

GUIDELINES

No. 166 - DECEMBER 2024



THE MAGAZINE OF THE CAVE DIVERS ASSOCIATION OF AUSTRALIA

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FRONT COVER:

Abi navigates through Tank Cave on a dive as part of the women's weekend at Tank Cave.

Picture: Keren Green.

BACK COVER:

Keren Green cruises through one of Tank Cave's tunnels.

Picture: Abi Harwood.

CAVE DIVERS ASSOCIATION OF AUSTRALIA

ABN 65 062 259 956

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GUIDELINES is a newsletter of the Cave Divers Association of Australia.

All articles for the following issue are to be sent to the Publications Director:
publications@cavedivers.com.au.

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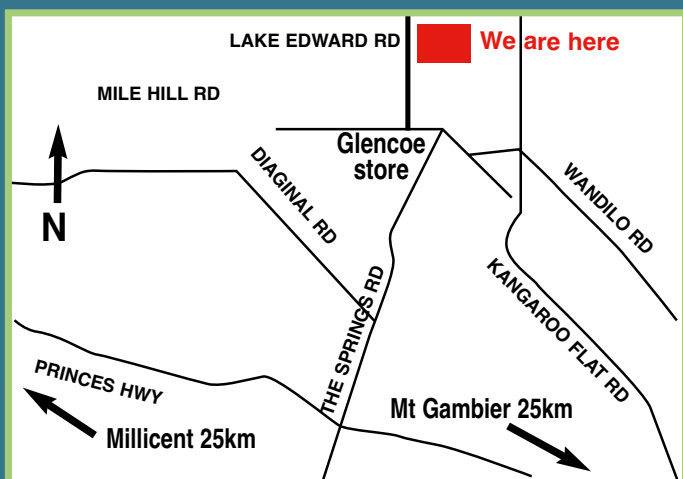
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GUIDELINES EDITOR INTRODUCTION



HELLO READERS,

I hope you enjoy this edition of Guidelines, which is the first I have produced after taking on the role at the request of Publications and Records Director Leon Rademeyer.

Since becoming a Cave Divers Association of Australia member when I undertook my basic cave training in early 2022, I have eagerly read each Guidelines edition and I now look forward to connecting with many divers through the role and encouraging you all to share your stories of exploring, travelling and diving.

I acknowledge the contribution of previous Guidelines coordinator Dave Bryant and others who have produced editions over the years.

Pulling my first edition together included reaching out to many contacts and I'm grateful for everyone who answered my requests for content, often after seeing their achievements or adventures on social media, along with new connections who emailed to share their stories.

I look forward to continuing to reach out to divers doing inspiring things, but the magazine is only as good as members are in sharing their stories, so don't be shy to share any content you feel others may find interesting.

This year's annual general meeting was another enjoyable gathering, providing the opportunity to learn from presenters and catch up with di-

vers from across the country, plus it generated plenty of content with stories featured in this edition about the symposium, life memberships and hall of fame induction announced, along with articles based on some of the presentations.

I am passionate about Australian stories in Guidelines, highlighting the achievements of members, how diving brings people together, such as this edition's women's weekend story shows, and sharing new diving opportunities and exploration discoveries to inspire people to maintain their membership, continue diving, support one another and see new areas.

Hopefully you enjoy this focus, along with some inspiration with some stories from adventures abroad for those looking to dive further afield.

Personally, I look forward to delivering a compelling and inspiring read combining my passion for diving, hearing about other's adventures and drawing on experience from my previous career in print media, including a long stint as editor of Mount Gambier's The Border Watch.

Please don't hesitate to get in touch by shooting me an email at guidelinesmagazine@gmail.com to let me know what you would like to see in Guidelines, provide any feedback on the magazine or pitch a story or photograph for inclusion.

Not every story has to be a four-page feature on a grand exploration expedition – a short story about a dive close to home or at your favourite site and why it impressed you, a poem about an underwater experience or striking photograph is also welcome to mix up the content and provide something for everyone.

Oh, and finally, a special shout out to Linda Claridge and Gary Barclay, who have guided me from basic to advanced cave level and made cave diving such an important part of my life, leading to many friendships and incredible experiences! It's nice to be able to give something back to the association by taking on the Guidelines editor role.

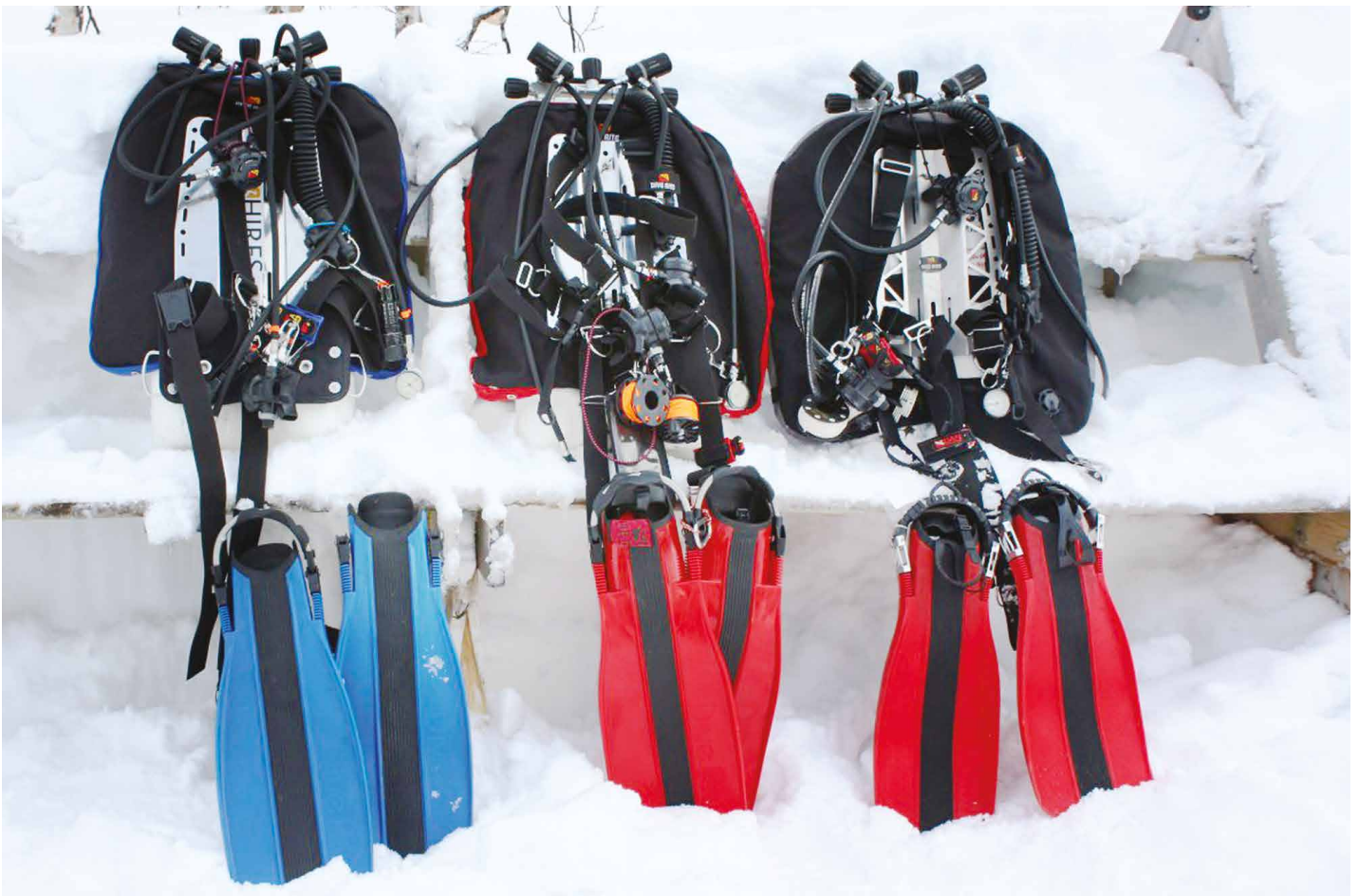
Jason Wallace CDAA #5460

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NATIONAL DIRECTOR'S ANNUAL REPORT

I would like to warmly welcome new members of the organisation and congratulate those who have successfully earned their next level of certification. Over the past 12 months, a lot has transpired, including changes in land managers, site upgrades, new directors and updates from the Australian Research Council (ARC) Fossils project.

We once again secured our 2024/25 insurance coverage. A copy of the certificate is available online on Member Jungle in the “Public Documents & Member Library” by selecting “finance and insurance”. You may wonder about the purpose of insurance certification, how it is maintained and the collective cost to us in dollars.

In today's increasingly litigious society, insurance certification is mandatory for all government land managers and private landowners, such as Graham Kilsby. It provides certainty that they are protected from potential litigation in an incident involving the public or our CDAA members.

Insurance certification guarantees to our land managers/owners that we conduct our cave diving activities according to the latest risk management processes. Simply put, our constitution reflects the requirements under common law for how an incorporated body such as ours operates, including rules for membership management, establishing policies and procedures and enabling the regulation of everyday operational matters. The next level of our regulation defines the details, such as how we prepare new members, upgrade others and maintain member conduct standards. Breaches of these regulations can seriously threaten ongoing access, as some sites have been shut down due to member breaches. All these matters are dealt with according to our constitution and regulations.

Directors are accountable for updating the constitution and regulations and copies must also be sent to the insurer to demonstrate due diligence in their application. As directors, we sometimes hear the CDAA referred to by its members as a “club”. Most members believe that our organisation is a semi-professional,

not-for-profit corporation, but I prefer the latter. Our annual premium costs are approximately \$6700.

In some exciting news, the ARC Fossils project was again a highlight at this year's symposium and annual general meeting, featuring a spectacular VR experience for members. I want to take this opportunity to acknowledge Joe Monks for his invaluable contribution as the CDAA liaison officer and dive coordinator. Joe played a pivotal role in representing the CDAA in the project, ensuring that safety protocols were upheld at Griffith University and providing updated reports on the project's progress. His dedication and hard work are truly appreciated. On another note, I am pleased to announce that Julien Louys has stepped into the role of dive coordinator. Julien is the principal research scientist on the project and holds the position of Professor at Griffith University. We are thrilled to have Julien on board and look forward to his expertise contributing to the project's success. Thank you, Joe, and welcome, Julien!

Just a friendly reminder to all members: While we collectively own Tank Cave, we are also the custodians of this unique site for future generations to enjoy long after we stop diving. It's essential to be mindful of our impact, as evidence of laziness and accidental damage, such as low-slung stages, gauges, hoses, and fin marks, are all too obvious. We are responsible for reminding ourselves and signalling those we dive with when we need to tidy loose gear or improve our technique. Please remember that damage caused by gear is permanent and doesn't magically repair itself when we are not there. Let's do our part to preserve Tank Cave for future generations.

We recently signed a new annual licence agreement with Graham Kilsby for ongoing access to dive on his private property. Front gate access is updated with code entry and an auto-closing boom gate. Access conditions are updated regularly, so it is essential to familiarise yourself with the conditions of your access to this private property. If you have any doubts, feel free

to contact the site director, booking officer Craig Larkin or any member of the national committee for assistance.

Site director Kelvyn Ball, Stu Donn and Wattle Range Council have joined resources to upgrade the entrance to Three Sisters Cave by moving the entry point further back from traffic, making it safer to set up access. Our strong relationship with the Wattle Range Council made this improvement possible. The council generously donated two of their staff for traffic management and operating earth-moving equipment on the day. We expect a formal access agreement to be finalised sometime in the next few months. Kelvyn and Stu have also been busy installing a new entry point in Bakers Cave. These developments signify our commitment to enhancing safety and access to these dive sites and we are grateful for the collaborative efforts that have made these improvements possible.

I want to welcome Leon Rademeyer as our publications director. Leon has brought an impressive professional journalist skillset to the role. Chris Edwards has been re-elected unopposed as the standards director for the second time and has been busy implementing an online student learning platform. We also welcome Martin Slater as the new business director, replacing outgoing Mathew Rochford. I want to thank Mathew for his exceptional service in the challenging role of business director.

Finally, on behalf of the current national committee, we would like to thank Engelbrecht Cave manager Jan Coleman for her 10 years of dedicated service. It's hard to imagine Engelbrecht's without Jan guiding our members on site etiquette. We truly value working with Jan and wish her all the best in the future. The lease for Engelbrecht's was not renewed as per the terms of the contract with Mount Gambier City Council. While the council seeks an alternative approach to running the site, access for the membership is still ongoing with the usual protocols in place. We will provide further updates to the membership as we learn more soon.

The October 11 AGM program at the Main Corner complex in Mount Gambier was fabulous with many prizes generously donated by sponsors. The Sorrentos function room catered for the day with evening drinks and food. Many thanks to Aren Leishman, Andi Russo and Steve Fordyce for arranging the day and for the many donations of door prizes.

We also want to extend a big thank you to all our office bearers and volunteers. Their contributions are invaluable and the organisation would not function without them.



