

Journal of the

Australasian Cave and Karst Management Association



THE FROZEN WATERFALL, SCOTT'S CAVE, MOLE CH. TAS. SPURUNG, 1939.

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FRONT COVER: Frozen Waterfall, Scotts Cave, Mole Creek, Tasmania. Photo: Stephen Spurling III courtesy of Stephen Hiller and Nic Haygarth.

INSIDE BACK COVER: Sarawak Chamber, Mulu NP, Sarawak. Photo: Robbie Shone

BACK COVER: Spellbound Tours, Waitomo Caves and Ruakuri Cave. Photos: Courtesy Dave

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FROM THE EDITOR



I hope that the holiday season has treated all show cave operators kindly and that everyone has had a successful period. I had worked nearly every Christmas holiday period since 1990 in the caves at Naracoorte and with a new job had no need to be there. So, how did I relax with this time off? I spent it caving and excavating fossil sites with partner Liz of course. A report of this work will come in the next journal.

It would seem that show caves are leading the way in the tourism industry in more than one state. Both Jenolan Caves and Augusta Margaret River Tourism Association for the Jewel Cave redevelopment have won their respective state tourism awards and will face off against each other at the Australian Tourism Awards, to be held in March in Cairns. It seems caves have it covered on both sides of Australia! I congratulate the teams at both sites and wish you the best of luck in March, may one of you win the top prize.

This journal features a report on the Piccaninnie Ponds deep diving project, one I was closely involved with while working with the Department for Environment and Heritage. It was a project that made me very nervous with the risks associated with diving over 100m deep through constrictions but also very excited with the information that the team was gathering. It was a very professionally run project and it is a real credit to all involved for the way they operated. Unfortunately, there has been another cave diving accident in Tank Cave in the South East of South Australia and the third fatality in a little over 12 months. After a long period without a fatality, 36 years or so, it is disappointing and distressing for all involved in the sport to lose friends and family in this manner.

The Cave Divers Association of Australia (CDAA) has responded by appointing a Safety Officer (Dr Richard Harris, co author of the Piccaninnie Ponds report and excellent cave diver) and an on line incident reporting system. The following is from the CDAA website.

Why incident reporting? Good risk management by the CDAA requires information from our members about incidents, accidents and even near misses. Most other cave diving associations worldwide collect information in

this way and the CDAA is overdue in doing the same. Hence, we are pleased to announce that any incidents can now be reported by completing an online form which can be found on the CDAA website.

At this time, we do not know how many of our members suffer decompression illness each year. How many rupture eardrums, get urinary infections from P valves, sprain ankles in lake chambers or even drop a tank on their toe? Information about all these accidents can help us devise preventative strategies, identify high-risk dive sites or better educate our members about risk. Accident analysis makes excellent teaching material in our courses but at this time we simply do not have the information we need.

By the way an incident does not need to cause harm in order to be an important learning tool. An incorrect gas switch that didn't cause any harm is a good example. Going past thirds because of a distraction or peer group pressure may not have caused an accident but we can learn from that mistake. A free flowing reg can be easily dealt with but might alert us to a manufacturing issue if reported by several divers. These are just some examples and hopefully you get the idea. We would rather receive too many reports that are not of interest, than miss one that might carry an important safety message.

Cave divers responded to cave diving deaths in the 1970s by introducing guidelines and regulating the sport internally and it is excellent to see the response to learn from mistakes and incidents and prevent further losses.

Peter Buzzacott, who attended the Margaret River ACKMA conference, has co-authored a paper of cave diving deaths which is available at www.cavedivers.com.au. It is a very interesting and sobering read.

Nic Haygarth's paper on the history of cave tourism in Tasmania presented at the ACKMA conference in Ulverstone, Tasmania in May 2011 has been published in this journal. Attention to detail is a feature of Nic's work as is his ability to find the stories behind the stories that make the history of cave tourism such a fascinating subject.

Dan Catchpoole continues his historical account of James McKeown and like Nic, delves deep into the literature to uncover the real story behind one of the interesting characters in Australian cave history.

Margaret River in Western Australia has again been ravaged by fire. Fortunately no lives were lost but once again a number of homes were claimed by the fires. Infrastructure associated with the show caves was all spared. Peter Wood reported that people were seen out searching for caves in the forest cleared by fire while the fires were still burning!

For those who missed purchasing the house in the cave on Ebay a couple of years back, it appears this amazing house in Festus is back on the market. The marketing includes;

“Plenty of room in our 17,000 square foot home. The front chamber houses the main part of the 3-bedroom finished house. The middle chamber holds the laundry room, storage, and a spare bath. The middle chamber made a great party room and is 80 feet by 80 feet. The back chamber still has the stage where Ted Nugent, Bob Seger, Ike and Tina Turner, the MC5 and many other bands performed. Energy efficiency: Geothermal and passive solar keep the home comfortable year-round without a furnace or air conditioning.” A home for the true cave enthusiast!



House in a cave in Festus, United States

And from the website of National Geographic:

Hang Son Doong, or “mountain river cave,” is in a remote part of central Vietnam. Hidden in rugged Phong Nha - Ke Bang National Park near the border with Laos, the cave is part of a network of 150 or so caves, many still not surveyed, in the Annamite Mountains. This is very close to a well-known tourist cave that we will visit: Phong Nha Cave World Heritage Site in central Vietnam. National Geographic calls Hang Son Doong “the world’s largest cave”, which, although true in many senses, is a bit misleading. Hang Son Doong is the largest known cave passage, a huge and spectacular tube over a 100 m in diameter (at places even 200 x 150 m) and 4.5 km long. This passage is not continuously “underground”, as the cave roof has collapsed in several places, creating large shafts open to the surface which allow jungle vegetation to grow on the cave floor. The largest cave room (by volume) remains the Sarawak Chamber in Deer Cave (Mulu, Sarawak, Malaysia) which is an unsupported natural chamber 700 m long x 400 m wide and over 70m high.

It seems the debate on the world’s largest cave continues perhaps because people have different ways of defining cave passages and chambers or are not even sure of their facts. Sarawak Chamber and Deer Cave are a long way apart! Deer Cave, Sarawak Chamber and Hang Son Doong-all REALLY big. I am extremely grateful to Robbie Shone who has provided his fantastic image of Sarawak Chamber for printing in this journal. I had the privilege of visiting Sarawak Chamber and thanks to a David Head Weidmuller light could actually see most of the chamber. I zero chance of capturing an image like this and can only imagine the time it took to get everyone in place. Many thanks Robbie!

The Wee Jasper ACKMA weekend is approaching fast. Andy Spate, Geoff Kell and Suzanne Newnham, and Ian and Helen Cathles have a great weekend of activities planned. Wee Jasper is easily accessible from Canberra for those who need to fly in, and New South Wales has many other caves within easy reach. I hope to see many of you there and enjoy a few days together in the valley.

Coming Events	
2012: 14-18March	International Symposium on Vulcanospeleology, Jordan
2012: April	Argentine Congress of Speleology, Mendoza, Argentina
2012: 4-6 May	ACKMA Annual General Meeting, Wee Jasper, New South Wales
2012: Aug 5-10	International Geological Congress, Brisbane
2012: September	12 th International Symposium on Pseudokarst, Galicia, Spain
2012: 6-15 Sept	World Conservation Conference. Jeju Island, South Korea
2012 13-15 September	International Congress of Scientific Research in Show Caves, Scocjan Caves, Slovenia
2012: November	International Show Caves Association Conference Greece/Turkey
2013: 6-11 Jan	Australian Speleological Federation, 29th Biennial Conference, Galong, NSW, Australia
2013: 12-18 May	ACKMA 20th Conference, Waitomo Caves, New Zealand

PRESIDENT'S REPORT

Peter Chandler

Somewhere, over the rainbow

In these southern regions of the globe, the traditional Christmas is superimposed on the summer holidays! This has always made for a slightly crazy end to the year, and start of the new year.

