CEGSA NEWS

Newsletter of the Cave Exploration Group (South Australia) Inc.

Volume 44 Number 2 **Issue 174** **MAY 1999**

CAVE EXPLORATION GROUP (SOUTH AUSTRALIA) Inc.

PO Box 144, Rundle Mall, Adelaide, South Australia, 5000.

http://www.users.on.net/smilner/index.html

Meetings held on the fourth Wednesday of each month, except December, at 7.30 PM usually in the Royal Society of South Australia meeting room, Natural Science Building, South Australian Museum.

1999 Committee

President	Marie Choi	(H) 8322 0895 (W) 8326 1777 (E) battymariec@picknowl.com.au
Secretary	Jules Gheude	(H) 8342 9025 (W) 8393 4298 (E) jgheude@baea.com.au
Publications	Athol Jackson	(H) 8337 8759 (E) atholjax@cobweb.com.au
Quartermaster / Training	Simon Kendrick	(H) 8331 3750 (W) 8223 5544 (F) 8223 5347 (E) soc@scoutnet.net.au
Safety / Search & Rescue	Frank Hankinson	(H) 8322 4300
Landowner Liaison Coordinator	Michael Caruana	(W) 8231 2850
	Garry Woodcock	(W) 8226 3950 (E) jacgjw@camtech.net.au
Museum Representative	Neville Pledge	(H) 8272 5483 (W) 8207 7454

Other Office Bearers

Public Officer	Graham Pilkington	(H) 8395 6713 (W) 8396 3044 (E) pch@chariot.net.au
Treasurer / Membership	June MacLucas	(H) 8261 4180
Key & GPS Holder	Simon Kendrick	As Above
Librarian / Records	George MacLucas	(H) 8261 4180
Trip Liaison (Logbook) / Research Coordinator	Steve Milner	(H) 8278 3784 (W) 8303 8904 (F) 8232 3381 (E) steve.milner@adelaide.on.net

Area Coordinators

Nullarbor Plain, Eyre Peninsula	Max Meth	(H) 8625 2700 (E) maxmeth@arcom.com.au
Upper & Lower S E, Glenelg River	Kevin Mott	(H) 8723 1461 (W) 8735 1131 (E) kmott@denr.sa.gov.au
Adelaide	Grant Gartrell	(H) 8556 9100 (E) bluebree@dove.net.au

Representatives

Australian Speleological Federation	Peter Kraehenbuehl	(H) 8278 4531
SA Speleological Council	Graham Pilkington	As Above
	Simon Kendrick	As Above
Caving Leadership Standards - Working Group	Peter Kraehenbuehl	As Above
	Marie Choi	As Above

Cover Photograph:-."THE ULTIMATE DIG" A Mount Gambier limestone building block quarry opens up an entrance to a cave. See trip report on p. 34. *Photo by Marie Choi.*

CONTENTS

Volume 44 Number 2 **Issue 174** **MAY 1999**

QUARTERMASTERS NOTE.

The high usage equipment will be stored at the Scout Shop so arrange with Simon to get it from there when required for a trip. At least three (3) days notice is required. **Gear must be picked up from and returned to the Scout Shop only.** We are looking for someone to store the less used equipment as Simon does not have the storage space so if you can help, please let Simon or one of the committee know. It will be greatly appreciated.

The deadline for copy or background material for Volume 44 Number 2 (Issue 174) must reach the Editor by Wednesday **11th AUGUST 1999**. Material not meeting this deadline may be retained for possible use in a following issue. The preferred method is on 3.5" IBM floppy disk or via E-MAIL at atholjax@cobweb.com.au as an attachment, in Word or ASCII text format. Of course other forms of communication will still be gratefully accepted.

PRESIDENTS SPOT

Well this is my first report since being elected. I hope I do a good job for all those that have faith in me. I will do my best. I have only just chaired my first meeting as I was away with my job for the March meeting. Being a Social Worker I tend to be a little laid back when it comes to protocols, and am not a great one for red tape, however please don't hesitate to let me know if I get a little too laid back.

We got through most of the business for the April meeting, in a relatively short time until we got to the trip reports. One of our members commented on how great it was to hear about all the "new" discoveries that had taken place, and it was. It has been a while since so many discoveries and extensions had been made so lets try to keep it up.

It was good to see Steve Milner back safe and sound from his Vietnam trip, and to see the slides of his great trip. If only we could have all been there.

Now to some house keeping issues. Simon has offered to act as a temporary Quartermaster until we can find a new one, however the gear is not in his possession as yet so I do apologise to any that may have been inconvenienced by this. We hope to have that sorted out soon. We do however need all equipment returned as soon as possible as we need to audit the gear when Simon receives it. If you have any **CEGSA** equipment, ladders, helmets ropes, harnesses etc they need to be returned.

The June long weekend is the "Bat Count Weekend" we hope this will also be a chance to socialise, check out the notice in the magazine. Kevin and Fred can really use our assistance on such a big project, and some of our Victorian Members are coming from Buchan so it would be good to see a few Adelaide Cegsa people there.

Marie Choi

%%%%%%%%%%%%%%

Cavers Wedding

On January the 2nd 1999 Damian ('the Pom") Grindley and Amanda Wagener were married at a small chapel in Lake Tahoe, Sierra Nevada Range, California USA. Amanda and the Pom met as members of CEGSA a couple of years ago. The Pom joined CEGSA in his first week in Adelaide, he had just arrived from England to do a Wine making course and has been an active member since joining. Amanda was introduced to CEGSA by Dave Glowacki and has been a member since 1997 and first met "the Pom" and the rest of us on a Flinders trip. Their friendship quickly blossomed into "love". The Pom is currently working in the USA at a winery. He hopes to eventually settle permanently in Australia.

Marie.

TRIP REPORTS

Lower South East: Easter 1999

Trip Members: Marie Choi, Linda Deer, Amanda Grindley, Dave Glowacki, Fred Aslin.

Linda Amanda and myself left Adelaide around 6pm on Thursday evening. We stopped at the Tintinara Service Station for the obligatory cup of coffee where my mobile phone decided to jump" out of my pocket and into the toilet. If you want to know if it was before or after ask Amanda who assisted in washing the cover. We picked Dave (the Hipman) up at Naracoorte on the way through and arrived at Mt Gambier at 1am.

DAY 1

Fred arrived around 9am Monday morning and it was decided to help him tidy up some survey data for a few small caves in the Drik Drik area. These are un-numbered features that Fred had located on an earlier trip and wanted to complete the survey on. What started as a ½hour job took until lunch, as some earlier data had been inaccurate. Fred took our newest member Linda under his wing and proceeded to teach her how to plot a cave with the rest of us taking measurements and readings.

The cave has 2 entrances (both a minefield of cow pats). We could only make voice contact, as we weren't in the mood to grovel in cold water (though Marie tried to convince us all it might be good 'Exposure' for any upcoming Tassie trips!!). The first entrance petered into a low flattener with water covering much of the floor. The second entrance leads into a standing size chamber. It contained a lone bat, a small number of cave crickets and some swallow nests. There were also two deep pools on either side of the path just inside the entrance and a small amount of degraded decoration.

After lunch we moved to another feature on the other side of the road. Here we found 2 large entrances that appeared to be possibly connected and a third entrance that Fred had not been aware of that was covered by a few large logs. Whilst Linda Dave and Amanda surveyed the first cave in the small cliff face, Fred and I looked at what appeared to be a dam. We found that it was being fed by a slow trickle on one side and was then disappearing down a plughole on the other side through some rocks.

The rest of the team completed the survey to the first cave, which consisted of a thirty metre Diameter chamber with a small passage leading to a smaller chamber and flatteners. A light and voice connection was made to the second entrance but was not pushed due to its size and the evidence of a fox's den (all of us recalled the story of Tracey coming face to face with one). None of these features are numbered.

