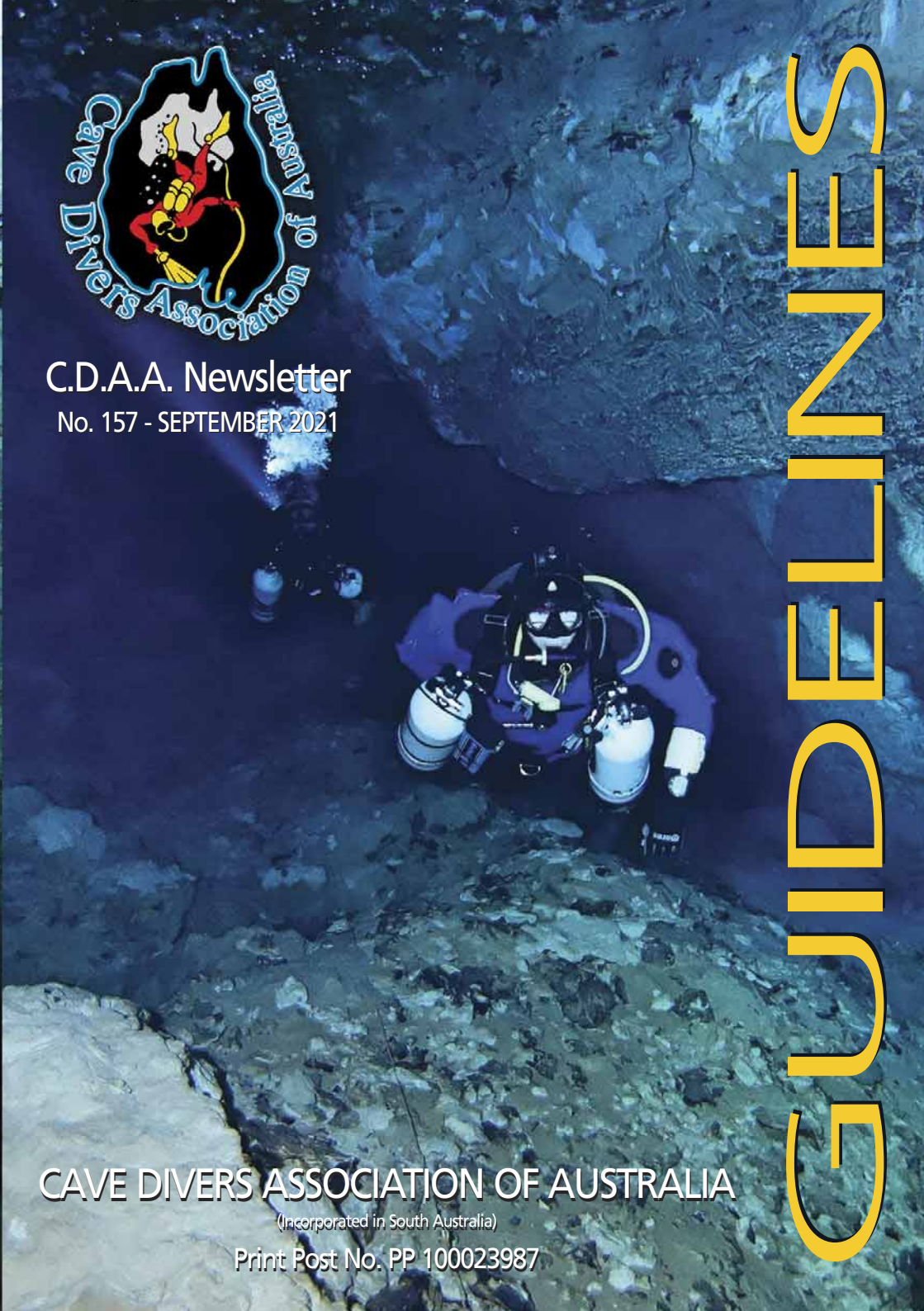




Graeme Bartle Smith and Alex Eacott in Tank Cave. Photo by Peter Mosse.



C.D.A.A. Newsletter  
No. 157 - SEPTEMBER 2021



CAVE DIVERS ASSOCIATION OF AUSTRALIA

(Incorporated in South Australia)

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**Front and Back Cover:**  
**Graeme Bartle Smith and Alex Eacott in Tank Cave.**

**Photo by Peter Mosse**

## CAVE DIVERS ASSOCIATION OF AUSTRALIA

ABN 65 062 259 956

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

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

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Web Site PDF: <http://www.cavedivers.com.au/public-documents>  
Policy Type: Affinity Combined General & Products Liability Policy - LIU-CAS-AEAL-14-01  
Insurer: Affinity Insurance Brokers Level 1, 1265 Nepean Highway, Cheltenham. VIC 3912.  
Underwritten by Liberty International Underwriters ABN: 61 086 083 605.  
Incorporated in Massachusetts, USA.  
Name Insured: Cave Divers Association of Australia Inc. Policy# 441680  
Public Liability: \$20,000,000 any one claim. Expiry: 30th September 2021.



# Pine Tank Lodge



Photo by Liz Rogers

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

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- Two separate socialising areas
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- Undercover gear drying
- Barbeque facilities

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- Deep Cavern to Cave
- Approved IANTD Facility offering full range of Technical Courses, Nitrox, Trimix, Deco Procedures and Extended Range.
- CCR Training  
KISS CCR Mod 1 – 3 Trimix



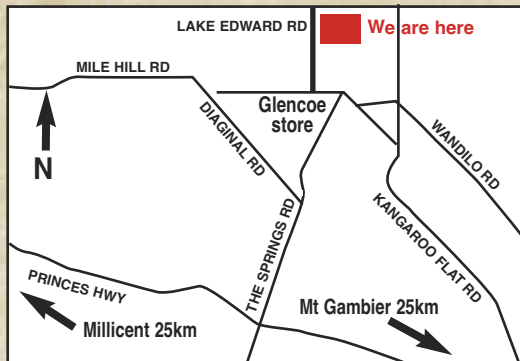
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- Specialist importers of Technical Cave Diving Gear.
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- Full range of Golem Gear tech gear (Inc. CCR BOVs, Side mount DSVs, Armadillo side mount system).
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- Spools & Reels.



## Pine Tank Dive Lodge AquiferTec Australasia

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Email: [stay@ptdivelodge.on.net](mailto:stay@ptdivelodge.on.net)  
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Web: [aquifertec.com.au](http://aquifertec.com.au)



## PUBLICATIONS REPORT

MEGGAN ANDERSON



Hi all

I've decided to keep my final report for Guidelines more personal and save the business end for my annual report, which will probably be put up on the website around the same time you are reading this issue of Guidelines. So please read my annual report as well!

For the last 6 years I've been involved in records, first as a Records Officer from late 2015 to 2017 and then as Publications and Records Director from 2017 onwards. When I completed my Deep Cavern course (now Basic Cave) in June 2015 it was the end of a long search for the path that would make me a more competent diver. During that journey I found my answers though CDAA members in my dive club. They planted the seed for me to do my Deep Cavern rather than putting another dollar in elsewhere and helped me to prepare. My instructor spent many extra hours with me working through my anxieties and once I completed the course I was just so proud to be a CDAA member. When I saw that the CDAA was looking for a Records Officer I put my hand up so that I could give back.

And so here we are 6 years later and I've decided to step down. However I want to make it clear that I will always be loyal to the association and will always help, I have just reached a point where the day to day commitment has become too much. I think when you reach a point where you feel burnt out and lacking motivation, then it's time to step aside and let some new energy in. I also feel like I achieved all my goals (the IT project isn't quite finished but will be in the next few months) and that other things I would like to do for the association I would have more time to do if I wasn't a director.

There are too many people to thank and hopefully you all know who you are. In essence they are the records and publications team, all the directors, instructors, office bearers and volunteers I've worked with and to all those who have bailed me out with Guidelines articles. On reflection, being a director involves a lot of difficult decisions and many people don't realise we make these decisions as a group. In the last 4 years the association has had some challenges which caused a lot of stress. However there are no decisions where I feel we didn't act in the best interests of the association but that doesn't mean it was easy or that it didn't come with a personal cost. But in the last 4 years I've developed a thicker skin and become less bothered by what people think of me. On the flip side I also forged new friendships and have come to appreciate my dive buddies. One thing I am really glad about is that I have kept up diving regularly throughout my two terms (I'm very lucky to live in SA) and even got my AC done. I still have diving goals and you'll still see me around.

There is one person I would like to mention by name and that is Pete Wolf. In the 4 years I've worked with Pete I have learnt so much from him, his attention to detail never ceases to astound me, he is a true leader and a good listener but above all, a good friend. Whenever I was stressed he was always there for a chat and tried to help, even if it had nothing to do with the CDAA. He is someone I will always trust and have the upmost respect for. I don't think some people fully appreciate yet what he has contributed but I know in a few years they will. I hope he will now have more time to dive (despite effing covid) and do the things he enjoys - and yes Pete you owe me a few dives!

There are a few things I'll miss and I'm sad that with covid it has been so long since I have seen a lot of interstate members and that we probably won't get to catch up again this year at the AGM. I want to congratulate Ricky and Victoria on joining the National Committee and Kelvyn on his third term (you're crazy but you'll continue to do a great job). My advice to the newcomers is: keep diving and don't be afraid to set boundaries when you are volunteering so much of your time. With the newcomers as well as the Mary-Anne, Tim and Kelvyn, I leave the NC knowing it's in the best hands and that they will do right by members.

And with that it's now time for me to drive off into the sunset....

Signing off,  
Meg

# NATIONAL COMMITTEE UPDATE

SEPTEMBER 2021

It is with mixed feelings that I write this, my final Guidelines report as National Director. After serving the CDAA for the last 7 years - nearly 3 years as the Victorian State Rep, and a further 4 years as ND - I feel that the time has come for me to hang up my gloves and hand the keys to the Ivory Tower over to the next victim... \*cough\* ...candidate. The last four years have certainly been a roller-coaster ride full of challenges, both for the CDAA and me personally. There's been a lot of laughs, great cave dives and memorable experiences. I've met some amazing people who will be my friends for life. I'd be lying if I said there weren't also more than a few stressful moments and sleepless nights. It comes with the territory - when you're passionate about something, it is sometimes hard not to take things to heart. I certainly wouldn't have maintained my sanity over the last four years without a lot of support from my family, my fellow directors and the friends who have counselled me along the way. But an individual can only wield such tremendous power, enjoy the high-flying Director-lifestyle, and enjoy unbridled private access to Australia's best secret caves for so long. It's time to let someone else have a taste of the glory.

## THE GREEN WATERHOLE (FOSSIL CAVE) – TANK CAVE FOSSIL COMPLEX

Last September, I was invited to join a working group that was established to achieve broader recognition and promote protection of features of scientific significance within The Green Waterhole - Tank Cave system. The group consisted of representatives of DEW,

the South Australian Museum, the CDAA and scientific experts from Flinders University, Griffith University and the University of Adelaide.

Throughout this year we have held regular online meetings, and earlier in August presented an application to the SA Heritage Council to designate The Green Waterhole – Tank Cave Fossil Complex as a place of Geological, Paleontological and Speleological significance. I am proud to announce that our application was successful, and the Green Waterhole – Tank Cave Fossil Complex is now provisionally State Heritage listed.