Of course many of you take a break at this time, and many many more descend into the natural attractions that are our caves. Let me copy here David Summers Christmas greetings :-

Let all of our incredible show caves

Be the source of great enlightenment

So that all people of the world

Will cherish our subterranean wonderlands

Of course this brings us to the consideration of what sort of enlightenment these people get. Although I did not attend the first Waitomo conference, Elery Hamilton Smith's *Improving the Visitor Experience* (1985) has long been an inspiration for our working in cave tourism. And as is described and as we know, so much is dependent on how the cave is presented. Certainly now with the information age in full swing, expectations of the travelling public have been raised somewhat.

There has been some excellent content in recent journals, thanks to those contributors, and we look forward meeting many of you at Wee Jasper soon.



The evening view across the Waitomo Caves

As a recce for the upcoming Waitomo 2013 post conference tour, and while Libby was holidaying in Hawaii with my sister, Dave Smith, Celina Yapp, and I took part in a Nikau cave tour operated by ACKMA members Phillip and Anne Woodward.

The Waitomo limestones of the Te Kuiti Group extend northward to Port Waikato, 28 km by road from Nikau Cave, being based at Waitomo its easy to forget about the Karst in these northern areas although the flaggy limestone outcrops are visible in the tide, across from the Kawhia and Raglan harbour settlements.

The area is Cattle Sheep and Dairy hill country, with the characteristic volcanic ash covering and original rainforest remnants. On the map Waikaretu looks like a tiny place, but the road west from highway 22 is sealed and so is a popular scenic drive for Aucklanders.

What is different about this area from Waitomo karst, is that there has been a history of adjacent basaltic volcanic activity around 1.65 Ma, the northwards younging Ngatutura basalts (1)

What originally started as diversification during a rural downturn and then seeing the business potential no doubt was the reason for investing in a purpose built Reception/Licensed Café/ Operations base and Art Gallery. Philip and Anne have operated out of this for the last 4 years, it is easy to see that it is well used and it works!

We joined a cave tour group - a fit Grandmother 's 70th birthday outing with son, grandchildren, the first cave experience for them. The tour is promoted as a cave in its natural state, the bump cap, torch and old shoes - perhaps this meant expect an easy 'wild' cave?

Geographically it's a walk over the road up a hillside, some recently retired from grazing, there are now 3 blocks on the farm under Queen Elizabeth II covenants(a), through a paddock into a fenced off tree filled doline, we head upstream the pace is easy going, the commentary chatty and personal with Philips rural sense of humor- not too rural! There is a wet squeeze, 3



L-R Peter Chandler, Anne Woodward, Phillip Woodward and Dave Smith

dry bins are stashed in the cave for emergency back up. There a number of small populations of NZ Glowworms, *Arachnacampa luminosa* and the cave is well decorated. The last chamber providing a wow here as well the closeness to outside providing for a larger number of glowworms.

Around the corner, daylight, some simple steps and the green of the rainforest, the first Nikau palm *Rhopalostylis sapida* seen by me here. The cave was originally named Mannering's Cave after the farmers owners, and surveyed by Peter Crossley, T. Smith and M Reynolds in 1970, having come to NZSS members attention for a search after the infamous Crewe murders in that district at that time.

As recorded in the bulletin –“ In all a nice little cave, suitable for beginners & close enough to Auckland for a day trip” we thank Philip and Anne for their hospitality and look forward to visiting their Cave and the surrounding Karst areas in May 2013.



L-R President Peter Chandler, Dave Smith and Celina Yapp in Nikau Cave

REFERENCES

Geology of the Waikato Area, S.W Edbrooke (ed) Institute of Geological and Nuclear Sciences 2005

Mannering's Cave NZSS Bulletin Vol 6 P166 September 1978

Further Info (a) <http://www.openspace.org.nz>

ACKMA'S 25TH BIRTHDAY

ANNUAL GENERAL MEETING 4 - 6 MAY 2012 WEE JASPER

Careys Cave and the Wee Jasper Valley will host the 2012 AGM in the beautiful Wee Jasper Valley. Activities include Careys Cave, inspections of Punchbowl, Dip, Signature and Dogleg Caves and perhaps even the wonderful Nice Cave for a select (and thin) few. Caving will vary from easy strolls through pull-down abseil trips in Dip Cave – and for the more adventurous SRT visits to Punchbowl Cave. Andy Spate will conduct his renowned Punchbowl Hill karst walk and a Wee Jasper Valley tour on several occasions. Ian and Helen Cathles will show off their marvelous Devonian coral and fish fossils in the historic Cooradigbee Homestead and on the water-washed limestone itself. Refer to insert for further details.



Dr Armstrong Osborn in the "humidicrib" at Wee Jasper. Photo: Andy Spate



Andy Spate on karst walk at Wee Jasper with school children. Photo: Andy Spate

‘A CUP of TEA with your CAVE, MADAM?’: CAVE TOURISM as a COTTAGE INDUSTRY at MOLE CREEK, TASMANIA 1894–28

Dr Nick Haygarth

Abstract

From the late 1800s, farmers at Mole Creek in Tasmania conducted nature tourism from their homes. Families such as the Parsons, Scott, Martin and Byard offered cave tourism experiences as a cottage industry, otherwise engaging in farming and in some cases hunting and other forms of work. While not operated by a Mole Creek farmer, King Solomons Cave was a similar example of family-based private cave entrepreneurship. King Solomons, Marakoopa, Baldocks and Scotts Caves offered rustic, idiosyncratic experiences with home-style hospitality. All four caves were lit by acetylene gas. Ultimately, the family cave trade was unsustainable. The government’s purchase of King Solomons and Marakoopa in 1920 and 1921 respectively and the introduction of the electric light gradually brought the era to a close.

Introduction

A recent television news report about the restoration of a hunter’s hut on Tasmania’s Borradaile Plains highlighted the inequity of heritage listing in the state. While dozens of 19th-Century Tasmanian sandstone mansions are heritage listed (two are World Heritage listed for their convict connections), the mostly wooden structures representative of the lives of yeoman farmers and highland industries have been neglected by an under-funded, architect-dominated Heritage Tasmania. Hopefully that organisation’s current examination of the Meander Valley Municipality, which contains cave tourism sites such as the Chudleigh Inn, the Mole Creek Guest House, the Mole Creek Hotel and farms in the Mole Creek district, will give it the chance to partly address this.

Until recent times, rural Tasmania was a divided society. In simple terms, wool-growers, effectively the landed gentry, owned the fertile central plains, and yeoman dairy farmers the island’s rural extremities. In 1918 the Midlands and south-east had two-thirds of the state’s sheep, while the north-west and north-east owned two-thirds of its dairy cattle.¹ Each industry had its own lobby group, the TFSOA (Tasmanian Farmers, Stockowners and Orchardists Association) for the Midlands and south-east woolgrowers, the Tasmanian Producers’ Association (later the TFF, Tasmanian Farmers Federation) for the dairy farmers of the north-west and north-east. Until the 1960s it was almost a case of never the twain shall meet.

