the trip I was dreading. Personally I have never driven in Joburg in my life, relying always on my family members who live there to get me around. Unfortunately Damian decided to start driving before I had entered information into the GPS, resulting in an argument. Eventually it was Andre’s email directions that saved us. We drove about 90 minutes to Witbank, to get supplies for the week ahead and then continued on. A great tip from Andre, who owns Komati Springs, was to stop at Alzu Petroport on the way (in South Africa they have very large service station complexes along the national highways) – it’s right next to a game reserve and you have a high chance of seeing rhino and other different types of game. We finally hit the Komati Springs sign leading onto the dirt road around lunchtime. Gate 2 is where you hit the game reserve that neighbours on the property (you need to cut through there to get to the Komati Springs gate). Security is high in the game reserves these days because of rhino poachers. Once you get past security, you get treated to your own mini game drive until you reach the Komati Spring’s gate. Over the course of our 5 days there, we would see game every day when travelling along the



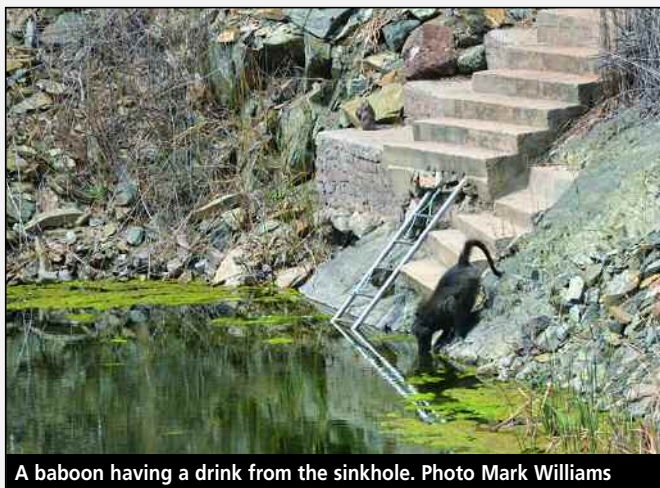
The entrance to the cave is below the fig tree



Komati Springs

fence to the dive site. One night the lions woke us up in the wee hours and I regret not getting out of bed to see if I could spot them. When you get to the gate, you do have to check they aren't hanging around before getting out of the car.

Komati Springs is owned by Don and Andre Shirley, who some may recall were our AGM international guest speakers in 2016. Don is also well known as being a part of Australian diver Dave Shaw's final dive, which he spoke about at the AGM. The Shirleys are lovely people and when Don talks about the dive site (one he has dived thousands of times), his eyes light up like he only started diving it yesterday. Pretty soon after we arrived, despite being tired and jetlagged, we couldn't



A baboon having a drink from the sinkhole. Photo Mark Williams

turn down his offer to take us for a tour of the site. The first thing you notice is the sheer size of the sinkhole – it's much bigger than sites in

Mount Gambier. Then you notice the sounds of the bird life, further amplified by the fact that the rest of the place is surrounded by quiet. You can hear if a little stone falls from the cliff into the water and at times your voice echoes. The surrounding mountains are what I miss the most about the South African landscape. It was once a working asbestos mine and an excellent job has been done in rehabilitating the environment around it. In the week that followed, we did not only fall in love with the dive site but with the habitat surrounding it. Where else can you come up from a dive to be greeted by baboons and monkeys? Where else can you drive to a dive site every day and see game such as warthog, wildebeest, water buck and impala? We even had a blue-headed agama lizard as a mascot who we saw in the tree every day.

In the words of Damian, Komati Springs as a dive is "the love child of a

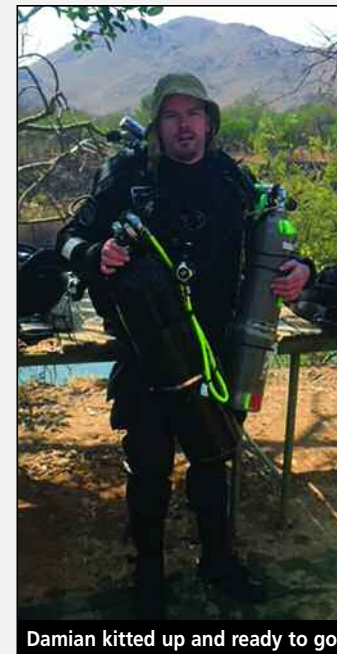
"The Shirleys are lovely people and when Don talks about the dive site (one he has dived thousands of times), his eyes light up like he only started diving it yesterday"



Damian admiring the surrounds

wreck and a cave." As it is a flooded mine shaft, it is man-made and therefore has a square profile with straight tunnels and 8 different levels, which are fun to navigate. Don discussed our plan with us every day and suggested circuits or routes we could take. I was initially not going to do my cave course before our trip, I am really happy I did though as while the sinkhole is large and deep (up to 55m), there is not much to see in it and the

water is quite green. The cave portion is very dark and saps all light, because the rock is black, so descending down the shafts was a little scary the first time. My favourite part was always going through the small square doorways. If you want to take photos, you are going to have to have very good lights (none of our underwater photos were any good). There are still many objects in there reminiscent of the site's mining days such as ladders, railway tracks, railway carts and shovels. On my first dive I noticed what sounded like trucks driving above me, turns out it was just our bubbles making all that noise! The deepest dive done that week was 46m on level 4, as we were on open circuit (the cave has a maximum depth of 186m). The site very much caters for rebreather



Damian kitted up and ready to go

divers but the 4 days diving we did on open circuit was ample adventure for us too. Next time I'd like to do it on trimix (we did our dives on nitrox and then had 100% O2 for deco – there are training grids in the sinkhole portion for doing deco or the shallow levels of the cave are great for knocking off deco as well). There is barely any fixed line, mainly because the cave is used a lot for training. We were lucky that we had the site to ourselves

when we were there, so we could leave our lines in and then just clean it all up at the end of the week.

Komati Springs is very much a dive for backmount, which us whinging sidemounters very quickly realized was the best way – some of the spots are just too narrow for sidemount. There are various entry points to the site and the stairs and ladders are well built. The site also has toilets and a change room, gear tables and chairs for if you just want to chill out under the trees. We brought most of our gear over but the Shirleys have a well - equipped operation if you don't bring yours. Basically everything you need is there. The gas, equipment hire, entrance fees and accommodation were incredibly affordable – Damian and I's all-inclusive



The well equipped dive facility. Photo Mark Williams



Planning the dives with Don Shirley

total for 6 nights came to \$310 each. At night, the Shirleys fully encourage fires (Don is a pyromaniac) and while their house is away from the dive centre and accommodation, they did make the effort to have a few drinks with us each evening. By the end of the week we were relaxed and not thinking about work or any other stress we had left behind. The African bush, the limited electronics, the fresh air and the starry nights were good for the soul and allowed one to simply switch off.