Grant Pearce
CDAA #1382
National Director

PUBLICATIONS AND RECORDS DIRECTOR'S ANNUAL REPORT ●

It has been a turbulent year in the publications and records portfolio, where I have essentially served as a stopgap for an elected member. I am however happy to report that I have been elected for a two-year term, which establishes a timeframe that should bring much needed continuity to the role.

One of the challenges is to keep up with the proliferation of IT systems and in particular the usability of platforms in terms of the storage

and management of membership data. We have come a long way in this regard, but more work is needed.

DIGITAL FOOTPRINT

The CDAA's digital footprint is set to expand with plans to not only engage our members (and prospective members) on our website and Facebook page, but also on other social media channels, including Instagram and Whatsapp.



Currently our Facebook page is ticking over nicely with around 3000 followers, but there is an appetite for expansion. Watch this space.

GUIDELINES

I'm happy to report that we have sourced an editor for Guidelines, who will be responsible for the full productions of the magazine. Jason Wallace is not only a Mount Gambier local, but also a former editor of The Border Watch and advanced cave diver. This is his maiden issue and we are looking forward to many more to come. Welcome to the team Jason.

The magazine's A4-format will continue as requested by our members, but there will be an update to the electronic version which has thus far only been a scroll-down PDF, which was very difficult to read. The new version will be a PDF flip-file which will read (and look) like a print magazine.

MEMBERSHIP

Membership renewals have kept us busy throughout the year and our records officer Andrew Ottanelli has done an outstand-

ing job in getting our members paid-up and registered in record time. We have worked hard behind the scenes to get these membership registration issues sorted and things should be running more smoothly in future.

In terms of membership, on 14/11/2024 we stood at 536 paid-up diving members with 13 teaching status instructors and 35 students undergoing training. In addition, we have a total of 48 current non-diving members.

MEMBER CONTRIBUTIONS

Last, but not least, please remember that we are totally dependent on member contributions for the publication of Guidelines. The magazine is simply not viable if we don't receive at least five stories with photographs. Please send all contributions direct to Jason at guidelinesmagazine@gmail.com



Leon Rademeyer

CDA #5013
Publications and Records
Director

BUSINESS DIRECTOR'S ANNUAL REPORT

It has been a very busy year in the business portfolio with Mathew Rochford taking the fore for most of the year. He has now stepped down after many successful years within the role and I and the other committee members would like to offer our deepest thanks to him for all that he has brought to the role and the commitment he has shown to our community.

At this point I should introduce myself, Martin Slater, as the new business director. Professionally, I work in IT with a long history of executive roles within multi-national companies and I hope to bring some of this experience to the role. I am delighted and somewhat daunted to step into Mat's shoes and hope I can continue his good work. With all that in mind, I will briefly recap some of Mat's excellent work over the past year.

AUDIT

Mat, working with our public officer Andrew, was kind enough to see the 2024 audit to the end. This is a complex and time-consuming task and I want to thank them both for seeing this to completion. There is more work to be done to add additional controls that will be looked at in the coming year.

MEMBER JUNGLE

There have been significant improvements to the auditing provided by Member Jungle which should make our legally required end of year audits much simpler to accomplish and we will be looking to further improve this in the coming year.

MEMBER BREACHES

A significant amount of time has been spent robustly investigating several member breaches

to ensure a fair process. These can take a disproportionate amount of time to process, involving not only the national committee, but also other members of the association that form the peer review committees. These incidents can have significant impact on our ability to access dive sites and as such there is an onus on all members to be aware of the regulations and abide by them.

CONSTITUTION CHANGES

There has been a long and arduous effort involving many people to update our constitution

to better reflect the association of today and to make sure that expectations are clear. This work is still ongoing and we hope to have a new version for the membership to vote on in the coming year.



Martin Slater

CDA #5061
Business Director

STANDARDS DIRECTOR'S ANNUAL REPORT

Over the last two years, the theory components of both Basic Cave and Cave courses have been migrated to an online format. We are now approaching our 100th student across those two courses, which is a great result.

This has allowed instructors to spend more time providing practical face to face training, which is a win-win situation. The re-write of the Advanced Cave Course is currently a work in progress with completion expected by early 2025.

Once again, the very popular SROP Program ran in the lead-up to the annual general meeting weekend with a full contingent of keen participants. A special thanks to Harry for running the course and to Ken Smith, Tim Payne, Phil Crocker and Damian Bishop for assisting as speakers and trainers. We were also fortunate enough to have Rus Pnevski - a clearance diver and trainer from HMAS Penguin - on the course. Rus provided some great training opportunities on the use of positive pressure face masks. And of course all programs of this nature need a "casualty" - this year's crash test dummy Brendan Moore did an excellent job!

Last, but certainly not least, thanks to the team at the State Emergency Service Mount Gambier and particularly Brad Flew for the manual handling and incident command sessions, along with the use of their excellent facilities. The theory component of this program will be available online by next year, which will allow even more

hands-on time for the participants. Warning to all who may be thinking about participating, get your requests in early, spots fill fast!

After a productive instructor meeting on the AGM weekend of 2023, the training standards were updated to continue to reflect current best-practice expectations and I continue to regularly review these to ensure we are providing the best training we can. We also currently have five instructor interns actively assisting with courses at present, three at Basic Cave and two at Cave level and I wish all of them well in their endeavours.

In co-operation with the records officer, I have been endeavouring to ensure that all new certifications are processed within 48 hours of course completion and I am confident that we have met that benchmark. Thanks Otto!

Overseas visitors continue to trickle through our borders and I was pleased to receive and recently approve a visitor permit application from Chen Qian (Charlie) who hosted Craig Challen and Andy Oakeley in April in China. Most of you would have read their story in the previous issue of Guidelines. Charlie will be visiting Australia shortly.



Chris Edwards

CDA #2247
Standards director

SITE DIRECTOR'S ANNUAL REPORT

BAKER'S CAVE: At the start of this year, I was able to organise a working bee at Baker's Cave to remove all the rubbish around the hole, old tyres, wire fencing, rocks and rubble, replace the cover with a mesh grid and give the site a tidy up. Many thanks to the landowners (Bruce and Janet Saffin) who organised an excavator to help clean up and install the very solid mesh and to Stewie (Stewart Donn) and all the guys that turned up to help. We had a very successful day and I think if you have been there since you would say it is a massive improvement and a safer and much tidier site now.

KILSBY'S: The agreement for the next 12 months has been signed, but please be aware that access details can change very regularly and it is up to each diver to check and read all the access agreement details and protocols before diving so everything can run smoothly and on time. There are no excuses for not knowing - you sign that you have read the details when making the booking.

ENGELBRECHT'S: Wow! A massive thank you to Jan, who has ran this site extremely well over the last 10 years and built a welcoming and protective relationship with divers ensuring protocols are followed for a safe return. We have really appreciated your efforts. Enjoy what the future brings.

EARL CAVE: Trying to regain access here has been quite challenging as contacts change jobs quite often, which puts me back to the start each time, but I am still trying to convince the owners to reopen. Discussions are slow, but I hope I will get there.

ELA ELAP: Still no movement here. Trying very hard with the landowners, but it is not a main income stream so not on their priority list to reopen it at the moment, but I'll keep persisting.

TANK CAVE: This site is ticking along quite well with various members helping out with small issues during the year and I appreciate their efforts in sorting out problems as they arise. We have had Dan fixing lighting issues and Stewie fixing up a step below the ladder. Every bit helps and is appreciated. The lock for the toilet is now code entry, so check with your AO or Damian

Bishop or myself if you haven't been told what it is.

I am quite concerned that a permanent line has been laid without permission from myself or any of the directors, which needs to happen before any line is fixed. Tank Cave is also not the only cave that this has happened in. We would really appreciate it if divers would let us know if they intend to install line. Reels should be used to lay lines and to take the line back out with you. If exploring a totally new cave, we need to be contacted immediately if a permanent line has been laid for the first time.

The ARC Fossils Project team were out at Tank Cave after Easter, when a significant amount of bones were removed with previously organised permission and very important bones were found amongst them. These were displayed at the AGM with a virtual reality display.

THREE SISTERS: We very recently had a working bee at Three Sisters and had a very productive day with Stewie once again rocking up to give a huge hand along with a couple of council workers and their equipment to make the job quicker. They were very enthusiastic, eager, great to work with, couldn't do enough to help and the site is progressing very well. We are just working on the access agreement and hope to have this site online again within 12 months. I am really looking forward to this opening as I have been working on it for the last 6 years (thanks to COVID). On one of the many trips to talk to council on site, Ryan Kaczowski and I got to go down and have a look at the dry cave and it was spectacular in itself. That was worth the look and I can't wait to dive it too.

PICCANINNIE PONDS: This site remains closed due to the algae bloom and I expect it will continue to be here for some time yet with the severe drought along the South East coast causing a lack of water flowing through the ponds and continuing the bloom outbreak. Hopefully it rains a lot and gets the water levels in the South East back up, creating a good flow for this magnificent site to be reopened again for diving soon for all to enjoy.

THE SHAFT: Diving is continuing quite regularly and can be open on request with realistic numbers. Please contact Gary Barclay for requests. The Ashby family are very interested and encouraging in making sure that divers are able to dive The Shaft and we thank them immensely for this continued privileged opportunity.

ONE TREE: Access to this site remains the same. Norm and Jenny are always up for a chat when picking up and returning the key. We appreciate their kind service in allowing easy key access as the landowners (Raymond and Kerry McKinnon) do not live onsite. Once again, we recognise our landowners for their amazing support and letting us access their properties to dive these unique sites.

ALLENDALE EAST: This is a site well supported by The Lady Nelson staff when picking up the keys and returning them and their efforts are greatly appreciated too.

FORESTRY SITES: These are running pretty well, except for Nettlebed. I was recently called in to do a dive there after concerns/reports were raised regarding disgusting drawings of genitalia in the silt and handprints left in there as well. This abuse and total disregard of a site is extremely disappointing and sad that a limited few divers will try to ruin diving for others if this continues to happen. I hope that if anyone knows anything about this graffiti or any future damage that divers will be reported for the offence. I also found divers in there doing training. This is not a site suitable for practising skills and dropping bottles off to the floor. It was previously an AC diving cave in the past, due to its delicateness, and was opened up to cave divers in the last few years as we thought cave skills were good enough to allow access, but now I'm not so sure. I will be monitoring this site and hope that nothing like this happens again. I wish to recognise Kieran Gosden for her efforts in doing the bookings for this site and thank her for her efforts.

WA SITES: These have had a good flow of divers. We have been having regular communication with Department of Planning, Land and Heritage in Perth on access agreements and

the booking system which we are working on to make a bit simpler for everybody to use. The system needs to recognise anyone from our association who is out there diving at any given time. It is a work in progress and I will keep you updated with any changes along the way.

Tim Payne has been our mapping officer for many years now and I would like to thank him for his role in this aspect of the association. William Passos is stepping up to this role now and we look forward to his enthusiastic attitude in keeping up the invaluable knowledge in our maps that we can access for the past, present and future.

PANNIKIN PLAINS: Due to heavy rain, the Plug Hole at Pannikin is inaccessible for gear and the site was closed for bookings from early October. A plan has been put in place, including sending members to reassess the site for access. I will inform members of the outcome.

WEEBUBBIE CAVE: The Department of Planning, Lands and Heritage has received information from the Eucla Police Station advising there has been a significant collapse of part of the roof in Weebubbie Cave. From the information provided, the department has decided to suspend the issuing of all permits to enter Weebubbie until further notice. I will be working with the department to keep you informed.

I would also like to take this opportunity to thank all my booking officers once again for their volunteer roles and dedication to keep everyone diving each week. You all are very dedicated to your roles and I appreciate all your help. I would also like to thank everyone who helps me continuously behind the scenes. As site director is a broad area to cover, without these extra people's knowledge and support I wouldn't be able to achieve what needs to be done.



Kelvyn Ball
CDAA #3276
Site Director

ENCOURAGING WOMEN IN CAVE DIVING: A WEEKEND OF ADVENTURE AND CONNECTION

● By Abi Harwood, Susan Entwisle and Keren Green



Nancy (left), April, Sherryn, Alyn, Anita, Susan, Ash, Keren, Helen and Abi gathered for a weekend of women gathering to dive and connect at Tank Cave in September.



Keren and Abi working together to open the cave.