SATURDAY.

Fred had some work to do on his property so the rest of us went to check out some features near Tantanoola. First stop was a sandy solution tube entrance that had been looked at in the past but nothing had been done. Dave attempted to get in and found that the tube reached a flattener that was not human size. We took a few measurements and moved on.

Next stop was 5L300 (Breathing Tube Cave), which didn't take long to find. This is a solution tube entrance that drops into a narrow joint passage. There is a breeze coming from the floor hole, which Linda and Dave followed but did not do much, some wallaby and other recent bone matter was noted.

We stopped for lunch where upon I proceeded to throw my ham cheese and pineapple roll at Linda when I was startled by a large millipede crawling on my arm. I made another roll, which I shared with Linda in a more appropriate manner. Next stop was Tindales E as we heard CAVEX would be there over the weekend, however it was not to be. We then had a quick look at the entrance to 5L322, which was filled with branches again!

Our next stop was a couple of holes over at the old Tantanoola Headquarters. I had looked at these on few occasions with the “Pom” but we always decided to wait for another time as the tightness of the entrances put us off. After Dave and Linda argued over hip sizes Dave was able to enter 5L309 with relative ease. He modified it slightly for Linda to enter and the survey gear was lowered in. Amanda and I waited on the surface as we realised they would need assistance getting out.

Dave and Linda disappeared for a few hours and on returning to the bottom of the entrance they noticed the maggot-infested carcass of a snake. Linda has a Uni project where she has to collect a number of insects and she could be heard telling Dave “to be a man, and get her some samples.” His comment was something like YUK! I think he still remembers the Cow in S102 with fond memories! Amanda and I assisted both of them out only to find out that they had got so carried away with exploring virgin passage they forgot to survey. They estimate that they travelled down some 500 metres of passage and there was still more to explore before they turned back.

The cave has an 8 metre deep solution tube entrance that drops into a 5 metre diameter chamber, 1metre high. It then splits into 2 main passages. One is a SE/NW controlled joint passage about 200 metres in length, averaging 2 metres roof height and 2.5 metres wide that ends in a rock pile. The second heads in a westerly direction and after 40 metres turns at a right angle slightly larger SE/NW joint controlled passage of 250 metres, with an average 3 metre roof height and 3.5 metre width that breaks down into a rock fall passage. There are further leads.

We spent the evening measuring hip sizes, and proved to Dave that he had the smallest hips at 80 cm’s. We won’t tell you what the rest were.

Sunday

Fred arrived at 9am and was excited about what had been achieved the previous day with 5L309 as he and others had attempted to enter it without success in the past. We then headed out to the limestone quarry that Fred has been working on for the past month or so. He showed us the entrance he had dug using an axe as well as the entrances that have since come about due to the quarrying. We also saw the spot where Fred had warned the quarry owner not to keep working due the to the roof thickness. The next day a piece of machinery had fallen through. We also noticed a number of fist size holes in the quarry floor where we took some interesting photos.

We took a photographic record of the cave entrances and parts of the cave and completed the survey with Fred. We lunched in the quarry before moving on to the next site in the Mount Gambier forest area where we looked at 3 caves, 5l283, 5L284 and a yet un-numbered cave.

We did the un-numbered cave first that was found by a local. This consisted of a 4 metre (approx) deep solution tube entrance that tapered in at the bottom. Whilst Linda and Dave explored the cave and mapped it the rest of us sat on the surface discussing future projects, when Amanda was visited by a very large dung beetle, which was about to crawl on her (Amanda doesn’t like Bugs). Fred proceeded to tease her by giving it a little cuddle. I thought Amanda was going to jump down the pitch! (we realised later and tried in vain to find the #$%!@ bug for Linda’s Uni project) Linda and Dave returned in a relatively short time having surveyed the cave which they described as a small rock fall chamber about 20 metres in diameter with one small lead off to the north with a breeze, that would require a lot of work to follow.

Next cave was 5L284, the initial description and map in P. Horne’s book, “Lower South East, Cave reference book” was accurate This cave has developed on 2 levels and Dave and Amanda pushed the fissure in the lower level and added approximately another 120 metres, where they came across some reasonable decoration, lots of bones (relatively new) and water at a depth of 15 metres. The upper level of the cave was generally phreatic type low tight passages.

We then moved on to 5L283, which we located with ease and its description fits with what’s in P. Horne’s book. Linda attempted to push a lead down the side of the sand and boulders but she was only able to extend it by 4 metres. This cave has no further leads that we can find.

Monday

Stopped off and saw Fred as we headed back to Adelaide to collect survey data from him so we could do some work on 5L304. The survey is only partially complete and requires some wall detail. Whilst Amanda, Dave and Linda set to work on that I began our trip report. After a highly motivated start the group entered the wrong entrance but once they made their way to the right entrance they spent 2 hours joining the dots on the previous survey. 100 metres of that were done and an extra 60 metres were added to the survey. There was still more to do but we wanted to get to Naracoorte at a reasonable time. The rest will be completed on our next trip.

At Naracoorte we caught up with Steve Bourne, Liz Reed and many of the other guides. It was the first time Amanda had seen the new centre so she was duly impressed. We sat and drank great cappuccinos and ate excellent food at the bent wing Café. Oh, beware of sitting under the edges of those sails when they have water in them. Amanda is lucky she moved when she did otherwise she would have copped a few gallons on the head (I knew she needed a shower but not that badly!). We left Naracoorte around 3pm.

All in all it was a fun and productive weekend, Fred was in great form and can be a real shit stirrer when he wants to be, just ask Amanda about that bug.
That's all for now folks.

Marie Choi

%%%%%%%%%%%%%%

Sellicks Hill - Status Report

According to the CEGSA calendar, on the first and third Thursday nights of each month, and occasionally perhaps on a Sunday, there is a trip to Sellicks Hill. Most of these trips actually happen, with one or two regulars, and others. Every trip is a working trip of some sort, and as the work is ongoing, and significant advances don't happen on every trip, there is not a great deal to report week by week. From time to time a status report is worthwhile, hence the following.

I'll start briefly at the beginning. I got a shock the other day to be flicking through CEGSA newsletters from 1969, and reading cryptic reports, written by me, about the discovery of what we called at the time Sellicks Hill Cave, 5A5. It was thirty years ago that the then Highways Department upgraded the South Road at Sellicks Hill. In the process the road was cut further into some bands of limestone on the side of a deep gully, and a small section of cave was exposed. This small cave was eventually given the number 5A6. I had a long-standing interest in the limestone of the area, and on the day the road was re-opened saw this cave and had a quick look. It was an enlarged joint crack about a metre wide several metres high and from memory about 7 or 8 metres in length, narrowing down at the eastern end and partially blocked by decoration including a nice shawl. I came back a few days later with my camera to photograph this, but in the meantime someone had thoughtfully put a brick through it.

I carried out a careful investigation of all the new cutting faces in limestone alongside the road, and was excited to find a small hole some distance above the road with warm air coming out of it. After many years of hard work, involving many CEGSA members including Mac MacDonald and Max Meth and anyone else we could rope in to rock hauling and concreting, this hole yielded what is now known as 5A5, a significant vertical fissure cave about 75 metres deep, developed by joint enlargement almost perpendicular to the bedding of the rock. Somewhat reminiscent of the current 5A25 push, Max and I spent untold Friday nights down that hole with lump hammers and star drills and quick setting cement mixed with water from buckets strategically placed the previous week under drips.

Although that cave is fairly simple in form so far, its exploration was characterised by a series of breakthroughs, with the size of the passages entered increasing each time we got deeper. There is no active digging program underway in this cave at present, although there is a good prospect according to the air flows through a difficult rockpile area about 50 metres down at the western end.