Working alongside a diverse range of experts, most from outside of cave diving, but who all share an equal sense of wonder and respect for the sites we dive, has been one of the most rewarding experiences of my cave diving "career" to date. It also reinforced to me (and everyone else involved) just how much the CDAA and its members have contributed to the scientific knowledge base and understanding of this cave system over many decades.

The provisional Heritage listing applies to a designated zone that covers Green Waterhole (Fossil Cave), and the far Western end of Tank Cave. Unfortunately, this means these areas will now be OFF LIMITS to cave divers..... Just kidding!!! For CDAA members undertaking recreational cave dives, access protocols for Fossil Cave are slated to remain exactly the same, with permits to dive issued by DEW. Access via the "main" Tank Cave entrance will also remain exactly the same.

The Heritage listing has however raised broader awareness and will bring greater leg-

islative protection to vulnerable features within the Green Waterhole – Tank Cave Fossil Complex, including areas such as the unique fossil deposits in Green Waterhole, as well as the "Elephant Room", the "Dark Room" adjacent to G15, and the "Bone Room" at the Western end of Tank Cave. Such recognition also opens the door for further research opportunities in which CDAA members will no doubt be involved.

## LOCKDOWNS & DIVE BOOKINGS

At the time of writing, Victoria, NSW, Queensland and the NT all have COVID restrictions in place. The associated border-closures have meant that many CDAA members have recently had to cancel trips to Mount Gambier and the Nullarbor.

To make our job a little easier, I ask that as soon as you become aware that your ability to travel will be impacted by restrictions, please cancel your bookings as a matter of urgency. We've recently had several instances where members from these states have not cancelled their bookings, and thereby prevented our members in South Australia, who fortunately can still travel, from being able to book on. These types of issues create a lot of extra work for the Committee and are easily avoidable by exercising a bit of common courtesy.

## NEW DIRECTORS

A single nomination was received for each of the three available Director positions. As all have stood unopposed, the nominees will begin their terms at the conclusion of this year's AGM.

I'd like to extend a warm welcome to Rick Nash who has been nominated for National Director, and Victoria Hudson, who has been nominated for Publications Director. I'd also like to request a psych evaluation for Kelvyn Ball for putting his hand up for a third consecutive term as Site Director.

Jokes aside, Kelvyn has done an amazing job, and I'm glad in the knowledge that the future

is bright for the CDAA with these three legends joining Mary-Anne McLeod (Business) and Tim Featonby (Standards) in the Ivory Tower.

If you need myself or outgoing (Publications) Director Meg Anderson, you're likely to find us enjoying a (stiff) drink by the CDAA pool.

## A FINAL THANK YOU

Before I fade away into the silty cloud of cave diving oblivion, I'd like to take one last opportunity to thank all the members, past and present, who have helped make the CDAA what it is today. I'd also like to thank everyone that has helped me personally during my two terms as National Director. It has been a privilege representing an organisation that has been so close to my heart.

Despite the unavoidable effects of COVID that have impacted us all, the CDAA's membership numbers are still higher than they were four years ago. Through this unwavering support, and with some new, enthusiastic Directors coming aboard the National Committee, I'm confident the CDAA is well positioned to bounce back after COVID and tackle any new challenges that may arise head-on.

Warmest Regards,  
Pete

Peter Wolf  
CDAA National Director



*On behalf of the  
National Committee*



Mary-Anne McLeod,  
Business Director



Kelvyn Ball,  
Site Director



Tim Featonby,  
Standards Director



Meggan Anderson,  
Publications and  
Records Director





Gday All,  
I hope all is well and you are not too bored. Lock downs have kept most of us away from cave diving lately and it doesn't look like it is going away in a hurry.  
I would strongly recommend that anyone who hasn't had their shots yet, look at booking in for one. I expect when they do start to open up there may be restrictions for those who are not yet vaccinated. That way you will be ahead of the game and hopefully underground under water within 17hrs of boarder

opening up. Or at least that is how long it will take me to get there.  
Keep on top of your skills in the mean time and start easy so you can wash the dust off when you get back into it. Be safe and hope to see you all back down the Mount soon.

Be safe and enjoy.  
Tim Featonby #3372  
Standards Director



Not a lot to report since last report unfortunately. COVID19 Keeps shutting the borders and keeping a lot of divers out of the water once again. Conversations with Landowners continue via phone, keeping up to speed with restrictions etc. Working bees etc put on hold also until restrictions lift. Most of my helpers are Victorians who are keen to get back to SA to finish works at Tank Cave and get back into diving again. Mark Townsend has picked up the holding tank for the new Toilet Block. Thank you Mark, your efforts are appreciated.

Been in regular talks with SA SES and Jan at Engelbrecht's and organised sites for Harry's upcoming SROP Course, weekend of the AGM. That's all for me, short and sweet again. End of year report for AGM coming out soon.

Cheers,  
KELVYN BALL #3276

#### Did you know?

**You can opt for an electronic copy of Guidelines** rather than a paper copy. **Simply login to your CDAA online account**, select the dropdown menu under the My Records tab and click on Update My Details. Handy for those who have multiple CDAA members in their household or for those wanting to do their bit for the environment!



And the COVID-19 rollercoaster continues.... It's been great to see our South Australian and WA members being able to enjoy some great diving on the Nullarbor and at Mount Gambier, whilst the rest of us can only watch. Please keep posting pics!

Over the last six months extensive has been invested in the website and membership database. Initially we had planned to go to vote with options, however a complete rebuild was not a financially viable proposition. We have instead opted for a software as a service membership model, which can deliver the majority of our requirements simply, with support and at minimal cost. The integration is now well underway. Thanks to those members that assisted with the scoping and review of options.

Over the last quarter my focus has been on completing the FY21 Year-end financials and associated audit, and planning for the upcoming AGM.

At the time of writing we have Melbourne, all of NSW, ACT and parts of QLD in lockdown and the SA borders closed with no view as to when they might open. Unfortunately that does put the Symposium part of the AGM weekend at risk. We are currently working through options and will be notifying members asap as to which avenue we can reliably take. Personally, I had really been looking forward to a live AGM, and have some fantastic speakers lined up. But as all members will be well aware, planning at this time is extremely difficult.

The AGM itself will still proceed on Saturday 9th October, 2021. Further details on the format will depend on the decision regarding the symposium and the border outlook. And for those booked onto SROP, barring any restrictions in South Australia, the SROP course will also be proceeding in Mount Gambier. Thanks Harry for organising this.

Nominations for the 3 Directorships are in, with each role receiving one nomination, these have been appointed with no vote required. Congratulations to Rick, Victoria and Kelvyn! I look forward to working with you all.

The 2021 Financial Statements and 2021 Budgets will be made available prior to the AGM. Please take the time to review these, and contact me if you have any questions.

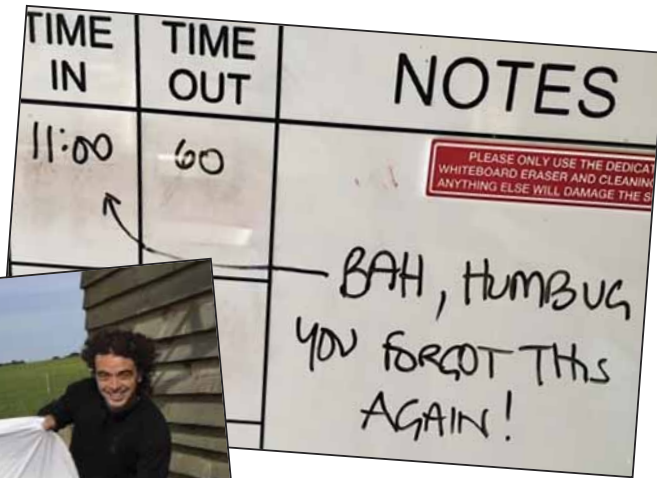
Meg and Pete will be finishing up their tenures as directors (and previously officer positions for the CDAA). Thanks to you both for the huge dedication of your time and expertise to the CDAA, its members, stakeholders and the National Committee over the last few years. It certainly has been challenging, and I'm fortunate to have worked with you. You will be missed. Enjoy getting some time back and I hope more of it is spent underwater!

Mary-Anne McLeod #5011  
Business Director

## Articles for Guidelines Dec. 2021 - Deadline is Nov. 12th

- Send articles and jpeg images by email to [guidelines@cavedivers.com.au](mailto:guidelines@cavedivers.com.au)

# Congratulations to our new AC divers



Jane Bowman with students Martin Slater and Burak Uslu.



## Members Symposium on Sat. 9th October 2021 to be Advised

At the time of printing, the viability of the Symposium to go ahead as planned is under assessment. This is due to the continued SA Border closures to those states with COVID-19 outbreaks. Members to be updated as soon as possible. SROP course to proceed as planned.

## AGM TO PROCEED:

**Sat. 9th October 2021**

The Annual General Meeting will commence at 11.00am, and complete no later than 12.30pm.

Further details regarding the format of the AGM to be issued via an official notice as soon as possible.

For any questions, please contact **Mary-Anne McLeod** (Business Director) at [business@cavedivers.com.au](mailto:business@cavedivers.com.au) or **0401 508 838**

## COMPETITION TIME!

Our Emergency Planning Information document was recently updated. It is available on the website and is now also published in every issue of Guidelines.

Once you have read the document, answer a few quick questions below, send your answers in and you could win a small safety prize! We have 10 to give away. Please email your answers to [publications@cavedivers.com.au](mailto:publications@cavedivers.com.au) and include your name and postal address. Entries close midnight 8 October 2021.

### Quiz questions:

1. Name one tip for effective emergency management.
2. What is step 4 in the Accident/Incident Response?
3. True or False: In the event of an emergency, you call Ghostbusters.