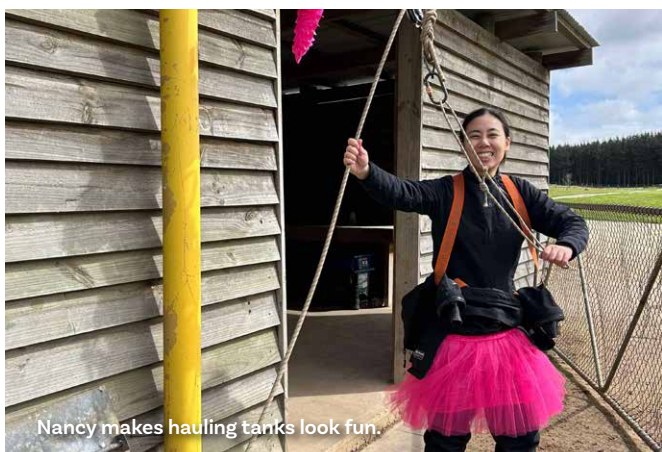
Did you know that around 40pc of certified divers are women? Yet, when it comes to cave diving, the numbers tell quite a different story. Today, only 15.5pc of members of the Cave Divers Association of Australia (CDA) are female, and there are only 43 females out of 303 current advanced cave divers. But that does not mean there is not a whole group of women who are passionate about technical diving and enjoy cave diving. To celebrate and support the growth of this community, a group of us decided to come together for a weekend of adventure, connection and, of course, fun.

The goal was simple: to build friendships and create a supportive network that encourages

each member to pursue their cave diving adventures with confidence. It was also about raising the visibility of women in a sport that is fun for anyone who loves adventure and a challenge.

From the 13th-16th September, a group of ten women got together to dive Tank Cave. We had people from three states (Victoria, South Australia, and Western Australia) all staying at Pine Tank Lodge. Half of us managed to work remotely on the Friday, which meant we could fit in an evening dive before gathering for dinner at the Glencoe Country Post and Bistro.

Saturday started with decorating Tank Cave. Pink bunting and flags really warmed up the



Nancy makes hauling tanks look fun.



Abi navigates through Tank Cave on a dive as part of the women's weekend at Tank Cave. Picture: Keren Green.

shed and tutus were donned for the haul in of tanks. It turns out, with enough effort, a tutu can fit over a drysuit (if you were ever wondering). We separated into small dive groups to plan our individual dives. Some of us dived with buddies that we had not dived with before, which was a great opportunity to learn from each other, share experience and go to sections of the cave that we had not been to before. After diving, there was a buffet of tea, cake, donuts and other sweets - it all felt very sophisticated.

Saturday evening led to an elegant group dinner at The Barn, joined by a couple of guys who were diving Pines over the weekend, and amusing discussions of sponsorship opportunities for cave diving (if anyone from Red Bull is reading this, please feel free to get in contact). Sunday and Monday followed a similar rhythm of diving, connecting, sharing experiences, photoshoots and many laughs.

THE SUPPORTIVE DIVE COMMUNITY

While the sport of cave diving itself is not biased and we have an amazing community of both men and women who support each other in developing skills and sharing knowledge, the relatively low membership numbers begs the question: can we encourage women to get more involved?

Cave diving is often viewed as high-risk and focused on exploration, but it is also about teamwork, skill and having fun. Factors such as physical demands and the challenge of “plumbing in” may be perceived as barriers for some women, but showing how well we work together and providing guidance reduces barriers. Of course, during our “girl’s weekend” we spent a lot of time sharing advice, such as the best way to apply a she-pee.

As women, we can sometimes doubt what we are capable of, but we also bring valuable strengths to dive teams. Seeing the achievements of female role models in the dive industry such as Jill Heinerth and our local female CDAA instructors who have made huge contributions to the history of cave diving in Australia, helps inspire newer divers to progress on their diving journeys. Building networks and providing a space where women feel comfortable to discuss female-specific issues, share tips and encourage each other also goes a long way towards building confidence.

LOOKING AHEAD

The success of this weekend has left us all excited and motivated to continue building more friendships and connections within the cave diving community. We are already planning a trip to the Nullarbor in 2025 and intend to dive Olwogin. We would also like to organise more regular “Girls weekends” in Mount Gambier for divers across all levels of cave diving experience (not just Tank Cave). We are hopeful that through these trips, we can encourage greater participation to share our love of cave diving.



Abi showing off her tutu at the entrance to Tank Cave.



Susan looking pretty in pink

CAVE DIVERS ASSOCIATION OF AUSTRALIA 2024 SYMPOSIUM AND ANNUAL GENERAL MEETING MOUNT GAMBIER MAIN CORNER OCTOBER 12

● By Aren Leishman

Following an event which was as prominent as the 50th anniversary annual general meeting is always challenging, but a refocus on the diving in and around Australia resulted in a lovely event for 2024.

A presentation from Meg Walker went into depth about the fossils that populate our caves, their implications for palaeontology and the role that cave divers play in allowing researchers to access the science and data hiding in the tunnels we dive. The use of a VR experience brought these fossils to life and allowed for them to be placed in context, not just relative to the terrain that they are situated in today but relative to the ancient fauna that the bones originally comprised.

An update on the expeditionary work in Tasmania by Steve Fordyce was remarkably informative, delving into how cave diving can be situated as more of a tool in a component of greater exploration. The effort required to get even a small quantity of dive gear to the water's edge in such an austere and extreme cave should not be underestimated. The quest for the 'master cave' is something that many cave divers can relate to. I vividly remember my first time in Tommy Grahams exiting the tight, dry section into the main chamber and the exhilaration in coming across the large, open cave.

Looking to our neighbours abroad we had Faz giving us a fantastic presentation on the caves of Sulawesi, an area ripe with profound natural beauty and exploration for all levels of cave diver. The proximity to Australia means it is a prime destination that has definitely risen high on my bucket list for dive holidays.

Ian Lewis' discussion on the use of geophysical techniques to try and identify where the caves lead was very interesting. The prospect of extending the caves we already know and love is a fascinating prospect and some of the preliminary results show great promise. I for one am

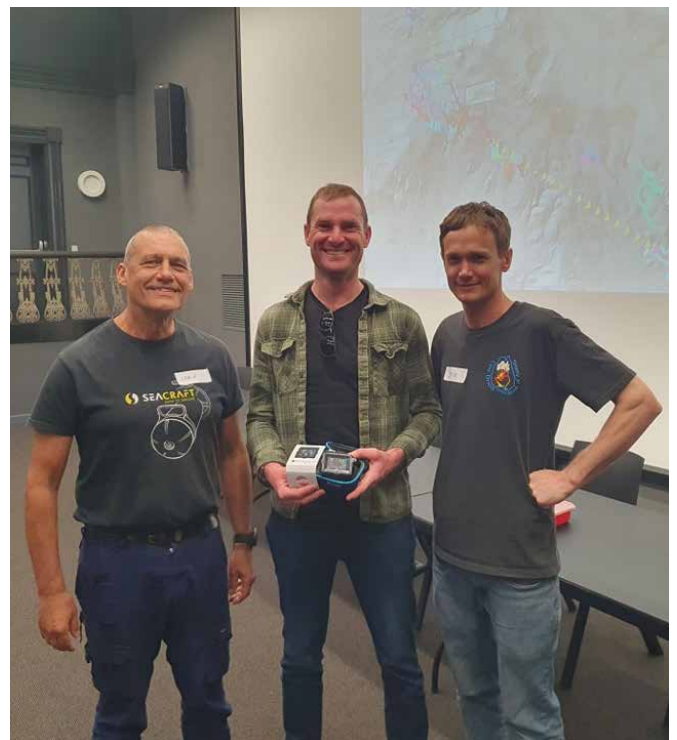
looking forward to seeing the fruits that these new techniques bear.

As always, the evening event was a wonderful time, with everyone chatting the night away with stories of adventures and tales of diving. It was fantastic to be able to catch up with many of the friends I have made over here on my cave diving journey.

Being based out of Western Australia, my trips to the Mount are few and far between so the opportunity to socialise with everyone is a treasured opportunity.

A special thanks to Sorrentos for their many years of support catering for our annual general meetings and evening social events.

Thanks also to the many sponsors who donated prizes and giveaways, which always adds to the fun and appeal of the event.



Shearwater generously donated a Perdix 2 Ti Black, with winner Brendan Moore saying "I will use this amazing gear to push further exploration".



Thanks to a donation from Scubapro, a 60th anniversary Galileo 3 was won by Andrew Seifried, who wrote in his entry "I need a watch!"



Scubapro donated a special edition 60th anniversary titanium and carbon regulator, won by Craig Challen who said "this reg will go to the heart of my setup".



Congratulations to Kelvyn Ball for winning a Scubapro single tank backplate and wing, with his entry stating "Cos I need one!"

SPONSOR	PRIZE	WINNER
Diving Adelaide	Hollis fins	Neville Skinner
TFM Engineering	316 shifter	Darren Cibis
Precision Waterjet	\$50 gift card, D-rings and cookies	Paula Bell
Dive Experience	2 hydro tests	Emre Orhan
Fourth Element	Seeker mask	Nicole Kuring
Fourth Element	Shoreline poncho	Danny Lyall
Fourth Element	Expedition duffel bag	Farzad Atefi
Shearwater	Drybag	Matt Gebert
Halcyon	Pathfinder reel	Michael Mallis
Santi	Cube backpack	Damian Bishop
Allendale East General Store	\$100 fill card	Jason Wallace
Australian Drysuit Repairs	Latex wrist seal replacement	Alex Aberle-Leeming
Scubapro	K2 Extreme one-piece undersuit	Chris Edwards
Tec Dive Gear	Duve Rute CX-2 light	Mark Simpson
Dive Lantern	Core 10 backup light	Danny Pethybridge
Dive Lantern	Core 10 backup light	Meg Anderson
Dive Lantern	Core 10 backup light	Victoria Kaczkowski
caveDB	Tank Cave map book	Meg Walker

FREDDIE BECOMES A LIFER

By Damian Bishop #4738 and Joseph Monks #4653

Freddie, aka Kelvyn Ball #3276, has become a Cave Divers Association of Australia life member in recognition of his exceptional and enduring contributions to the association. His nomination was officially endorsed at this year's annual general meeting in Mount Gambier on 12 October.



Kelvyn "Freddie" Ball has been honoured with life membership of the Cave Divers Association of Australia.

Kelvyn's journey with the CDAA began on 6 February 1999 and for the past 25 years he has been an instrumental force in propelling our organisation forward. He has taken on many roles during his time, including as dive guide at Tank Cave and The Shaft, which stands as a testament to his expertise and passion for connecting members to the caves of the Mount Gambier region. Kelvyn's contributions have not only contributed to upholding the standards of the association, but shaped some of the systems we rely on today and have aided in the global recognition of the CDAA's diving practices.

Guiding The Shaft requires a unique perspective and Kelvyn has not only demonstrated his skills in this regard, but generously shared his knowledge by training new dive guides for the site. His influence has granted many of us continued access to this remarkable cave. In addition to The Shaft, Kelvyn's impact extends to his involvement in the Tank Cave Management Committee, with which he played a pivotal role

in developing the site and its training requirements.

In his fourth term as site director, Kelvyn's time and passion have been pivotal in expanding the association's dive sites and nurturing relationships with landholders. Even during the challenging times of the Covid-19 pandemic, Kelvyn held the fort, providing reassurance to all involved parties, including members.

Kelvyn's many contributions include dive site access improvements (such as the installation of ladders at Kilsby's Sinkhole and One Tree), regaining access to dive sites (such as at Kilsby's, Three Sisters and Pannikins), contributing to the development of the Member Jungle (and electronic membership systems) and handling the operational backend of the CDAA. These examples, though small in comparison to his overall contributions, showcase his selfless commitment and the significant impact he has had on the association.

Beyond his accomplishments, Freddie is a genuine person who has poured his heart into our cave diving community. Always accessible despite his tight schedule as a farmer and business owner, Kelvyn generously offers his time to fellow members. He advocates tirelessly for the sport, evidenced by his appearances on national television promoting the CDAA. In short, he is the embodiment of the very best of our association and we hope his service will continue for many years to come.



Kelvyn (right) with construction workers expanding the entrance to The Three Sisters cave near Tantanoola to provide access for divers.



Kelvyn at the entrance to The Three Sisters cave near Tantanoola before excavation work to make it more accessible for divers.



Matt Gebert – Licensed electrician, cave diver and maker of things.

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RON ALLUM RECOGNISED FOR A LIFETIME OF SERVICE AND DEDICATION TO THE CDAA

Story: Peter Stace #186 | Photographs: Peter Rogers #399

Legendary cave diver Ron Allum #257 has been inducted into the Cave Divers Association of Australia Hall of Fame and received life membership for his dedication and exemplary service to the association, which has always been of the highest standard, particularly in respect of training and testing.

Ron's nominations for both honours were officially endorsed at the 2024 Annual General Meeting in Mount Gambier on 12 October.

Ron first became interested in cave exploration in the mid-1960s as a Boy Scout when his troop visited caves at Bungonia, New South Wales. Later he joined the University of NSW Speleological Society and, in 1968, made the first of many dry caving trips to the Nullarbor. He snorkelled Weebubbie and Cocklebidy lakes to collect water samples, but was frustrated that the caves continued beyond his breath-hold ability.

In 1972, Ron was conscripted as a National Serviceman with the Royal Air Force in Butterworth, Malaysia. It was there that he was introduced to scuba diving basics by a local BSAC club and on returning to Australia, Ron undertook certification to become an instructor with the Federation of Australian Underwater Instructors.

