

# Roe Plains, WA

## Olwolgin Cave Revisited (Part 1)

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CEGWA

**O**N 6th October 2011, a remarkable thing happened when I decided to revisit a muddy pool of water I had last looked at almost ten years before.

The pool was in the entrance chamber of Olwolgin Cave where 2,700 m of cave diving passages have been explored and mapped since it was first dived in 2002 by me and Andy Nelson (CEGWA). While all the diving and exploration was being done from the 'main' (north-east = upstream) pool, the 'other' (south-west) pool had been ignored.

At the bottom of the 'other' pool, an awkward restriction was negotiated which led to a further 80 m of silty and reasonably small cave-diving passage. Later that same afternoon, with full 7-litre cylinders and reels of knotted guideline, my primary dive buddy, Alan Polini (CEGWA) and I extended the new line straight into large phreatic conduit for several hundred metres with no end in sight. Turning on our thirds, we left an exploration reel tied off to the top of a large rock in the middle of a big tunnel.

While surveying back out of the cave, several substantial side passages to the south were noted. There was disbelief around the campfire that night as Alan and I excitedly relayed our discoveries to the rest of the group. Sweet dreams indeed that night, and many more since.

### EXPLORATION IN EARNEST

This discovery was made at the end of a Roe Plains sightseeing trip with Brian Kakuk (Bahamas), Ken Smith, Richard 'Harry' Harris and Grant Pearce (all CEGSA).

As Alan and I had to drive back to Perth the following day, they prepared for one more dive in the new cave, but only after Brian and Ken had dived next to extend the line, and more importantly, retrieve Ken's reel still in the cave.

On the next morning, Brian and Ken explored several hundred metres of the main conduit (A Tunnel) and when they turned around on their thirds, Ken reported, 'I



Alan Polini (left) and Paul Hosie after their dive on October 7 2011

was so overwhelmed by what we had just done that I was shaking with excitement, so much so that I couldn't hold my pencil steady enough to write down the survey data, so Brian had to do it for me.'

As soon as Brian and Ken were clear of the water and it was obvious that extending the main conduit would require stage bottles, Alan and I headed in, laying over 400 m of line in side passages they had noted that were to become the C and D Tunnels. A gas failure (free flowing 2nd stage) experienced by me at the furthest penetration of the C Tunnel (600 m) during this dive meant that no survey data were collected.

While Alan and I drove back to Perth, Harry and Grant extended the main tunnel using stage bottles to a penetration of over 800 m with the passage continuing, although it had reduced down to a much smaller, side-mount-only sized tunnel.

### AG'S DREAMTIME

Before the rest of the group headed for home, Brian Kakuk was to make a sensational discovery while checking side tun-

nels at a penetration distance of 400-500 m. After pushing through a small, non-obvious side tunnel for 20 m or so, the passage opened into a tunnel of generous proportions: 10-20 m wide and 3-5 m high. This stunning cave-diving passage continued for almost 200 m before Brian had to turn on his thirds, where he tied off on a rock in the middle of a large, continuing passage.