**CAVE DIVERS ASSOCIATION OF AUSTRALIA  
NATIONAL COMMITTEE ELECTIONS  
OCTOBER 2021**

## **NATIONAL DIRECTOR**

### **Nomination for Standards Director: Ricky Nash #4187**

*Proposed by: Jane Bowman #1880    Seconded by: Peter Wolf #4419*

#### **NOMINATION STATEMENT:**

*As a long-time passionate cave diver and CDAA member since 2006, I would like to present my nomination for the position of National Director.*

*I have extensive cave diving experience in Australia and overseas, diving in Mexico, USA, France and Germany.*

*I have previously served as Publications and Records Director and have a good working knowledge of the day-to-day requirements of the National Director position.*

*Changing times present new opportunities, along with the new problems to be solved, the CDAA is not immune to this. I will build on the good work of the current Directorate in, but not limited to the following areas:*

- Completion of the updated website and backroom computer management systems*
- Site improvements in liaison with the Site Director with an emphasis on constructive dialogue with Landowners/Stakeholders*
- Continued improvement in course materials and a review of course Standards to ensure the CDAA is current with developments and training elsewhere in liaison with the Standards Directors*
- Strengthening our standing as a Cave Diving Association with stakeholders such as government bodies*

*A well-directed Association with strong Landowner links is of benefit to us all, I will make this a priority.*

*Safety has always been a strong point of the CDAA. Some great work has been done lately in this area, this needs to be continued with adequate funding.*

*Finally, I sincerely believe that we should be putting back as much as we can, for the continued improvement and enjoyment of the sport we love so much.*

*Thank-you.*

*Nomination: Ricky Nash #4187*

***Ricky Nash has stood unopposed and has successfully been elected for the position of National Director.***

**CAVE DIVERS ASSOCIATION OF AUSTRALIA  
NATIONAL COMMITTEE ELECTIONS  
OCTOBER 2021**

## **SITE DIRECTOR**

### **Nomination for Standards Director: Kelvyn Ball #3276**

*Proposed by: Gary Barclay #1735    Seconded by: Peter Wolf #4419*

#### **NOMINATION STATEMENT:**

*Yes, it's that time again, nomination for Site Director has come up for renewal, I have really enjoyed my time as CDAA Site Director and all the people I meet whilst filling this role. My intentions for the last four years and for the future if re-elected, have been to improve and maintain the wonderful sites we all get to enjoy. It has definitely been a unique challenge with COVID19 and the closing of borders, but I have always been in contact with our landowners and communicating with ways sites can be reopened or kept open.*

*Tank Cave improvements are always on the go. Just installed water tanks, stand and solar system to run the new pump setup, ready for new bathroom amenities that are literally sitting in my backyard, waiting for the border to open again. The regular mowing service with the Bedford Group supporting people with disabilities, has been a wonderful regular service.*

*With changes to Forestry access there has been plenty behind the scenes negotiations and follow up for the National Committee that has kept us super busy the last 18 months. Still plenty of follow up that I would like to continue with and to keep up liaisons with other landowners, this is something which I really enjoy. Being a farmer also with most of them, I think does add to a rapport with them. There are still ongoing projects I would like to continue with, so please vote for me as your CDAA Site Director.*

*Kelvyn Ball #3276*

***Kelvyn Ball has stood unopposed and has successfully been elected for the position of Site Director.***



CAVE DIVERS ASSOCIATION OF AUSTRALIA  
NATIONAL COMMITTEE ELECTIONS  
OCTOBER 2021

**PUBLICATIONS & RECORDS DIRECTOR**

**Nomination for Standards Director: Victoria Hudson – CDAA #5099**

*Proposed by: Meggan Anderson – CDAA #4942    Seconded by: Linda Claridge – CDAA #2214*

**NOMINATION STATEMENT:**

*As a current member of the CDAA, I would like to nominate for the position of Publication and Records Director.*

*I have been diving since 2014, joining the CDAA approximately 4 years ago. Since then, 90% of my diving has been in CDAA sites.*

*I currently hold volunteer positions with the CDAA as Little Blue Site Access Officer and Products Officer, both of which I have performed since approximately 2019.*

*Since taking over the Products portfolio, I have conducted a comprehensive audit of our suppliers, identified and implemented cost savings, and streamlined the ordering process while supporting the small business of one of our members.*

*I have worked in the Victorian public service since 2011, performing diverse and challenging work in both small and large team environments. I routinely handle personal information in a professional and confidential manner. I consider myself to be a conscientious person with good communication skill, high attention to detail and a commitment to doing a thorough job in everything I do.*

*In addition to the specific duties associated with the position, I am applying for directorship because I am committed to the CDAA, I want to contribute to the future direction of the association and ensure we continue to have access to some of the best freshwater dive sites in Australia.*

*If elected, I am to continue the great work of Meg ANDERSON in improving and streamlining the way CDAA processes memberships and records as well as working with stakeholders around the new website.*

*Victoria Hudson – CDAA #5099*

*Victoria Hudson has stood unopposed and has successfully been elected for the position of Publications & Records Director.*

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# JF-389 Porcupine Pot – diving “The Ken Murrey River”

**Party:** Keith Chatterton, Stephen Fordyce, Gabriel Kinzler, David Myles, Ciara Smart and Petr Smejkal.

By Stephen Fordyce. Photos by Stephen Fordyce unless otherwise credited.

*A utopia of new rigging! 420m of new JF master cave (The “Ken Murrey River”)!  
A lovely dry bypass! Some excellent progress in Tasmania!*

Apart from the JF-036 Growling Swallet/JF-237 Niggly Cave system and the JF-008 Junee Cave resurgence, JF-389 Porcupine Pot is the only other section of accessible Junee-Florentine master cave – 1.5km of large scale streamway passage which carries water from many small feeders. It's upstream of Niggly, with a gap of about 1km between their extents (and the Living Fossils section of Growling Swallet is punching right for the middle of this gap). The Porcupine downstream extent ends in somewhat inconclusive rockfall, while the upstream extent ends in a rather remote sump which had been known for decades but only dived in recent times.

It had been 2.5 years since the December 2018 dive in Porcupine (refer Speleo Spiel 429) – a sordid affair with 300m of new underwater cave but no survey. The intervening years saw everyone distracted by breakthroughs in Niggly and caving politics. Both having been (mostly) resolved in late 2020, Porcupine could now be visited again, and the black mark on my surveying record could be expunged.

## Track Clearing & Rigging

Back in April, Gabriel and I couldn't bring ourselves to actually go underground after a punishing day finishing off JF-703 Jimmy's Window (report and map still on the list), and ended up spending hours clearing the track anyway. Alas the gouge in the door of my Falcon attests to our failure to cut all logs back far enough. Keith, Dave and I had a shake-down and played with new rigging on the first day (Friday 7th) of our 2 week May 2021 JF trip. Delicious new Bluewater 9.5mm rope (we had 2m to spare off a 200m roll), new concrete screws/SS hangers/SS maillons are installed throughout, mostly

using the same concrete screw holes. I covered the cost of most of this gear (SS hangers and maillons from Niggly were re-used) but while it's in Porcupine it should be considered club gear. I'm hoping to get reimbursed by a grant I've applied for, in which case it will become club gear in perpetuity.

So please take the opportunity to visit this significant and interesting cave!

A few changes and simplifications were made, including converting many rebelay to redirects and a new route down a final pitch rather than around the awkward traverse. I was quite proud of the new rig, but the grumbings from the Sherpa team suggest that the rigging is likely to evolve over the next little while, so we'll do detailed notes once it's settled.

The old rigging was completely removed by others. It was in surprisingly good condition considering some of the concrete screws had been there since 2016!

## Push Day

Saturday 8th May was the day, and a hardy team of 6 met up at our AirBnB in Maydena to faff with gear and packing - we got away at a suboptimal but not totally unreasonable time. As usual, I was not one to waste an opportunity and we split into

pairs to enact dye missions on the way. Petr & Dave headed into the cave straight away, to go through the miraculous bypass and place a dye detector as far downstream as they could get without getting really wet. Ciara & I went to set up a dye dispenser at JF-414 Jolly Roger, and Gabriel & Keith went to set up a dispenser at JF-388 (these are the big dolines flanking the Porcupine one). The dispensers were programmed to drip slowly for 6hrs and allow us to do a visual dye trace, and another slug release in a few days once things had settled. Cross pollination of mainlanders and Tasmanians was also achieved. Nobody complained of hayfever, so that was good.

Dye missions achieved, we met up with impeccable timing at the bottom of the rockpile (damn my plans are awesome) and proceeded. The Horrible Crawl (75m wriggling on your belly in the stream) lived up to its name but the team remained undaunted and we popped into the master streamway. There was no sign of dye from the dispensers, but we put out a detector to catch water from the various inlets (and the main stream from JF-35 Gormenghast) feeding the Horrible Crawl. We also put a detector in the master cave streamway upstream from the junction, and a weather station to record atmospheric pressure up the bank opposite the HC. The 4th and last detector was eventually installed near Trump Rock and the upstream sump. It was interesting to note that flood marks from the intervening years were no more than 1.5-2m (contrasted with the 20m+ floods we know happened in Niggly over this time). Interesting indeed.

With Petr and I veterans of the 3 (4?) previous dive attempts, route finding was easy, despite the intervening years. Improbable wet squeezes, rib-cracker rocks, stoopy wades and precarious rockpiles were remembered with fondness and enjoyed by all. The newcomers were impressed with the proportions and significance of this section of master cave.

Trump Rock (a large and belliger-



*Porcupine veterans discussing the finer points of caving light design  
(by Gabriel Kinzler)*

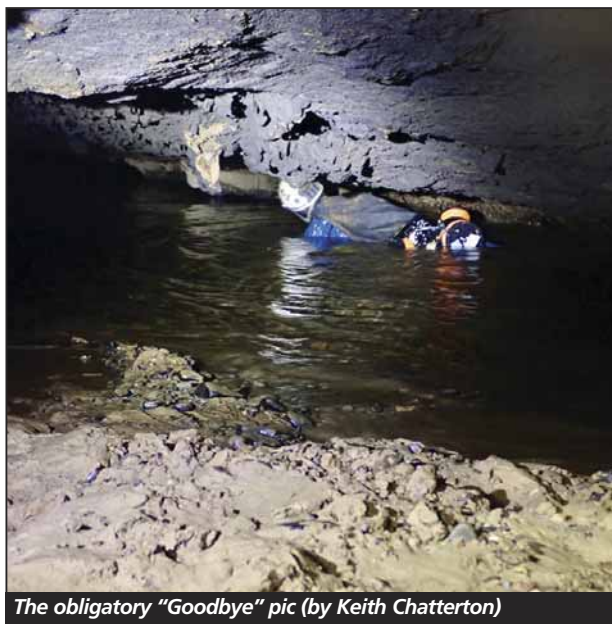


*The dive gear made for 6 reasonably acceptable bags*

ent orange thing which sits alone and out of place in a large room) and a cache of old gear was reached. We had brought all our own stuff except weights, but figured we probably should use the 2.5 year old gas canister first... Everyone pitched in to get me dressed and help me get to the water, saw me off (about 3:30pm) and headed back to look at the pretties and work on a lead Petr had in mind. They found a bypass to some of the worst of the squeezes between the 2 rockpile sections! We went back that way, but I'm not sure I could find it again...

### The Dive

Arrrrgh! I screamed in terror as the friendly but unexpected 2m bull ray disappeared back into the murky darkness from whence it came. This was not supposed to be in the cave. Neither was the fisherman who tentatively hooked me, the puffer fish, rusty junk or giant mutant starfish with spikes. I was also overdressed and overheating in the autumn warmth of northern Port Phillip Bay. This was my dress rehearsal night dive, a few days before heading to Tassie – as I often do, I ran through a simulated push dive including line laying, surveying, GoPro'ing and generally practising all the mental and physical skills I might need. The cave would be much more pleasant.