I was sad to leave Komati Springs and certainly will go back – in this quiet corner of vast landscape, in a place that reminded me so much of Zimbabwe, I thought about my grandfather – and how I wished he could've seen and painted its beauty.



Meg and Mark outside the cave entrance. Photo Damian Bishop

Useful information:

Safety: South Africa has a crime problem but don't let this put you off visiting. If you are vigilant and don't create situations that make you or your possessions vulnerable, you can maintain safety. Don't leave items visible in your car when you leave it unattended or have them visible when stopping at traffic lights (which may result in a "smash and grab"). Lock the doors at all times, including when driving. When you lock your car doors in a town or city, check they are all locked, as the latest tactic is to try and jam your remote. Don't carry around wads of cash or put your wallet in easy reach of pick pocketing. If in a rural area, I don't recommend driving at night because chances are you'll drive into some wandering livestock. Komati Springs however is very safe because it is isolated and fenced in, so there is minimal risk to you and your possessions.

Currency: South African currency is the called the Rand (ZAR). At the time of writing this, 1 AUD gets your 11 ZAR. Damian and I purchased rands on Virgin Velocity prepaid cards, we monitored the exchange rate for some time prior to the trip. As far as I know Virgin is the only company that has rand as a currency on prepaid travel cards. Capitec Bank charged the lowest ATM fees for withdrawing cash, however it is not a good idea to carry around a lot of cash (say R1000 at the most at a time). All places accept cards; car hire places however do not accept prepaid cards so take your Australian credit card. Sometimes your credit card will give you better rates than a prepaid card.

Flights: We flew with South African Airways (www.flysaa.com). One of the reasons we chose them was because of a generous baggage allowance (2 x 23kg bags each) and because we got the flights cheap on a special (around \$1300 return Adelaide to Johannesburg). I subscribe to SAA's emails and therefore am always aware of specials. Ensure you take out travel insurance (as well as DAN insurance). The food on the plane was of a high standard but their website can be a pain to use. All of SAA's flights go via Perth and they codeshare with Virgin. A number of other airlines also fly to

South Africa including Qantas (usually via Sydney), Singapore Airlines and Emirates.

Car hire: Car hire and petrol is about the same price as Australia. Don and Andre can pick you up but a car allows you to travel more of the country afterwards and be more independent (the dive site is also not in walking distance but they would obviously give you a lift). It is good to shop around and there are plenty of options at OR Tambo Airport (Johannesburg). Damian and I hired a Toyota Fortuner through Avis, which was great for loading all the gear and handling the dirt roads. I recommend hiring a Garmin GPS – yes you can use Google maps for metro areas but later on in the trip when we were driving through a rural area, Google maps led us completely astray because we chose their directions over the GPS.

Roads and driving: South Africans also drive on the left but the speed limits are lower. The national roads are good, better designed than



Rhino at Alzu Petrport. Photo Mark Williams



Our dive mascot, a blue-headed agama lizard. Photo Mark Williams

Australia and you'll enjoy the driving experience. Roads in towns though are in a much worse condition and you'll encounter potholes. Do exercise caution with the trucks. You'll notice when driving that the roads have wide shoulders, as a courtesy people often pull over on the shoulder to let the person behind them pass if they are going faster. If someone pulls over for you, indicate thanks by briefly pressing on the hazard light button.

Tippling: In South Africa you tip a minimum of 10% when eating out, unless the service was abysmal. It is also good practice to tip petrol attendants and bar staff (not usually as much as 10%, say R5 to a petrol attendant and anything up to R10 to bar staff). At times you will encounter car guards, the going rate to tip them is R5.

Altitude and jet lag: Komati Springs is 915m above sea level. Our dive computers (Shearwater Petrels) automatically adjusted for this, check that yours does as well. I don't cope well with altitude and you may experience shortness of breath, nosebleeds, digestive issues and fatigue along with the jet lag (For example South Africa is 7.5 – 8.5 hours behind Adelaide depending on the time of year). You might want to go somewhere else for a few days to adjust before you dive or book a few extra days at Komati just to relax.

Climate: We chose to go in spring to avoid extreme temperatures. The days were hot (high 20s or low 30s) but bearable and the nights were cool. Other parts of South Africa have different climates so if you're travelling to different parts you want to pick a time of year where the weather seems to be reasonable in all parts. The water temperature at Komati Springs averaged about 15 degrees.

Phone: The only phone company that has reception at Komati Springs is Vodacom. There is a Vodacom shop at OR Tambo Airport that opens quite early – if your flight is super early have a coffee and breakfast at the Wimpy to kill some time.

Food and drink: The food and drink in South

Africa is amazing and the prices and quality put other popular destinations to shame. You will need to buy your own food for Komati Springs. They have everything you need to cook there and plenty of fridge and freezer space. Andre will give you advice on where to go on the way (we stopped at Witbank, the other option is East Rand Mall but I find that place too overwhelming). Grocery wise, most things are cheaper than Australia, especially the meat. If you're in South Africa, you have to try boerewors (farmer's sausage), ostrich and basically all the meat on offer, which you can get from nearly any supermarket. If you want to "braai" one night (or just have a fire), Don and Andre allow fires. Eating out

is also very cheap and is high quality. You can get a nice steak in a nice restaurant for less than \$15. I also recommend the seafood if you go to coastal areas, particularly if it's local catch. Alcohol (including spirits) is on average 50% cheaper than Australia (don't buy it at duty free going in, it's cheaper outside the airport). An excellent bottle of wine costs only around \$10 but a \$5-\$6 is equivalent quality to a \$15-\$20 bottle in Australia. Most supermarkets have a liquor outlet attached to them. I recommend shopping at Pick N Pay for groceries and alcohol.