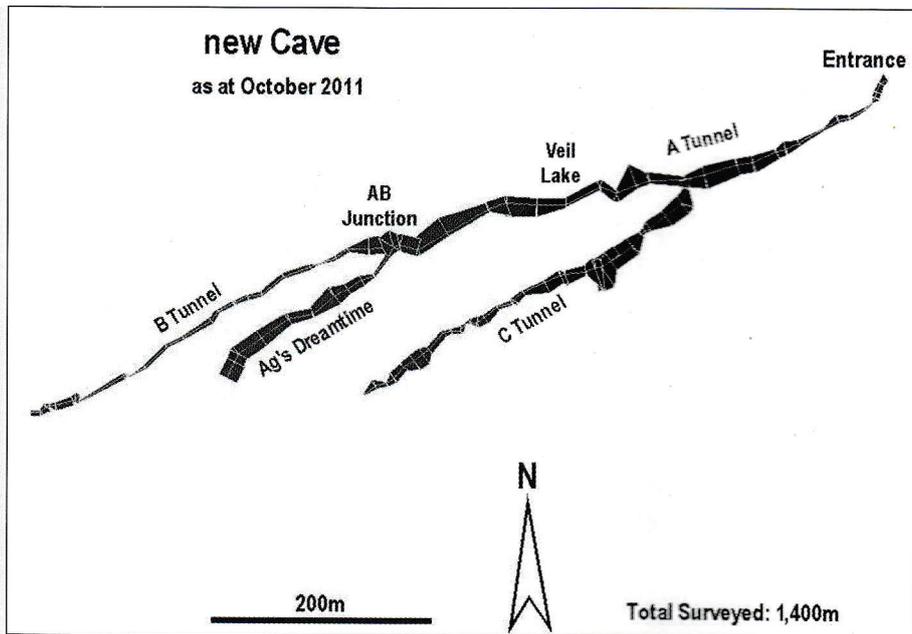
On Brian's suggestion and with the approval of her family, the passage was named after Australian cave diver Agnes Milowka, who had tragically died in a cave diving accident earlier that year.

Brian had this to say shortly after his discovery: I was hoping to maybe name that big passage Ag's Dreamtime Tunnel, or something along those lines.

I was thinking about Ag while I was swimming down that borehole, wishing she was showing it to me.'

And so it was that during three days of diving in early October 2011 over 1,400 m of diving passages were explored and surveyed following the initial discovery.

There were three main leads, each con-



PAUL HOSIE

Ken Smith (left) and Brian Kakuk after their dive on October 7, 2011

tinuing in parallel passages to the south-west with penetrations of 600 m (A), 800 m (B) and 550 m (C).

It was realised from the start that this was potentially a very large and complex cave system and therefore I established strict requirements for surveying and station numbering by the exploration teams, which is why I am referred to by some as 'Sergeant Major Survey.' Following the initial exploration hiatus, the passages were labelled according to their potential for continuation.

### CEGWA CREW RAID

It took little encouragement for a return trip ('The Raid') to be organised by a small crew of keen CEGWA cavers and cave divers for a four-day long weekend in late October 2011. Kim Halliday and Craig Challen paired up as a dive team with us, possibly over-enthusiastic with our rebreathers and scooters ready to explore caverns measureless to man. The four divers were brilliantly supported by Christie

Allen, Mark Brown and Jeff Gibson; they looked after everything around the camp and the cave so that the divers could focus on the cave diving.

Given the zero visibility and awkwardness of the first 30 m of diving through the entrance restrictions, a thick rope donated by Craig was fixed in place by tent pegs and weights, thus improving the situation massively.

The next piece of infrastructure to be put in place was a staging area, which was brilliantly set up by Alan 80 m into the cave. The staging area consists of a rope fixed horizontally to the side wall with several hanging lines, each having several D-rings on it to clip off scooters, stage bottles, rebreathers etc.

Owing to a few equipment problems and the fact that Ag's Dreamtime Tunnel shut down a further 70 m beyond Brian Kakuk's tie off, only 600 m of passage were explored and surveyed on this Raid trip, but there were still a couple of leads at the end and many side passages marked for exploration.