5A25 made much more sense after Mac Macdonald and I began the exploration of 5A20 at the invitation of Southern Quarries in 1991, in similar limestone several kilometres north of 5A5. Here the company had been intersecting fissures probably not all that dissimilar to 5A5 as they mined down through the limestone. We were invited in because they had intersected what seemed even to them to be more extensive cavities at a deeper level in the quarry. Although we were denied the opportunity for a comprehensive study of this cave when the company sealed the entrance and later attempted to destroy the largest known chamber with explosives, we were able in the few visits we had, to observe major trends and survey 1 kilometre of passage in what was undoubtedly and probably still is a substantially larger cave system.
5A20 exhibited development by enlargement of joints just like 5A5, and also like 5A5 the scale of the development seemed to increase with depth, but in 5A20 the cross joints linked at depth to even more extensive cave development along bedding planes, including large wide chambers. This more lateral development was possibly as a result of more shallow gradients in the passage of water through the system due to ponding behind the more impervious adjacent shale beds in what might be considered the downstream direction. There were many questions to be resolved about this system and its drainage, including evidence of big silt filled tunnels under a large area of the quarry floor, according to drill logs, as well as indications of a lower level of cave development in the north western end of the system into which the silt in that part of the cave had vanished.

Twenty five years after the discovery of 5A5, and still very upset about the destruction of 5A20, I decided to check out the limestone cuttings along the roadside near 5A5 once again, and perhaps not surprisingly, after a quarter of a century the earth abutting the rock faces had settled a few centimetres here and there. About 130 metres west of 5A5, I noticed a small hole at the base of the exposed rock, only wide enough and deep enough to put my hand in, but a hole nevertheless. The difference with this inconsequential little cavity was that on a cool July day it felt warm, suggesting that it was being fed by a bleed of air from a larger cavity further underground. I scratched a few rocks out of it there and then, and a week later returned with Gary Woodcock and Jeanette Chapman, armed with a few tools. After that the cave almost doubled in size. It was now almost big enough for a rabbit. More importantly, though, the more we unblocked it the better it looked, and the stronger the airflow became. Now, almost five years later this hole is now 45 metres deep, with more complex development than 5A5, and although progress downwards is slow at present, we have observed the same trends of cavern size increasing with depth. At present we are slowly enlarging a fissure that is just too narrow to squeeze through. We can see down perhaps 4 metres at a steep angle, and cannot quite see what happens at the limit of vision, although it possibly gets a little bigger. There is still good airflow, but in this location with high vertical fissures above our heads, the circulating currents caused by body heat make estimation more difficult. Almost every available space in the cave is filled with stacked rock. It was relatively easy hauling it out to the surface from higher up, but now we need at least 18 people to take rock out of the cave using conventional means. We can stack up a little bit more, but unless we sort something out in the next few months, progress will drop off drastically.

To try to estimate the potential of the cave system, I have conducted a series of fairly crude measurements of airflow in the entrances of 5A25 and 5A5 and correlated these with barometric pressure variation, measured with a barometer (actually an altimeter) at the cave entrance as well as looking at records from the Adelaide Bureau of Meteorology. The measurements tentatively and consistently indicate that 5A5 and 5A25 are connected, indicating the likelihood of a larger cave system at depth. The measurements also suggest that that cave system could contain in excess of 1 million cubic metres of air space, which would be a very large, but not impossibly large system for the extent of limestone in the vicinity. I am hopeful that within the next six months I will have the opportunity to instrument both cave entrances for a short period of time with recording sensors, which should resolve this.

The entrance to 5A25 is approximately 180 metres above sea level, and 90 metres above the valley floor below the road. We are therefore only half way to the valley floor so far in this cave, and it is not yet clear if and when we may strike the larger scale lateral development that is likely to exist deeper down. It may be around the next corner or we may have a long way to go. I'd like to find it before I'm too geriatric, but 30 years has already slipped by without too much effort, and by all accounts the next thirty goes quicker.

Last spring the picture got even more complicated. I got a bit restless and had another little wander across some limestone and found another little hole. This is close to the valley floor and a little towards the sea from 5A25. Like 5A25 the hole is yielding its secrets reluctantly, but certainly qualifies as a cave, to be henceforth known as 5A30.
At this stage it is too early to speculate usefully on the relationship of this cave to those above, if any, but that has never stopped an optimistic digger in the past, so let us just say that it is not impossible that they may be related.

While the valley obviously has a winter creek, not all the water flowing over a waterfall above the limestone flows over a waterfall on the shale below the limestone, whereas similar waterfalls on gullies to the north and south seem to behave more conventionally. If it ever rains again, it is proposed to check this out more carefully, but observations so far point to the possibility of cave development below the valley floor. What bearing this may have on the potential vertical extent of 5A25 is also much too early to predict.

It has been demonstrated in 5A20 that large caverns may be formed in these limestones, and in the case of 5A20 the speculated origin of the cave system was drainage from a relatively minor surface catchment. Drainage in the valley adjoining 5A25 and 5A30 has been on a very much larger scale, but still with impervious shale beds downstream of the limestone, so the cave development on a large scale at depth is not only quite possible but quite likely, and consistent with the rough airflow measurements already undertaken.

With all this potential excitement, you would think people would be queuing up to work on the cave, but that is not exactly the case, although over the years a large number of people have put a considerable amount of effort into advancing the cause.
There are too many people to list individually in this report, although some deserve special mention. You know who you are, and I hope that we will all have the satisfaction of major discoveries in future as a result, although even what we have already is both sporting and photogenic. Gary Woodcock and Steve Milner worked hard in the early days until commitments elsewhere dragged them away. I would particularly like to mention in dispatches Frank Hankinson who has helped on innumerable Thursday nights without complaining, well not too loud, anyway, knowing that he wouldn't be getting much sleep before heading off to work at an hour of the morning that I didn't even know existed. Jules Gheude is also heavily involved these days when he's not roaming around the Flinders Ranges. I always knew him to be a man of vision. David Bowey and Simon Kendrick on several occasions enthused their Venturers to line up in a row and pull rocks. It is great to see a system going where the buckets are travelling smoothly and well over a tonne of rock comes out of the cave in one session. The only problem is that we need about another twenty sessions. It is also great to see some of those Venturers bitten with the cave bug and even come back to 5A25 for another go.

In conclusion, Thursday nights were proposed because at the time they suited most people. If you wish to get involved, and Thursday doesn't suit, please contact me with alternatives and we may be able to arrange something. It could be history in the making, and even if not, it will help to keep you fit.

Grant Gartrell

%%%%%%%%%%%%%%

RESEARCH IN THE REDWOODS! 24/25 APRIL 1999

Cave **R**esearch **F**oundation Lilburn Sequoia National Park. California USA.

Damian "Pom" Grindley, Peter & Ann Bosted (Calendar fame) Dr John Tinsley & 9 others

That white fluffy stuff, snow, love It, but when it interferes with caving, that devotion becomes somewhat strained. Trip after trip in 99 got snowed out. I almost contemplated skiing in like some hardy folks, but as there is only so much you can bring on the plane. I decided my Rossi's weren't quite up to 2m of the stuff at –10 deg C besides the picket fence would have missed the planks.

A seven mile hike, through the largest remaining ancient giant redwood grove in the dark, without a rucksack or map in Teddy Bear territory, no worries, even used a flashlight that used LED's instead

of bulbs to light the way. Thought it worked great until I realised on the return in daylight how many of the monoliths I had stumbled past. Don't think it would have frightened the Teddies much either. Later Peter revealed his headset containing scores of multicoloured LED's, a very weird light quality.