Having heard of the sinkholes and caves of South East South Australia, Ron moved to Adelaide in 1975, where he soon became an established member of the diving, caving and cave diving communities. He soon became involved with the newly formed Cave Divers Association of Australia, serving as a committee member from 1976 to 1985 in addition to six years as both the South Australian and national testing officer. He was also a very active trainer/instructor in the emerging sport and a leading figure trialling and refining skills and equipment to safe standards.

Ron's concern and dedication to safe cave diving was however not limited to the sinkholes and caves situated around Mount Gambier, but also included the sumps of the New South Wales and Victorian caves. He drafted a new code of ethics for free diving in caves, which

was accepted by the Australian Speleological Federation, where he also served as cave diving representative. What would now be characterised as 'technical diving' began to emerge with new specialised equipment, such as multiple tanks and regulators, streamlined buoyancy devices, high powered underwater lights and guideline reels. Ron was 'Mr Make-it' in cave diving circles, developing, manufacturing and refining a complete range of cave diving gear that was not commercially available.



Hugh Morrison (left) and Ron in 1982 tying on new line to start pushing into the unexplored main passageway in Cocklebidy. This was the dive when Toad Hall was discovered.

CAVE DIVING HIGHLIGHTS

The following is a list of many of the more significant dives that Ron has undertaken, each of which forms a significant part of the history of cave diving in Australia.

1973/74: JENOLAN - Ron and Al Grundy performed a number of dives in Jenolan, Bungonia, Wyanbene and Cliefden in New South Wales, and Ron (and later Ian Lewis) investigated some sumps in Yarrangobilly.

1976: COCKLEBIDDY CAVE - A joint West Australian/South Australian team including Ron extended the cave to 1000 metres, discovering the first major air chamber, a long lake with a 20m high and 80m long rock pile of large loose rocks. The rock pile was traversed and the north side lake was discovered with the submerged passage dived for a further 150m, where it continued into the darkness.

1977: COCKLEBIDDY CAVE - A small South Aus-

tralian team, including Ron, explored another 350m in Cocklebidy (totalling 1520m). Further exploration and surveying was also undertaken in Tommy Graham's, Weebubbie and Murra-El-Elevyn caves using Radio Direction Finding (RDF) equipment designed and built by Ron.

1978-79: JENOLAN CAVES - A small team of South Australian cave divers led by Ron became only the second team allowed access to explore Jenolan, completing significant exploration and mapping of the Imperial Cave streamway, Mammoth Cave and Spider Cave.

1978: TASMANIA - A team of four South Australian cave divers including Ron were invited by local cavers to Tasmania to conduct dives in several locations that previously showed promise. The team connected the outflow stream from Kubla Khan Cave to the cave system, mapping 1400m of new passageway. Several other sites were also investigated with arduous, dirty and very cold passage discovered.

1979: COCKLEBIDDY CAVE - A South Australian team, including Ron, penetrated the same distance as a previous Western Australian team with each diver carrying five tanks, each with triples on their backs and a tank under each arm. The 4000m continuous swim from the rock pile to the 2000m mark and back took four hours. By this stage the number of tanks required by each diver was becoming problematic, particularly the effort required to carry them out of the cave (100m vertical) to refill between dives. Ron provided a solution, using a small diameter copper tube from the compressor on the surface above the cave, down to an outlet manifold that could fill five tanks simultaneously inside the cave. This was an indispensable item on all subsequent Nullarbor cave diving expeditions, saving divers from the arduous and potentially dangerous task of climbing steep, unstable rock pile cave entrances with twin tanks, multiple times each day.

1979: ENGELBRECHT CAVE EAST - Ron was part of a small team to negotiate their way into the partially blocked eastern cave within the sink-hole and explored the lake. On the first dive the main lake chamber was systematically explored and a series of passageways discovered leading to a small air chamber, the first air chamber to be found in the region. (The first dives in the eastern lake were made in 1964 but the majority of the passageway and air chamber were not found.)

1979: ENGELBRECHT CAVE WEST - Ron made the very first dive entering the bath sized lake, making his way down the silty, unstable and restrictive rock pile on the western side. After scraping his way back up through the collapsed rock pile in nil visibility he reported that there was open cave beyond. This was the beginning of exploration of one of Australia's most unique and important cave diving sites.



Ron in 1979 preparing to dive in Cocklebidy. At that time there were South Australian and Western Australian teams pushing to explore further into the cave.

1981: PANNIKIN PLAIN CAVE - Despite the notoriously difficult, loose rock pile entrance, a small team led by Ron skilfully manoeuvred their way to the lake. Ron made the first dive discovering a large tunnel and penetrated several hundred metres of new cave. This discovery ignited years of intense exploration in this cave and expanded interest in the Nullarbor caves to an international level.

1982: ALLEYN'S CAVE (DEATH CAVE) - Ron was a member of the first group to dive this site following the triple-fatality accident that nearly led to the closure of all cave diving sites and precipitated the inquiry by the South Australian Government.

1982: MURRA-EL-ELEVYN - Ron, together with a small SA team, made a major discovery resulting in a 300pc increase in known cave passage.

1982: MULLAMULLANG CAVE - Ron was the first person to dive the lakes along the main passageway. (It took five hours to walk into and first dive in Easter Extension, then a 15-hour trip to the series of lakes near the terminal rock pile. Notably Phil Prust and Chris Brown carried the tanks.)

1982: COCKLEBIDDY CAVE - A team headed by Hugh Morrison (WA) including Ron and Peter Rogers used a new technique to carry additional tanks, a sled manufactured from PVC pipe, to enable them to dive well beyond the 1000m

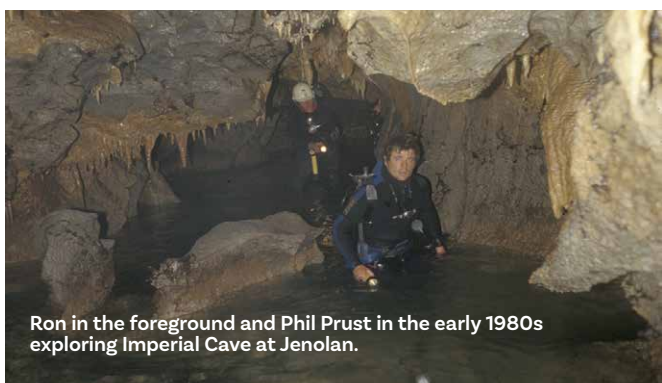
Rock Pile chamber. They discovered a second sump and emerged into a huge underground lake and dry rockpile chamber. This chamber was 10m high and 250m long, named “Toad Hall” by the divers. A further sump was discovered at the farthest end of the 250m long Toad Hall rock pile with the cave continuing underwater into the darkness.

1983: COCKLEBIDDY CAVE - Following the discovery of Toad Hall, a major push dive was being planned by an Australia-wide team. In preparation, Ron designed and manufactured several purpose-built aluminium tubing sleds to enable a dive beyond Toad Hall. The sleds were designed to carry 14 dive cylinders plus sleeping gear, food and drinking water in sealed containers to be used for an ‘overnight’ stay in Toad Hall.

The divers pushed an additional 1790m from Toad Hall sump, a total distance of 5290m of underwater passage (a total of 6240m from the cave entrance) – a world record dive with a return underwater distance of 10,580m. The duration spent underground was 55 hours and the entire expedition was completed in seven days. Ron was a pivotal member of what is considered the ‘greatest cave dive in Australia’ not only as a lead diver but also in developing the sleds that were essential to the dive plan.



Hugh Morrison (right) and Ron in 1983 in Cocklebidy exploring the passageway beyond Toad Hall. This dive passed the end of the French line and established what was at that time a new world record for the world’s longest cave dive (as recorded in ‘The Darkness Beckons’ by Martyn Farr, Diadem Books, 1991).



Ron in the foreground and Phil Prust in the early 1980s exploring Imperial Cave at Jenolan.



Ron preparing to dive in Slug Lake at Jenolan in the early 1980s with a support team including Phil Prust and Cheryl Bass.

1987: PANNIKIN PLAIN CAVE - Using four back-mounted tanks plus one under-slung tank, Ron (accompanied by Chris Brown who wore triple back mounts with twin under-slung tanks) discovered Concorde Landing air chamber that become the ‘base camp’ essential to all further exploration of the cave system.

1988: JENOLAN CAVES - Six dives were undertaken by a small team led by Ron in Imperial Cave and Lower River. An attempt was made to use the RDF system Ron had developed for positioning survey points in air chambers in Nullarbor caves. Unfortunately, due to the severe topography of Jenolan and the presence of high voltage cables in the area, this trial was unsuccessful.

1988: PANNIKIN PLAIN CAVE DIVING EXPEDITION - This was the first professionally sponsored, hi-tech scooter-assisted cave diving expedition in Australia. The team consisted of 10 highly experienced cave divers including Ron and three international divers. During this Australian Geographic Society sponsored expedition a freak storm caused a landslide that blocked the entrance trapping most of the team underground. Fortunately, Ron had developed a two-way communication system, as part of his RDF equipment, capable of transmitting voice from within the cave through the 100m of solid limestone rock to the surface. Being able to communicate with the rest of the team on the surface was a crucial factor in conducting the safe rescue of all the trapped team members.

As a result of the Pannikin Plain expedition, which gained significant worldwide press coverage, Ron was launched into the world of film and television over the next decade. He later joined a documentary team and explored the cave systems of Mexico, Florida, the Bahamas, the Caribbean and the ice caves of Alaska.

1989: TANK CAVE - Following the initial breakthrough by Peter Horne and Mark Nielsen in 1983, a small team including Ron undertook numerous exploration and mapping dives, installing several thousand metres of fixed line providing the data for the first comprehensive map of the system.

1993: JENOLAN CAVES - The Sydney University Speleological Society sponsored British cave diver, Rob Palmer, to hold a six day International Association of Nitrox and Technical (IANTD) Divers Sump Diving course at Jenolan Caves. Rob was assisted by Ron, who obtained his IANTD Sump Instructor rating.

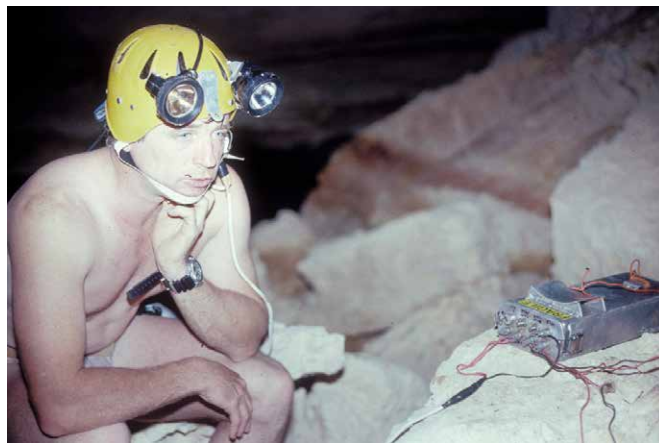
1998: JENOLAN CAVES - Back at his home turf once again, Ron planned a dive in Slug Lake, Mammoth Cave. He used several tanks of different gases for different phases of the dive and even to compensate for pressure in his drysuit. He descended to 96m depth and was pleased to note that the cave continued into a deepening flooded passageway, leaving something for future cave divers to tackle.

2000: TITANIC - Ron was hired as technical director for Hollywood-producer James Cameron's 3D IMAX film on the wreck of the Titanic. Ron's ability to design and build specialist equipment for use on the expedition's Russian Mir submersibles earned him the title 'The Professor'.

2005: DEEPSEA CHALLENGER - Ron began working on building a submersible capable of carrying James Cameron to the deepest point on the planet, the Mariana Trench. Working on a tight budget and in utter secrecy, Ron not only

researched, co-designed and oversaw the build of the vehicle, but using a domestic cake-mixer, invented a special foam capable of withstanding the intense water pressure 11km below the ocean's surface. Deepsea Challenger carried Cameron to the bottom of the trench on 25 March 2012. Later that year Ron was awarded the New South Wales Senior Australian of the Year in recognition of his outstanding contributions in the fields of engineering, science and exploration.

TODAY: Ron is the managing director of Ron Allum Deepsea Services (RADS), a 100pc Australian-owned company that designs, builds and tests specialist underwater systems capable of operating in the deepest, most remote parts of the planet. RADS design and build specialised underwater systems for defence, scientific and commercial applications.



Ron in Toad Hall in 1983 using a communications system he developed to transmit through 90 metres of limestone to people on the surface to let them know that the push dive had been successful and all the divers were safe.

AWARDS AND HONOURS

- 2002** Australasian Diving Technologies Conference Award for "Outstanding Contribution, Commitment, & Support in Developing Cave Diving Explorations and Underwater Film Productions"
- 2012** New South Wales Senior Australian of the Year
- 2012** Companion of Engineers Australia
- 2012** Australian International Design Award of the Year for Deepsea Challenger
- 2016** Australian Geographic Lifetime of Adventure Award
- 2016** Australian Museum Top 50 Australian Trailblazers

Ron became involved in caving over 60 years ago, becoming an internationally respected technical cave diver. His ability to find solutions to problems through innovation is legendary. During all this time he has been a proud ambassador for cave diving and has always displayed a professional image.