What else is in the area: If you want to do other activities in the area, the Shirleys are very knowledgeable and can provide recommendations. The province of Mpumalanga is the place to go to in South Africa for safaris. I suggest spending a night or two at my friend Marlonet's property Almar View (www.almarview.co.za) near Nelspruit and then going from there to one of the many private game reserves in the area or the famous Kruger National Park (<https://www.sanparks.org/parks/kruger>). On this trip, we spent a night in Almar View to readjust to civilization and then moved on to the coast but next time we intend to spend more time in this area. ■



A kudu bull spotted on the way to the gate.
Photo Mark Williams



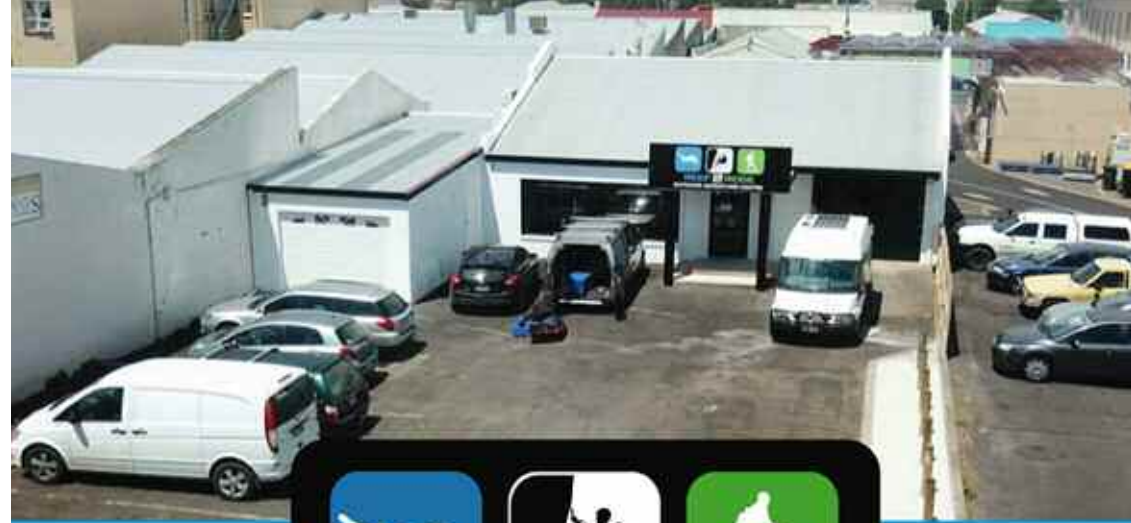
A kopie on the way to the dive site



The site



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Cave Survey and Cartography: The Key to a Deeper Connection

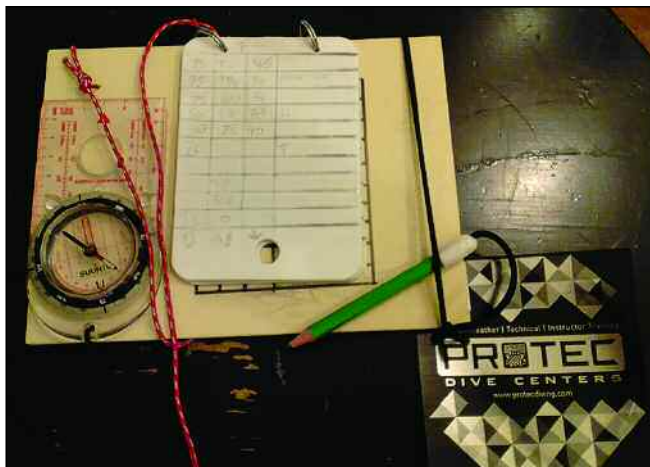
by Alexander Coffield-Feith

In December 2016, I managed to squeeze in a few days of Underwater Cave Survey and Cartography training with Kim Davidsson (ProTec manager, instructor, explorer) and Tamara (colleague, amazing diver, Melburnian). It was a great course (we expect nothing less from ProTec instructors), we learned about an aspect of cave diving that I had heard people talk about, but had never given too much thought to. We had a really interesting classroom session then made our survey slates before doing some dry surveying practice.

One of the key things that came from the classroom session was the requirement to survey exploration lines (something I hope to do one day), because without the survey data, there is no point laying line. As Kim says, "if you don't know where you've been, you have not been there..." As cave divers and cave explorers we have a responsibility to the rest of the community to share our discoveries and lay the path for future explorers and cave divers. I am looking forward to continuing the "exploration" part of the workshop and I am excited to one day lay my own line in virgin passage and survey it.

The next day we went off to Cenote Carwash to practice surveying lines, before learning how to plug the data into a computer program (in this case Arianne's Line). With the data in the program we were able to see the lines we had surveyed, and check how far off our errors were. It was a very cool experience and that really makes you appreciate the many hours of hard work that go into exploring and surveying caves!

After completing the survey workshop I wanted to put the new skills to practice. After some discussion with the guru, Kim, I decided my project would be to resurvey Mayan Blue. It has been an interesting experience to resurvey the lines in Mayan Blue for a number of reasons. Most importantly, it has been a great excuse to go down many of the lines that I had previously overlooked! I always knew it was a big cave, but diving and surveying gives a picture to this reality. I love to see the "big picture" growing together and knowing each section of cave intimately is very rewarding. Many times we dive caves a few times and then move onto other sites, but so many of the caves here are so big that each dive you can go somewhere new. After exhaust-

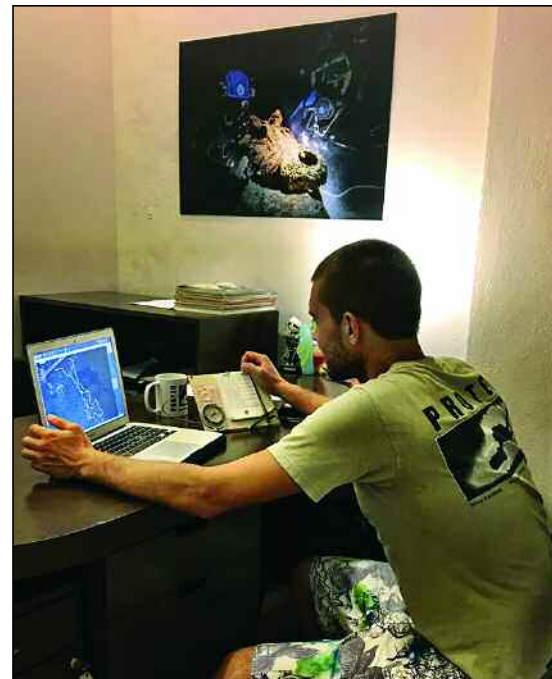


ing the options close to the entrances on back-gas (or side-gas), I then started to add stage tanks to my dives to get further back into the cave. Going down lines that don't get frequently dived, where the guideline is covered in a layer of silt, is an exciting experience and shows how once you get off the beaten path there are many areas of busy caves that very few people dive.

an opportunity to learn and practice skills in a safe environment, but divers need to continue to practice these skills to improve them (and prevent their deterioration). From the perspective of developing new skills the course was a good start and every dive I have surveyed on since has continued to build on those skills.

Another reward is seeing the survey data once it has been entered into the computer (and doing many dives in the same cave) has really helped me to learn the cave and it's lines. This is invaluable for guiding clients and being able to explain where a certain jump is, or drawing accurate stick maps of the lines, where arrows are and how long it takes to reach them. As it is, there is still much cave to resurvey so the project will continue! There is something cool about seeing the in water work you do turn into an accurate stick map. For those cave divers who are interested in a new challenge, and would like to learn new skills I highly recommend the Underwater Cave Survey and Cartography course Protec teaches. It is great to gain an understanding of the survey process and all the work that goes into surveying cave passages.