This division reflected different land settlement policies. In the period 1824–31 most of the best grazing land on the island was granted to large-scale growers of fine wool for the European market.² From the 1850s, however, when Tasmania’s population was being

depleted by the Victorian and New South Wales gold rushes, the Tasmanian government opened bush blocks (the so-called ‘waste lands’) beyond the Midlands plains on liberal terms in order to encourage selection and develop a stronger economy.

From late in the 19th Century, the typical regime for a dairy farmer on bush blocks at Smithton, Winnaleah or Mole Creek might be growing potatoes, oats and peas for human consumption, rye corn or mangolds to feed the cattle, and keeping pigs which lived on the skim milk residue from the dairy. Many backblocks farmers supplemented—or even multiplied—their incomes by hunting for furs in winter, repairing roads, clearing other bush blocks or doing other labouring work. In 1923, for example, when the average wage of a farm labourer was from about £110 to £120 per year, Anderson ‘Jack’ Scott of Scotts Cave made £240 from wallaby, pademelon and possum furs during one three-month hunting season.³

The advent of nature-based tourism at Mole Creek

As branch railways radiated into the backblocks, some of the more enterprising bush farmers also took advantage of their frontier location to provide nature tourism experiences for urban excursionists. In the inner north, proprietors of the Chudleigh Inn had provided an early model for nature-based tourism in the Mole Creek district by guiding visitors through nearby Wet Cave as early as 1851.⁴

From the 1880s there were regular experiments in nature-based tourism in Tasmania. Diego Bernacchi failed in an attempt to sell his Grand Hotel sanatorium on Maria Island to inter-colonial and international tourists.⁵ By the 1890s even the remote West Coast



Mole Creek district caves known by 1920:

Map by Alan Jackson

offered nature-based experiences such as Gordon River and Macquarie Harbour cruises. Accounts of recreational treks to Cradle Mountain, in the northern highlands, appeared in newspapers by 1888, and five years later John Wat Tyler examined the potential of the Forth River Gorge, Cradle Mountain, Mounts Roland, Pelion and Black Bluff for tourism.⁶ Tyler also operated summer tours from Hobart to Russell Falls, Bruny Island, Maria Island and Eaglehawk Neck, as well as a tour from Launceston to the Flowery Gully Caves near Beaconsfield.⁷



Traps, tents and even a ladder at base camp during a Railway Department excursion to Wet Cave in 1902. Stephen Spurling III photo

Examples of nature tourism as a cottage industry, that is, carried out in or from the home, were rare. In the early 1890s, at the Henty River on the West Coast, Theophilus Jones and his family turned an old ferry house and farm into a nature tourism resort near the Strahan-Zeehan Railway.⁸ Similarly, the advent of railway excursions on the Mole Creek line from 1894 enabled Joseph (JR) and Phil Parsons and their brothers at Caveside to guide tourists through Wet Cave and along their own track to Westmorland Falls.⁹ They not

only conveyed visitors from railway station to cave, but began the tradition of providing refreshments which became a staple of Tasmanian cave tourism. Dairy farms, of course, were never short of fresh milk, cream, cheese, butter or, usually, ham, bacon, eggs and vegetables.

This was only one facet of the Parsons brothers' tourism enterprise. Working in tandem with the Northern Tasmanian Fisheries Association, they increased the traffic through Caveside by stocking the Chudleigh Lakes on the Great Western Tiers with fish. The Parsons track, Parsons Falls and Parsons hut, features of the brothers' hunting regime, now also featured in accounts of hiking and fishing expeditions which they guided on the Great Western Tiers.¹⁰ Phil Parsons declared the Devils Gullet lookout the 'Yosemite Valley of Tasmania', but the Chudleigh Lakes fishing resort was scuttled by the advent of the famous Shannon Rise near Great Lake after 1911.¹¹

The advance to entrepreneurship: Scotts Cave

In 1907 the Scott family took the Parsons regime a step further after the discovery of Scotts Cave on their land at South Mole Creek. While the Parsons family made money from their own labour and their own track infrastructure, the Scotts, dairy and potato farmers, spent money to make money. Equipping their cave with acetylene light and applying fantastical names to its features, George Scott and family added private cave tourism, accommodation and guiding to a family work regime of farming and hunting.¹³ (While acetylene blackened caves, it was a step up from the equally damaging candles and bark torches, at a time when electricity was not a lighting option.) A four-room Scotts guest-house accommodated those who wanted to see more of the district that had produced such limestone marvels (on one evening there were 32 guests, some in tents and others sleeping on straw in the barn).¹⁴ This anticipated highland tourist regimes like Paddy Hartnett's centred on Pelion Plain and the upper Mersey River and Gustav and Kate Weindorfer's Waldheim Chalet business at Cradle Valley.¹⁵

THE HENTY FERRYHOUSE, WEST COAST, NEAR ZEEHAN DUNDAS SILVER FIELD.

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W. L. JONES—Dundas, 21/1 Breakfast or tea, 1s 6d. Beds, 1s. As room is limited, ad- vances write in advance, or wire, prepaid reply. Henty is a Fact and Tourist's Business.

T. F. H. JONES, 45114
Henty, February 17, 1891.

Tourists should visit

Scott's Caves,

MOLE CREEK.

These magnificent Caves are beautifully illuminated by acetylene gas, and are easily and conveniently reached by the railway.

LAKES AND MOUNTAINS, BEAUTIFUL FRESH CULLING

In the evening see water sports, and I can prepare them as guide for parties visiting them.

ACCOMMODATION

Good Beds Four Accommodations provided, 1/2 per bed (one per week). Expenses from Mole Creek Railway Station, last mile. Tickets out at Dundas if advised. Charge, 1/- each way per passenger.

CAVE INSPECTION CHARGES:

One, six; Twelve of this, 5/-; Five or more, 1/- each.

GEORGE SCOTT, Proprietor.

Tours from Deloraine.

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Falls, River Falls	2/ 0	1/ 6	1/ 0
Lake, Falls	2/ 0	1/ 6	1/ 0
Acetylene Caves	2/ 0	1/ 6	1/ 0
Mole Creek Caves	2/ 0	1/ 6	1/ 0
West Coast (Deloraine)	2/ 0	1/ 6	1/ 0
Great Lakes	2/ 0	1/ 6	1/ 0

Round Drives, Deloraine to Deloraine

Via	1st Class	2nd Class	3rd Class
Del. Top, Forest, and Lake	2/ 0	1/ 6	1/ 0
Del. Forest, Falls, and Mountain	2/ 0	1/ 6	1/ 0
Del. Forest, Falls, and Lake	2/ 0	1/ 6	1/ 0
Del. Forest, Falls, and Lake	2/ 0	1/ 6	1/ 0

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Like the Jones family at Henty River on Tasmania's West Coast during the 1890s (centre), and Gustav and Kate Weindorfer at Waldheim Chalet near Cradle Mountain from 1912 to 1932 (right), the Scotts (left) exploited a particular natural asset, their cave, but also offered other nature-based recreations, farm-style accommodation and home-grown food. Scotts advert from a 1908 tourist guide; Henty Ferryhouse advert from Mercury newspaper 3 March 1891, p.3;



(Left and right) The financial limitations of private cave tourism conducted by bush farmers is apparent in these images of Scotts Cave visitors packed onto a rickety cliff-face balcony and a precarious rock perch between fallen logs. Twenty-one people await a tour in the left-hand photo, taken in 1917.

Left photo cropped from one by JW Beattie; right photo courtesy of Jim Scott.