OCTOBER 2024 SUMP RESCUE AND RECOVERY ORIENTATION PROGRAM



SROP course participants pictured at Pines Cave.
Picture: Chris Edwards



The Sump Rescue and Recovery Orientation Program was hosted by the Cave Divers Association over the two days prior to the 2024 AGM and symposium. The course was led by Richard “Harry” Harris and a group of experienced instructors with 12 participants on October 10 and 11. Adelaide-based advanced cave diver ANITA FUTTERER provided this participant’s perspective of the course.

The Sump Rescue and Recovery Orientation Program (SROP) is one of the pathways to becoming a Tank Cave access officer, but I urge every diver planning a trip to the Nullarbor or another remote location to do the course.

The Cave Divers Association of Australia offered the course this year to cave and advanced cave rated divers over two-day days, with one day focused on theory and one practical day dealing with a rescue scenario.

The trainers did a wonderful job covering the areas of first aid, communication, self-rescue and logistics required for a sump rescue.

State Emergency Service staff provided training on how to properly handle a person in a stretcher.

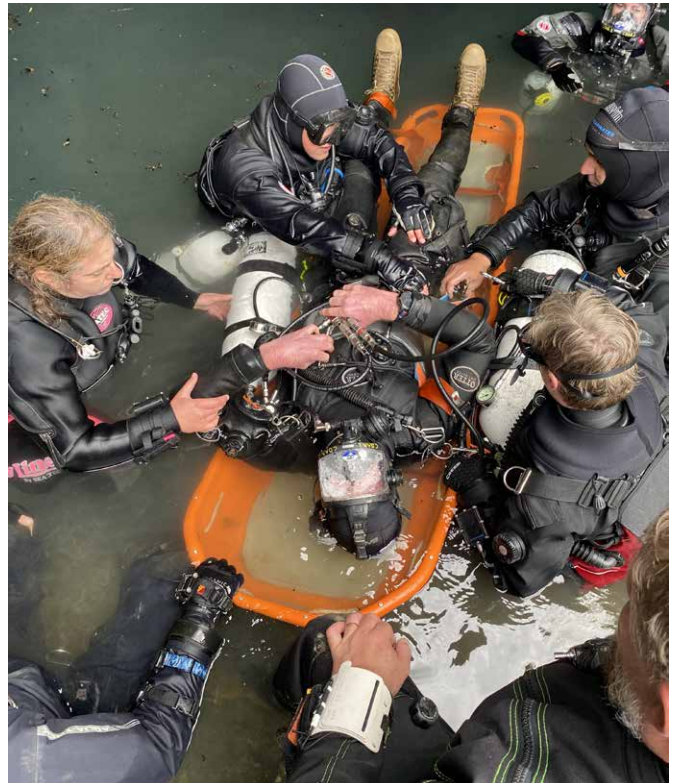
They also tested their new toy, an underwater drone, in Pines Cave. It made it past the stop sign, all without being AC certified!

The 2024 SROP team were very lucky to have full face mask instructor Rus as a participant. He took all the divers that were keen for a try dive. Personally, I absolutely loved it. What a great opportunity it was!

On the more serious side of the course, the practical scenario involved an injured diver in a sump that needed rescuing. A site operations manager (SOM) was appointed, a dive team established and inventory taken of what resources and equipment we had available. Getting communication into the cave, in our case via Cave Link, was a priority. We quickly learnt that



Divers prepare to extract the “injured” diver from Pines Cave.
Picture: Ken Smith



SROP participants prepare to lift an “injured” diver out of Pines Cave.
Picture: Richard “Harry” Harris



Divers monitor the breathing of an “injured” diver during the SROP course rescue scenario at Pines Cave. Picture: Ken Smith



The “injured” diver is lifted up the Pines Cave stairs to safety.
Picture: Ken Smith

every little oversight had consequences and we started to get to the point where we had barely enough divers to take all the necessary equipment into the cave. Everything took us longer than anticipated.

Overall, it took 12 people 4 hours to get an injured diver safely to the cave entrance from a sump that was a 10-minute swim away from the entrance lake. According to Richard “Harry” Harris, that was a good result. This provides an idea how long it would actually take to get someone out of a cave like Weebubbie or Cocklebidy, particularly if you don’t carry rescue equipment or communications with you as part of your trip that you can deploy quickly.

Paraphrasing Tim Payne: “Olwolgin is not the Nullarbor. It is so people like me can still dive the Nullarbor when we are in wheelchairs”. In essence, if you are diving the High Plains, your preparation and the gear you take may significantly differ to a trip to the Roe Plains. Prevention of accidents is what we realised we really want to achieve as we learnt a rescue can be complex, difficult and not without risks. ➔

A few key learnings for me personally were that after having completed the course, I feel better prepared for my next Nullarbor trip. I am adding additional safety equipment like emergency ponchos and an emergency headlamp for all my future caving and cave diving trips, just in case. I have also renewed my first aid training as you are not always going to have the luxury of a medically trained professional being part of your team.

I would like to thank Harry and the trainers for their time preparing for and putting on the course. It is fantastic and I can't recommend it highly enough to every cave diver.

Be prepared and stay safe on your upcoming adventures.



Rus Pnevski explains the function of full-face diving masks.
Picture: Chris Edwards

TEACHING GROUP

Search and Rescue Officer Richard Harris
Phil Croker
Tim Payne
Ken Smith
Damien Bishop
Chris Edwards

ATTENDEES

Rus Pnevski	Mathew Leviny
Matt Pridham	Farzad Atefi
Anita Futterer	Mike Woodbury
Stuart Colla	Kristen Lovell
Hayden Smart	Rodney Powell
Darren Cibis	Susan Entwisle

SAFETY TIPS FROM A CAVING VETERAN

Cave diving veteran KEN SMITH was among the SROP teaching team and shared this advice.

- 1 The best way to handle an accident in a cave is not to have it in the first place.
- 2 Good planning can ensure that you are better able to handle a problem if it does occur.
- 3 Good planning will also identify areas of risk and allow risks to be mitigated as much as possible.
- 4 Don't rush and don't make foolish decisions in a cave.
- 5 Stop and think and talk to your buddy about what you plan to do.
- 6 If you haven't done an SROP course, consider doing one.
- 7 Learn about cave communications and practice using the equipment on trips.



SROP course participants celebrate a day of learning at the SA State Emergency Service Mount Gambier Unit. Picture: Chris Edwards



SA State Emergency Service Mount Gambier Unit's Brad Flew explains the function of rescue equipment to SROP participants. Picture: Chris Edwards



◀ SROP participants learn to transport a patient in life-saving equipment under the guidance of Brad Flew of the SA State Emergency Service Mount Gambier Unit. Picture: Chris Edwards

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MAPPING MURRA EL EVELYN

● By Joseph Bicanic

A detailed, modern map of Murra El Evelyn now provides a valuable guide to visitors to the Nullabor and is printed in this edition of Guidelines for your convenience (or inspiration). JOSEPH BICANIC wrote this article to explain the purpose and process of creating the map.

Murra El Evelyn is one of my favourite Nullarbor destinations. It offers a wide variety of diving suited to cave diving students through to experienced advanced level cave divers. Unlike other Nullarbor caves, Murra does not have a fixed line at the entry pool. Instead, a temporary fixed line is laid and connected to the permanent fixed lines which are as close as 20 meters from the entry, the line to “Pippa’s Room”, and as far as 200 meters into the cave, just beyond “The Big Room”.

I first dived Murra in 2014 and at the time wondered why a permanent fixed line was not in place. In my early days exploring Murra, my opinion was that a fixed line should be in place. However, after running several trips and needing to run the temporary fixed line, I soon changed my mind and appreciated the fun this involved. Furthermore, I’ve started to delegate the task to cave diving students as both part

of their course and part of the trip, forcing the students to take extra care in laying the line as this would be in place for the duration of the trip for all divers to follow (talk about putting the pressure on!).

After contacting Ian “Lewy” Lewis, I was kindly provided with some historical data pertaining to the mapping of Murra. The first mapping project was of the cave’s large dry passages by Edward Anderson and the Sydney Uni Speleos in 1964. The discovery and mapping of the low dry passages and pools was in 1974, led by divers Ian Lewis and Keith Dekkers and a caving team.

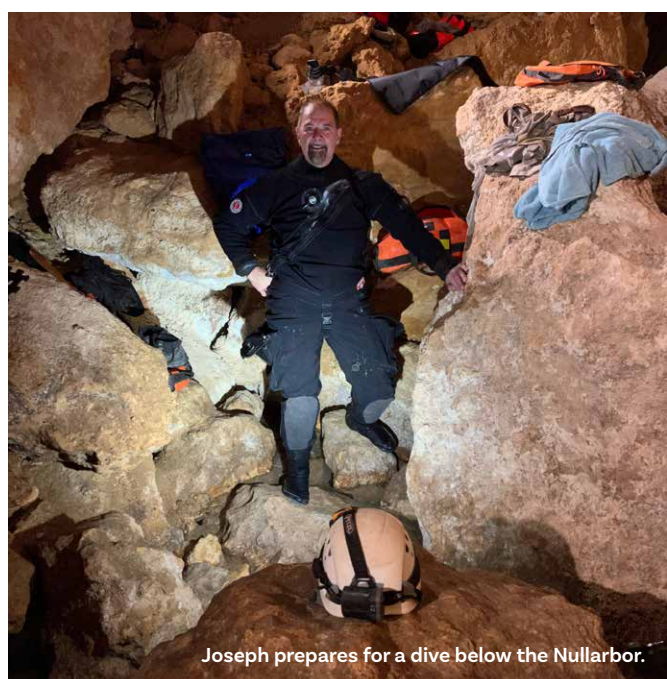
Lewy’s data inspired me to contact Liz Rogers, who kindly sent me some of her dad Peter Rogers’ old logbooks from 1982, when Peter, Cheryl Bass, Ron and Robin Allum, Phil Prust and Christopher Brown were diving, exploring and mapping the cave. After reading these, I was motivated to track down Christo-



The view back to the surface shows how far the team has descended before reaching the water.



Mathew Rochford prepares for the 2024 mapping work.



Joseph prepares for a dive below the Nullarbor.

pher Brown for more information and he kindly wrote the following: "About a week after Ron Allum and Peter Rogers, along with Hugh Morrison, had discovered Toad Hall in Cocklebiddy, we dived Murra El Evelyn on the 16th September 1982. This was my first dive in this site. On this dive we went to the Crystal Room all wearing Single 88 CF tanks, but all kitted up with octopus regs and homemade 30 and 55 watt torches. Very powerful for the day. On the way-out, Phil and I swam down the left-hand wall looking for leads with the others looking elsewhere. I was in front of Phil and under a small overhang. I shone my torch and my beam disappeared into a large low flattener. This was my first discovery of virgin passage. Phil got a little overexcited at this. The dive lasted 60 minutes. Next day Peter Rogers and Cheryl Bass dived on single tanks to check out my lead. They discovered about 120 metres of new passage, a new air chamber and a large room now referred to as The Big Room. That afternoon Ron Allum, Peter Rogers, Phil Prust and I all dived twin 88Ccf (cubic foot) back mounted tanks. Another 150 metres of passage was found and terminated in a very low flattener too low for back mounted tanks. The dive lasted 90 minutes. "On 26th August 1984 using a line marked with

measurements, about 20 meter intervals, Paul Arbon, Richard Megaw, Phil Prust and I dived the new section and surveyed the 270 meter long section.

"All survey information we did was usually given to Robin Allum to draft. I do not have a copy of what she drafted. "On the 31st August 1986, I dived there again with Paul Arbon. My aim on the dive was to try and get through the low flattener at the end of the cave. For the dive, I wore a single 88cf tank on my back and 'underslung' a set of twin 40Cf tanks. When I got to the flattener, I unhooked the twin 40s, removed my back mount BCD and then pushed the twin 40s in front of me and managed to get through the flattener. The cave opened up again and then I promptly ran into a rock collapse with no apparent leads around or over the collapse." ➡



Members of the expedition unload equipment from the flying fox to prepare for the dive.



Setting up infrastructure is vital to make the expedition a success.



A close-up of the SeaCraft Electronic Navigation Console.

Fast forward 42 years to March 2022 where Huw Porter joined me on one of my trips. Huw had one prior trip to Murra and expressed interest in creating an updated map of the cave based on a proper survey. “Awesome!”. Some careful thinking went into the pre-trip planning, yet only a few tools were required to execute the plan:

- ✦ 30 m fibreglass tape measure
- ✦ Wet notes
- ✦ Compass
- ✦ GoPro
- ✦ SeaCraft ENC (*Electronic Navigation Console*)
- ✦ Dedication and enthusiasm.