See more at:
www.protecblog.com/2644/underwater-cave-surveycartography/
[#shash.KwuMNTFE.dpuf](https://www.instagram.com/shash.KwuMNTFE.dpuf)



Beyond the Twilight Zone

Story and Photos by Pierre Constant.

Just like a gold digger who found a lucky streak, I keep coming back to Madagascar. The lure of the Great South and its enchanting spiny forest, together with the discovery of sinkholes, had hooked my curiosity over the years. Back in 2011, it was in the region of Itampolo, south of Tulear on the Mahafaly Plateau.

Then in 2012, the sinkholes of Tsimanampetsotse National Park fascinated me.

There I had discovered skulls and the skeleton of an extinct dwarf horned crocodile. These reptiles had appeared in the Holocene (11700 years to present) on the south west coast of Madagascar. The same year, I dove Binabe Cave, near Sarudrano, north of the Onilahy River, where at a depth of 25 metres I found the femur of a dwarf hippopotamus, "Hippopotamus lemerlei", in the sediment. Scientists of the CNRS at the Museum of Natural History in Paris, had dated the bone with C14 to be 1400 years old. A few months later in 2013, in a remote sinkhole of the Mahafaly Plateau, I brought out of the water the lower jaw of a dwarf hippopotamus, which species became extinct due to the predation of man, as early as the 7th century.

Starting September 2015, I ventured into the new territory of the Belomotra Plateau, north of Tulear. A karstic environment in the Eocene limestone (56MA to 34MA), well hidden into the so-called Mikea forest. An arid and spiny bush of Euphorbia sp., Alluaudia sp., Didiereacea sp (Octopus trees), as well as giant Pachypodium and enormous baobabs, such as "Andansonias", "Andansonias rubrostipa" (bottle baobab) and "Andansonias grandidieri", all amazing and endemic plants from southern Madagascar. Only accessible with a sturdy 4x4, - for tracks are very rough and usually very sandy - this remote region was home to an indigenous tribe surviving into the wild like savages: the Mikea people. Only they knew about the localization and existence of these caves and waterholes, where they would come from time immemorial in search of water and bats, on which they fed. Without their help, I would have been unable to proceed with my explorations and discoveries. For sometime, businessmen from Tulear also prospected, looking for bat guano, mostly in dry caves. These were

exploited for a number of years with local work force, loading trucks with big bags of guano. I had indeed visited some of these caves at first, only to find there little water or no water at all. A bitter frustration considering the distances to get there or the tough walks under the scorching sun. In 2015, things turned suddenly positive, when I found out about a magnificent cave, which I instinctively named Ali Baba cave. It required a reasonable walk into the Mikea forest, on a reddish sandy trail, carrying dive equipment. Hardly noticeable, a lentil shaped entrance into the limestone, was a portal into the underground world. We had to duck under an uncomfortable and narrow passage with a low ceiling. A slippery slope in the pitch darkness, with loose rocks, opened into a fascinating chamber, with stalactites, stalagmites and dantesque pillars. There, 15m to 20m below ground, laid a subterranean lake with more pillars. A cryptic cathedral, where the air was stale, hot and humid, so aggressive that one would sweat profusely. Breathing properly was even difficult. Bats were fluttering about



Into the twilight zone of the lake, Gargantua cave

in the dark space and cockroaches were creeping everywhere on the damp guano floor. It felt like a sauna of some sort. After carefully double checking my dive equipment, I handed my head lamp to the Mikea guide and told him to wait for me. "Just turn the light on upon my return!", I said, while slipping into the water. Endemic white blind fish, "Typhleotris pauliani", survive there on bat guano, for the first 5m to 7m depth. The clear water had a balmy 28°C temperature. At the far end of the lake, the bottom dropped suddenly into narrow and twisting passages among stalactites and pillars, in golden and brownish colors, against a pastel green background. The further I sank, the more white became the mineral world of limestone, with outstanding decorations. At a depth of about 20 metres, I reached a restriction

where I had to squeeze through without getting struck - which indeed would happen once! This was another portal after which the cave opened up in magnificence into a snaky tunnel. The further I went before a turn around, the more baffled I was by the beauty of the cave. A fantasy come true. Yet, on a single tank, I had to be realistic about my limitations, as a solo diver even. Without the shadow of a doubt, I just knew it was not the end of it. The suspense would go on, into a projected future.

June 2016

Needless to say, I had to crave for some more. Diving Ali Baba cave on a couple of occasions, my exploration ventured even further into a succession of chambers, apparently endless. In one of



The sandy dirt track into the bush

those, stemmed up a replica of the "Phallus impudicus" mushroom, in front of a cascade of stalactites. An awesome sight beyond expectations... A morbid thought even crossed my mind: should I have to die, I would not mind being in a tumb like this... this place was truly hypnotic. A cryptic paradise far from this world.

Fresh revelations from my local host, were to give me a hint and a brand new direction for my research of sinkholes. Nonetheless, after a courtesy visit to the local headman -locally known as 'fokontany'-, I understood that my interests were also interpreted as to become someone else's profit. Somehow, many people wanted to have a piece of the cake. The more quiet I would be about my intentions, the better. "But you must

pass by Mr.Faazoua for the 'fomba' ritual!", warned Diana dead serious. "We do not wish to have any problems with the local community...". She was referring to the prayer to the cave spirits, which was performed by an obscure sorcerer with hazy eyes. We found the man sitting in front of his hut mid-morning, watching the flies go by, absent minded. The procedure required a little bottle of rum, a few packs of tobacco and his acceptance to come along for the day. Later on, the fellow turned out to be really greedy, expecting an exorbitant price for his service. An issue not to be taken lightly, which did put me into turmoil...

Simply because he was born there, my Mikea guide, knew the forest like palm of his hand. A fair walk into the arid spiny bush lead me, beyond a set of baobabs, to a collapsed sinkhole partially covered by vegetation. Ten metres down into a conspicuous depression, it opened up rather wide. An arched entrance, with hanging roots in front of a gaping mouth. I'll name the site: **Gargantua Cave**. In the dim light, an underground lake laid still. At its far end, it descends gently into a long winding tunnel with an oval shape. At a depth of 10 metres, on fine grey silt, I suddenly marvel at the skull and jaws of a dwarf horned crocodile resting sideways. Grinning with red teeth. The unusual coloration is due to the presence of oxides in the water, among which iron. A little distance away is the spinal chord and vertebrae of the extinct reptile. A few minutes further on the side slope below a ledge, my eyes discern a full horned crocodile skull that came to rest in eternal peace. Almost totally covered in silt, it is hardly visible. Finally, in a pit like hole, the beam of my torch spots an accumulation of small bones around the remains of a croc jaw. These belong to numerous bats and small lemurs.