Just as Gustav Weindorfer became famous for his badger (wombat) stews, the Scotts' goose dinners, apple pie and scones rated highly. The family's general hospitality prompted much banter:

Six precious souls from Westbury
Arrived here yesterday;
Two came upon the bicycle,
Three drawn by Harry's bay.

They saw the Alexander's [Scotts] Caves
And thought them very fine;
They stayed the night at Mr Scott's
And drank up all the wine.

They ate up everything he had,
Sang songs both high and low,
They kept the household out of bed
And filled their souls with woe.¹⁶

References to drinking and adolescent romance, plus the composition of verse, suggest that the intimacy of the small cave made visiting Scotts Cave more of a social experience than visiting the rival Marakoopa Cave:

What have become of the girls we kissed?
What of the challenging lips we knew?
Ah! Let me whisper it - the're [sic] not missed
Half as bitterly those we kissed
As those we didn't, but wanted to!!!!¹⁷

The weekend outing must have been a release for many 'townies'. There were no wowsers in this underworld:

These stalactite caves make a deep impression on a thinking mind. In the dark recesses you may easily [sic] imagine there are little gnomes hidden. It seemed to me they were offering me goblets of wine

and [lager], for they knew I was thirsty, as it was very warm in the upper world...¹⁸

The cave was also child friendly. The Scotts Cave underworld contained other sparkling fairy 'receptacles' and 'dishes', later known as 'The Waterlilies'. The 'Kings Palace' seemed to be

made for the king of gnomes to hold his court, and has a bower opening out of it fit for his queen, though Titania, queen of fairies herself, need not disdain it.¹⁹

In 1913 the Scotts hosted the American Presbyterian evangelist John Wilbur Chapman, during his worldwide 'revival' tour. Jack Scott recalled how, as a 17-year-old, he and Lindsay Howe guided a Chapman party into the mountains:

We were to get a prize for the first one to shoot a kangaroo. None of us shot any the first day, but the next day Dr Norton came around and he said, 'Dr Chapman wants to see you two boys around at the front!' Lindsay and I went around and he gave us a sovereign apiece. We thought we were made.²⁰

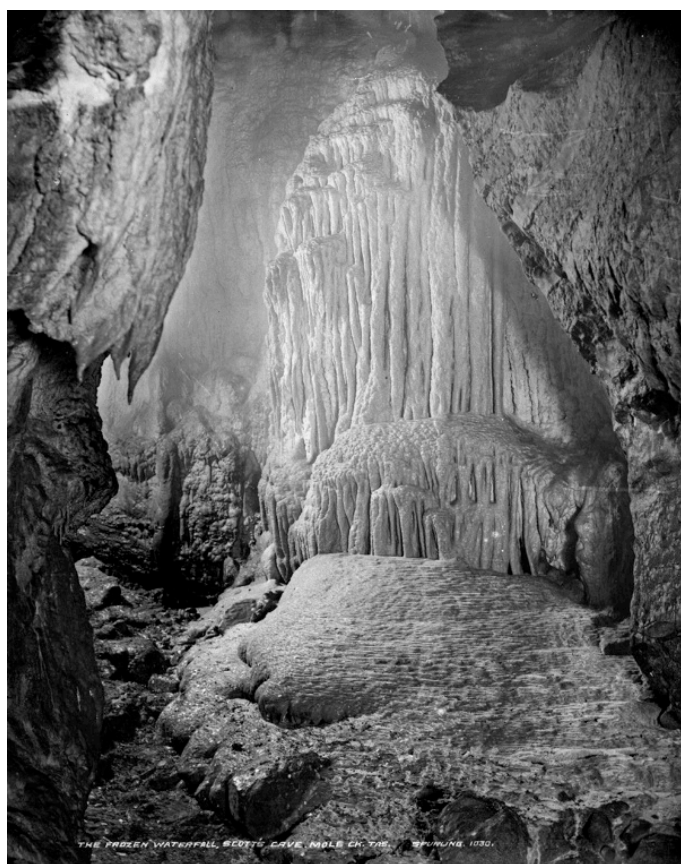
Scotts' boarding house lasted only until 1915. It was then sledged by bullock team a short distance from 'Roslyn Lea' to replace Mick Scott's house, which had been destroyed by a bushfire.²¹ Growing and improving competition, aging parents and scattering offspring sapped the Scott family business.²² The dawn of the electric light at a rival cave in 1928 cast Scotts Cave into eternal shadow.

Dazed and convinced: selling King Solomons Cave

King Solomons Cave was the next private cave venture in the Mole Creek district to be developed with acetylene light. It was never a farming family affair—but an entire

family suffered for it. Edward Charles (EC) James, the cave developer with what his grandson Bill James calls the ‘soup-strainer’ moustache, was full of bluster. ‘I claim and can prove that I with my own money and brains have done more for tourists and mining in Tasmania than any other man or men,’ James justified his unsuccessful application to mine the Cradle Mountain Reserve in 1942.²³

King Solomons tourists saw the input of his money, in the form of stairways, galleries and an acetylene plant with 40 lights, which were in place in time for the cave’s official opening in 1908. EC James’ family did not see much money, his wife Elizabeth having to grow vegetables in the back yard to sell to support their family and his entrepreneurship.²⁴ Nor for many years did King Solomons’ discoverer WH Pochin see the exchange of money which gave James the right to call himself the cave’s lessee.²⁵ It took the Supreme Court to make



Stephen Spurling III backlit this image of the ‘Frozen Waterfall’ in Scotts Cave. Visitors to the cave would have seen a less glamorous formation by acetylene jet. Stephen Spurling III photo courtesy of Stephen Hiller

James pay up, a deal which was only finalised when the government bought James’ lease from him in 1920.²⁶

The former Dover shopkeeper was a born showman who invited patrons to ‘be convinced, mystified and dazed’.²⁷ He named not only King Solomons Cave but all its features, including the three columns ‘Faith, Hope and

Charity’ after the Christian saints.²⁸ With qualified backing from Jenolan Caves superintendent Voss Wiburd, James declared his cave the finest in Australia.²⁹ So keen was James’ bluster about King Solomons that he sponsored a lawn bowling trophy in its honour, personally conducted the first Government Tourist Bureau excursion to Mole Creek, and even featured lantern slides of the main cave and nearby Queen of Sheba Cave in his Queenborough (southern Hobart) Council electioneering.³⁰ James claimed there were six separate caves on the 15-acre King Solomons lease:

- King Solomons
- Queen of Sheba
- James Wyburd [sic] Cave
- Mammoth Cave
- Jacksons Cave
- Badger Cave

He claimed that there was also an unexplored ‘Underground Lake’.³¹ Some of these features have never been seen since.

More substantial was the tea room which James built at the cave, although the original plan was for something stronger. A legend exists that James’ proposal for a Mole Creek hotel was defeated by a temperance clause in the fine print of a property deed, but the truth is more prosaic.³² James bought a block of land opposite the Mole Creek railway station from the estate of Henry Reed at an auction in December 1908.³³ At that time the nearest pub was at Deloraine, 23 kilometres away, the licence on Dan Pickett’s Chudleigh Inn having been allowed to lapse since his death in 1899. The local licensing board met to consider applications in November each year, but in April 1909 it received a lone application from Dan’s son, Walter Pickett, to grant him a new licence for the Chudleigh Inn.³⁴ Pickett had probably got wind of the proposed Mole Creek Hotel only seven kilometres from his establishment and decided to get in first. James either met with local resistance to a second hotel licence in the district or decided that a second licence would not pay.