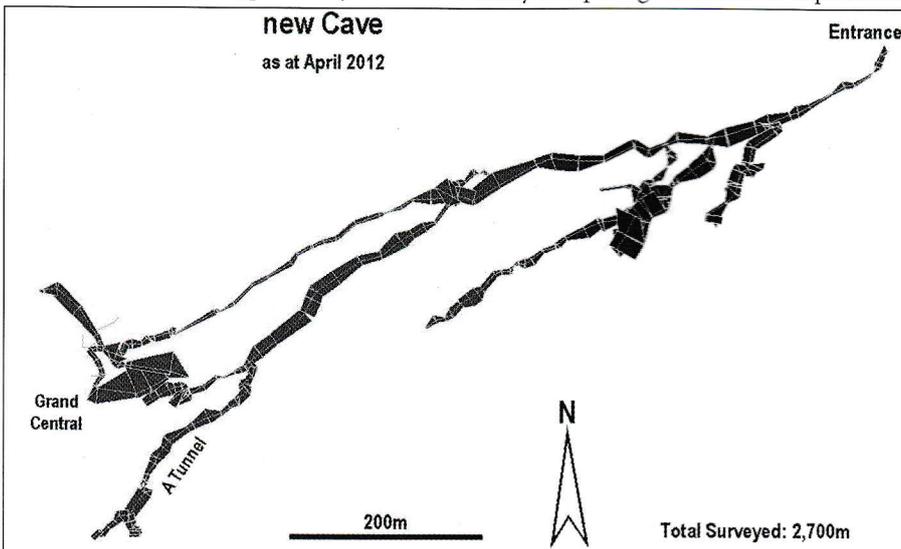
On the last dive of this trip, a significant discovery was made at the end of the B Tunnel by Alan and me—The Sanctum, an 80 m long, 20 m wide, 2 m high room/passageway which had further leads to explore but was now over 900 m from the entrance and only accessible with sidemounts.

The next visit was during Easter 2012 involving Alan Polini, Grant Pearce, Chris Edwards (CDAA), Ken Smith, Liz Rogers (VSA) and me.

A significant event occurred early during the course of our diving when something shifted in the entrance restriction whilst four of the divers were in the cave. Owing to the zero visibility conditions we couldn't be 100 per cent sure what had happened, but we believe the Letterbox rock (a big chunk of several hundred kilos) had shifted into a new position.

This shook us up a bit and stopped us diving for a few days until we were confident that the situation was stable and it was safe again to enter.

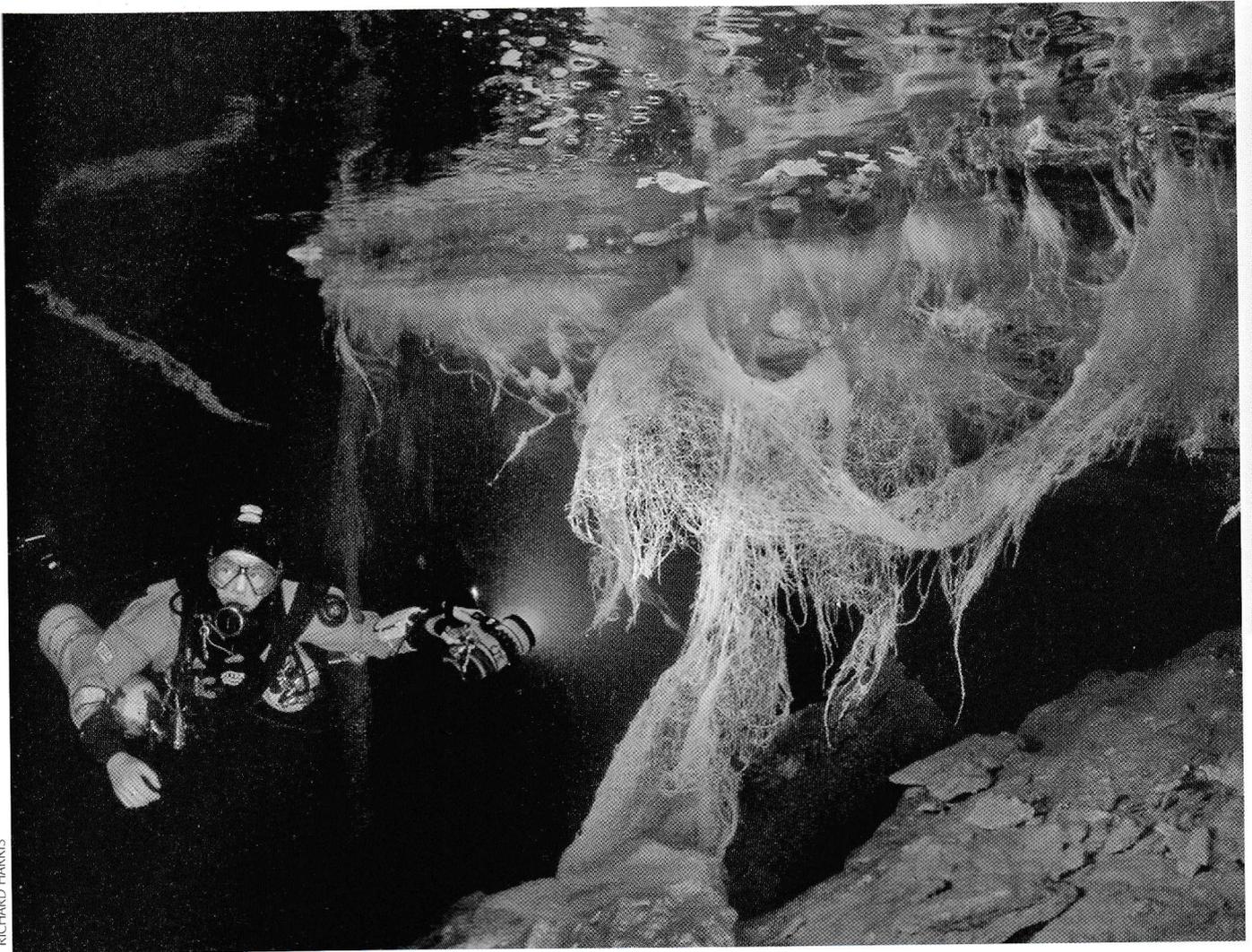
We added only 700 m to the survey on this trip, bringing the total Downstream passage length to 2,700 m. The most significant discovery was made by Grant and Chris when they extended the B Tunnel line to the south-west from The Sanctum and entered an enormous room which proved to be 130 m long, 30 m wide, 3 m high with a completely flat roof at -4 m. Subsequent visits have shown that this remarkable room can be accessed from five different passages around its perimeter, hence the name Grand Central.