Any road Lilburn (The longest cave in California @ almost 17 miles) is an interesting system, developed in a highly folded strip of marble sandwiched between huge chunks of granite. The Metamorphosed Limestone is thought to predate the igneous intrusions. It is amazingly complex, a passage junction on average every five meters (Sound familiar). It also has a very active hydrology. Some years the sediment deposition/erosion can completely change the drainage within the cave, filling in or cleaning out passages. Hence popping in post snowmelt to see what had moved where. I didn't go on this team but apparently not much had shifted about this year as the snow had melted slowly rather than in one big whooosh.

The remaining two teams (Mine included) checked off question marks on the survey. This is divided in to quadrants to aid in deciphering the three dimensional nature of the cave much like the Lechuguilla mapping. Most leads proved to be no goers. However a few metres where found in a supposedly blank wall and a couple of potential digs where thrashed around in for half an hour or so. One revealing a small 2mx3mx3m high chamber, the other 10m of 3mx3m rising canyon passage. The survey now seems to be coming to an end after more years than most people have fingers. However the Sunday trip extended the nearby Maze cave in the Lilburn direction. Open leads remain; Connection may be imminent. But 'tis a shame Lilburn didn't pass the seventeen mile mark this trip.

Interestingly Lilburn has a siphon that pulses every twenty seconds or so at the right flow rate (missed that). A unique species of something or other (Nope didn't see that either). Eleven entries in "Cave minerals of the world" including Geothite, Hematite, Azurite, Rosasite, Sepiolite, and Witherite (must have walked straight past them). But I did see a cave pearl the size of a golf ball and surprise, surprise, those couple of digs.

The CRF successfully interface with the parks who manage the area as a wilderness enabling scientific investigation of the cave. Trips are limited to CRF trips and probably so much is known about this cave due to its No 1 length status in California and the presence of the very comfortable Teddy proof, solar powered CRF hut and associated twin long drop right on its door step. 'Tis a great Hut.

You know the weird thing was that there was even some sad old git round the fire in the evening spouting on about Australia and how absolutely wonderful the caves where. I was going to correct his meaningless gibberish until I realised it was me. But seriously the Guys discuss Lechuguilla as though it was Corra-Lyn. Watch this space…

POM

%%%%%%%%%%%%%%

ANOTHER QUICKIE TRIP TO THE LOWER SOUTH EAST - MARCH 1999

Party: Peter Horne plus 4 overseas student friends, Wei Hua Hew, Eunice Boo, Kai Ying Sim and Sean Hor.

Well, here it is ... another inevitable trip report from one of those little running tour trips I have undertaken on and off with friends to the Great Ocean Road! But this time, there were a few things worthy of mentioning for the records, even if just in passing. Just in case people were beginning to think The Horne had truly fossilised somewhere!

Our trip commenced on Friday 12 March 1999, when we drove direct to our accommodation at the Koala Motel just out of Camperdown, Victoria, near Colac. While we Aussies are so used to the sight of our Milky Way galaxy overhead, folks from the northern hemisphere - eg Japan, Korea and so on - are often really shocked to look up and see so many thousands and thousands of stars and nebulae etc because many of our stars can never be seen from the northern hemisphere, our southern starfields are far richer than those in the north, and our skies are astonishingly dark and clear in the countryside compared with the smoggy, humid atmospheres so frequently encountered overseas.

(Did you know that in many of these countries they won't even dare drink their rain-water because it is so heavily polluted with airborne toxins?? I really have trouble convincing my friends to have a glass of our rainwater!...)

Anyway, on Saturday we went down to the Great Ocean Road via Gellibrand, seeing the great forests and then stopping in an absolute howling gale at Princetown for a short time before getting blown away at the 12 Apostles! A huge rain cloud came in from the sea so we went on to Loch Ard Gorge, where we were the first to emerge from our car after the squall passed, and then we went down onto the sand to visit Pearce's Cave (along with hordes of other tourists, once they realised there were no other monsters in the cave apart from us)! This was where the party experienced their first contact with the echoey, spooky underground world - all had good fun, got some nice photos, and then we went back to 12 Apostles for "sunshine weather" photos before heading on to London Bridge and then the lovely Grotto. We also stopped briefly at the Bay of Martyrs near sunset and then headed on to Mount Gambier, stopping to enjoy the cute little possums (Kevin Mott's favourite animals, eh Kev??) at Umpherston Cave. We also picked up our caving permit from the forest mill security gate and we spent that night in the excellent divers' cabins at Pine Country Caravan Park.

Sunday morning, 14 March, we did the usual touristy stuff, stopping to look down at Valley Lake, then the underpass to Blue Lake which was now a rich steely blue type of colour rather than the fluorescent light blue of earlier in the year, and then we dropped in to Kev's to pick up a ladder for our planned visit to Morgans Cave (5L34). Unfortunately Kev forgot to include any rope or climbing gear (might have helped if I had asked him!!), so we then did a quick drop in to cave diver Phil Argy's terrific little "Blink Bonney Lodge" near 5 Corners on the Millicent road, and Phil was able to provide 20m of emergency rope which was to serve perfectly for belaying the excited group into Morgans later in the day.

First stop was 5L74 which is one of the many "forest caves" and is a great intro for new cavers, but to my surprise for this time of the year (considering the warm weather too), as we were moving along the entry passage, I heard the chatter of bats talking to each other, so after confirming they were there in considerable numbers in the main chamber I asked the group to turn around and we left quickly and quietly so as not to disturb them any further. Bit of a pity, but it actually suited the non-male members of the party to not have bats belting around their ears, I think! I am mentioning this in this report because it might be a good idea for parties to perhaps put off any visits to this site for at least the next few months if they can - or at least to be aware that they could be disturbing the bats.

We headed down to Glencoe where the group experienced another type of local Aussie meat pie - always appreciated, I have learnt! - and then we went down to Tantanoola Forest area where we stopped briefly at The Pines (5L61) so I could show the group the reason why we go cave diving! There was a car there - "probably bloody cave divers", I mumbled - but the two guys we met were really nice and they were from Sydney, visiting the region to complete a CDAA "Cave" course with Gary Barclay and Linda Claridge. (Ever the opportunist, I asked them whether they could just pop back in to take a critical linking measurement from the surface to one of my underwater survey markers so I could finalise the map I had started there almost 10 years ago, but they were out of their cushy little dry-suits already - what WIMPS!! And I didn't want to ask if I could just hand-hold one of their tanks to finish the work myself - without a permit or proper gear, heaven forbid - not while so many witnesses were around, anyway!!)

I was again surprised to find that the water level was so low for this time of the year - LOTS of dry land where normally it should be under more than a metre of water. Really wonder what is going on with the regional water table these days!

We then said our goodbyes and drove to Morgans Cave, where the tube entrance had the desired effect on all who stared into it! 15 minutes later we were all safely down the hole and we did the main drag before coming back to the entrance and going "the other way". The cave, to my physical discomfort in many places, seems to have shrunk! Or maybe the tree roots have just increased in diameter, making it hard to get through in places (but then again, it's been a long time since I was last there and about 10 years since I dived the "lake" at the end of the cave - I couldn't have increased in girth THAT much, surely??). But the end crawlway was really squeezy for me (so envious looking back to see that the more "petite" members of our group - namely Eunice, Wei Hua and Kai Ying - were just squatting down and walking through most of that section), and emerging at

the “lake” I was shocked to find that there was only about 2-2.5m of water at the bottom of the fissure!!

When I dived the lake so long ago, the water was right at the entry portal and my line had snagged a number of times on the sharp little nodules and projections along the fissure, but now all of these features were suspended in the air - really weird view for me, having only previously seen them in the bright blue colour of an underwater lamp! We rested for a little bit and then headed out, the “easy” way --- what a mistake for me!! Someone really needs to take a hacksaw to one or two of those final roots! Once through the final restriction I squatted to use my back and neck as a stepping-stone for the others, and then we exited, driving down to the Little Blue Lake (5L9) for a quick wash-off before hurriedly preparing for our trip home. (Little Blue is also the lowest I have ever seen it - about a metre lower, with heaps of stromatolitic formation now exposed all around the walls). We left the Mount around 5pm after dropping Kev’s ladder back, and had an uneventful drive home.