As Mountain View House, James’ pub with no beer remained unlicensed until 1953. James kept it in the extended family by selling to his son’s in-laws, George and Alice Lee, who operated it as an accommodation house from which they conducted tours to all the caves and local attractions. James maintained a fatherly watch over King Solomons right up until its official reopening with electric light in 1928, during which visit he stopped off at the Mole Creek State School to ‘convince, mystify and daze’ small children with postcards of ‘his’ cave.³

Rustic charm and family fare: Baldocks Cave

There were no homestays at the Martin farm. The government-owned Baldocks Cave, however, provides another example of a backblocks farming family—in this case an *immense* family, at least 12 children being born in the years 1909 to 1925—building a cave tourism business at home. From 1903 the lessee of Baldocks was Albert Herbert Peter Hissell (Bert) Martin, beginning a tenancy of perhaps more than 40 years. This makes him

a contender for the title of Tasmania's longest-serving cave guide. His caving feats fitted the bill of heroic explorer. The government-owned cave was lit by acetylene in 1909, and a 'rustic tea house' was constructed at the cave entrance.³⁷ This building probably perished in 1915, when the Martins lost all but the clothes on their back to the same bushfire which prompted the closure of the Scotts Cave guesthouse.³⁸ Having survived 'my worst day on earth', Bert and Mary rebuilt their uninsured home, dairy farm and business for the motor touring era:

When you reach a sign-post which reads: 'Guide's House,' and points up the hillside, you frantically toot the horn of the car; loudly shout and call, and make every ear-splitting noise you can think of!

If that does not attract his attention, you get out of the car—and muttering darkly to yourself—toil up that hillside to the little home perched above.

Then out he comes, apologising all the time and laughing heartily, and leads the way down the hill at a double-quick pace, shouting to his young son to 'hurry-up-there-now-come-along-do!'³⁹

Bert Martin was not averse to borrowing a little magic from the rival Marakoopa Cave by claiming that Baldocks was the setting for Marie Bjelke Petersen's romance novel *The Captive Singer*. To demonstrate the plight of the book's heroine, Iris Dearn, Martin extinguished the light — a staple of cave tours worldwide to this day.⁴⁰ Magnesium ribbon was burnt to highlight particular features to which the acetylene jets did not do justice.⁴¹ The trailing son referred to above was probably Ernie, who often joined his father in the cave, training, like his sister Thelma, to become a Baldocks guide himself.⁴²

Although the difficult 'Dry Swim' section at Baldocks was cut away during the early 1920s, failure to secure the electric light doomed the cave to a dwindling custom after 1928.⁴³ Two surviving visitors' books suggest that in the years 1923–29 it received at least 4,500 customers. Praise for the cave (including descriptions



For EC James, postcards were a propaganda weapon, a King Solomons calling card that he still dispensed in 1928, eight years after he handed over the cave to the government. The 'Gem of the West' helictite in the unlit Queen of Sheba Cave, however, remained unseen by visitors. Stephen Spurling III postcard courtesy of Mike



BALDOCK'S CAVES, MOLE CREEK.
(Visited in Northern Tasmania Tourist Association by the Tasmanian Government.)

+

The special attention of all Tourists is called to these wonderful sets of Caves at Mole Creek. The Caves are dry and well lighted by acetylene, so that they may be inspected with perfect comfort. To attempt to detail the beauties of the caverns would be a difficult task indeed. One quotation from the Visitors' Book, written by a tourist who has visited all the principal Caves in Australia, concerning one of the principal chambers in these magnificent subterranean caverns, will suffice: "Can claim to be the best single chamber in Australia."

A visit to these Caves is full of interest, as in addition to the Caves the country traversed is through some of the most beautiful scenery in the State, and the journey affords many pretty glimpses of the extensive Western Tiers.

Complete arrangements have been made by the Northern Tasmania Tourist Association for day return trips to the Caves, and the programme to be followed are herevid outlined.

MOTOR TRIP.

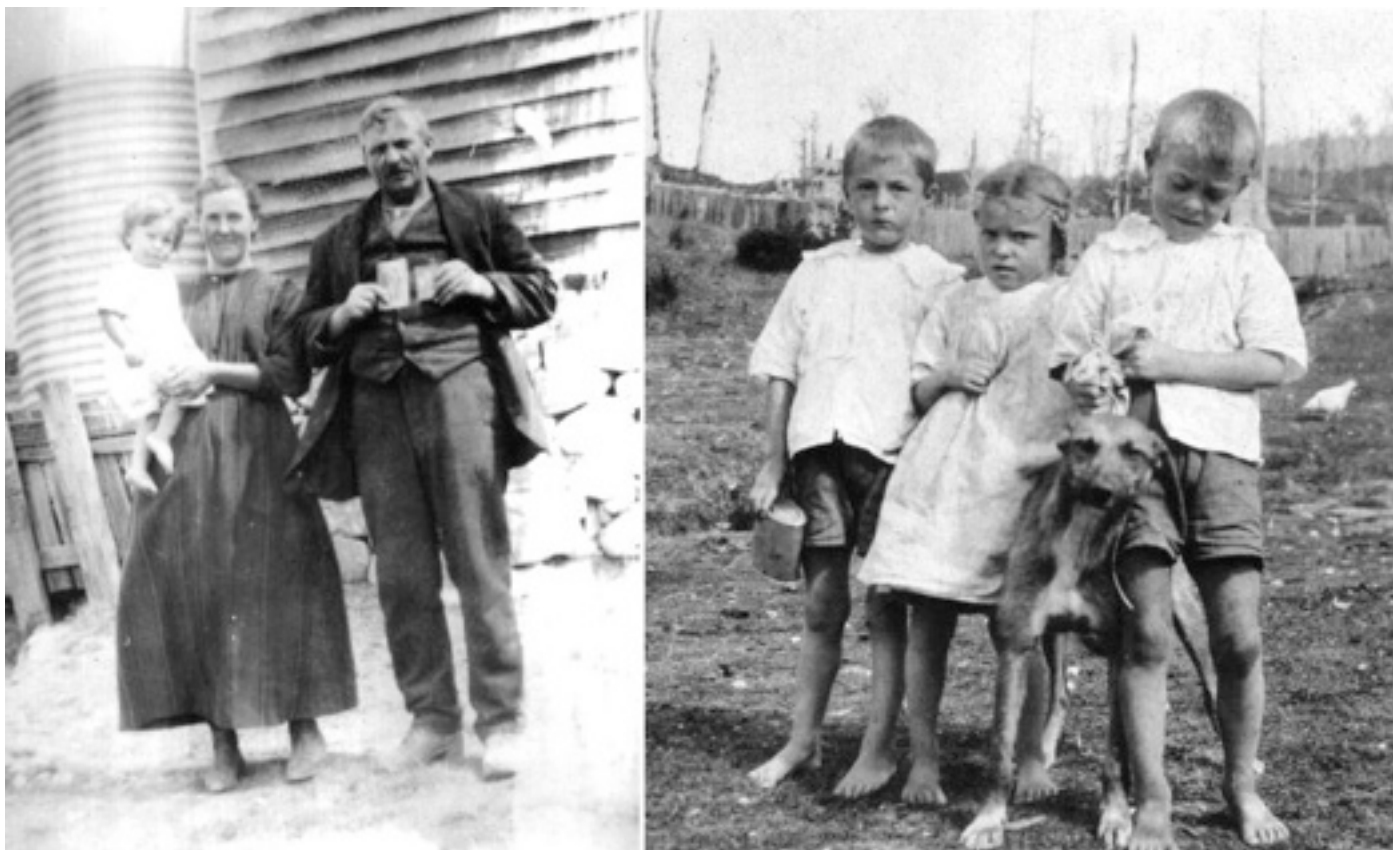
Leave Launceston	9 a.m.
Arrive Baldock's Caves	
Morning Tea Baldock's Caves	Noon
Inspection Baldock's Caves	
Lunch Baldock's Caves	1.30 p.m.
Leave for Scott's Caves	3 p.m.
Afternoon Tea Scott's Caves	
Inspection Scott's Caves	
Leave for Deloraine	5.30 p.m.
Dinner at Deloraine	5.30 p.m.
Leave for Launceston and arrive at	9 p.m.