Gargantua was a crocodile lair, in the days of the Holocene - around 11700 years ago - when the Nile crocodile had not yet made it to Madagascar. For sure, the climate must have been very different, more lush and tropical, not as arid as now. This species was of freshwater, not saline, with a habitat away from the coast. However, scientist brought into light the fact that they had functional lingual salt glands,

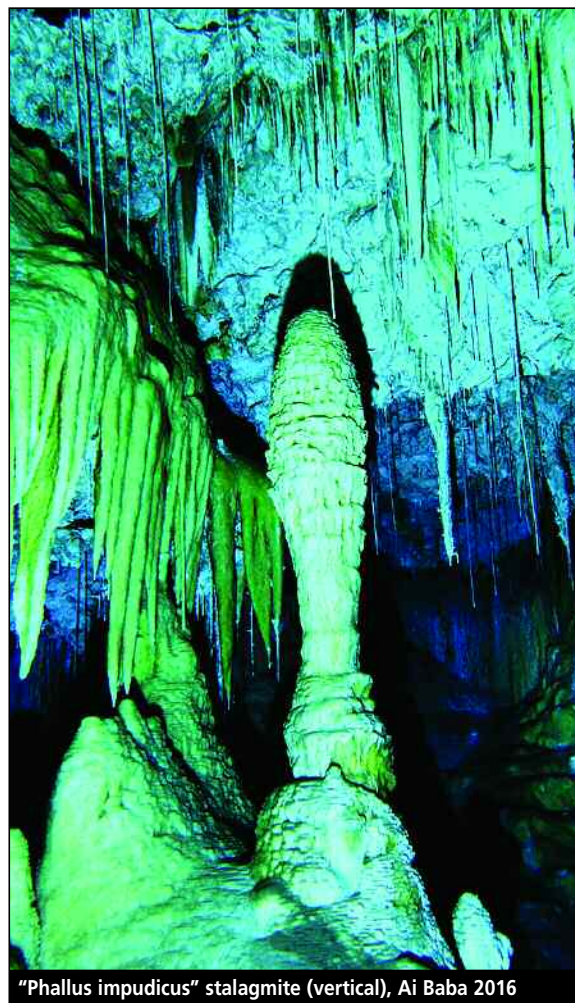
secreting excess salt. Their ancestor of the Osteolaeminae family originated from Africa in the Miocene (Tertiary). A new species "Crocodylus anthropophagus" of the Pleistocene, having small horns and deep snout has been discovered (2010) in tuff formations dating 1,8 MYA, in Olduvai Gorge, Tanzania. A miniature horned crocodile from the Quaternary was also discovered on Aldabra atoll in 2006. Meaning to say that, indeed, the dwarf horned crocodiles did cross the 400km wide Mozambique channel on their own. What really brought the extinction of "Voay robustus", the dwarf horned crocodile of Madagascar - which

bigger specimen could have reached 3m in length -, remains anyone's guess.

The main tunnel had walls visible on both sides, then at a depth of 14m, appeared a restriction under a low ceiling, with a silty bottom. Not too sure about getting stuck and in fear of a black silt out, I chose wisely to turn around... My inner voice comforted me, that there would be another opportunity. On the way back to the 4x4, we met some Mikea men wandering about. They knew of another spot. Same offered to show me another site, off the track into the bush. A moment later, we stood in front of a star shaped hole in white and pink limestone, disappearing into a straight black void. A vertical solution pit. Could it open into a chamber below? That was creepy. "How do you expect me to get down there?...", I coughed, with an uneasy smile. I don't know if he understood me, as he shrugged, amused like a naughty kid.

May 2017

A year elapsed before I made it back to the south of the 'Grande Ile' (Great Island). The wet season was over and conditions were dry again. My former experiences had been reviewed in my memory over and over, thinking that I had to go twin tanks from now on. It



"Phallus impudicus" stalagmite (vertical), Ai Baba 2016



Ancient shell of a freshwater turtle



Inside the lake chamber of Ali Baba cave, 2016

was just too far to go on safely otherwise. In anticipation to that step, I had brought two of my 80 cf Luxfer aluminum tanks in a suitcase, all the way from the Galapagos Islands to Tulear. The only tanks available for hire in Madagascar were steel tanks, rather stubby, impractical and too heavy for double tanks dives. As a cave diver used to backmount diving, there was no way I could squeeze through restrictions with that configuration. The only viable alternative was sidemount diving. With that in mind, I signed up for a Full Cave and Sidemount course in Yucatan (Mexico), which took place in Playa del Carmen during the month of April. An opportunity to get some practical experience as well, diving cenotes and caves of Yucatan, so I would feel comfortable with the new configuration and the new skills (see the article on 'Yucatan wonder caves' in the Sept.2017 issue of Guidelines).

Back in hot Tulear by mid-May, I was excited like a kid, at the thought of using my brand new X-

Deep harness, the new Maxflex hoses and the lot. Even bought myself a yellow helmet, that made me look like a middle age clown on a crusade. Yes, to support a backup light, you got it! Gee!, wasn't I ready for the real stuff? The 4 wheel drive all packed, we headed off for the first stop, one hour up the road. The new tar road meandered along the seashore over rolling sand dunes, overlooking fringing turquoise green lagoons, where colourful Vezo sail canoes drifted timelessly into the breeze. Postcard perfect. There I would fill the Luxfer tanks and hire some steel tanks as well. However, wasn't I up for a big devastating surprise! The aluminum tank was already connected to an old rusty compressor, running at 'teuf teuf' speed in the backyard of a beach house, when "puff!!", I heard the hissing sound of air escaping the valve. Blistering barnacles, it wasn't the O-ring, but the burst disk, now useless. The cold shower of doom soaked me in despair. No burst disk replacement to be found anywhere and no aluminum tanks either. My long lasting hopeful sidemount plan was falling apart just like that, abruptly. I would have to dive the same old way...

After a long day on the sandy dirt tracks, Same, my Mikea guide, welcomed me with a big smile. For the sake of sanity, I chose to avoid the village headman, and bypass the mad sorcerer as well, who would for sure cast me the evil eye. The plan for day one was to dive Gargantua Cave and negotiate the low ceiling restriction, at a depth of 14 metres. This, I managed successfully by slipping thru sideways. The tunnel then widened up dramatically, with a conspicuous bend to the left and reached a T-junction, where it sharply split into two branches. Depth was now 17.4m. I took a right turn for another 20m or so, gazed at a stubby stalagmite, before another bend to the left. The continuing tunnel was large enough for a train to go through. Calling it off for now, I turned back. Maximum dive time was 54 minutes, for a maximum depth of 17.4m.

On a successive dive, I explored a side tunnel, with a flattened neck, on the right of Gargantua cave entrance. A silty chamber, where I soon laid eyes on more bones and a crocodile lower jaw, with a femur delicately resting inside!