*The obligatory "Goodbye" pic (by Keith Chatterton)*

I had optimistically underestimated the effort required to get the gear between Trump Rock and the sump proper (we'd previously always done it with 2 people). It's low and shallow enough to be really painful, and I recommend asking the Sherpas to help as much as possible – using a low/dry bypass up to the left, it's possible to get quite close to the sump, while the diver can float on their belly through a low semi-submerged section. I recommend not kitting up properly until the actual sump. After ~30m of easy floating past the point where Sherpas would have to get properly wet, a 2m section of awkwardness is required between pools – it's cobblely streambed, too low to crawl and bloody annoying. I recommend kit off, especially on the way out. The sump pool is extensive but also low, the roof is perhaps 0.5m high. Once in the sump pool proper (it's an upstream sump, so you don't have to worry about thrashing about and silt going where you want to see) the hard work is over. The sump is a joy, typically at least 1m in any dimension, and often 2m or more. I had been a bit concerned about the state of the 260m of unsurveyed line laid by Andreas and I last time, but it was in great condition and better laid than I remember doing. The only thing I had to do was pull it out of siltbanks on occasion. The visibility was great – maybe 5m – and the GoPro footage

was quite decent (I will keep this in my personal archive in case anyone ever needs it). Water levels in the master cave that day seemed pretty normal, and flow on the dive was not appreciable, although while surveying out I did notice a silt cloud tended to catch up with me when I stopped. The underwater passage is almost entirely free of rockfall or breakdown, with clearly defined walls (usually vertical, sometimes pinching out horizontally) and often a ceiling too high to easily see (although I did check for airbells). The rock sticking out of the walls and sometimes on the floor is brittle and breaks easily – fairly typical of other JF dives I've done. Mostly, the floors are mud/silt, with dolerite cobbles noted primarily on the floor of airbells (interesting?). There were plenty of Anaspides.

I hooned along the existing line although was a bit dismayed at the amount of gas I had used on surfacing in the airbell previously named "The Room of Correct Terminology" (RoCT for short, and the politically correct result of a conversation had last dive). Last time while diving in a wetsuit I had used about 1000L to get here, but with the added drag of a drysuit and many bulky undergarments this time around, I had used 1400L. Compressibility of gas (you get less bang for buck at the high pressures the tanks were filled to) was probably also a factor.

### Into the Unknown

Another complication which had loomed was my buoyancy. The carbon fibre tanks and the double layer of undergarments made me quite floaty, and I'd put what I thought had been a ridiculous amount of weight on to compensate at the start of the dive. However by this point in the dive, I could



*Making a decent tie-off on this rock (it subsequently disintegrated)*



*I'd left a loop at the end of the old line waiting and ready*

tell that my I didn't have much reserve sinkiness left and as I used the gas in the tanks (about 2kg in each tank!) I would get lighter as the dive progressed. There was a long way to go before this became a survival risk, but was something best dealt with sooner rather than later. There was also the matter of how uncomfortable bulk surveying would be while struggling to stay off the ceiling (my dress rehearsal dive was awful for this). I had been looking for good rocks and finding none, but fortunately the RoCT floor had plenty of dolerite cobbles – I filled my drysuit pockets as if they were gold (the density of gold would make it excellent for dive weights).

I still had a chunk of gas left before having to turn for home, so I attached Ken Murrey's reel and headed out. Ken was a friend of mine and fellow caver and sump diver who passed away recently and this seemed like a good way to honour him. I also decided to name the whole upstream sump section the "Ken Murrey River" in his memory just to make sure honour was fully satisfied. The character of this new sump was similar to previous, but it was very straight and consistent, arrowing down to a deep point (15m) and then a sharp right and up again in similar fashion, surfacing after 93m total length. Still no restrictions or anything other than easy going – this was exploration cave diving at its finest!

Where the RoCT was more of an airbell, with barely a place to get out of the water, this new dry chamber (named "The Undressing Room") was bigger, with a nice dry shelf 40cm above water level big enough to stand up, and a bit more length to it. Neither air chamber had any sign of dry leads (although both had dolerite cobbles). I would discover an annoying shallow bit requiring annoying crawling/wriggling to progress into the next pool and some straws on the ceiling – significant for consistently ending about 50cm above water level.



They were also clean. It would seem like these indicate the maximum long-term flood level here.

### Undress for Success

I didn't have much gas left before I would have to turn for home, but enough to check out the next sump and see what it was doing. However the rocks in my pockets weren't being very effective (hard to beat the density of lead for negative buoyancy!) and I wanted to deal with the floatiness issue a bit better before going any further. Having taken tanks off to scope out the dry chamber, I took stock of things. A lot of rocks were going to be needed – my pockets were full and I didn't have a bag to put any in. I could flood the case containing the DistoX... that was set aside for later. I still had 350m or so of orange guideline which floats a bit, but leaving that would be poor form. Aha! I was wearing 2 sets of undergarments and had been if anything slightly too warm from the various exertions and breaks out of the water. Carefully taking off the top half of my drysuit, I removed my 2nd jumper and bundled into a ball, tying it up with a spare spool of guideline. It hurt to do, but I

submerged it and squished the air out of it. This made an excellent difference and I had a more comfortable amount of negative buoyancy – great success!

Leaving spare reels and unnecessary junk clipped to the guideline since I wouldn't have gas for more than a quick checkout, I negotiated a short/shallow/dry section with tanks and fins off and then re-kitted. The 3rd sump headed down a slope and I reached the first proper restriction for the whole day. A classic JF gravel slope on angle of repose meeting a roof step, about 5m wide and with obvious bigger passage the other side. It didn't seem steep enough to give way and bury you, but was loose enough to give pause for thought. Aha, this is the sort of thing I had wanted to have a quick look for.

The gravel was loose and shifting it to get through in the centre would be possible, but take a bit of time. Fortunately I thought to check out the entirety of the restriction before starting on that, because at the far left (looking upstream) of the restriction it was big enough to get through in reasonable comfort, although as a precaution against gravel slides I went in feet-first. I got the line sitting as best I could, but future divers be warned if it's going to break anywhere (or get pulled into a line trap), it will be here.

### Homeward Bound

Once through, the cave opened up again and I knew this was the time to turn around. I tied off the guideline beyond the gravel slope, attached a commemorative marker the Sherpa team had written messages on, and cast a wistful look into the gloom as I began to survey out. I left it at a depth of 12m barrelling off in 2m x 2m passage. It turned out that this point is 420m of fairly linear cave from the end of the dry survey, following largely the same line as the rest of the master cave. The trip out was reasonably uneventful. Stress levels peak at the far end of the push, where you are furthest from home and have the least amount of reserve gas. At this point you should have in reserve at least the amount of gas needed to get home if one cylinder fails. But by halfway back, this reserve is twice as much as you need to get home, and that's very reassuring. Some of this spare reserve can also be used if extra time is needed for surveying or line fixing, but I came out with plenty left – I

think the slight current helped. Surveying out was pretty straightforward (the water was pretty clear) and despite my lack of the 2nd jumper, temperatures were tolerable. Towing the ball of jumper behind me in the water was easy, but on the occasions when it had to come out of water, the sodden thing weighed a ton!

Surfacing in the home sump pool (about 6:30pm) and recording the last survey leg were nice, but the unanticipated epic effort of awkwardly de-kitting and getting gear back to Trump Rock was a rude and painful shock. I'd been away for some 3 hours and the Sherpa team were settling into hibernation after a successful excursion to the pretties and finding a nice bypass of some of the painful bits. Still, I was well before callout time and we were all in good spirits after the successes of the day, and there were hot drinks and only occasional whinging as we slowly fuffed our way towards packing and departure. The soaked undergarment jumper was not appreciated by whoever had grabbed the undergarment bag thinking it would be a light option!

### Taking One For the Team

We left the old kit at Trump Rock with an intention to collect it when retrieving/swapping the detector (I did record a stocktake video). Since then, the old dive wing and fins were removed. The intention is for the only things left there to be lots of weights, but that will be confirmed later. Spirits remained high as we headed out, only briefly dampened when a falling rock broke my little toe at the base of the pitches (very lucky it didn't hit anything more important – a separate incident report has been

submitted). Fortunately it would seem little toes are unimportant for caving and my next 2 weeks were more or less unimpeded.

We arrived back at the cars sometime after midnight after about 14 hours underground, and my attempts at an inspirational speech were quickly quashed – the cretins were admirably nonchalant about the discovery of several hundred metres of JF master cave. Offers to collect the dye dispensers were admirable but unnecessary – these still had programs to run now that the detectors were in place. Nobody had noticed any coloured water, perhaps I had been overly conservative with the amounts, or estimated the transit times wrongly. Stupidly, I'd forgotten to arm the team with coloured lights, giving us a much better chance of spotting the fluorescent dye. Keith and I happened to be recovering after our return through the Horrible Crawl when the detector there went off and we saw Fluorescein there from JF-388. Bugged if we could find where it came in with our white lights though unfortunately. Oh well, that's an easy one to repeat.

### The Future

It was great to get back into Porcupine, especially carrying off a pretty audacious plan with near perfect success – awesome work by the whole team, who even all seemed to enjoy themselves. The detectors will be left in there over winter to record water levels, and many of the dye traces targeting them have already been done (but please, help with releasing dye desperately needed if we are going to get every single inlet!).

There are more things to be done in Porcupine in



There was no shortage of guideline  
(photo by Gabriel Kinzler)



A peek down the gravel slope



What does the commemorative marker say?  
You'll have to go there to find out.

the next little while, like push the downstream rockpile and perhaps attempt what should be a very short dive to connect to JF-35 Gormenghast. The upstream sump is going on the backburner until dye tracing results are in, and options for finding a way in from the other end are re-checked and exhausted. Even then, pushing further would be a much larger logistical undertaking requiring a whole lot of Sherpa (and diver) enthusiasm. One day, perhaps I'll be that diver, perhaps not. In that case, I hope I'm still around to meet that diver, and I hope this report is useful to you. Good luck, have fun, and don't die.

### Dive gear used:

- Drysuit, with 2 pairs explorer socks, polypro thermals, 2-piece Fourth Element Artic (top removed, would omit both next time), 1-piece Fourth Element Halo3D
- Nomad XT sidemount wing/harness, fins
- 2x 9L carbon fibre tanks (with 4x 1.2kg weights on each)
- 7x 1.2kg weights on belt (NOT ENOUGH!), 4x 1.2kg weights per CF tank. Beware of the trap of assuming 1.2kg weights are close enough to 1.5kg weights.
- Breathing gas: Nitrox 32 (to reduce risk of The Bends)
- Line: all is orange 3mm polypropylene floating cable-hauling line, knotted at 3m intervals. There are frequent arrows and a few cookies marking it.

### Gas usage:

#### Gas pressures:

- Start: 295bar/290bar
- At Room of Correct Terminology: 280bar/200bar
- At Undressing Room: 220bar/210bar
- (Turn pressure: 200bar/200bar)
- Back at Undressing Room: 200bar/170bar
- Home: 130bar/50bar

#### Litres of gas used:

- Sump 1 transit (in): 945L
- Sump 2 transit (in): 450L
- Sump 3 (total): 540L
- Return through sumps 1 & 2: 1710L

#### Distances (from survey data):

- Sump 1: 262m long
- Sump 2: 93m long
- Sump 3: 40m penetration

(see dive profiles for max and average depths).