—

Fare (Including Meals, Cave Inspections, etc.), 3/6 6d each person.

Minimum number of passengers, 2. All bookings must be completed at the Bureau before 2 p.m. each day.

(Left) Lucy King sliding through the 'Dry Swim' entrance to the second chamber of Baldocks Cave. Her clutching of a candle suggests this photo may pre-date the installation of the Baldocks acetylene system in 1909. (Right) Morning tea at noon, lunch at 1.30PM, allowing 90 minutes for Baldocks Cave guide Bert Martin to weave his magic. HJ King photo courtesy of the late Daisy Glennie; advert from a tourism guide



(Left) Lillias (babe in arms) and Mary Martin with Bert Martin, perhaps Tasmania's longest-serving cave guide. (Right) The Martin twins of 1915 were followed by the Martin triplets in 1917. Raymond George, Rita Jean and Reginald Albert (pictured), were an incidental feature of a trip to Baldocks Cave.³⁶ Photos courtesy of Ivy Crowden

such as 'Bonza', 'Tres Bon', 'Top Hole', 'Snifter', 'Splendid' and 'Snodger') and the guide, usually Bert Martin ('Chaplin's Double', 'very fine chap' and 'better than Mark Twain') abound in these books, as do compliments about Mary Martin's hospitality and home-style teas and dinners (featuring cream, cream cakes, raspberries, raspberry jam, tarts, homemade bread and mushrooms).⁴⁴

From cottage to cathedral: songs of praise for Marakoopa Cave

Having their own cathedral must have been very appealing to the Byards. Strict Baptists and dairy farmers Jabez and Jane Byard took the name of their house, 'Berachah', from a town between Hebron and Jerusalem in Israel, the scene of an Old Testament battle.⁴⁵ 'Berachah' roughly translates as 'Valley of the Blessings', and blessed were the Byards in about 1905 when along the valley Jim Byard, then in his early 20s, and brother Harry, 11 years his junior, explored a sometimes subterranean creek. It emerged from a cleft in a rock face. 'We'll keep this up our sleeves', Jim told Harry after their second visit to the labyrinthine chambers of what they later called Marakoopa Cave.⁴⁶

Jim bought the adjoining Crown land which contained the cave mouth, and from 1911 Marakoopa operated as a



*Members of the Byard family outside the entrance of Marakoopa Cave. Discoverers Jim and Harry (in hat) are at the back. The girl in front of Harry is probably their sister Jane, who also sang and guided in the cave, and the woman at left is probably their mother, Jane, caterer and, presumably, crèche matron.
Courtesy of Paul van Nynanten*

family business. The financial limitations of this, obvious today, probably escaped the censure of first-time show cave visitors. Guard rails and ladders guided travel, but there were no walkways, patrons sometimes having to

1916

THE QUEEN

Financial Government Fund and Information Service

Henry Phillips
has deposited this
Book

Wet Cave	28	(6 of them House)	1-2-0
Scotts	32	(6 of them House)	1-12-0
King Sol.	22	(6 House)	1-6-0
Marakoopa	22	(6 House)	1-12-0

\$7.15

MOUNTAIN VIEW HOUSE, Opp. RAILWAY STATION, MOLE CREEK.
 GEORGE LEE, PROPRIETOR.

GOOD ACCOMMODATION. HOT AND COLD BATHS. TERMS MODERATE.
 BEAUTIFUL SCENERY, MOUNTAINS, LAKES, GUNSES, FALLS, FERRISWHEEL, CAVERNS AND CLIFFS.

APPOINTMENTS MADE FOR PARTIES VISITING THE CAVES.

CHARGES FOR CONDUCTORS TO

SCOTT'S CAVES,
 2 PERSONS, 2/-
 4 PERSONS, 3/-

BALDOCK'S CAVES,
 2 PERSONS, 2/-
 4 PERSONS, 3/-

TO WET CAVES
 2 PERSONS, 7/-
 4 PERSONS, 10/-

TO KING SOLOMON'S
 1 PERSON, 7/-
 3 PERSONS, 10/-

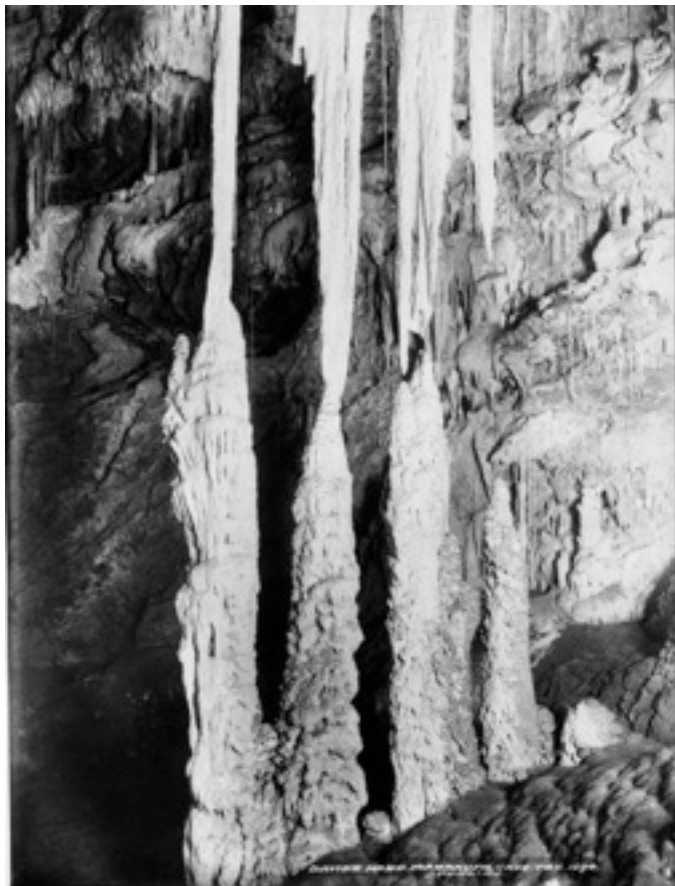
TO ALUM CLIFFS,
 1 PERSON, 5/-
 3 PERSONS, 10/-

Distance to River Murray, Two Miles. Distance to Mole Creek, Five Minutes' Walk.

EXHIBIT

WELL-APPOINTED DARK ROOM FOR TOURISTS.

An invoice from Mountain View House for the government's 1916 Easter trip to Mole Creek shows that the family-friendly Scotts Cave (32 visitors) was then more popular than the more beautiful King Solomons (22), Marakoopa (22) and Baldocks (28) Caves. Advert courtesy of Denise Hilton; invoice courtesy of Bill James.