It was another fun trip, reminding me of the freedoms we enjoyed in the days of yesteryear, and I really enjoyed sharing these experiences with such a nice group of friends. Some may even go on to become cavers of one type or another ....!!

Peter Horne.

%%%%%%%%%%%%%

Bridge Day: Sunday May 2nd

The weather was perfect for the bridge day and even brought people like “ Paul Harper” out of the woodwork. All up about 18 people attended the day including a few prospective CEGSA members. People practiced various skills including rigging, prusiking, abseiling, rebelays and SRT using only prusik cords. The day went well up until after lunch when an incident occurred whilst a visitor was abseiling using a whale tail. CEGSA’s safety officer is preparing a report that will highlight a potential problem then. Overall though it was a good day and there is another planned for **Sunday the 1st of August starting at 11am**.
FUSS requires all people attending the bridge days to use cows tails as safety’s.

Marie Choi.

%%%%%%%%%%%%%

Corra-Lynn: Saturday May 8th

Several of us who stayed at Minlaton overnight were impressed with the morning sunshine even if it did cool down a bit later and tried to rain a couple of times. Twenty six people turned up for the day which included a number of visitors and potential members, and we even had a few junior cavers attend. Bill Binks, Dave Glowacki and Amanda Grindley even drove up from Naracoorte. Some of us were hoping Steve Bourne would make it as we wanted to show him some different caves to those “soft” ones at Naracoorte but he couldn’t make it. (He is getting on). Everyone survived the day although some visitors weren’t too sure about their knees. Graham also gave an impromptu digging demonstration, (he used to fit there once). It was great to see all those who could make it. Some members are suggesting we make this an annual event, What do others think, and should we set a regular date? Please let the committee know your thoughts.

Marie Choi.

TECHNICAL and OTHER ARTICLES

Observations of the ACKMA Conference, Mount Gambier.

Call me old-fashioned, but I really enjoyed the ACKMA Conference in April. I was only able to attend the second half of it, so I was waiting at Naracoorte on Thursday morning bright and early when what seemed like two whole bus loads of old geezers with beards pulled up and disgorged their contents. Actually it was only one and a half bus loads of old geezers with beards. There was another half bus load composed of those of either sex who were pretending to be fully paid up members of the late twentieth century, but as a disguise it didn't fool me. I don't wish to dwell on it, and cave persons seem to take it for granted, but two bus loads of ACKMA members is absolutely nothing like two bus loads of an average cross-section of the community. It was worth the drive just to be there for that moment. I felt at home immediately.

As for the rest of the conference, what can I say? It was outstanding. The program ran to schedule, the food was good, the venue was good, the weather was good, the company was stimulating, and the papers were varied and interesting.

I had only one major disappointment. Earlier in the week, before I arrived, there had been papers presented in the first chamber of Blanche Cave at Naracoorte. Participants were then shown through the cave. Days later they were still raving about the magical sight of the third chamber in Blanche illuminated only by the soft light of 400 candles, smokeless, I hasten to add for the tut-tutters. By all accounts I had missed something really special.

I also missed the cavers versus Croatians soccer match, but perhaps that is just as well. It was obviously diplomatic to let the Croatians win. It was fitting to be having a conference about karst at the Croatian Club in a hall with a large map including the original Karst region on the wall, and it certainly was a wonderfully multicultural affair.
Nick White is something to behold doing the Haka.

At the AGM, Brian Clarke was elected President. Congratulations Brian. You've got to watch that guy. I know that the rest of the organising committee did a fantastic job too, but Brian just kept smiling and keeping things running on time and telling people where the toilets were and all that good stuff. At the final dinner, he reared up on his hind legs and gave an incredible performance, one of several bursts of entertaining oratory that evening, but by over a length and a half the magnum opus (that's racecourse jargon and the dinner was at the racing club). Bloody Brian regaled the assemblage with a merciless recount of every slightly embarrassing or otherwise hopefully forgotten happening for the last week, and we all felt guilty for laughing hilariously as someone at the next table's ears turned pink, and apprehensive that it would be our turn next. It was impressive to say the least, and there's a lot of ACKMA members wandering around now scratching their heads and asking "How did he do that?" and wondering if he is omnipresent

To top off a great week, I returned on the Sunday via Naracoorte, and located Steve and Andrew in Blanche Cave relighting the candles which had only half burned down, to give the 11.30am tour a special treat, before they removed them. So I did get to see the cave by candlelight after all. Disneyland is great, but this was real. It is an evocative chamber at the best of times, but somehow the candlelight emphasises the antiquity and the mystery in a way that no other lighting can hold a candle to (Sorry. I can't help it!). It is a memory I will treasure.

Grant Gartrell. 12 May 99

Fretted Stals near Gnome Point.
Photo: Ken Boland, April 1995.

Thampanna Cave, Part 3

Ken Boland

My first visit to the Nullarbor, and to Thampanna Cave, was on a Western Australian Speleological Group trip, led by Peter Bell, in May 1983. I had in my pocket, a hand-drawn copy of the Cave Exploration Group South Australia (CEGSA) map of Thampanna Cave derived from the Nullarbor cave index.

On the map I could see tacked onto the eastern end of The Drain a small suggestion of a squarish chamber. I was a new caver at that time, and a solo one to the end of The Drain. What I saw there did not seem to be quite like the little map.

On 30th April 1987, while on a trip with Max Meth, Graham Pilkington, "Mac" MacDonald and several others, Graham pointed out a nasty looking slot in the southeast extremity of the squarish chamber and said, "Dig".

So, we dug, Graham directed and we all went through. All, that is except Mac who, not to be idle, had gone searching elsewhere.

We found first his footprints, then carbide light prints, then Mac himself, beyond the new dig. He had simultaneously found a second route. Mac's route is the easier of the two, being via the True Tube and the V-Notch. It is the standard route used today.

It is important to understand the nature of these two routes, particularly the first, by which we entered the Railway Tunnel for the first time as it explains our choice of name. After the confines of the dug out slot by which we had gained access, the new space beyond, in which we could stand and walk about, seemed huge.

Today, with the dimming memory of that connecting dig, the Railway Tunnel appears somewhat less magnificent and a little smaller every trip. Anyone who was not involved in the earlier event will most likely agree with Mark Sefton's railway modeller's description, "The Railway Tunnel — 00 Gauge."

In part 2 (Boland, 1998) I wrote of the possibility of Thampanna Cave having developed partly, or even mainly, 'from the bottom up'. That is, a cave created by aggressive water percolating down through a multitude of tiny pathways to the level at which the cave is developed most fully — large, phreatic passages oriented along the joints at the fairly consistent magnetic bearing of 062° at 50 metres below the surface.

I also suggested there may be more such passages, as yet undiscovered, cross-linked by smaller passages on a second joint system along a magnetic bearing of 150°.