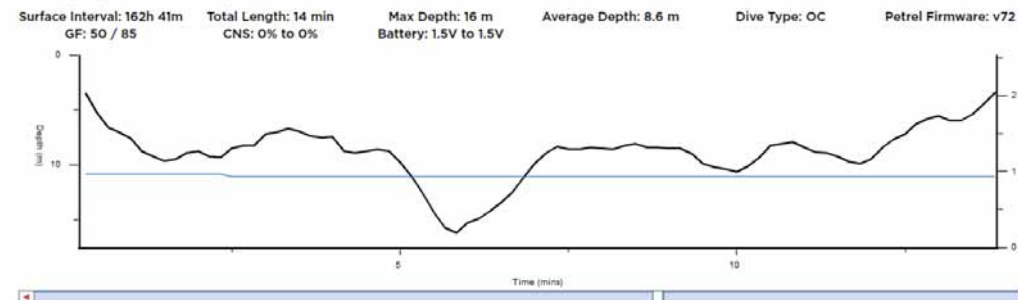


The day after - some good swelling and bruising

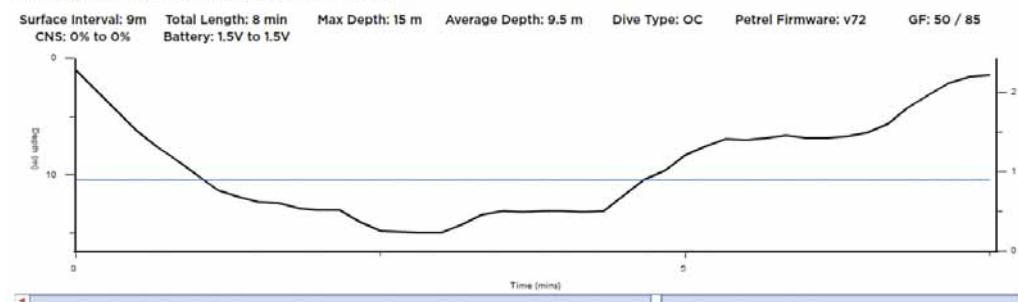


The closest thing I could find to a group photo (by Gabriel Kinzler)

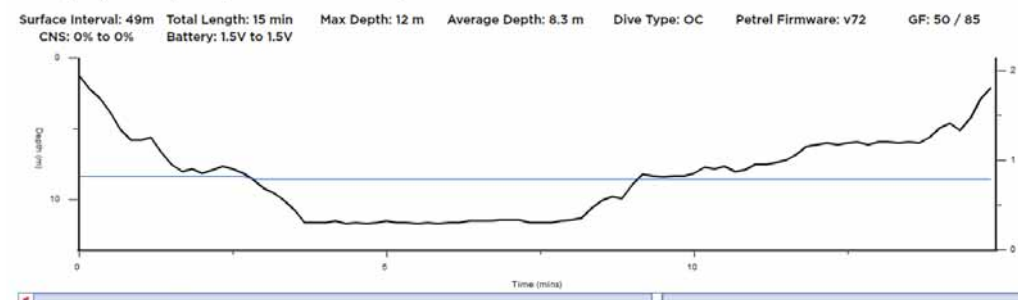
### Dive profile #1 (Sump 1): start 15:44



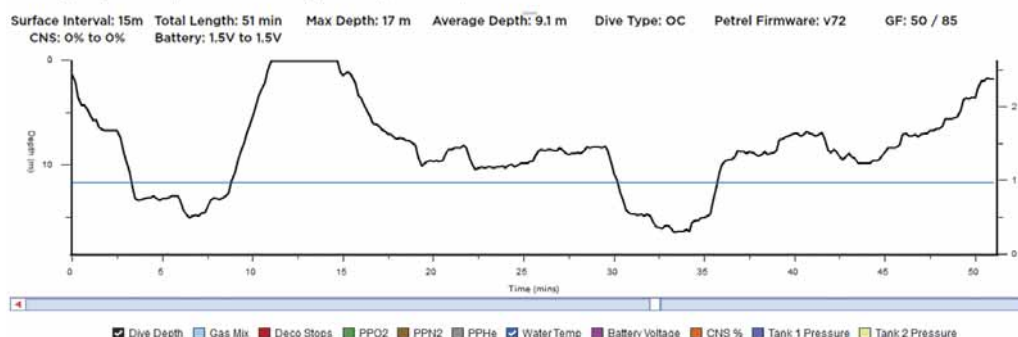
### Dive profile #2 (Sump 2): start 16:06



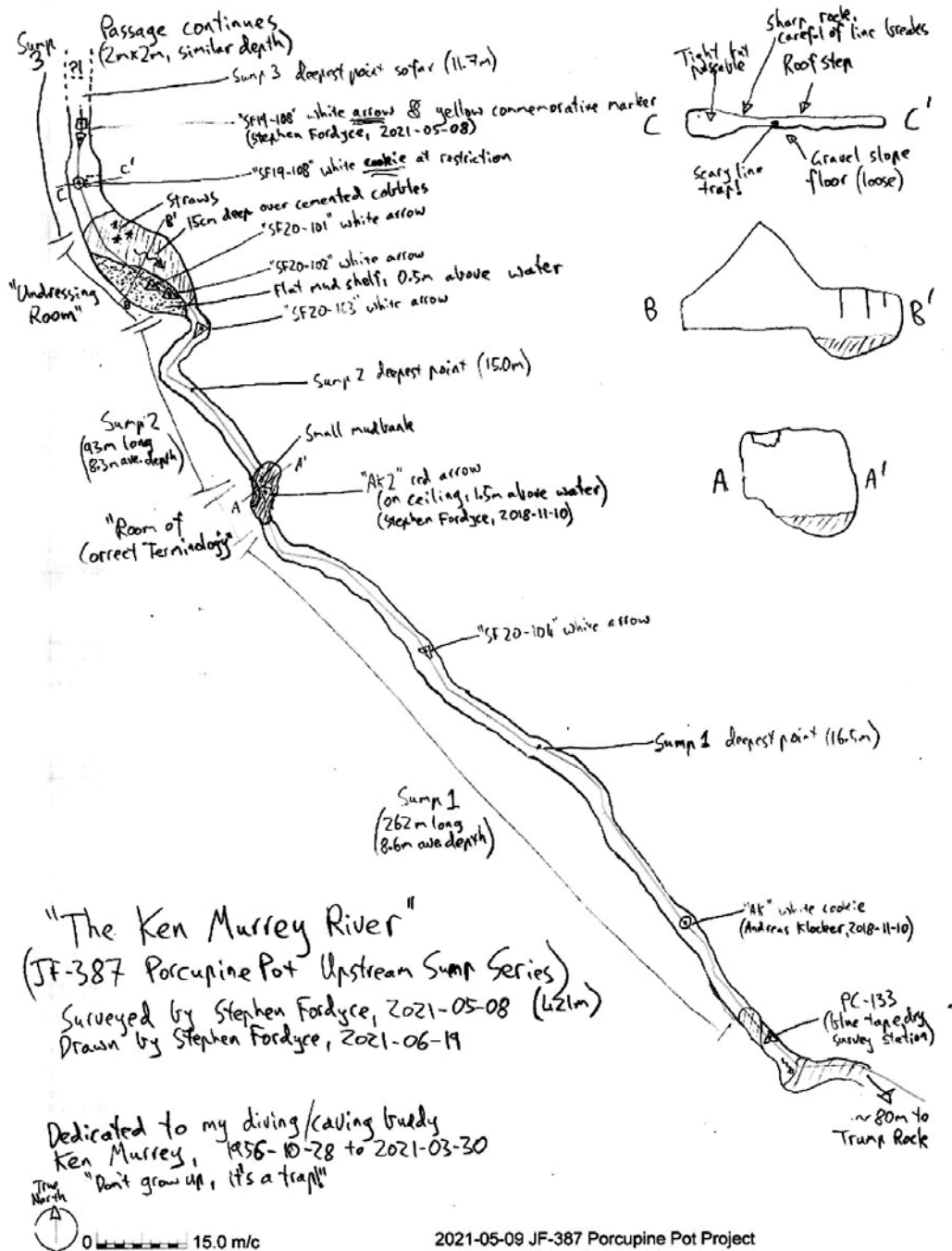
### Dive profile #3 (Sump 3 out and back): start 17:02



### Dive profile #4 (return through sump 1 & 2): start 17:32







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# Felicitas German Slatemine

Story and photography by Kurt Storms

*As often happens, I make this trip with my regular diving buddy Willem Verrycken. Willem has announced our presence in advance. Early in the morning we load the car and leave for Sauerland, a 3.5 hour trip by car. Once we arrive, we meet the manager of the mine. He tells us something about the history.*

The Felicitas mine is located around 2 kilometres north-west of the Kneipp spa Bad Fredeburg, which is a district of the town of Schmallenberg in the Hochsauerlandkreis with a population of around 4,000.

In the immediate vicinity, there are other recreational areas such as the Hennesee and hiking trails through the Rothaargebirge (e.g. The Great Escape of the Sauerland).

The mine was opened in 1850 and owned by the company Hesse & Schneider KG until 1990. It was then sold to the company Magog GmbH & Co. KG, which also holds the only current slate in

North Rhine-Westphalia.

Via an inclined shaft with a length of approximately 130 m and a ventilation shaft, the mine was opened. The mine consists of two footbridges at a depth of 32 and 46 m. A reel and a trolley were used to transport the stone along the inclined shaft directly into the splitting house. In recent years, diesel vehicles were used for transport underground. The mining took place in chambers. These were about 15 m long and 4-5 m high. Since the 1970s, mining was mechanised by mobile saws and hydraulic splitters.



## Back in time

Once we have set up our rebreathers, we put on our suits with heating. The water here is about 9 degrees Celsius all year round. We make our way to the shaft and do the necessary checks.

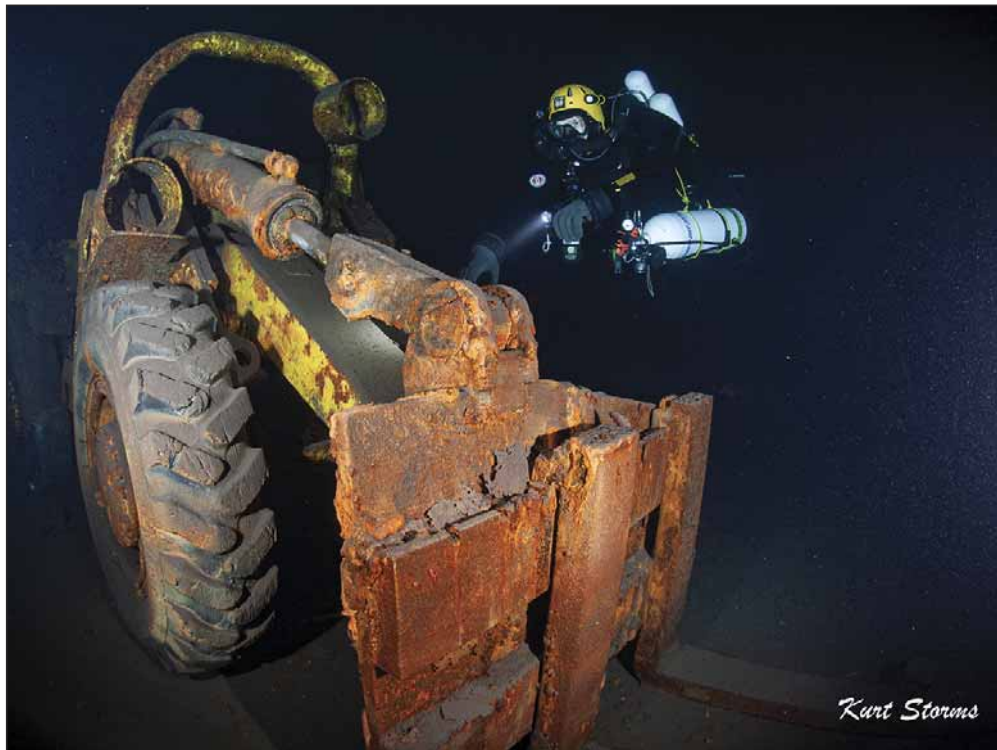
Willem is the first one to go through the shaft, which is quite steep to a depth of 30m. Because several divers have already gone into the water before us. Visibility is very poor here and we have

to follow the line by touch. At a depth of 12m and 20m we lay down the bottles with our deco gases. At a depth of 26m we reach the junction and turn left as agreed. This is the new part of the mine, here the slate was mined by machine. Before the dive, Wolfgang gave us an extensive briefing, which we used to plan our dive. Probably to protect the miners.