Marakoopa is an acoustic paradise. The Byards played 'Davids Harp' with a mallet during cave tours. Today it receives 'hands off' treatment as a living example of the immensely slow process of calcite column formation. Stephen Spurling III photo courtesy of the National Library

clamber over flowstone. The cave was lit by hand-held acetylene bicycle lamps and later by miners' lamps. Unlike Scotts or King Solomons, Marakoopa was a massive cave, making it far too expensive to install an acetylene lighting system. Guides supplemented their hand-held lamps by burning magnesium wires at every notable feature, conferring on them a 'weird beauty'. Still, the cave was never effectively lit during the Byard era.⁴⁷

The lamps became very hot, sometimes burning those who came into contact with them.⁴⁸ One visitor forgave the 'loss of dignity in crawling', another wetness 'underfoot'.⁴⁹ 'The rippingest sight out of England', a Mother-countryman enthused.⁵⁰ Small children who might have been admitted to Scotts Cave were checked in at the Marakoopa crèche instead, probably because the three-kilometre-long walk to the cave from the Byard family homestead was too taxing, the hand-held acetylene lamps too dangerous, but also, possibly, out of fear of losing the innocents in the cave labyrinth.⁵¹

As Scotts Cave was cosy enough for a gnome empire, Marakoopa was big enough for God's. 'Berachah' was a rabbit warren compared to the cave's 'Great Cathedral'. No wonder the Byards, cramped up in their farmhouse, liberated their voices in this vast chamber, exploring its full resonance:

The guide, in a low voice, asked 'Do you sing at all?'...He walked away several paces, and then in this awe-inspiring cathedral, in the bowels of the earth, he sang Rida Johnson Young's lyric 'Mother Mackree'. I stood dumbfounded. He had a good voice, and away in the depths it was followed with echoes that seemed to run for miles. It was here, there, and everywhere...his voice seemed to travel like wings away and away through caverns and chambers for leagues...⁵²

In 1914 Hobart romance novelist Marie Bjelke Petersen and her companion Sylvia Mills joined a Marakoopa tour party. Like the Byards, Bjelke Petersen was a pious, teetotaling Christian. The Byards' vocal performance and the shadow and light effects created by the acetylene



The Byard farmhouse 'Berachah'—or 'Possum Palace'—today. At least two Byard family weddings were celebrated here. Light refreshments and a crèche service for patrons' children were provided during Marakoopa tours. Photo by Paul Van Nynanten

lamps in the massive, dark cave must have worked on the author's imagination, because her romance novel *The Captive Singer* was clearly derived from the experience.

Corporatising the cottage: the government takes control

By the 1920s, mainlanders accustomed to electric cave lighting disparaged Tasmania's comparatively weak acetylene gas. Entrance requirements of physical agility at Scotts Cave, a head for heights in King Solomons Cave and ability to turn turtle at Baldocks Cave must have limited these caves' custom.⁵³ The financial stringency of small family businesses was obvious.

The death of private cave tourism was encouraged by a 1918 report on the management of Tasmania's caves by Voss Wiburd. The report is notable for its hysteria. He believed Scotts Cave too dangerous to be open to the public. In fact he used Scotts as an excuse to damn private cave tourism altogether, suggesting that purchases or leases of Crown land be issued with the specification that limestone features on the land remained public property. Wiburd's complaint about Scotts presumably related partly to its rickety cliff-face balcony and awkward entrance, but he also loathed and feared acetylene gas lighting systems. While the safeness of acetylene had been widely debated at its introduction in the 1890s, by now it was commonly used in underground mines, public halls, hotels, private homes, and for street and vehicular lighting. There were regular press reports of acetylene explosions, but only one death by this means had been reported in Tasmania by 1918

and not a single incident was ever reported in any Tasmanian cave lit by acetylene.⁵⁴ For Wiburd, however, the installation of acetylene lighting was 'a great mistake':

The pipes running through beautiful grottoes over head [sic] and under foot, along passages, with props and stays, bends, and reflectors does not improve or add to the beauty of a cave but seems to mar the view, offend the ear by its fizzing, and fumes are very disagreeable to smell and would in many cases overcome a weak or delicate person. In our caves we will not allow an aceteline [sic] lamp to be carried. We know what happens if anything goes wrong with it. Candles are much safer and can be depended on.

Not even Marie Bjelke Petersen's delicate flower of a heroine in *The Captive Singer*, Iris Dearn, had succumbed to acetylene fumes! Still, Marakoopa and King Solomons, according to Wiburd, needed to be government owned, lit by electricity and safeguarded by iron gates and caretakers. At the time of Wiburd's report, his only son was serving at the front, so it is not surprising to see the Jenolan expert expressing the hysterical anti-German sentiment generated in Australia during World War I. He warned Emmett to guard Tasmania's caves against 'Vandals, Huns and travelling lunatics'.⁵⁵

Wiburd's recommendations were blessed by a Caves Advisory Board appointed by cabinet. King Solomons (1920) and Marakoopa (1921) joined Baldocks as state possessions.⁵⁶ This meant that, aside from the sporadically-visited Flowery Gully Cave, Scotts Cave was the only Tasmanian tourist cave left in private hands.⁵⁷

While the full glories of King Solomons and Marakoopa were finally seen under electric light, the tradition of serving refreshments and lunches faltered under government control. In the private cave era, most of the simple fare served had been fresh homegrown produce. Visitor numbers were small, costs minimal, with no administrative overheads or red tape.

It was a different story when government-operated caves got down to business in the post-World War II period. Although tearooms and restaurants attached to King Solomons, Newdegate and Marakoopa Caves were operated as private enterprises, they were a constant headache to both the Tourist Department as well as their operators.⁵⁸ Patrons grumbled when food and drink were unavailable. Guides' catering wives were run ragged providing these. Caterers were not employed (that is, *not paid*) by the government, yet the Tourist Department required them to provide teas and meals whenever patrons requested them, even on Christmas Day. Refusal to cater was viewed as a breach of the conditions under which *the married couple* was engaged, making the female partner effectively a round-the-clock slave.⁵⁹ If some of the simple pleasures of the cave visit were lost by the new business model, however, the gains were more substantial: safer, less damaged, better lit caves educating a wonderstruck public.