Let the fun begin! On our first dive we carefully laid the temporary fixed line through to the permanent line (200m into the cave) and with mapping in mind we did the longest straight runs possible with minimal tie-offs, always mindful that the goal was to map the cave, not the line. Labelled arrows were placed along the way at key points such as tunnels, fixed lines and points of interest. We also laid a temporary circuit in “The Big Room”.

On subsequent dives, at each tie-off and/or survey arrow, Huw would note the depth and bearing then swim to the next point with the end of the tape measure while I remained behind in preparation to record the measurement. Upon reaching the next survey point, Huw would tension the measuring tape then signal me to record the distance. Once recorded, I’d reel up the tape while Huw took a reverse bearing. Rinse and repeat until all the data was collected. This data collection method worked well. On

the 2022 trip, we managed to survey both the temporary fixed line as well as the circuit in “The Big Room”. To confirm Huw’s survey notes, I videoed the entire length of the line while having my ENC in the frame and close to the line. This was a godsend as we were able to accurately reinstall the 2022 line two and half years later and survey place arrows exactly as we had done on the first trip.

Huw and I intended to complete the survey in late 2022, however due to health issues Huw was unable to return until this year. In the meantime, I had two more trips to Murra in 2023 during which I found an area I had never been to and named it “A New Hope” (this area is on the map, but yet to be properly surveyed). About 15 meters from the start of “The Crystal Room” fixed line, there is an unassuming passage off to the right. After 10 years of neglect, I decided the tunnel needed some investigation and ended up running about 80m of line in total, of which 40m is now a permanent fixed line in the passage. As this area has little (or no) previous traffic, the silt is very easily disturbed. Towards the end of the newly laid fixed line is a fairly tight and easily silted passage that borders on an Advanced Cave classification. As such, I’ve not added a jump on the main line nor is my fixed line immediately obvious so reference the map to find it. If any readers have been in this area pre-2023, I’d appreciate an email on any experiences. With Huw’s health back to normal, we made a plan to get back out this year to continue with the project. With the additional help of Mathew Rochford and Matt Gannicott, the temporary fixed line and arrows (survey points)

were re-installed exactly as per the 2022 survey. Over the course of a few days, we surveyed:

- ✶ Fixed line to “Pippa’s Room”
- ✶ Fixed line to “The Crystal Room”
- ✶ The permanent fixed main line beyond “The Big Room” (total of 170m)
- ✶ The “60m Line” which is the last 60m (exactly) of the 170m fixed line and the designated Advanced Cave section of Murra (first 110m of line is orange, start of “The 60m Line” is yellow and final 30m of this line is white)
- ✶ The two alternative entry passages from the entry lake
- ✶ The two short cuts between the main passage and the Crystal Room line
- ✶ Chamber southeast of “The Low Flattener”
- ✶ Chamber on right towards “The Big Room”
- ✶ Tunnel on left of “The Big Room”
- ✶ A lovely passage we called “The Corkscrew”
- ✶ And finally, we closely inspected and measured “Gary’s Back Passage” (apologies to Linda as we never asked express permission). ➡



Huw gathers data to prepare the map.



The entry to the wet section of Murra El Evelyn is an enticing sight for divers.



Huw Porter (back left), Hope Berry, Kim Woodcock, Jenny Ough (centre left), Jamie Goodwin, Joseph Bicanic and Chris David (front) ready for adventure on the Nullarbor.

A couple of dives were also dedicated to sketching details of the cave layout - these sketches, together with various video footage, were invaluable in turning the raw survey data into a living map.

As we reeled back in from "Gary's back passage" we noticed on the right yet another low flattener that needed investigation, but sadly the trip was coming to a close, leaving the taste of possibilities embedded in our minds. I do believe Murra still has more secrets to be revealed.

We'd thought a third trip would be required to finalise the map, however with good planning and team work all the surveying intended to be done was accomplished.

A few weeks post trip, Huw converted the raw data into the spectacular map. Credit for all cartography and map design goes to Huw Porter,

who was also the project instigator and ring-leader.

A big thank you to Mathew Rochford, Matt Gannicott and Neal Antoncich for partaking in the 2024 portion of the survey. Additional thanks to Ian "Lewy" Lewis, Liz Rogers and Christopher Brown for providing the historical information.

We are hoping to repeat this exercise in Weebubbie in the not-too-distant future, but for now we have the satisfaction of sharing our Murra El Evelyn with any person or organisation wanting a copy.

Feel free to email me at joseph_b@me.com for the full-sized PDF then pop to your local print shop and hang a copy at home.

Safe Diving.

Joseph Bicanic CDAA #4691



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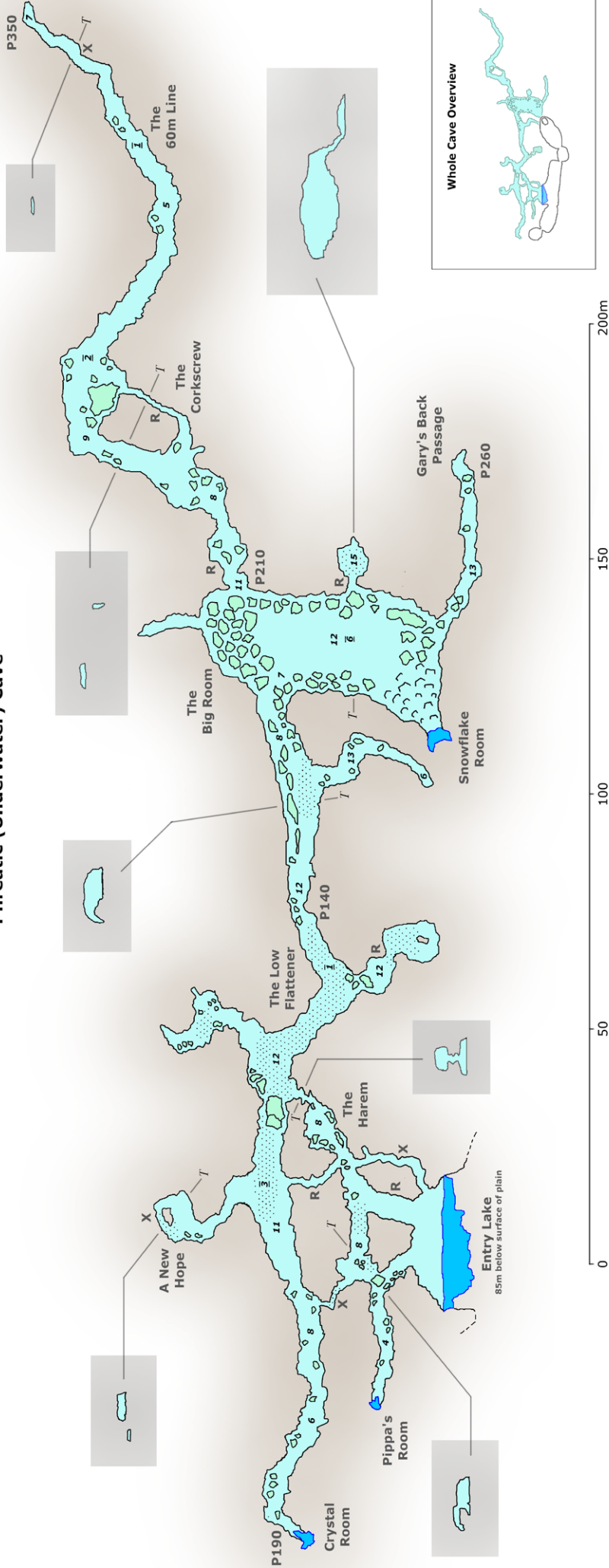
Based in Mount Gambier, SA

MURRA-EL-ELEVYN 6N47

NULLARBOR PLAIN, WESTERN AUSTRALIA



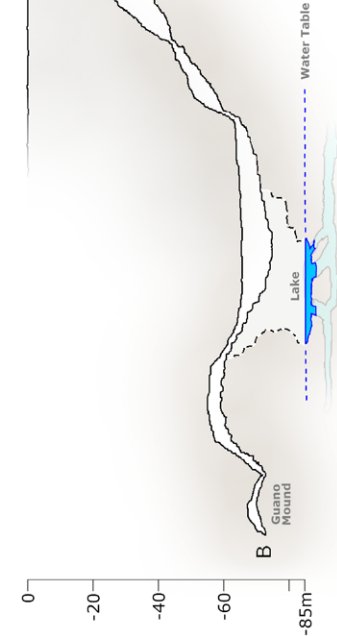
Phreatic (Underwater) Cave



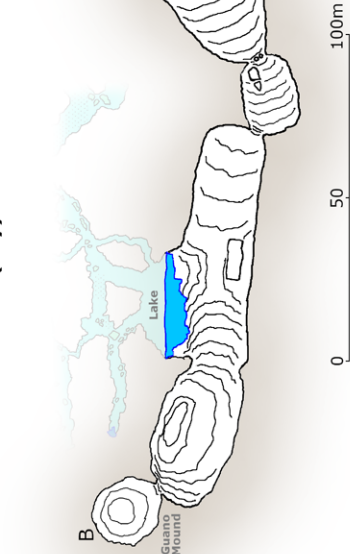
Whole Cave Overview



Vadose (Dry) Cave - Longitudinal Section



Vadose (Dry) Cave - Plan



- Water filled passage
- Air / water surface
- Boulders
- Silt
- Boulder slope
- Water depth at floor (metres)
- Floor to ceiling height (metres)
- Restriction (single file)
- Major restriction (sidemount only)
- Transverse section along line shown by major passages
- P5

Cartography: Huw Porter

Survey: Mar 2022 / Sept 2024
by Huw Porter, Joseph Bicanic
Mathew Rochford, Matt Gannicott
Neal Antonicich

ASF map grade 43
Version 1.1 Print size A2



GROWLING SWALLET DIVE

(COELECANTH SUMP AND WELL BEYOND)

LONG-TIME adventurer **STEPHEN FORDYCE** has continued to blend his passion for dry caving and sump diving to pursue exploration, with his focus in recent years in Tasmania. It was interesting to hear at the CDAA AGM he can get to the area he is currently exploring via a flight to Hobart from Melbourne as quickly as a trip to Tank Cave. However, the journey allows for a pursuit involving many more obstacles, including tight and silty spaces and logistical challenges. He has been a successful push diver at the pointy end of projects in Elk River Cave (Victoria), Growling Swallet, Niggly and Junees Caves (Tasmania), the extension of Cocklebidy Cave on the Nullarbor (WA) and West Timor (Indonesia). He was part of a large team effort which connected Growling Swallet and Niggly Cave (2019), setting a new record for the deepest (mostly dry) cave in Tasmania and Australia. The depth record was broken again in July 2022 when he led a project to explore and ultimately connect the newly-discovered Delta Variant cave into the Growling Swallet/Niggly Cave system. But he is not done yet with further expeditions to build on exploration of the area.

Party: Kynan Bonnice, Stephen Fordyce, Henry Garratt, Jemma Herbert, Adrian Hills, Chris Jewell, Ciara Smart.

On June 1, 2024, we set out for our fourth dive at Growling Swallet in Tasmania. The rest of the blissfully large crew helped carry dive gear and then went off to have their own adventures. This trip was a lot smoother than the last, although we still made the last exit from Slaughterhouse at 2am and there was minimal beyond-sump survey achieved, despite our efforts. It was a carbon copy in terms of gear, but with a bigger support crew, who (supposedly) knew the way. Unfortunately, due to flight delays, a suboptimal amount of sleep was had the night before, which compounded the misery a bit, but wasn't a showstopper.

Getting to the dive base was uneventful and we remembered to shift 50m or so downstream to a place with plenty of standing room, close to the stream and a nice rock bench. There wasn't too much dive gear faffing as most of it was left at the sump – we proceeded through the roof sniffs in good order and said goodbye, planning for a 5 hour return to the Coelacanth/Living Fossils junction.