Further on, the machines loom up from a dark







mine. These machines have been left in place because it would take too much time and money to dismantle them.

There is an excavator and a large forklift truck in pristine condition. Willem poses by these machines so that we can see them on film. We swim further down the corridor, on ground level there is a beautiful large saw blade. The corridor is supported by iron profiles and plates, which results in loose rust swirling down regularly. The main corridor is beautiful, from here there are many side corridors, which we enter by making a "jump". After 35 minutes, we return and do our obligatory deco in the shaft.

### **History lesson**

During a break of about 2 hours, where we can drink coffee for free. Wolfgang tells us about the history of the mine. We discover that the part that we have now dived was still in use until 1994. The corridor to the right is the old part, which we are going to dived later. This is where the slate was mined from 1850 onwards. The slate was cut by hand and worked with dynamite.

### **Explosives storage**

In the afternoon, we leave again for a second dive, but this time I don't forget to connect my heated undersuit. The aim of the dive is now to do the old

part of the mine.

We go back down through the main shaft where our bail out gases are still lying around, quickly check them. We continue our way and turn right. Immediately it is clear that the corridors are narrower. It's a totally different mine to the one we had this morning. Walls are coarser and there are slate walls. Along the way, we come across pipes that were there to dry out the mine. Along the way we come across a remnant, a bottle, Willem poses eagerly, and I take some photos.

We go further into the corridor, and now we come to a beautiful door, which is open. this was the storage room for the dynamite. we take a look in the room, but find no remains.

After the room, we go further into the corridor, and we come to a junction, we take the right turn, here the corridor becomes slightly narrower, but we come across a wall with an opening. Here I shoot again some pictures of Willem.

Unfortunately time passes faster than we want and we have to turn back, on the way we stop at an old electricity cabinet before we do our obligatory deco.

Happy as 2 children we come out of the water with a big smile and immediately start analysing our dive.

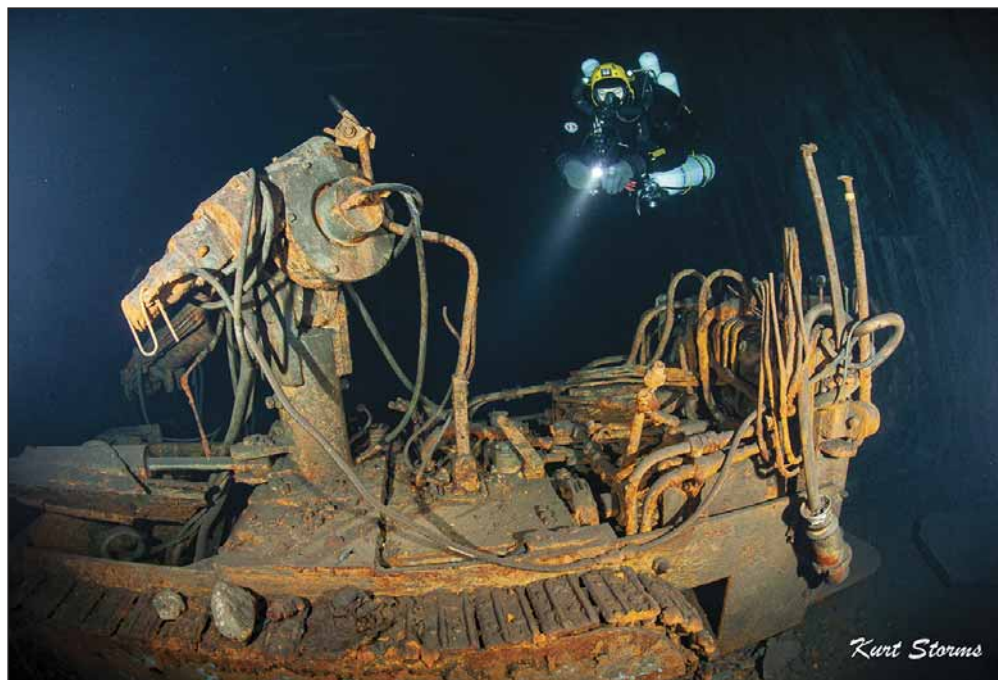
Conclusion, we have to come back here.







*Kurt Storms*



*Kurt Storms*



#### ABOUT THE AUTHOR:

Kurt Storms is a Belgium Military, underwater cave explorer, and active Technical/rebreather diving instructor for IANTD.

He started his diving career in Egypt when he was on vacation. And the passion never ended. Kurt is also founder and CEO of Descent Technical diving. He has been diving on several CCR's like AP, SF2, Divesoft Liberty SM.

Kurt is also one of the pushdivers who are documenting a new slatmine in Belgium (Laplet). This project was news on Nationale TV.

Most of his dives are mine and cave dives. In his own personal diving, Kurt's true passions are deep extendend-range cave dives.

His wife (Caroline) is also a passionate cave diver. In his free time he explores the Belgium slatmine's. When he is not exploring, he take's his camera with him to document the dives.



*Kurt Storms*



# JF-36 Growling Swallet (Coelecanth Sump Dive)

By Stephen Fordyce. Photos by Stephen Fordyce unless otherwise credited.

*I've been keen to see the end of Coelecanth Sump for myself for ages. For the uninitiated, getting to the sump take about 3-4 hours of hard caving in the Growling Swallet cave system in Tasmania. It's been dived several times before, but the proximity to the master cave between Porcupine and Niggly, and several major flood events since the last dive attempt made it worth another look. My modest diving successes nearby provided the ego-laced icing on the cake, and a support crew of almost all keen(ish) mainlanders made it happen, dragging gear in and out over several trips. Thanks guys, awesome work.*

Here are some key references to previous dives in Coelecanth Sump:

- Speleo Spiel 411 (Stefan Eberhard 2015 dive)
  - Speleo Spiel 235 (Nick Hume 1988 dive to the end)
  - Speleo Spiel 210 (first 1985 dives in Coelecanth)
  - The TCC Exploration Journal has a few things
- On dive day, I offered the support crew the option of coming through the roof sniff or staying dry with

the stove – the latter option was unanimously chosen. This distinct possibility had partly driven the decision to use 7L steel tanks and one less undergarment layer, so that I could be more comfortable walking with full kit to/from the Coelecanth Sump. “Comfortable” was a relative term and it was pretty hot and hard, but on the plus side it made flopping into the sump pool most pleasant. I left the support crew about 4:35pm and it took 25 min-

utes to get myself to the sump.

The sump proved to be exactly as per Stefan's 2015 description, right down to the terminal blockage at the end. It only took me 3 minutes to get there at a depth of 18m, and a similar time to get back to the surface (plus a safety stop) – visibility was generally excellent both in and out. I was mindful of how old the line was, but it seemed fine and I left it in. I checked the walls and ceiling carefully for leads but nothing was apparent.

I really hadn't grasped the aptness of Stefan's description of the end of the cave. There is a spacious room approx. 2m x 2m, and 1.5m high, and it's almost like the far end of it has a stained glass window – such is the variety (white, black, grey, and more), beauty and clean-ness of the rocks apparently completely blocking the upward sloping passage – which is also dismayingly small considering the generous size of the underwater passage to get to this point. 7L steel cylinders had been select-

ed for their low profile and better squeezing ability, but there was no chance of squeezing in there (although the line did indeed disappear up into the pile).

The rocks are all rounded and vary in size from birds eggs to tennis balls. They are all completely loose and don't appear to have any smaller gravel or major silt associated with them. Closer inspection hinted at a small gap between rock slope and ceiling – but a single touch started the entire slope gently rolling



*Closeup of the bottom of the slope*



*My best (and most tantalising) glimpse up the rubble slope, early in the dive*



*Most of Coelecanth Sump is lovely*

down. I was still safely in the larger chamber, but this was quite sobering. A fine mist of silt rose up the slope and that was the end of trying to see if there was a larger void not far up slope (it didn't look too promising).

I spent 20 minutes or so pushing armfuls of rocks to one side as more came down to replace them. There was plenty of space to do this safely, and the automatic feeding mechanism was a joy to work with. Eventually the auto-feed was less effective and I had to start reaching a hand up the slope to pull rocks down.

I could feel enough space to get into, and managed to gingerly get a body length or so up the low continuing passage – perhaps 25cm high and 75cm wide. The slope seemed stable now but the passage was tight enough that an unplanned avalanche would be quite suboptimal. My bubbles running up the ceiling and the shifting slope had obliterated visibility so it wasn't possible to see what the cave was doing ahead. It didn't feel like it was getting any bigger but my experience with underwater gravel slopes in other JF caves is that there is often a pinch point with a roof step. Admittedly, all those slopes are with pea-sized gravel or smaller.

Gas and thermal reserves were reaching limits not conducive to further pushing, so I retreated. In hindsight there was plenty of gas left for more digging, just not for pushing restrictions. I did a long

safety stop as a nod to the time spent at 18m and the exertion required post-dive. This was also a factor in choosing Nitrox32 (32% oxygen, compared with the 21% of air) as the breathing gas, which helps reduce the risk of decompression sickness (the bends) a surprising amount.

The stumble back to the support crew did a good job of warming me up again and they were pleasantly surprised when I was well short of the 3 hour callout time. This trip and two subsequent others eventually got all the dive gear out of the cave, leaving only the weights (4x 1.5kg threadable, 2x smaller line weights) from Stefan's 2015 dive trip.

**A dive in upstream Pendant Pot is still waiting for someone to attempt.**

### Thoughts for future divers:

If the dive was more accessible, it'd be easy digging and a red hot lead. Given that there are dry leads well beyond the end of the sump and the effort required for a dive, it's rather less so. Still, I would love to find out what impact my efforts made, and similar efforts will eventually yield dividends, at least on passing the rubble slope. And at least the underwater passage is well defined and free of rockfall.