PAUL HOSIE

### CAVE DIVING CONSERVATION

I have written several articles and given presentations to the Australian caving and cave diving communities regarding the uniquely fragile features found within the



RICHARD HARRIS

*Olwolgin roots*

Roe Plains caves. The basis of this claim is that the most fragile features are organically based, rather than mineral or crystalline as found in other cave systems.

Whereas in dry caves it is the speleothems that warrant the greatest conservation and protection efforts, in these underwater caves it is bacterial colonies, threadlike tree roots and tree tap roots that predominate.

These features are very spectacular, with some of the tree roots hanging in drapes up to five metres long. They are incredibly fragile because they are decaying—rotting and breaking down—and this makes them highly susceptible to damage from divers' exhaust air bubbles, fin kicks or body movements.

It is fortunate that the exploration of Olwolgin Downstream has been done following ten years of exploring and mapping of the Roe Plains caves—Olwolgin Upstream and Burnabbie Caves.

This experience has enabled the exploration team to identify the fragile features and place the guideline so that divers, including themselves, avoid damaging them.

This strategy is supported by floating

reflectors and signs that identify the feature and ask divers to swim directly above the guideline for a short distance around it. And so it is that underwater track marking has been implemented with the hope of conserving these unique and spectacular

features for future generations to enjoy.

In Part 2, we will continue the story of the exploration of Olwolgin Downstream Cave and provide the most up-to-date status of the work being done there.

<p><b>STOP!!</b></p> <p><b>Please swim directly above Guideline for next 50m, or...</b></p> <p><b>your exhaled bubbles WILL obliterate the hanging roots of Olwolgin Cave.</b></p> <p><small>This is a Conservation Initiative brought to you by: Australian Speleological Federation - Cave Diving Group Cave Divers Association of Australia</small></p>	<p><b>Thank You.</b></p> <p><b>for recognising the fragility of this cave.</b></p> <p><small>This is a Conservation Initiative by: Australian Speleological Federation - Cave Diving Group Cave Divers Association of Australia</small></p>
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*Front (left) and back of conservation alert signs*