Low ceiling restriction, Gargantua cave



Horned croc skull on ledge, Gargantua cave 2017

Strangely, I also encountered some blind fish that were blue and black in colour. Could it be a new species?

At the end of the day, it felt good to be back to the comfort of a cozy bungalow. At peace with the surrounding nature. Facing sundown on the Mozambique channel, a well deserved drink in hand, one cannot help but to reflect on the cave exploration experience. As a solo cave diver, you need to have guts, for you cannot rely 100% on self-confidence. To put it bluntly, you are on your own down there in the dark. You cannot depend on the emotional support of any dive buddy. Not to mention having assistance in a tricky situation, such as lacking air, getting stuck or ultimately getting lost. In short, you need to be fully aware of the reliability of your equipment, to control your breathing. All in all, to remain calm under any circumstances and trust that everything will go well. For the human being, it is an instinctive feeling to be afraid of the dark, to go into holes. To realize that the further you swim away from the entrance, the more hairy it will be to return,



Skull of horned crocodile with red teeth (upside down), Gargantua cave 2016



"Phallus impudicus" mushroom and cascade of stalactites, Ali Baba 2016

should an emergency arise. Subconsciously, you know that you are playing with your life and frankly, it does scare the hell out of you. But somehow, you still go for it. For the adrenaline rush, as if pulled by a magnetic force. Like a drug in your mind, it fuels your imagination. Deep down, you are wild at heart, you are an explorer in the core, and this is what you crave to push your limits. Discovering places where no one else has gone before. You set yourself apart, to evolve into an unknown dimension, as a free spirit. Sure, your desire is to bring back images, as a coveted prize, to prove yourself and others that you are not dreaming. Although well hidden from view, the cave is real. A fantasy world frozen in darkness, that tells the story of geological times. Millions of years in the making, it is simply mind blowing. As in Alice's looking glass, it is also a window into paleontology, a peephole into life as it once was, a living museum of natural history. Accessible only to the chosen few who dare to pass the threshold of fear. A challenging mental process, that induces slow growth in confidence,

detachment, but which proves to be ultimately rewarding. "You are mad!...", I am told. Controlled folly, I should correct.

A Malagasy suimanga (sun-bird) came collecting the pollen of an hibiscus flower in the early hour. The day started bright and the sun promised to be hot. Today's plan of action was **Ali Baba Cave** again. My resolution was to go as far as possible beyond my previous record, on a single tank. With a last breath of fresh air, I bowed down under the humbling lentil shaped gateway to the cave sauna. Steel tank on his back, Same was following suit. My headlamp was already low in power, when I switched to the powerful back up torch on the helmet. Holly smoke!... a 1.5m long snake appeared on the slope in front of me. A magnificent Dumeril's ground boa, "Acrantophis dumerili", endemic to southern Madagascar. It was stoically in ambush for passing bats.

Utterly colourful, reddish brown and silver, with a diamond shape design on its sides and back. The boa remained oblivious to our presence and we proceeded swiftly downhill.

A few minutes later, I submerged, following the same route downhill as before, squeezing through the restriction, passing by the bulbous headed missile shape of the “Phallus impudicus” mushroom, with a long extravagant ‘corniche’ (overhang) of stalactites on the left side. Like a spaceship into the black void, I continued into the main tunnel that looked like a capharnaüm (mess) of broken rocks. Past the round window, with the great curtain of organ pipes hanging above. It now went further, beyond a couple of restrictions, until I stumbled upon a dead end. A small rounded chamber displaying some ripple marks in the sediment. To my surprise, it stopped there, 19 minutes after I started, at a depth of 24.5m. A look at my pressure gauge, it was about time to turn around!... On the way back, I froze in awe in front an amazing double pillar, erect above a fountain of stalactites, under an incredible ceiling full of helictites. All in white and bluish hues. Heading up along the slope, back to the lake chamber and its population of albinos white blind fish, I was filled with inner peace, from the achievement of the day. As I paused at 5m for my deco stop, a blindfish approached and stared at

me with its vestigial eyes, as if it could see me. Surrounded by dantesque pillars, Same turned on his light as I surfaced, glad to see me back and ready for help. Before we exited Ali Baba cave, we fell upon a baby Dumeril’s ground boa on the top of the rubble slope, aloof in its stalking quest. Fresh air was a blessing. I’d call it off for today. The afternoon, would be dedicated to write details and data of the dive, for future reference. Big clouds were drifting in the blue sky, as we crossed the weathered karst plateau covered by “Euphorbia stenoclada” trees with thick spiny leaves. A parched land under the sun, it was. Making a halt by the well, Same and friendly driver Gelah went to recover a home made rope ladder, rather heavy, which needed to be carried with a long stick on the shoulders. The night before, my host had suggested that I should use it, to explore the star shaped hole discovered one year ago into the bush. “It is 9m long, that should do...”, he reckoned. I would refer to it as “Chimney pit”.

After breakfast, direction Gargantua Cave again. The **Pit hole** was a stone throw away, behind some tall and massive “Andansonias” baobabs. I tied up my torch to a line, which was lowered down into the chimney to have a look at the bottom. When I measured the line, it was 8 metres deep. The rope ladder was just perfect. Fastening

it with some ropes to a nearby tree, I made sure it was well secured - with some pieces of wood under the ropes, so these would not be sliced by the sharp limestone, on the edge of the pit. Then I climbed down slowly, cautiously, on the wooden steps. What I feared happened, for the last 2 metres were a free fall. Not supported by the wall of the pit anymore, the rope ladder went sideways and I was hanging awkwardly! Down below was a bell shaped chamber, full of rocks, with more holes where thick roots were flowing down from the surface. Bats were flying around, when I turned on the torch for a look around. A slope lead to what I anticipated: a pool of clear water, with some blindfish swimming about. It was going into obscure depths, which I had now to investigate. Back to the 4x4, we grabbed a tank

and the diving equipment. Everything was lowered to the bottom of the pit with a rope. A primary tie-off was made to an horizontal wooden stick secured between rocks. When I entered the water, I sunk to my knees into the black guano, which at once flowed downhill as a mud slide. Not a good omen! A leap sideways helped me to avoid being caught in the dark cloud....

About 10m below the surface, a large rock was sitting at a T-junction. The cave divided into three azimuth. Making a secondary tie-off, I explored a passage to the left, another to the centre and finally to the right, all coming to a dead end, rather quickly. A bit disappointed, I finished the dive in 43 minutes, with a maximum depth of 15.6m. The experience and the thrill were nevertheless alright. One cannot always win, but was-

n’t this part of the game? Climbing up the rope ladder would be quite hectic for my arms in the first two metres, hanging sideways like a helpless puppet, swinging like a clown.