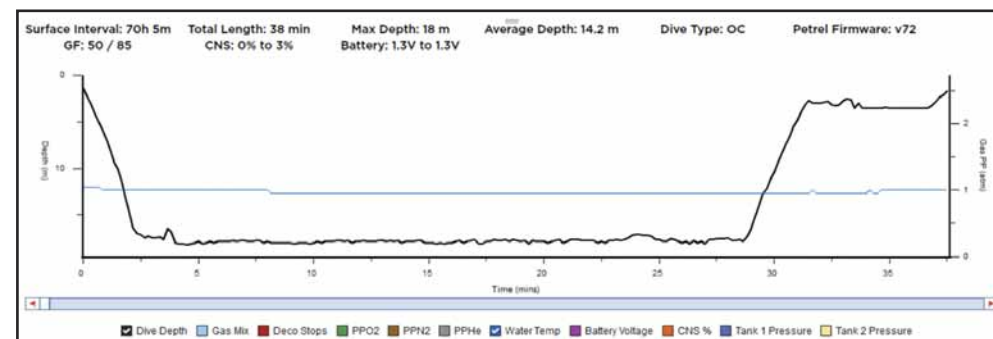
I have GoPro footage – ask me for it. I'm still getting to editing and posting a video.

In reviewing the GoPro footage I noticed a potential infeasibility at the base of the left wall (looking

downstream) at the very start of the line (ie. the pink tape on the wall). This might be where the Black River flow rejoins the sump, which would be nice to pin down. The terminal room and the final line tie-off are such that your bubbles don't go up the onward slope until you stick your head close to it. I tied off my reel to the existing line, got light and GoPro sorted, and then held my breath to have a



The rubble slope leading into the unknown



Dive Profile

peak up the slope while the visibility was still clear. Highly recommended – you may need to get eyes close to the slope, but should be able to look up through the area I've cleared.

I would assume that the rocks I've cleared are sufficiently far away from the constricted areas to be unlikely to be washed back up the slope. None of the previous dive reports indicate any serious attempt at digging. However, the line disappearing into the slope does suggest that sometime in the past 33 years an event(s) occurred to bury it and the lead weight that Nick Hume used as the final tie-off point. The flat rock floor and distinct line where the slope starts is ominous though.

The dive gear was most appropriate, if I do say so myself. I wouldn't change 7L steels or contemplate a wetsuit (too deep – it will compress and be cold). Using nitrox was mentally nice. Dive time and gas required to reach the coal face is small – calculate turn pressures accordingly. It might be a good idea to plan for a sequence of dives, to allow for actual

viewing of dig results. Perhaps in this case, a 9L carbon fibre could replace one of the 7L steels for a long initial digging dive (or several), really clearing out the lower, more accessible sections. Without apparent water movement, it would be safest to wait a week if you want proper visibility, although overnight might be sufficient.

### Dive gear used:

- Drysuit, with one less undergarment layer than I normally would use for a leisurely dive in June
- 2x 7L steel tanks
- Mix: Nitrox 32 (nice considering time at depth and post-dive exertion)
- Gas: start pressure 250b/250b, end 90b/130b (total 1960L used)
- 4x 1.5kg weights
- Nomad XT sidemount wing/harness, fins

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# Sun Springs

By Guy Bryant

*Every few months a bunch of us old cave divers from the 70's and earlier get together for lunch. The usual crew includes Paul Deloach, Mary Ellen Echhoff, John Zumrick, Bill Mane, Jane Gray, Steve Foreman, Dale Sweet, Court Smith and myself. On February 21st, 2019, we gathered at Jessica's Bistro in Lake City, FL for lunch. During the lunch Court told me that I should check out Sun Springs.*

Court had retired at Sun Springs near Bell, FL on the Suwannee River. As a member of the home owner's association, he had access to it. Court had retired from cave diving in the 80's so he jumped in the water with a single tank and looked at the two cave entrances in the spring basin. He said both were small but might be accessible using side mounted tanks.

Finally, on June 5, 2019, I had time to go visit Court and check out the cave entrances. I asked Tracy Niesent if she would like to check it out with me.

She is the most flexible, time wise, of my current dive buddies and can dive just about anytime that I can. We both arrived at Court's house at 10am ready to see if there was any cave to be explored. The spring looked really inviting and very clear. I had never heard of any cave diving in the past at Sun Springs, so we were hoping to explore some virgin cave. That is, if we could get inside at least one of the entrances that Court had looked at. We placed our tanks at the springs edge and geared up.



Guy Bryant  
PHOTOGRAPHY

If you come up the spring run from the river there are two vents in the basin at about 13 ft of depth. There is one on the left (south) and one on the right (north). We first checked out the south entrance and quickly determined that it was too small and low to get into. So, we then swam over to the north entrance which was small, but definitely big enough to get inside. The entrance measured about 4 ft wide by 5 ft high. Tracy led the way with her reel in hand and started into the cave with me following behind. About 8 feet in we noticed an old tattered dive line. Oh well, not a virgin cave after all.

This old line only went about 20 feet before it was tied off and ended. The passage continued ahead at about 2 feet high. We had been in 3 foot high passage up to the end of this old line. Tracy continued on pushing through the low tunnel in front of me. I followed, squeezing and wiggling through. At a couple of places I had to move sand and clay on the bottom over to the sides just to fit through. After a total penetration of 68 feet we came to a restriction about 1 foot high. We could look through the restriction and see that it opened up on the other side. Tracy tied off the line and fortunately at this restriction the tunnel widened

enough to effect a turn around, thus keeping us from having to back out.

After exiting the cave, we reported to Court what we had found. We were all a bit disappointed that the cave did not open up and continue on. But, Tracy and I decided that we would try digging out the restriction on our next dive and hopefully continue to explore more passage in this small cave system.

I later found out that Jerry Murphy had been the first person to dive the spring. I contacted him and he said that during the Summer/Fall of 2009 that Eric Deister and he had helped the home owner association clean out the basin. During that time Jerry made a foray into the north entrance. He said that he didn't go far and reeled his line back up as he exited. So, the line that Tracy and I had found was placed by someone else since Jerry's dive.

Tracy's and my second dive at Sun Springs to try digging out the restriction occurred on July 18, 2019. We met at Court's house and he once again let us onto the spring property. We had brought some hand shovels and a small hoe to move sand and rocks out of the restriction. Fortunately, the cave was wide at the restriction which meant we could basically get side by side as we worked. Only

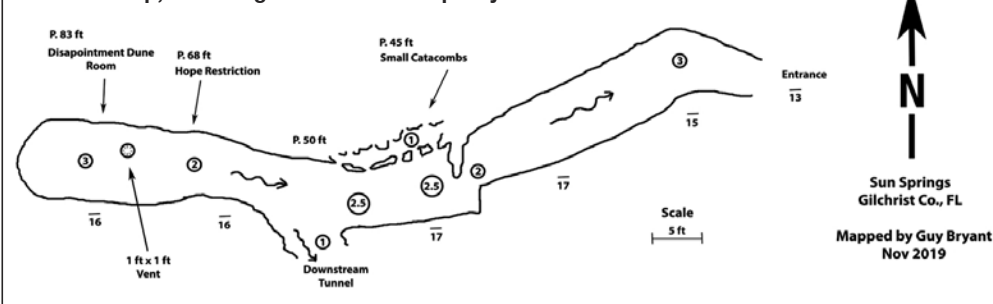


Guy Bryant  
PHOTOGRAPHY

Tracy in the spring basin swimming toward the north entrance of the cave.

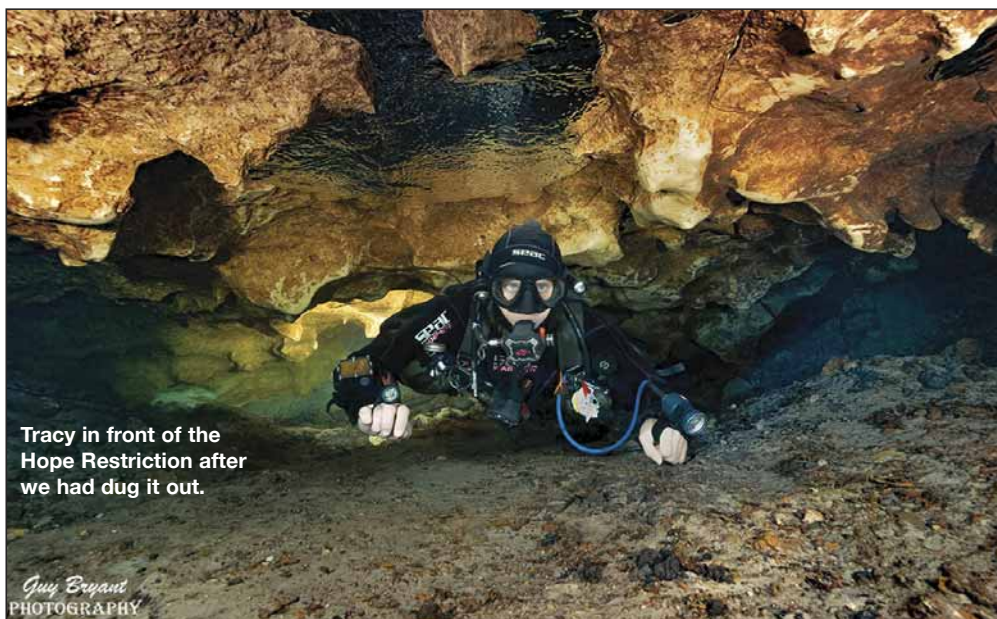


# The cave map, not a large cave but it is a pretty cave.



problem was the ceiling to floor was only 2 1/2 feet high. Tracy is much smaller than me so she got right up to the restriction and started digging into the sand. It soon became apparent that there were some large rocks buried in the sand and that we would have to dig all around them in order to move them out of the way. While Tracy was digging at the restriction, I backed up about 6 feet and started moving sand and clay out of the bottom and pushing it to the side. My intention was to make the floor to ceiling height a little more so that I could more easily position myself at the restriction in order to help Tracy dig the rocks out. After about 45 minutes I had a nice little trench in the floor that would enable me to more easily attack the restriction. We continued to work

another 50 minutes on digging the rocks out. It was slow hard work in such a confined place. Fortunately, the depth was only 16 feet so running out of air in our tanks was not an issue. We still had lots of gas, but we were tired from all the work. We had spent a total of 95 minutes continually digging and prying rocks out of the sand and clay. With all that work, we had only managed to widen the restriction from 1 foot high to about 1 1/2 feet high. It would obviously take another dive to make the restriction passable. Needless to say, when we turned to exit the visibility was zero. No problem, due to the good current we waited about a minute and had descent visibility for our exit. Tracy and I returned on September 11, 2019 for our second attempt at digging out the restriction.



Tracy in front of the Hope Restriction after we had dug it out.

Guy Bryant  
PHOTOGRAPHY

We had decided to name it "Hope Restriction". We were sure hoping we could open it up on this dive and continue exploring this small beautiful cave. As usual we met at Court's house and he accompanied us to the spring to unlock the gate. We grabbed our digging implements and geared up to once again attack that restriction.

We made our way back to restriction and immediately started digging and removing rocks. There were two huge rocks that we kept getting loose but sand and clay would come in from the sides and refill the hole we had just dug. This occurred as a result of trying to move the large rocks. So, we would started removing sand and clay again. Tracy kept trying to remove the sand and clay from the side that was refilling our holes but it just kept coming.