The dive gear hadn't been washed away and I started shifting rocks off it, finding the dive light lost last time, hooray! At that point, my digestive system decreed that a very inconvenient thing must be done and there would be no argument. Done it was, I'll spare you the details, but a bit of faffing time was gobbled up in the wetsuit removal and replacement. My recent record on this is admittedly terrible, some more drastic



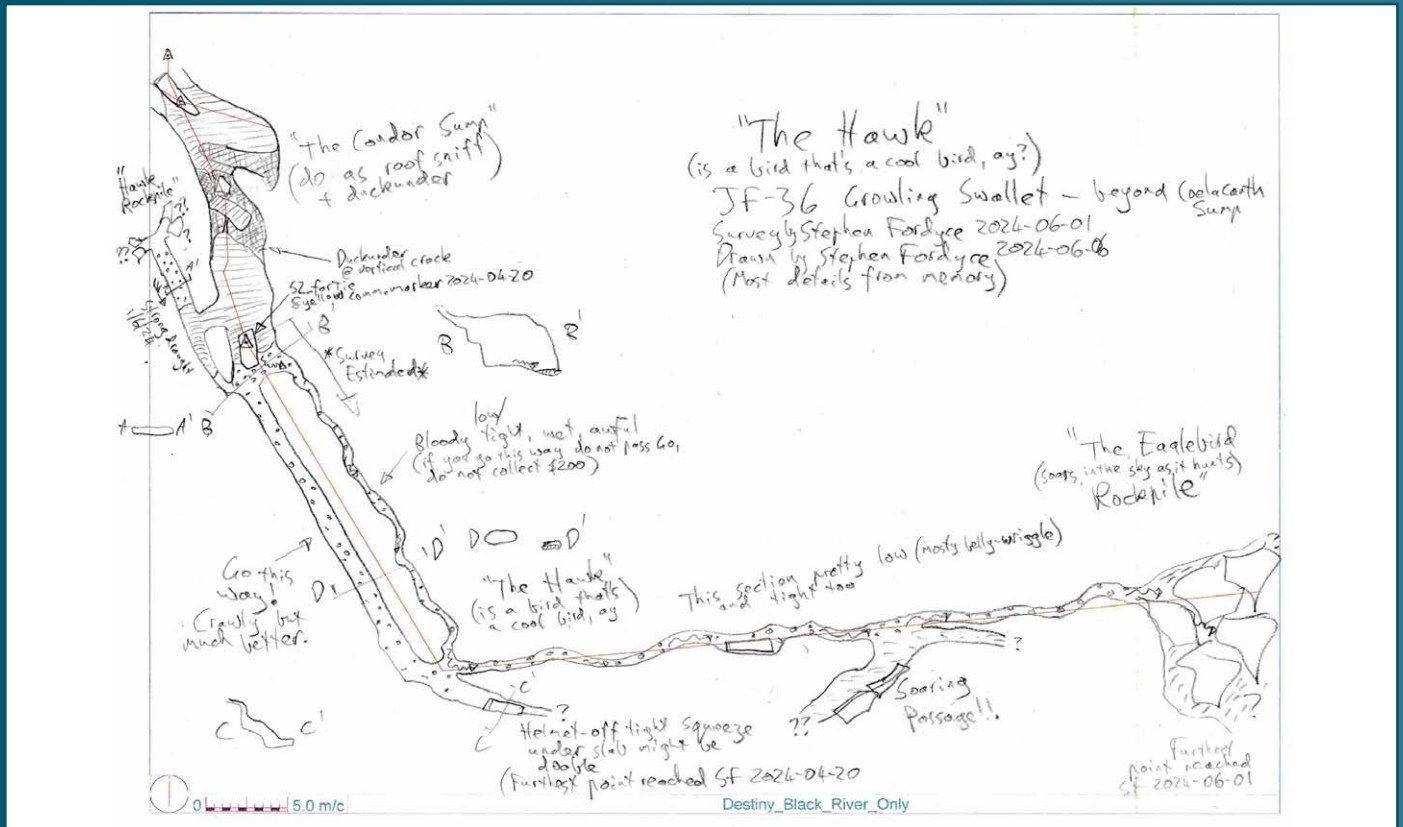
The logistics of moving dive gear at the far side of sump one adds to the challenges involved.

preparation/training will be done next time. The kitting-up was finished and the first dive was done. No stuckies this time, and a 5-minute transit using a nice small amount of gas and I had a poke about and tried to film beyond the restriction in case there was another surface somewhere. It didn't seem like it.

At the surface (far side of Sump 1) I noticed a meandering lead at water level and followed it a surprising amount before it crapped out. Interesting, but not really worth pursuing – a choked upward mud slope. Regs were pulled off the tanks (dustcaps were an important item on the checklist) and bagged with fins and other stuff, and I grovelled through the Cloaca (it was comparatively quick and awesome) to Sump 2. This all felt pretty efficient but by the time I'd put the regs on the stashed little tanks, re-kitted and surveyed through Sump 2 to the far side, it was 2 hours since split time and only 3 hours were

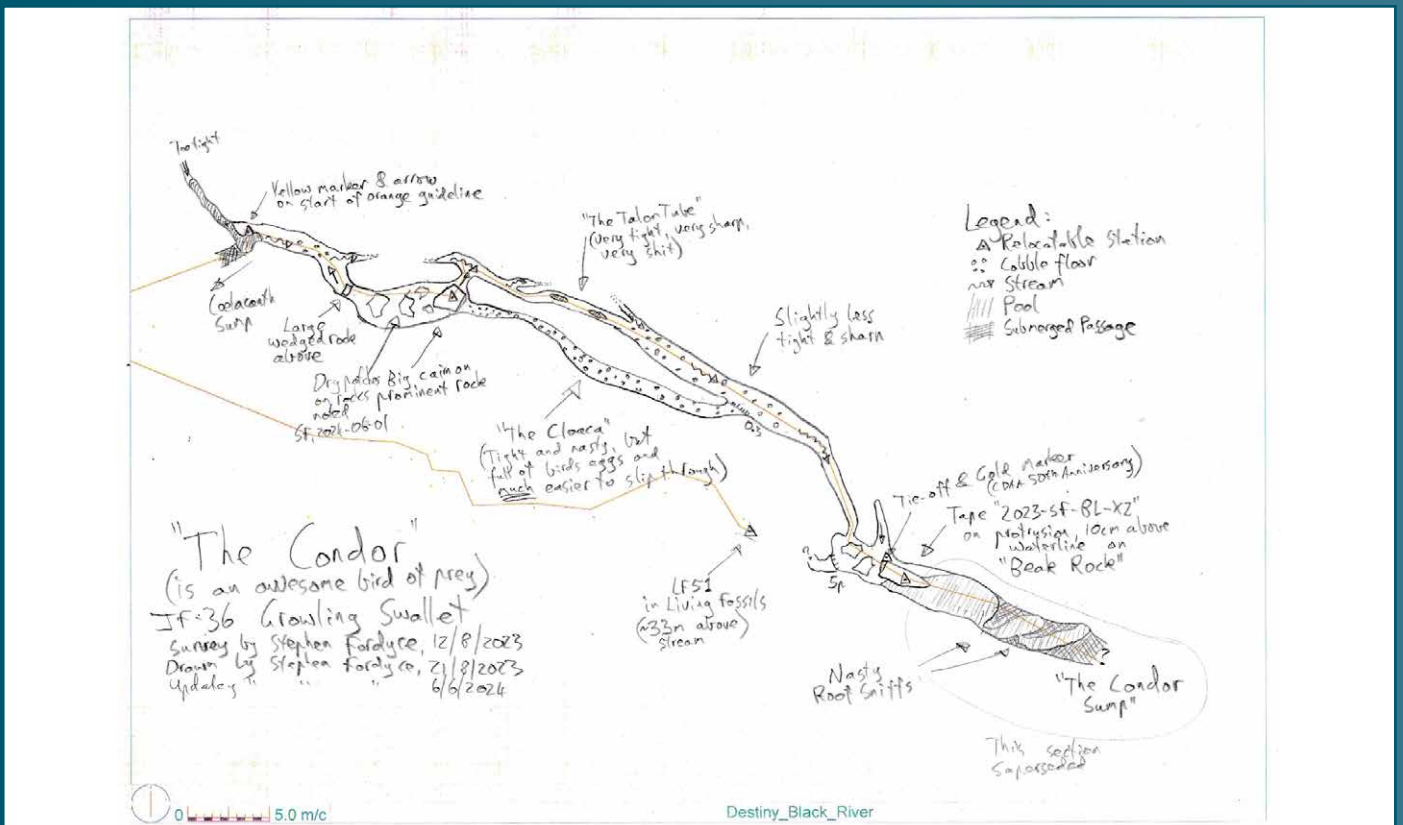
THE CONDOR SKETCH

An updated sketch of The Condor, now properly surveyed.



THE HAWK SKETCH

Sketch of The Hawk (survey estimated), which will be re-done as further detail is gathered.





Adrian's hair is almost as warm as a dive hood, pre-dunking.



Steve narrates the experience to the GoPro as the adventure unfolds.

left. So I had 1 hour left to do meaningful stuff, plus a bit of stretch. With dive gear removed, I had a look at the lead left untouched last time, back from the sump 2 far side guideline tie-off. Crawling in and looking left, I could see some little rocks I'd placed on a hunch just behind the tie-off, it just looped around (tightly). But looking right was a surprisingly wide if very low flattener.

It looked impassable but I went for a closer look and it kept going, about 1m wide and 25cm high (just enough to keep my helmet on) with a cobble floor that was muddier than usual. It had a draught! Some strings of foam gunge or something hanging off the roof were at a 45degree angle towards me. The passage was straight and about 20m long, I didn't want to get too distracted, but it was impossible to ignore and felt like it was heading back in the direction of Living Fossils, implying a dry bypass to the sump. At the end was a small chamber where I could stand up and to the right was a big black void with rockpile and to the left was rockpile with smaller but possible leads. Whoa! This area is labelled ("The Hawk Rockpile") on my sketch.

I wanted to prioritise following the water before expending too much energy, so headed back to the tie-off and threw a few things in the bag for an adventure. I dragged it a grand total of 5m to

where the stream disappeared and dry crawling passage continued – I'd taken the dry passage last time and it ended up tight and nasty, I thought it hit the stream again but wasn't certain, so I followed the water left and then around a sharp right to peek into awful tight, wet, sharp passage. Remembering the Talon Tube, the bag was immediately abandoned. This thing was awful, probably worse than the Talon Tube, although having the water made it slightly easier because sometimes I could get a bit of buoyancy.

There was no way turning around would be possible so I had to be pretty mindful of saving enough energy to back out. It was horrendously slow going but finally a parallel dry passage emerged on the right, complete with trog marks from last time. Oops. I had a quick poke about but the most prospective way was back in the stream, at least it didn't seem to be getting any smaller and was mostly cobble floor. I belly-wriggled along for an eternity, but if anything the cave was slightly bigger – not really enough to crawl, but enough to turn around in a few spots. A few sections had some deeper bits requiring a semi-roof sniff, but doable with head on one side and always with helmet on. I wasn't cold in my 7mm dive suit, but I never got hot enough to take my dive hood off.

After a long time and no sign of the cave shutting down, hope of a Porcupine-style breakout into the master cave was growing. Time was getting tight, but a few minutes of stretch into grumpy caver time was worth it to see what happened when the grovelling eventually ended and enable better planning for the next push. A void appeared on the right and it looked awesome. Walking passage (named Soaring Passage to fit the bird theme) of lovely 3m x 4m proportions (okay, more like 1.5m high and 3m wide from the GoPro footage) running parallel to and above the stream and with mud banks and rockpile. I rolled the GoPro and wandered downstream – it sort of crapped out but would be worth another look next time. Upstream went further and I left it wide open – it could be a flood bypass to the master cave downstream of the junction, but was unlikely to be a quick and easy way to get there.

I reluctantly got back in the water grovel and continued, feeling the pressure to turn considerably more, but reasoning I'd save a bit of

time on the way back with better routes. The misery of the grovel was now tempered with excitement and it was also a bit bigger, crawlable in a few places. Finally, the grovel was truly over – the stream flowed into a large (5m x 5m) chamber and disappeared into the middle of a big rockpile. Could this be the master cave?! I couldn't hear a big stream, and the rockpile was ... intimidating. I had a quick poke, worried about getting lost and all the other rockpile things. I also regretted having left the bag with Disto and spare lights way back near the sump (I had food stashed in my socks, so that wasn't a worry). I had my primary helmet light, with a separate backup light, but being solo with only two lights wasn't the greatest thing. Shearwater dive computers have been used for lighting in a pinch, but I didn't really want to be testing that today.

The rockpile was given a last wistful poke and I wished Petr was there to work his magic and find the way. I knew rockpiles need time, energy and mojo to solve and I was going to need the dregs of all those for the way back. Being out there alone is something I'm constantly assessing, and a bunch of complex rockpile on top of everything else to get there may tip the cost/benefit/risk analysis towards a second diver in the not too distant future.

With carefully marked shortcuts, the going was bearable on the way back and I kept an eye on my dive computer compass to get an idea of the direction. The pencil on my Aquasketch (dive note taker) had broken and a tiny nub was all that remained – making notes was still possible but very painful. Plus this needed a diligent survey anyway and I'd conveniently left the Disto way back, so estimates would have to do today. These have gone into the latest survey plot and been used for sketches to show all the open leads and the most optimal ways to go – hopefully I got them right, my penance for not surveying will be having to re-do them again later. The bird song naming theme was continued with the lines after the Condor. Having left this trips commemorative marker in the bag, it was placed next to the previous one on the Sump 2 far side tie-off.

On the way back through Sump 2, I did a careful assessment of whether this could be done without tanks. The visibility had cleared, I was going upstream and so could have a good look

from below the water at the air bells. I had a reg in my mouth just in case, but did everything breath-hold, and decided this was completely viable. It will make things heaps more efficient to be able to leave dive gear back at Sump 1.