The picnic break over, I signalled Same. Back to **Gargantua Cave**, for a last dive. My goal was now to swim straight to the T-junction, then explore the right branch of the tunnel, as far as possible. My camera will help me record the dive and timings, through photos of key points. I could figure out time elapsed between all the landmarks. As well as the total dive time, in addition to the dive computer reading. Practical and ideal.

The crocodile skulls were passed after 6 min. and 9 minutes respectively. The low restriction was negotiated at a depth of 14m, in 10 minutes, the T-junction in 14 minutes. Onwards, the right tunnel was very big and oval shaped. Although I could see both sides of it with my torch, it would be impossible to take a wide angle shot, for it was just too dark. Concentrating on the left wall, I’ll passed a funny stalagmite with a rhino horn, then a



Skull of the smiling croc



Sides of the main tunnel, Ali Baba 2017



Organ pipes and the round window, Ali Baba 2017

gigantic pillar rose in front of me. Maybe 10m tall, it showed high up, conspicuous marks of former water levels, with two dark bands. These reflected extended periods when the cave lake had a pocket of air above. The hot humid air had cooked the limestone in almost black colour. Overcoming a short thumb like stalagmite with two watermarks, the beam of my light shone on an apparent dead end. Somehow, a lead continued onwards through a funnel like restriction... With 120 bars left, the voice of wisdom made me

turn around. The cave depth was now 18 metres. Upon return, I had a glimpse on the left side of the line. Soon, my eyes distinguished an adjacent tunnel branching to the left. I had not taken notice of it earlier. I boldly went forward for a quick look, coming across a pretty cluster of ornate stalagmites - like a 'mille feuilles' cake. This, however, came to a dead end in a round chamber.

The manometer now indicating 90 bars, I was struck by a moment of fear. Exerting a mental control of my breathing, I made a swift bee line back to the T-junction and thru the main tunnel, all the way to the smiling croc skull. A 13 minutes rush! There I knew I was safe. The rock slabs on my left were announcing Gargantua's entrance lake. In the presence of a skinny white blindfish, a 6 minutes decompression stop was in order. The beam of light revealed 2 enormous winged crocodile vertebrae on the side slope. My inner voice was already whispering: "Next time, sidemount diving, by all means". Only then, thrilled by the feat of the day, did I swim leisurely through the shallows of the lake, into the pale bluish light of the twilight zone...



'Same' carrying tank in the Didiereaceae forest



Tunnel and lake of Gargantua cave, from the inside, 2016

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MEET YOUR NEW CDAA COMMITTEE

The 2017 AGM gave the Association three new Committee members including Peter Wolf as National Director, Kelvyn Ball as Site Director and Meggan Anderson as Records and Publications Director. We asked the new Directors to tell the members about themselves...

Peter Wolf

I was introduced to scuba diving by my dad in 1999. Ironically, I didn't enjoy it in the beginning. I was a keen surfer and free diver, and in-comparison scuba gear felt unbearably bulky and restrictive. It opened up a whole new world though, and that is what got me hooked!

Prior to joining the CDAA almost 10 years ago, cave diving was not even on my radar. I enrolled in the Deep Cavern course to develop my skills for diving wrecks and never would have predicted I would go on to develop such a passion for cave diving, let alone tackle a director's role! Born in Germany and immigrating to Australia in 1983, I grew up in the eastern suburbs of Melbourne. My family and I (wife & 3 kids) have now made our home by the beach near Phillip Island. It's such a beautiful place to live, and I love the laid-back approach of the people here, as well as the sense of community. My other passions include riding Motocross, and Brazilian Jiu Jitsu. I think I am drawn to these pastimes because, like diving, they are as much cerebral as they are physical. I have a voracious appetite for learning, and I love the challenges of problem solving while 'in the moment'.



Kelvyn Ball

Hello Everyone! My name is Kelvyn Ball but you probably all know me as Freddy. I am your new Site Director. I am a long time farmer from Pimpinio, Victoria. I have been diving open water since 1989 and have progressed through the ranks to Cave in 1999 and then Pen in 2006. I love to dive in all facets of diving from fresh, salt and cave, although the tropics suit my aging body the best. I took on a Dive Master Role in 2000 because I love to share my passion of diving with others which led me to being a Guide at the Shaft. I'm also a Rebreather Diver as I enjoy the advancement in technology and the flexibility in diving it gives. I enjoy the travel, sights and friendships I have found along the way in my years of diving so far. My other hobbies include flying, fishing, shooting and travelling with my family around Australia. Cheers!












Meggan Anderson

I started diving in 2009, I wish I had started sooner but couldn't because I was moving around or did not have the money. I was born and raised in South Africa in a fishing village and used to snorkel as a child but there wasn't much diving where I lived, it was very much focused on surfing (the surf break where Mick Fanning nearly got munched by a shark is 30 minutes from where I grew up). I lived in South Africa until I was 21, then I worked in the UK for nearly 3 years and travelled quite a fair bit. I eventually migrated to Australia in 2007.

For me diving has provided me with a great support system in Australia and has been a great way to make friends. I started cave diving in 2015 as I wanted to improve my skill set and because I would come to Mount Gambier and feel I was missing out while my boyfriend dived. I used to work as a teacher many moons ago but for the past 8 years I have been working as a social worker. In my spare time I write, travel, go camping, do yoga, read, watch Netflix and waste time motivating myself to exercise more while eating chocolate. If I couldn't dive I think I'd seriously get into bird watching.



CDAA INSTRUCTORS

NAME	Deep Cavern	Cave	Adv. Cave	NAME	Deep Cavern	Cave	Adv. Cave
NEW SOUTH WALES				VICTORIA Continued			
 BOULTON, Alex (CDAA 4125) Mob: alex@subaquaservices.com.au	Yes			 CLARIDGE, Linda (CDAA 2214) Mob: 0408 052 070 E: garinda@tpgi.com.au	Yes	Yes	Yes
 FEATONBY, Tim (CDAA 3327) Worworing Heights, NSW Mob: 0402 129 253 E: tim.featonby@hotmail.com	Yes	Yes	Yes	 DALLA-ZUANNA, John (CDAA 236) Mob: 0407 887 060 E: jdz@paintandcustom.com.au	Yes	Yes	Yes
SOUTH AUSTRALIA				 EDWARDS, Chris (CDAA 2247) Mob: 0417 116 372 Email: chrisedwards01@me.com	Yes		
 MAIN, Robert (CDAA 4909) Mob: 0411 519 825 E: rob@reef2ridge.com	Yes			 McDONALD, Warrick (CDAA 1882) Mob: 0408 374 112 E: info@oceandivers.com.au	Yes	Yes	Yes
 PAYNE, Timothy (CDAA 2640) Mob: 0448 147 927 E: Tim@diveessentials.com	Yes	Yes	Yes	 MONACO, Rubens (CDAA 1731) Mob: 0413 429 533 E: info@idcscuba.com.au	Yes	Yes	Yes
VICTORIA				 MUSCAT, Tim (CDAA 4557) Mob: 0422 127 802 E: tim_muscat@bigpond.com	Yes	Yes	
 ALLEN, Terri (CDAA 3483) Mob: 0419 176 633 E: terri.allen@monash.edu	Yes	Yes	Yes	WESTERN AUSTRALIA			
 BARCLAY, Gary (CDAA 1735) Mob: 0407 527 921 E: garinda@bigpond.com	Yes	Yes	Yes	 BICANIC, Josip (CDAA 4691) Mob: 0412 571 779 Email: joseph_b@me.com	Yes	Yes	
 BOWMAN, Jane (CDAA 1880) Mob: 0407 566 455 E: janelbowman@hotmail.com	Yes	Yes	Yes	 PAYNTER, Geoff (CDAA 3784) Mob: 0407 445 112 E: gpaynter60@bigpond.com	Yes	Yes	Yes
 CHAMBERS, Geoffrey (CDAA 3484) Mob: 0438 059 886 E: geoffie1@gmail.com	Yes			 POOLE, Andrew (CDAA 2208) Mob: 0417 040 020 E: andrew@poole.com.au	Yes	Yes	