Finally! After 2 hours of rock removal we finally got the restriction opened up enough for Tracy to slip through and check out the other side. She found a sand filled room about 15 feet long with beautiful ripples in the sand that looked like miniature dunes. About half way into the room there was a vent in the floor bottom about 1 ft by 1 ft. This was where all the current was coming from. It was basically a solid rock vent so no way to dig it out. All that work, 3 1/2 hours total time digging, and we only got 15 more feet of passage. It was a disap-

pointment. Oh that's a good name. We decided to name it the Disappointment Room. Later after more thought we decided to incorporate the little dunes into the name since it was a pretty room. Hence the new name, "The Disappointment Dune Room". It kind of had a ring to it.

We decided we would return one more time to map the cave, take some photos and see if it might be possible to remove sand from the other south entrance. But, I didn't have much hope for the south entrance. About 50 feet into the cave, along the left wall is a low 1 foot high siphon tunnel. It is headed in a south east direction which would line it up with the south entrance which is headed in a north westerly direction. I'm pretty sure that the siphon tunnel discharges at the southern entrance. It wasn't until November 22, 2019, that Tracy and I returned to map the cave, take some photos and lastly, see if it is feasible to attempt to dig out the south entrance. Once again we met at Court's house and he let us onto the spring property. I readied my camera while Tracy gathered the digging implements which we then placed at the spring's edge. I also attached one of my strobes on one of Tracy's tanks to hopefully better light up the cave tunnel. We then geared up and headed into the cave. The first order of business was to take some photos and then exit the cave. After the pho-



Tracy going ointo the north entrance.

Guy Bryant  
PHOTOGRAPHY



tos I would solo into the cave to map it while Tracy attempted to dig out the southern entrance.

We made our way back to the "Hope Restriction" to take photos, as that was the only place in the cave that was wide enough for me to move around with my camera while Tracy posed at the restriction. I had to set the strobes on my camera and the strobe that Tracy was carrying to their lowest power settings since the cave was so small, otherwise I would have blown out the photos with no detail in them. After about 20 minutes of taking photos we exited the cave. I then grabbed my mapping slate and headed back into the cave while Tracy attempted to dig the southern entrance.

When I went back into the cave, I slowly took distance and compass readings. I also noted the width and height of the cave as I slowly moved along. Periodically, I would stop and make notes on some of the features of the cave so that I could include them on a simple map. It doesn't take much time to map an 83 foot long cave. When I had finished and exited I was greeted by Tracy at the entrance. She indicated that the south entrance dig was a bust. Which I suspected it would be, but as they say, "If you don't go, you won't know". Tracy said she tried to dig some and squeeze into the cave but it was just too small. When she removed some sand it quickly revealed rock and there was just no way to squeeze through the rock.

Above is the basic map that I made of the cave. For those not familiar with underwater cave maps, note that circled numbers indicate floor to ceiling

height in feet. Numbers with a line above them indicate depth in feet. "P." followed by a number in feet means "Penetration in feet from the entrance of the cave".

\*NOTE – Please understand that Sun Springs is on private property and diving is not permitted in the spring. We had special permission only to explore and map the cave.

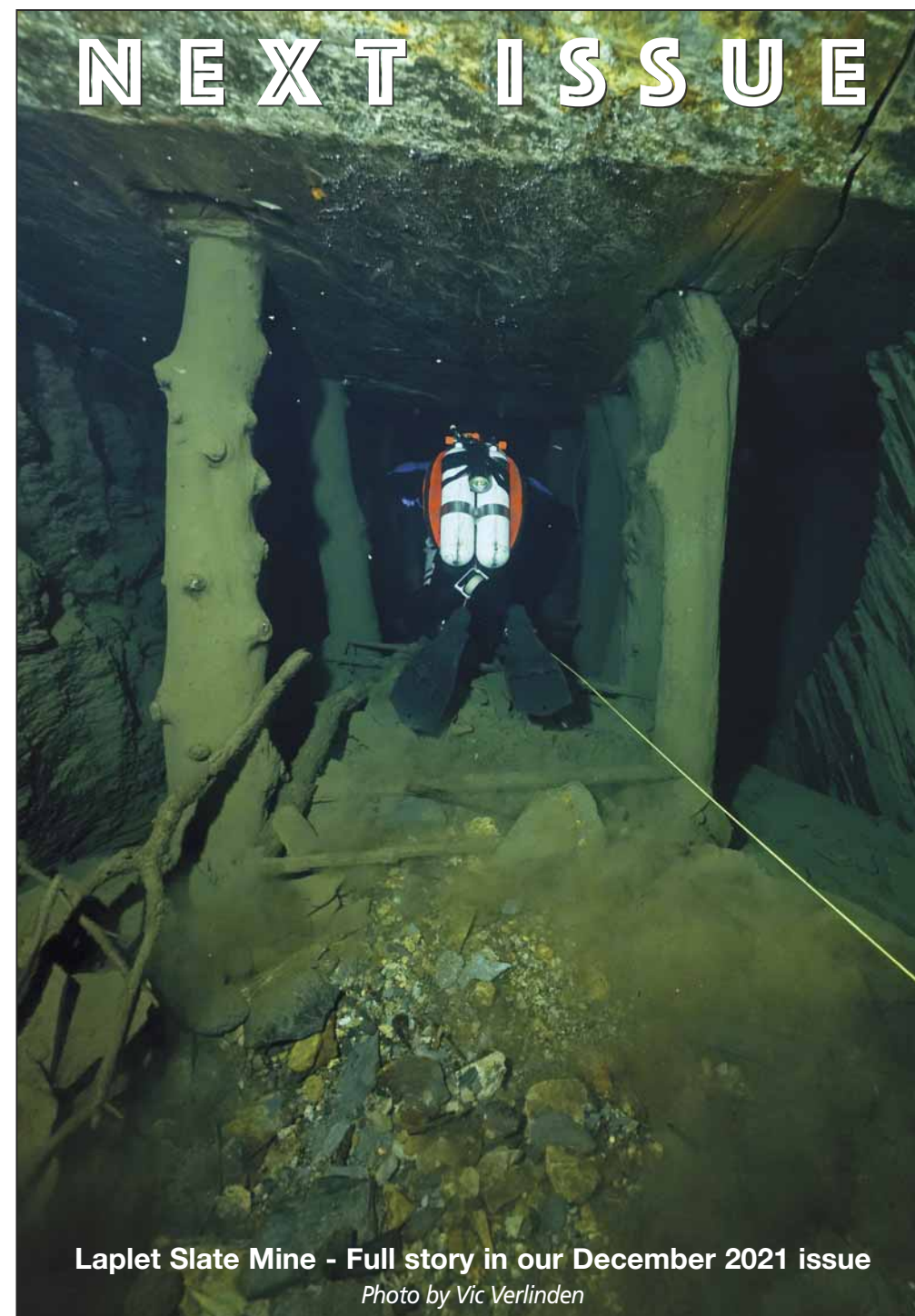
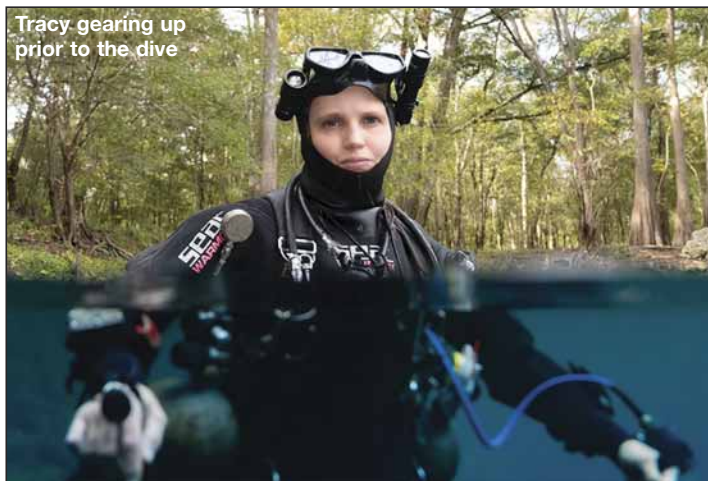
#### ABOUT THE AUTHOR:

Guy Bryant always had an interest in caves from early childhood. He had the good fortune to grow up in Valdosta, GA (USA) which is only 11 miles from the Florida border where many springs and sinkholes can be found with underwater caves. Initially, Guy was mostly interested in dry caving but after a few years made the transition from predominantly dry caving to cave diving. His first cave dive was in 1972 (while in high school) at Orange Grove Sink, which is part of the well-known Peacock Springs cave system.










He had the good fortune to attend high school with Court Smith who was a close friend of Lewis Holtzendorf. It was Court and Lewis who originally came up with the idea of line arrows using duct tape, hence the name "Dorf Markers". Guy and Court did a lot of dry caving in southern and northern Georgia and this friendship with Court eventually led Guy to start cave diving with Court from time to time. In 1978 Guy decided to make the transition to mostly cave diving with a little dry caving on the side. He learned to cave dive in an untraditional manner in the early years via mentorship

from Court Smith as well as input from other renowned divers at that time such as Paul Deloach and Sheck Exley.

For almost 50 years Guy has found and explored new underwater caves or contributed to the exploration of underwater systems in Georgia, Florida, Nevada and Mexico.



# CDAA INSTRUCTORS

NAME	Basic Cave	Cave	Adv. Cave	NAME	Basic Cave	Cave	Adv. Cave
<b>NEW SOUTH WALES</b>				<b>VICTORIA Continued</b>			
 FEATONBY, Tim (CDAA 3327) Worworing Heights, NSW Mob: 0402 129 253 E: tim.featonby@hotmail.com	Yes	Yes	Yes	 EDWARDS, Chris (CDAA 2247) Mob: 0417 116 372 Email: chrisedwards01@me.com	Yes		
<b>SOUTH AUSTRALIA</b>				 MONACO, Rubens (CDAA 1731) Mob: 0413 429 533 E: info@idcscuba.com.au	Yes	Yes	Yes
 PAYNE, Timothy (CDAA 2640) Mob: 0448 147 927 E: Tim@diveessentials.com	Yes	Yes	Yes	<b>WESTERN AUSTRALIA</b>			
<b>VICTORIA</b>				 BICANIC, Josip (CDAA 4691) Mob: 0412 571 779 Email: joseph_b@me.com	Yes	Yes	
 BARCLAY, Gary (CDAA 1735) Mob: 0407 527 921 E: garinda@bigpond.com	Yes	Yes	Yes	<b>OVERSEAS</b>			
 BOWMAN, Jane (CDAA 1880) Mob: 0407 566 455 E: janelbowman@hotmail.com	Yes	Yes	Yes	 BENNET, Samuel (CDAA 5203) Mob: +44 7508 079 191 E: bennett96@outlook.com	Yes		
 CLARIDGE, Linda (CDAA 2214) Mob: 0408 052 070 E: garinda@tpgi.com.au	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
  - d. Provide the **NAME** of the injured person/s.
  - e. 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 15 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 – Pete Wolf	0413 083 644
State Emergency Services	132 500	CDAA Site Director – Kelvyn Ball	0428 842 259
Mt Gambier 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