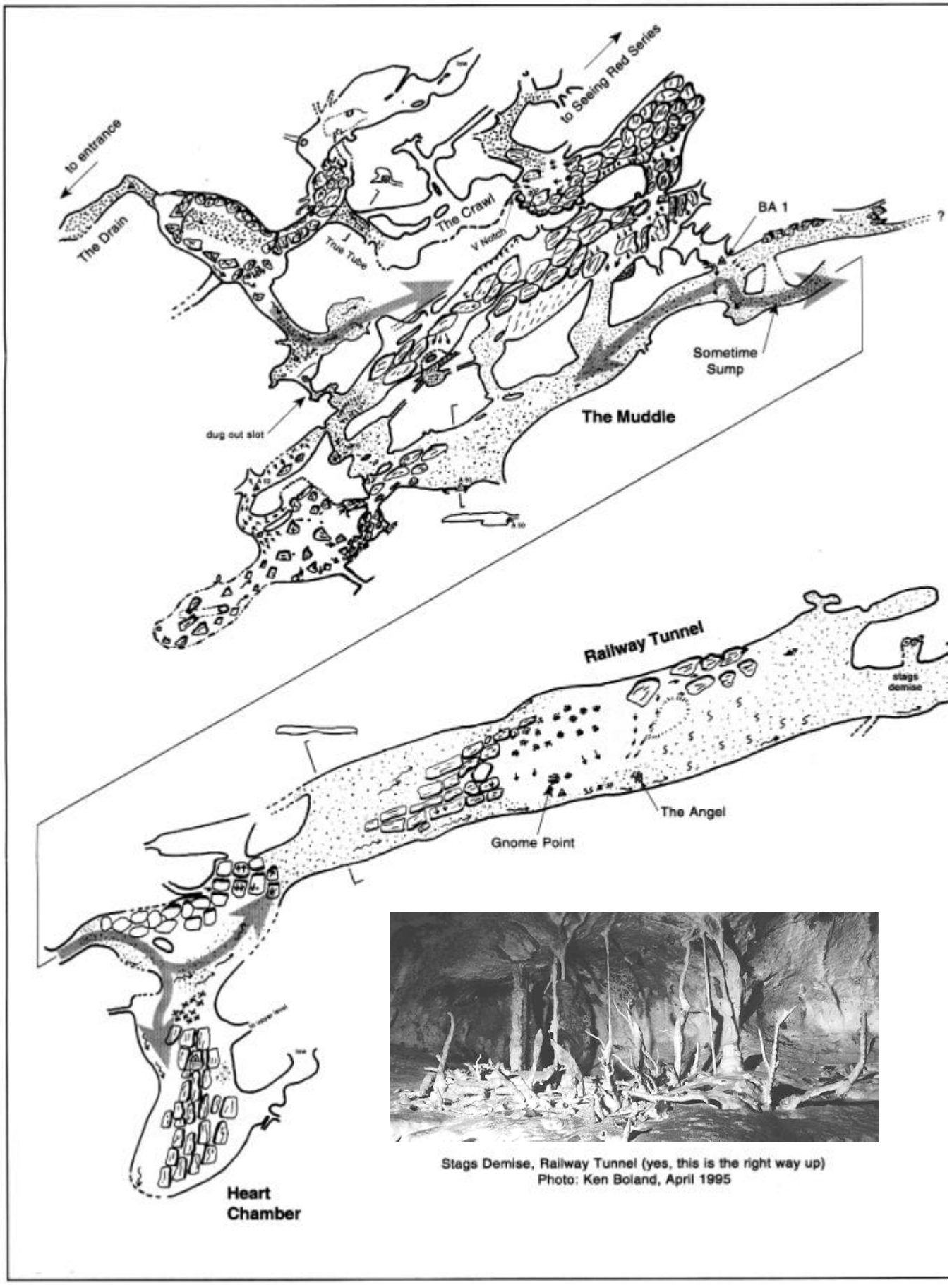
In the case of the Railway Tunnel, the cross-links are our 1987 dig and the True Tube. Without these little links there would be no known Railway Tunnel, "00 Gauge" or otherwise.

This suggests that exploration of other small passages, running at similar 150° bearings, may well lead to even more Thampanna. This will need time and energy to continue to traverse the known parts of the cave for there are many such passages, which remain unentered to date.