So I put the 2.7L tanks in the bag and dragged a very heavy bag out through the Cloaca, through Sump 1 in good time and back to Coelecanth. There was a gratifying amount of gas left in the big cylinders (probably enough for at least 2 more goes) and the pile of stashed gear was left how I'd found it (but with plugs in the cylinders this time). I was pretty knackered both physically and mentally and it was lovely to catch the rest of the crew at the junction point again. Getting my restrictive dive wetsuit off and some hot coffee in worked wonders and large team bottlenecks were the worst thing to happen on the way out. Cobra progressed to carrying a tank and Adrian also carried a very respectable bag, both all the way out. It was great to have Chris's extensive experience and stories along. Henry, Ciara and Jemma were awesome as usual of course. The last exit was at 2am – a bit over our par of midnight, but better than 4am last time.

With leads galore, a shameful lack of post-sump survey and plenty of gas in the cylinders, a return beckons. But it's going to need a lot of time beyond the sump and these post-midnight finishes are getting pretty lame.



EXPLORING CAVE DIVING IN INDONESIA

● Photographs and article by Anita Futterer



Scan the QR code to see the video.

BAUBAU

Deep under the City of Baubau, in Indonesia's South East Sulawesi, lies a hidden treasure few get to experience - Goa Lanto.

Entry to this site is via a hidden track off the main road that leads down into a dark cave entrance where, as you descend, you are greeted with beautiful decorations formed when the cave was dry before being flooded.

There is a cool air pocket in the cave that allows you to surface. The air is breathable but there is no exit at this point of the dive. Care must be taken to find your way back to the main line and

entrance of the cave via the lined circuit as this area can get quite silty. Goa Lanto is a fantastic little dive before embarking on to the next destination, Muna Island, for the more daring and passionate cave divers.

MUNA ISLAND

After a ferry ride from Baubau you arrive in Muna Island, a remote area with deeper, more complex cave systems. The island is home to hundreds of caves, many of which remain unexplored. Here you will find a cave that truly makes your heart sing. Ranging from waters to a depth of over 80 meters, ideal for rebreather divers, to shallow mazes, fractured and highly decorated caves, featuring calcite crystal formations and straws in water so clear it takes your breath away. These systems extend for several kilometres in some cases.

Some of the caves are tide dependent with strong flow, while others have little to no flow. You may encounter haloclines of an intensity that make it near impossible to see the line and you are met with currents of a strength that completely counteract all your finning, just to find a few meters along a peaceful and still part of the cave.

Every cave has its unique entrance. Emerald green lakes that are also being used by the locals as swimming holes and a place to wash clothes where the sunlight filters through to the cavern



Diving on Muna Island is a treat for divers with spectacular formations decorating the caves.

area as well as small rocky and dark entrances where a world of calcite formations and limestone rocks in crystal clear water awaits you. The diversity of the dives and sites are astonishing. You can do long shallow, deep decompression dives or traverses with an entrance on either side of the cave. The fit, strong and adventurous may attempt a sump dive where you navigate both dry and flooded sections of the cave. And yes, you are right it means both you and all your gear need to make it up and over the rockpile and you will need to do it on your way in and out. Just consider it a free workout.

Taking additional tanks can extend your dive time to 3+ hours and allow you to penetrate further into the maze of tunnels. Water temperatures ranging between 25-28 degrees means



Unique formations create for a spectacular dive in Goa La Pahia cave.

you can do all of this comfortably in a wetsuit.

Because these caves are still relatively new to divers, depending on the cave you can experience percolation, where your exhaust bubbles dislodge silt or loosen limestone rock from the cave ceiling. This can cause a deterioration of the visibility particularly on your return.

GOA LA PAHIA – THE HOUSE CAVE

In the backyard of where we stayed lies Goa La Pahia, the hidden cave, with an unassuming small rock entrance surrounded by vegetation. As you descend, it slowly unveils its secrets. Calcite crystal formations decorate the ceiling, which turn into whole sections covered in crystal straws. As you swim further along the cave it reveals more and more of its unique formations. Small but impressive, it has a special place in my heart. The first underwater crystal cave that I have ever seen was a dream come true. The

sheer beauty, uniqueness and the masses of speleothems took a while to sink in. I was on such a high, but at the same time I was so calm and close to a meditative state as I took in the surroundings with awe and wonder. This was my introduction to cave diving in Muna Island. What a phenomenal start that made me curious for what lay in store for the coming days

GOA LALAUWI – THE MAZE

This is a cave that deserves a special mention. A 600m submerged tunnel leads into the heart of the cave. So far around 3km of tunnels have been explored, yet the cave keeps on going.

Goa Lalauwi keeps a few secrets up its sleeve as it wants you to come back for more. On my first dive we swam through big tunnels with white limestone, sections of fractured rock and large areas of stalagmites in crystal clear blue water. To get to the water you walk over 100 steps down a dry chamber which means the cave itself is never exposed to any sunlight. It's pitch black. This means you are reliant on your torch as soon as you step into the cave. It is quite slippery at the entrance lake and you need to take care not to slip and fall. Then you kit up inside the lake aided by your torch light before the descent towards the first tunnel.








The second dive in this beauty was far more complex from a navigational perspective with lots of directional decisions and several jumps that lead to a section with little white humps in the form of witches' hats. According to our guide, these formations are considered quite rare and, unlike the other speleothems in the caves, form under water. While I have spent several hours in this cave, I will be back for more.


SUMMARY

Whether you are an adrenaline junky or a Zen seeking diver, South East Sulawesi has something for everyone. It really does have it all. If you are keen to showcase your skills, or if the deep is your happy place, or someone that gets a thrill out of untouched, beautifully decorated crystal caves, there is a cave for you.

If this has sparked your interest and you would like to see more, check out the video on YouTube that I made featuring the different caves I visited during an unforgettable trip.

CDAA INSTRUCTORS

NAME	BASIC CAVE	CAVE	ADV. CAVE
NEW SOUTH WALES			
 DUCHATEL RYAN CDAA 4983 M: 0419 268 714 E: ryan@totalimmersiondiving.com.au	YES		
SOUTH AUSTRALIA			
 BISHOP DAMIAN CDAA 4738 M: 0433 345 743 E: Damian.bishop@live.com.au	YES		
 PAYNE TIMOTHY CDAA 2640 M: 0448 147 927 E: Tim@divessentials.com	YES	YES	YES
VICTORIA			
 BARCLAY GARY CDAA 1735 M: 0407 527 921 E: garinda@bigpond.com	YES	YES	YES
 BOWMAN JANE CDAA 1880 M: 0407 566 455 E: janelbowman@hotmail.com	YES	YES	YES
 CLARIDGE LINDA CDAA 2214 M: 0408 052 070 E: garinda@tpgl.com.au	YES	YES	YES
 CALLAWAY SHANE M: 0407 354 862 E: shayne.callaway@bluewaterascend.com.au	YES		

NAME	BASIC CAVE	CAVE	ADV. CAVE
VICTORIA (CONTINUED)			
 DALLA-ZUANNA JOHN CDAA 236 M: 0407 887 060 E: jdz@palmrtaustom.com.au	YES	YES	YES
 EDWARDS CHRIS CDAA 2247 M: 0417 116 372 E: chrisedwards01@me.com	YES	YES	
 LEE HEE MAN CDAA 5064 M: 0413 422 850 E: htleee@hotmail.com	YES		
 MONACO RUBENS CDAA 1731 M: 0413 429 533 E: info@idscuba.com.au	YES	YES	YES

WESTERN AUSTRALIA			
 BICANIC JOSIP CDAA 4691 M: 0412 571 779 E: joseph_b@me.com	YES	YES	YES
 PAYNTER GEOFF CDAA 3784 M: 0407 445 112 E: gpaynter60@bigpond.com	YES	YES	YES

EMERGENCY PLANNING INFORMATION

TIPS FOR EFFECTIVE EMERGENCY MANAGEMENT

- Always inform someone (who is not part of your dive team) of your dive plan
- Be prepared, and ensure you can provide critical information (such as your location) to emergency services when required
- Always plan your dive and dive your plan!
- Be trained to administer First Aid and CPR. It's better to have it and not need it, than need it and not know what to do!

ACCIDENT/INCIDENT RESPONSE:

In the event of an incident or accident, CDAA members are to:

1. Assist the person or persons injured.
2. Contact emergency services (if needed) and provide clear and accurate information:
 - a. **WHAT** is the emergency?
 - b. **WHERE** is the emergency? Provide relevant information – street address, GPS coordinates, nearby landmarks.
 - c. **HOW** do emergency services access the site? If possible, direct another member to meet emergency services at the road or a nearby intersection and direct them towards the emergency. Provide the **NAME** of the injured person/s.
 - d. Provide **YOUR NAME** and contact details.
3. While you are waiting for emergency services record as much relevant information as possible, including times, names and contact details and events leading to incident.
4. Contact the CDAA National Director and/or the CDAA Site Director as soon as possible

MISSING/OVERDUE DIVER:

In the event that a diver has not returned to the surface by the expected time, it is important that members act quickly as time is of the essence. As a guide, if a diver is 30 MINUTES or more over their expected run-time, members are advised to:

1. Contact the CDAA Search & Recovery (SAR) Officer. In the event that the SAR Officer cannot be contacted, call the National Director, or Site Director. Follow the directions provided by the SAR Officer or relevant Director.
2. Provide as much information as you can – names of the missing divers, summary of the dive plan, time the divers entered the water, equipment configuration used, expected run time, time overdue.
3. Establish an appropriate course of action. Consideration should be given to the dive plan, extent of penetration and gas reserves of the missing/overdue divers. Are there are other divers on site (or nearby) who may be able to assist with an emergency search. *Note: a search should ONLY be considered if divers available are suitably experienced, equipped, and have sufficient (additional) gas to undertake a search and provide assistance.*
4. If no other divers are available to conduct a search or the missing/overdue divers are not located and have not otherwise returned within the timeframe decided, enact the **ACCIDENT/INCIDENT RESPONSE** procedures listed above.

DECEASED DIVER:

1. If a diver is found to be deceased within the cave, do not disturb the scene. If possible, try to note down pertinent information - location, position, remaining gas, computer runtime, then return to the surface as soon as possible.
2. Contact the CDAA National Director and the CDAA Search & Recovery (SAR) Officer immediately. The SAR Officer will liaise with the relevant authorities as required.

NOTE: Members are advised not to make any statements regarding incidents or accidents to members of the public, to landowners, to the media, or via any other platform/media. Please direct all associated enquiries to the National Director for comment.

EMERGENCY CONTACT DETAILS

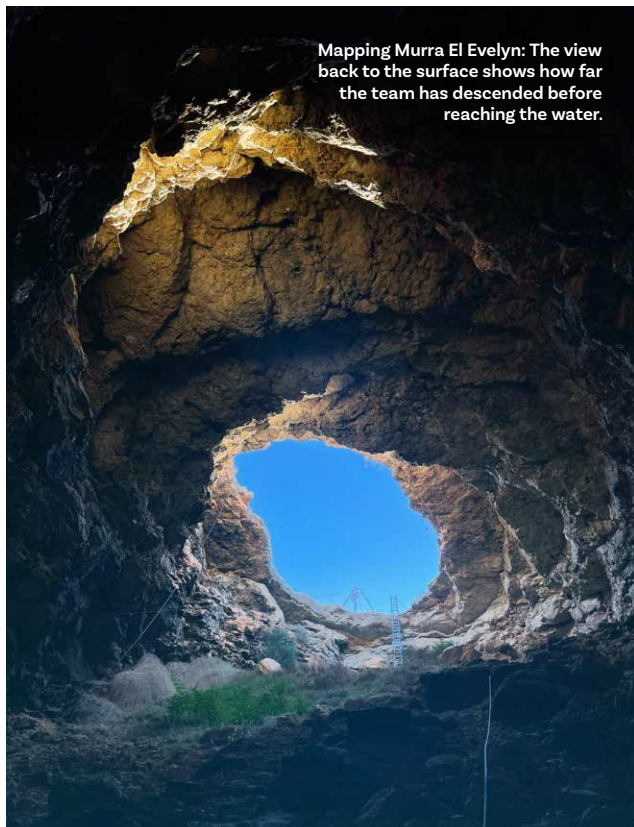
Police, Ambulance, Fire	000 or 112 (mobile)	CDAA National Director – Grant Pearce 0438 833 103
State Emergency Services	132 500	CDAA Site Director – Kelynn Ball 0428 842 259
Mt Gambler Hospital	8721 1200	CDAA SAR Officer – Richard Harris 0417 177 830
Divers Emergency Service (DAN)	1800 088 200	CDAA SAR Officer – Phillip Croker 0423 393 347



Mapping Murra El Evelyn: Matt Gannicott, Aren Leishman and Joseph Bicanic on the Nullarbor.



Abi navigates through Tank Cave on a dive as part of the women's weekend at Tank Cave. Picture: Keren Green.



Mapping Murra El Evelyn: The view back to the surface shows how far the team has descended before reaching the water.



Exploring Cave Diving in Indonesia: Clear water greets divers at the entrance to the cave site.



Exploring Cave Diving in Indonesia: Descending into the depths of Goa Lanto.