CDAA 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 AC = ADVANCED CAVE

SITE	LEVEL	OWNER	ACCESS DETAILS
MT. GAMBIER - SA Ewens Ponds	Nil	DEWNR	Groups of 6 or more, phone DEWNR on (08) 8735 1177 for booking. Smaller groups, no need.
Gouldens	CN	DEWNR	Phone DEWNR on (08) 8735 1177 for booking.
2 Sisters	CN	DEWNR	Generate a DEWNR Permit from www.cavedivers.com.au and either post to DEWNR (PO Box 1046 Mt. Gambier SA 5290) or hand deliver (11 Helen St, Mt. Gambier) before a booking can be made. A CDAA Membership card must be carried at all times. Training: Instructor must generate DEWNR permits from www.cavedivers.com.au for their students and submit to DEWNR before use of the site.
Fossil	C		
Piccaninnie Ponds	S	DEWNR	Bookings can be made online from www.cavedivers.com.au
Horse & Cart Tea Tree	CN CN	Dale & Heather Perkins Dale & Heather Perkins	Phone (08) 8738 4083 or email dherkins@bigpond.com at least 24 hours in advance.
Little Blue	S	District Council of Grant	Booking can be made online from www.cavedivers.com.au.
Allendale	C	District Council of Grant	
Ela Elap	S	Dean & Carol Edwards	Obtain key from Management at Bellum Hotel.
One Tree	S	Mr. Peter Norman	Visit the house before diving. If no one is home - no dive!
Dave's Cave	C		Maximum 3 divers all weekends between May & November inclusive (check and update on CDAA website).
Hells Hole	S	Forestry SA	Booking can be made online from www.cavedivers.com.au. Show ForestrySA Permit to obtain key from Lady Nelson Tourist Ctr.
Pines	C/AC	Forestry SA	Bookings can be made online from www.cavedivers.com.au. Cave Rated divers cannot enter Advanced Cave Section of Pines.
Mud Hole	C	Forestry SA	Bookings can be made online from www.cavedivers.com.au
Nettle Bed	AC	Forestry SA	Bookings can be made online from www.cavedivers.com.au. Show ForestrySA Permit to obtain key from Lady Nelson Tourist Ctr.
Stinging Nettle Cave	AC	Forestry SA	Bookings can be made online from www.cavedivers.com.au. Show ForestrySA Permit to obtain key from Lady Nelson Tourist Ctr.
Iddlebiddy	AC	Forestry SA	Bookings can be made online from www.cavedivers.com.au. Show ForestrySA Permit to obtain key from Lady Nelson Tourist Ctr.
The Shaft	S/C	Trevor Ashby	Booking can be made online from www.cavedivers.com.au. Landowner mandates Dive Supervisors (with their own Insurance) leading all dive trips.

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SITE	LEVEL	OWNER	ACCESS DETAILS
MT. GAMBIER - SA (continued) Engelbrechts - East - West	C AC	Mt Gambier Council Lessee: Ph: 08 8723 5552 Owner:	Obtain key from Lady Nelson Tourist Information Centre. Diving should be avoided after heavy rain due to possible water contamination. Diving hours are now restricted to 8am to 8pm CST.
Three Sisters Access available for	AC	Wattle Range Council	Download Indemnity from www.cavedivers.com.au and email to council@wattlerange.sa.gov.au. A \$30 processing fee can be made over the phone on (08) 8733 0900 after Council has received your indemnity. Allow 4 wks for indemnities to be processed.
Tank Cave	AC	CDAA	Bookings can be made online at www.cavedivers.com.au. An email to the Tank Cave officer is required to dive. Booking Officer is Noel Dillon Email: tankcave@cavedivers.com.au
Baker's Cave	C	Janet & Bruce Saffin	Bookings can be made online at www.cavedivers.com.au. An email to the Tank Cave officer is required to dive. Booking Officer is Matthew Skinner. Email: bakerscave@cavedivers.com.au Climbing equipment required. One member must have previous dive experience at site.
NULLARBOR - WA			
Cocklebidy	C/AC	WA Dept of Parks & W'Life	Apply in writing for permission to dive at least 4 weeks in advance of trip to:
Murra El Elevyn	C/AC	WA Dept of Parks & W'Life	District Manager, PO Box 234, Esperance, W.A. 6450. Phone: (08) 9083 2100.
Tommy Grahams	C	WA Dept of Parks & W'Life	
Burnabbie	AC	WA Department of Lands	Apply in writing or email for permission to dive at least four weeks in advance of trip.
Olwolgln Cave	AC	WA Department of Lands	Miss Shannon Alford, Email: Shannon.alford@lands.wa.gov.au Phone: (08) 6552 4661 Fax: (08) 6552 4417 P.O. Box 1143, West Perth WA 6872.
Weebubbie	S/C	WA Department of Lands	A site indemnity form must be filled out for each visit to the site. Diving permission acknowledged by official letter from Land Owner.
WELLINGTON CAVES - NSW			
Limekiln (McCavity) Cave	C/AC	Wellington Caves Management	Access coordinated by Greg Ryan Email: giryman@gmail.com Ph: (02) 9743 4157 Both Cave and Advanced Cave Level are being accepted for this site depending on its water level at the time. When entrance is under water, Advanced Cave Divers only!
Water (Anticline) cave	C	Wellington Caves Management	Access coordinated by Greg Ryan Email: giryman@gmail.com Ph: (02) 9743 4157 Affected by high CO ₂ levels during Summer/Autumn.