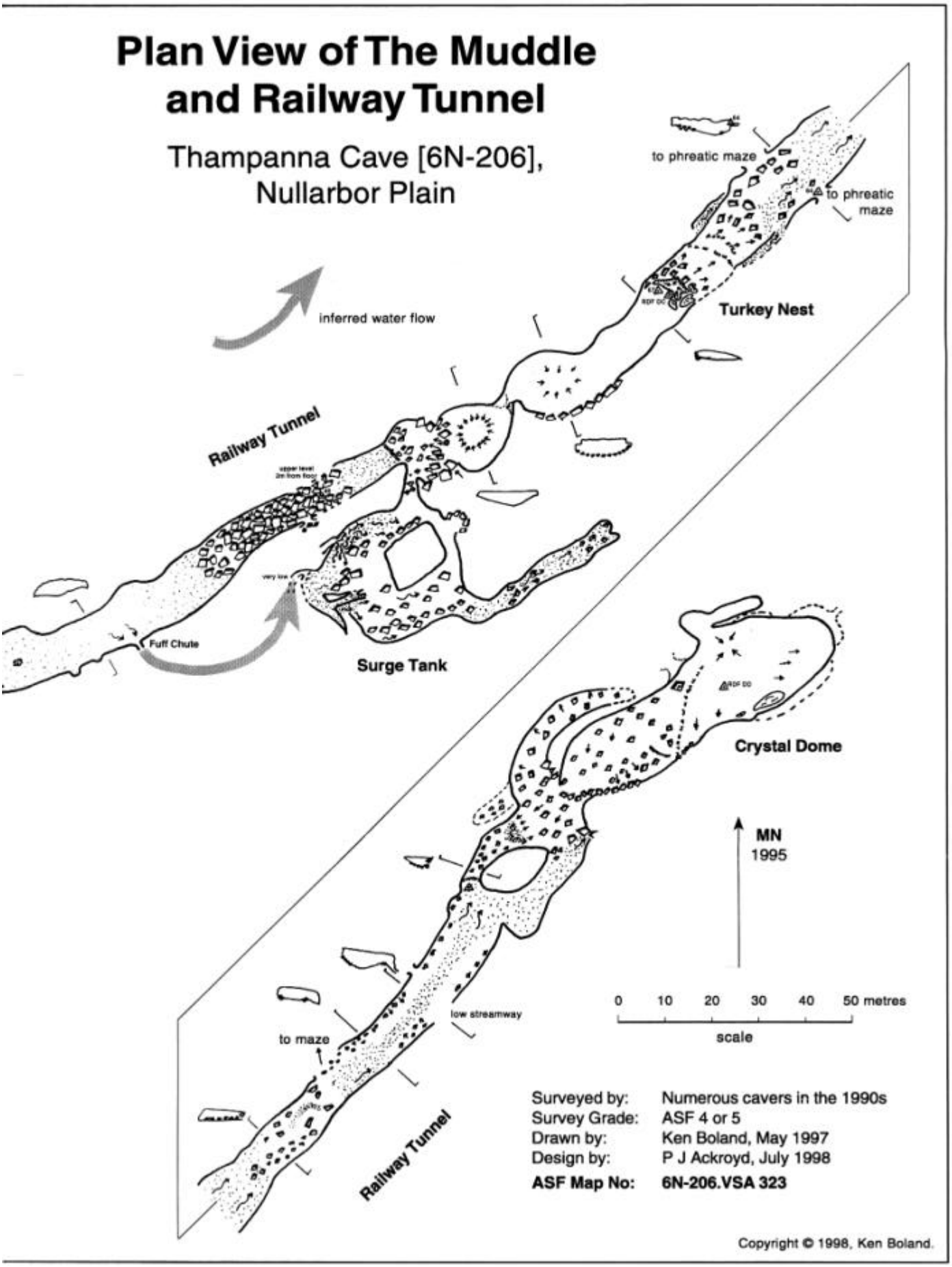
The Muddle

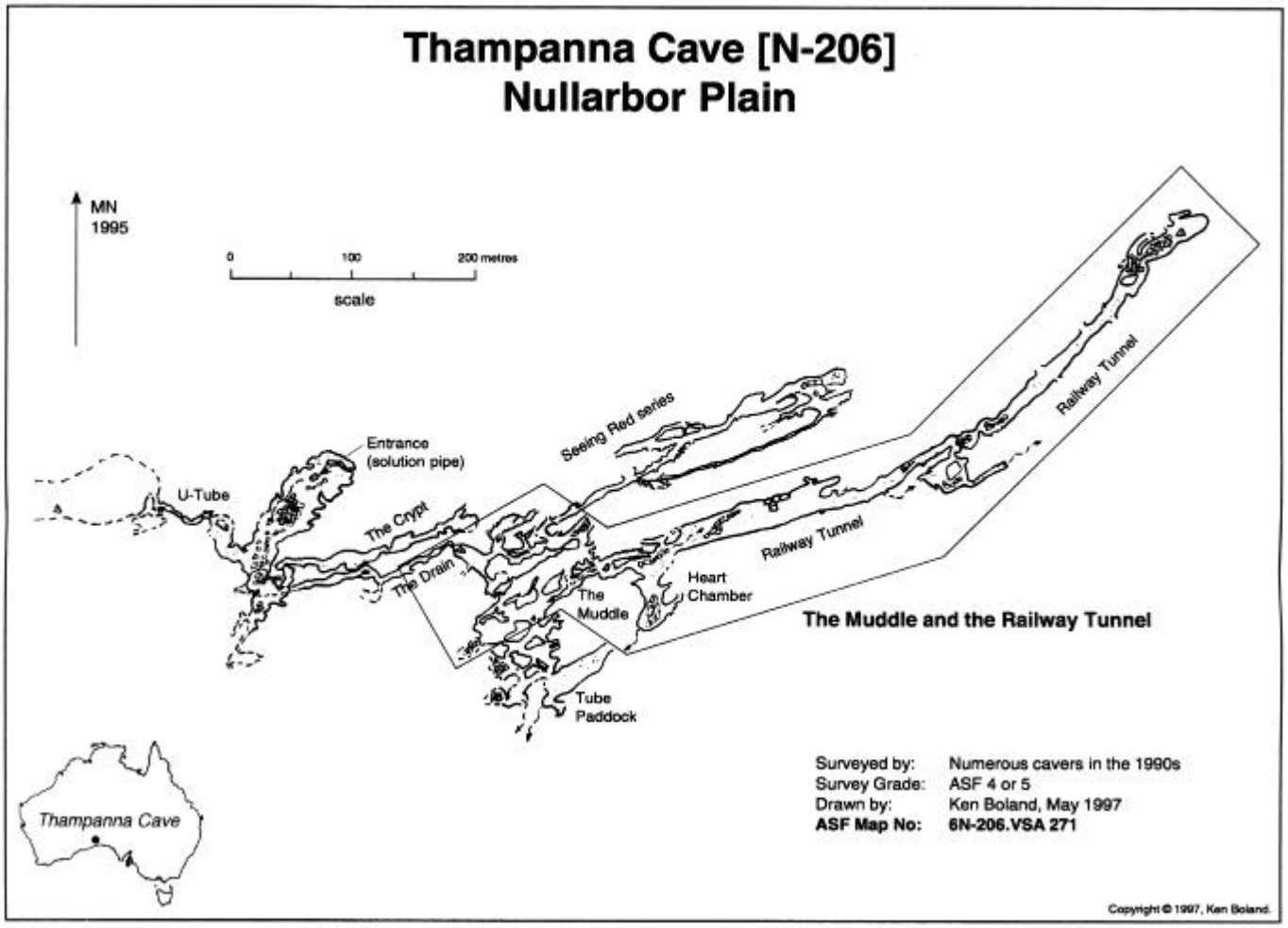
The Muddle lies just beyond The Drain. It covers an area of about 7,000m², which is greater than the plan area of the entrance chamber (5,500m²).

The Muddle is a complex mix of beautifully sculpted phreatic passage and caverns, extensive talus piles, awkward crawls, delicate "coffee and cream" sediments, gypsum



Stags Demise, Railway Tunnel (yes, this is the right way up)
Photo: Ken Boland, April 1995


Plan View of The Muddle and Railway Tunnel
Thampanna Cave [6N-206], Nullarbor Plain
to phreatic maze
to phreatic maze
Turkey Nest
inferred water flow
Railway Tunnel
Fuff Chute
Surge Tank
Crystal Dome
MN 1995
0 10 20 30 40 50 metres
scale
to maze
low streamway
Railway Tunnel
Surveyed by: Numerous cavers in the 1990s
Survey Grade: ASF 4 or 5
Drawn by: Ken Boland, May 1997
Design by: P J Ackroyd, July 1998
ASF Map No: 6N-206.VSA 323
Copyright © 1998, Ken Boland.



decoration, large echinoids and even what appear to be corals.

The Nullarbor is a dry place now. Rain, usually in the form of a sudden downpour, is rare so water flow in *Thampanna Cave* is now infrequent. Therefore, all my descriptions of water flow which follow are based on sand patterns, which seem quite clear, and not upon actual observation of water.

When water does flow in the cave it may go via The Drain. The end of The Drain, just to the north of the 1987 dug out slot, has coarse, sandy sediments across a floor of firm mud. The same coarse sands are found throughout an unsurveyed lower-level phreatic network beneath the Muddle's talus. These coarse sands seem to reappear at a "water-surged" mound just to the south of survey station BAI. The lower-level network may be entered via a slot a few metres north-west of station BAl.

At this point, on the south side of The Muddle, the flow path divides, going both east and west along the Railway Tunnel which has a firm mud floor here. Continuing east, the stream passage has been reported by one party as blocked by water at the time of their visit in April 1988 (Meth, 1988). The point at which it was blocked is normally a wide and dry flattener with a coarse sandy floor. This is now known as the Sometime Sump. It was also reported that, at the same time as the Sometime Sump was flooded, The Drain was dry. Therefore, it cannot be assumed that The Drain is the main water path, or even a water path, for water on its way to the Railway Tunnel.

The Railway Tunnel

The Sometime Sump opens to a wide area of very coarse sand at the start of the "main drag" along the Railway Tunnel and into the Heart Chamber.

At this point the water flow appears to divide again. Some of the flow continues north-

June MacLucas at the Angel.
Photo: Ken Boland, April 1995

The start of the Railway Tunnel. Photo: Ken Boland, April 1995.

east along the Railway Tunnel over finer muddy sediments, while some heads south through the Heart Chamber where it disappears under a very low flattener before re-emerging in a very wide, firm-mud floored chamber just south of the Tube Paddock.

Continuing north-east along the Railway Tunnel, one arrives at Gnome Point, a wide area of talus upon which sits an array of black stalagmites. These are the Gnomes, presided over by a fat and friendly Head Gnome, which is also survey station RDF-DB.

On the south wall are black shawls, including the Angel, then, with a quite dramatic change, comes a sandy crawl through a wide area hung with very beautiful, multicoloured, water eroded stalactites. This part of *Thampanna,* and the helictite chamber known as The Stag's Demise just beyond, are my favourite areas for photography.

About 50 metres beyond the Stag's Demise the flow in this part of the Railway Tunnel appears to disappear down a little hole called the Fuff Chute on the south side of the Tunnel.

From the Fuff Chute the water seems to flow to a lower phreatic area for a few metres before surging up about two metres into The Surge Tank. The force of the flow has left a rippled pattern in the gravel and sand just above the Surge Tank. However, the flow appears to end soon after, in a short and quite muddy terminal passage which again follows the magical bearing of 062°.

Meantime, the Railway Tunnel passage changes dramatically beyond the Fuff Chute. The continuous flat sand or mud floor gives way to a series of high talus piles culminating in the rather spectacular pit of Turkey Nest, It was so named by Max because, "if you slip, you're turkey."

Some effort has been expended in pushing passages around the sides of these talus piles. So far these efforts are far from complete and the possibility of yet another cross-link passage to a new 0620 tunnel remains. The same applies, only more so, to the phreatic mazes to the north and south of the main passage, about 50 metres beyond Turkey Nest.

Crystal Dome

This third part of the *Thampanna* story ends with a short mention of the large, terminal chamber called the Crystal Dome.

It is a high chamber soaring above massive talus blocks. Some of these blocks have large quantities of very old decoration still adhering to them after they have fallen and rolled to their present positions. There is a powerful sense of a very long time having passed since the decoration formed.

Furthermore, the origin and nature of the thick black calcite layers and the black stals and shawls to be found in the Crystal Dome remain a mystery.

Efforts have been made to dig beyond the final collapse but appear to be hopeless. However, exploration of the high level passages around this terminal chamber has been minimal and so further effort may well reveal a way on.

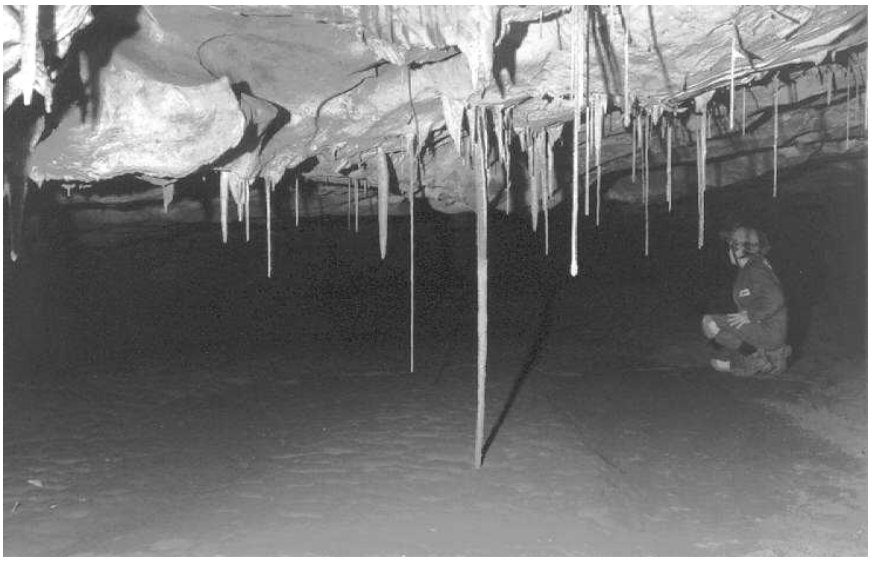
It is best to recall that the survey is far from complete and that *Thampanna Cave* has never yielded her secrets easily.

References

Boland, Ken (1997) Thampanna Cave, Part 2. *Nargun* **30(7):** 99-102.

Meth, Max (1988) Nullarbor. *CEGSA Newsletter* 33(1): 6-8.

Reprinted from Nargun with permission from the author and editor. Thanks to Peter Ackroyd for the scans of the photos.



The Railway Tunnel near the Stag's Demise. Photo: Ken Boland, April 1995.

MEMBERSHIP

NEW MEMBERS - WELCOME TO

FULL MEMBERSHIP

DEER, Linda	9905	6 Amethyst Cres.	Hope Valley	5090	(H) 8396 5386

COUNTRY FULL MEMBER

DEVINE, Paul	9906	PO Box 458	Kalgoorlie WA	6430	(H) 08 9021 6244 (M) 0419 934 988

ASSOCIATE MEMBERSHIP

SHEAHAN, Adam	9907	18 Ashton Place	Wynn Vale	5127	(H) 8251 6137

CHANGE of ADDRESS

SEFTON, Mark	8709	(E) seftons@senet.com.au
TREHEARNE, David	8604	(E) david.trehearne@transport.sa.gov.au

MEMBERSHIP FEES

Please remember that Membership fees were due on the 1st January 1999. It would be appreciated if members paid on time. REMEMBER WE NEED YOUR SUPPORT AND YOUR MONEY TO KEEP GOING. **PLEASE PAY ON TIME.**

JUNE MACLUCAS
MEMBERSHIP OFFICER.

%%%%%%%%%%%%%%

AN INVITATION

WHAT DO YOU THINK?

"After some REALLY wet caving with Motty, I wondered...."

Go Batty Weekend

Queens Birthday Weekend June 12th-14th

All Cavers and Caving Clubs Welcome (even some of you old guys) Help Kevin Mott and Fred Aslin out with a winter bat count in the Upper South East and then get together in the evenings for a BBQ. I'm told its great fun for young and old. Caves to be checked out include: Cathedral, Blanche, Robertson's and any others the little darlings hide.

<u>ACCOMMODATION</u>: Kevin Mott has arranged the use of Carters for $4 per night for those that need a place to stay and don't want to tent it. Contact Marie for more details. If you cant make that weekend Kevin and Fred would appreciate your help at other times so give them a call.

%%%%%%%%%%%%%%

Joint Club Training Day 2.

FUSSI **extends an invitation to all S.A. Caving clubs to join them on the university footbridge for vertical training and practice. BYO gear and lunch (there are no shops nearby)**

If you need to hire gear contact your respective club Quartermasters.

<u>FUSSI requires that everyone uses cows tails as safety's</u>

Sunday August 1st 11am – 4pm

The footbridge is located near carpark 6 at Flinders University, Just follow the signs. If you need more info contact Marie Choi on 019 696 299 or Email: battymariec@picknowl.com.au

CALENDAR OF EVENTS

Date	Type of Event	Description	Contact
9/6/99	Committee Meeting	Simons place	Marie Choi
12/6/99	Working Bee	Library and Records	George MacLucas
12-14/6/99	Go Batty Weekend	Bat Count in SE	Kevin Mott
23/6/99	General Meeting	Discussion on caving lights.	Simon Kendrick
26/6/99	Working Bee	Library and Records	George MacLucas
26-27/6/99	Surveying	Victoria Fossil Cave	Garry Woodcock
3-7/7/99	Caving	Novice trip to Bat Ridges (Vic)	Simon Kendrick and Linda Deer
14/7/99	Committee Meeting	Simons place	Marie Choi
17/7/99	**No Working Bee**		
18/7/99	Caving	Novice trip to Punyelroo and Gloop caves	Simon Kendrick
28/7/99	General Meeting	Presentation on Victoria Fossil Cave Survey	Garry Woodcock
31/7/99	**No Working Bee**		
1/8/99	Joint CEGSA/FUSSI Training	Flinders Uni. Footbridge	Marie Choi
11/8/99	Committee Meeting	Simons place	Marie Choi
11/8/99	**CEGSA NEWS**	**Deadline for Material.**	Athol Jackson
14/8/99	Working Bee	Library and Records	George MacLucas
25/8/99	General Meeting	Slides of recent USA trip.	Marie Choi
28/8/99	Working Bee	Library and records	George MacLucas
25/9 to 5/10/99	Caving	Old Homestead cave.	Graham Pilkington

%%%%%%%%%%%%%%

BAT RIDGE KARST AREA

Linda Deer and Simon Kendrick extend an invitation to all CEGSA members (novice cavers & new members included) to join us on a caving trip to BAT RIDGE karst area near Portland in Victoria

Saturday 3rd to Wednesday 7th July

This should coincide with both school holidays and University semester break.
Join us for only Saturday + Sunday or the complete 5 days.

For extra information and to book a place contact either Linda a/h 83965386 or Simon a/h 83313750 w 82235544 as soon as possible.

%%%%%%%%%%%%%%

RIVER MURRAY AREA

Simon Kendrick extends an invitation to all novice cavers and new members of CEGSA to join him on Sunday 18th July and visit Punyelroo Cave 5M1 and River Road (Gloop) Cave 5M18.

For extra information and to book a place contact Simon a/h 83313750 w 82235544 as soon as possible.