References

1. These figures are derived from a table in *Statistics of Tasmania 1917*, p.246, which quotes stock numbers as at 1 March 1918. Figures for the districts of Evandale, Fingal and Launceston have been removed from the statistical division of north-east, and Westbury has been removed from the north-west division. These districts have been more appropriately included in the Midlands division.
2. Sharon Morgan, *Land Settlement in Early Tasmania: Creating an Antipodean England*, Cambridge University Press, Oakleigh, Victoria, 1992, p.22.
3. *Statistics of Tasmania 1922–23*, p.58; transcript of a 1972 interview with Anderson ('Jack') Scott (held by Jim Scott, Hobart).
4. See Nic Haygarth, 'Dan Pickett, Pioneer Cave Guide', paper in these proceedings.
5. See Marian Walker, *Memories, Dreams and Inventions: the Evolution of Tasmania's Tourist Image 1803–1939*, PhD thesis, University of Tasmania, 2008, pp.192–99.
6. 'Peregrinator' (WD Weston), 'Notes of a Trip in the Vicinity of the Cradle Mountain', *Colonist* 17 March 1888, p. 4; John Wat Tyler to Henry Dobson 11 May 1893, PD1, vol.60 103/93 (Tasmanian Archive and Heritage Office).
7. See Nic Haygarth, 'Ozone-wetted Appetites and Hearts Devoid of Care: Cruising to Cave-land in Nineteenth-century Tasmania', *Proceedings of the Cave and Karst Management in Australasia 17 Conference, Buchan, 2007*, ACKMA, 2007, unpaginated DVD.
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9. See, for example, 'The Chudleigh Caves', *Examiner* 22 January 1901, p.5; and 'A Visitor', 'Westmoreland Falls', *Examiner* 7 December 1894, p.7.
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11. For the 'Yosemite Valley of Tasmania', see 'One of the Party', 'A Trip to Lake McKenzie and the Devil's [sic] Gullet', *Examiner* 24 December 1896, p.10. For general discussion about the Shannon Rise, see Simon Harris, *Selling Tasmania: Boosterism and the Creation of the Tourist State 1912–1928*, PhD thesis, University of Tasmania, 1993.
12. Kate Weindorfer died in 1916, after which her husband Gustav Weindorfer continued to operate Waldheim Chalet until his death in 1932.
13. See Jim Scott, *Down the Crick: Stories of Early Generations of Scotts at Mole Creek*, the author, Hobart, 1996.
14. Transcript of a 1972 interview with Anderson ('Jack') Scott (held by Jim Scott, Hobart).
15. For Hartnett, see Simon Cubit and Nic Haygarth, 'Paddy Hartnett: Tasmanian Frontiersman', *Papers and Proceedings of the Tasmanian Historical Research Association*, vol.57, no.2, August 2010, pp.80–104. For Weindorfer, see GFJ Bergman, *Gustav Weindorfer of Cradle Mountain*, Tasmanian Government, Hobart, 1959.
16. Jim Scott, *Down the Crick...*, p.29.
17. Miss IA Greenhill, Mr Thos HW Jones et al 19 January 1922, p.192, Scott's Cave visitors' book 1911–29, NS1780/1 (Tasmanian Archive and Heritage Office).
18. 9 March 1912, p.30, Scotts Cave visitors' book 1911–29.
19. 'One of the Five', 'In the Fertile North West', *Examiner* 14 February 1911, p.3.
20. Transcript of a 1972 interview with Anderson ('Jack') Scott (held by Jim Scott, Hobart).
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22. *Elphinstones: Pioneer Farmers in Tasmania*, no publication details, 1988, p.85.
23. EC James to Colin Pitt, Scenery Preservation Board 12 February 1942, AA577/1/6 (Tasmanian Archive and Heritage Office).
24. Interview with Bill James June 2011.
25. King Solomons Cave was reputedly discovered by WH Pochin and either Ern or Alf Holmes when their dog chased a wounded wallaby among some limestone rocks—where it vanished into a typical 'animal trap', the original cave entrance which can still be seen today near the old generator shed. Other writers claim the men were following a swarm of bees. For various discovery stories, see 'A New Caveland: King Solomon's [sic] Caves at Mole Creek', *Examiner* 14 September 1908, p.6; FAW Gisborne, 'Underground Tasmania', *The Red Funnel* vol.IX, no.1, August 1909, p.3; 'King Solomon's [sic] Caves', *Examiner* 2 November 1911, p.6; or 'The Land of Caves and Caverns', *Advocate* 19 December 1928, p.7.
26. See file TRE 5/1/1075 no.2254/16 (Tasmanian Archive and Heritage Office).
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29. Wiburd stated that King Solomons was the finest cave in Tasmania ('King Solomons Caves', *Mercury* 30 January 1915, p.7). James claimed that Wiburd stated King Solomons was the finest cave in Australia (EC James, 'Mole Creek Caves', *Mercury* 29 April 1918, p.2).
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37. 'Tourist Association: Meeting of Committee', *Daily Telegraph* 9 March 1909, p.8.
38. 'Great Bush Fires', *Examiner* 18 February 1915, p.6.
39. 'Grapho', 'In the Mist of the Mountains: the Magic of Mole Creek', *Advocate* 17 January 1925, p.1.
40. 'Grapho', 'In the Mist of the Mountains...'
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42. See Hilton Stott's Wesley Dale website stott.customer.netSPACE.net.au/Wesley.htm.
43. 'Mole Creek Caves', *Examiner* 3 September 1920, p.7.
44. The Baldocks' visitors' books are held by Ivy Crowden, George Town.
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47. 'Verdant', 'A Visit to the Wonderland of Tasmania', *Weekly Courier* 29 February 1912, p.29.
48. 'History of World-Famous Marakoopa Caves', *Advocate* 12 February 1960, p.18.
49. Mary C Dickson 23 February 1915; ? Webb 27 February 1916, Marakoopa visitors' book (held by Mrs Kelly, South Mole Creek).
50. I Wallis 18 January 1912, Marakoopa Cave visitors' book.
51. 'Verdant', 'A Visit to the Wonderland of Tasmania', p.28.
52. 'The Maracoopa [sic] Caves', *Mercury* 23 March 1928, p.7.
53. See Charles Miscamble, Commissioner of Railways, to Minister for Railways 15 August 1927, AB455/4 R21/1 (Tasmanian Archive and Heritage Office).
54. For the death of Launceston photographer Albert Sargent, see 'Acetylene Gas Explosion', *Mercury* 28 August 1913, p.5.
55. Voss Wiburd to ET Emmett 7 January 1918, 'Tasmanian Caves 1921-28', TC10/1/1882 21/285 (Tasmanian Archive and Heritage Office).
56. Wiburd had recommended the government buy King Solomons after his first visit in 1909. For the Caves Advisory Board, see 'The Caves', *Daily Telegraph* 2 February 1920. Under the *Public Works Execution Act* (1915), £900 were set aside for the government acquisition of King Solomons (see file TRE 5/1/1075 no.2254/16 [Tasmanian Archive and Heritage Office], which also discusses arrangements for WH Pochin to receive some of this money).
57. Scenery Preservation Board minute book 18 September 1918, AA264/1/1 (Tasmanian Archive and Heritage Office).
58. See, for instance, Torry Richardson's report 22 January 1961, AA494/141 703/1/59 'Mole Creek Inspections' (Tasmanian Archive and Heritage Office).
59. See FH Southey to Roy Skinner 13 January 1960; and Roy Skinner to FH Southey 14 January 1960, AA494/1/336 176/6/59 (Tasmanian Archive and Heritage Office).



EC James surveyed his realm from this glass lookout at 'Fernleigh', Sandy Bay, Hobart. A vegetable garden behind this grand façade helped sustain his family while he played at cave and mining entrepreneur. Courtesy of Bill James.

JAMES McKEOWN: FROM FACT to FOLKLORE and BACK AGAIN! Part 4

Dr Dan Catchpoole

From the time convict James McKeown arrived in the colony in 1825 he started to make a name for himself as the 'pest of Bathurst' (1). As a serial absconder he found himself crossing paths with the local gentry and constabulary as they strove to bring order to the new western frontier. His continuing misdemeanors culminated in the theft of a horse belonging to James Whalan in 1836. The ensuing manhunt led not only to the capture of McKeown, but also the discovery of the Jenolan limestone and eventually the caves within.

McKeown's fate after being taken into custody has been the topic of much debate, speculation and conflicting reports. By the 1890s considerable variations in the telling of the story had evolved. A report in "Argus" in 1899 states...

"McKeown lived to return from a long term of exile on Norfolk Island and to revisit the scene of his former exploits". (2)

By contrast JJ Foster states...

"It is not necessary to give a detailed account of McEwan, suffice to say he was captured, lodged in Hartley Gaol, afterward tried by a Sydney Jury, and subsequently sentenced and transported to Norfolk Island, where he died." (3)

Other records support this notion...

"He was lodged in Hartley Lock-up, and subsequently convicted by a Sydney jury on the charge of stealing clothes from Mr Roberts, publican of O'Connell Plains. McKeown was transported to Norfolk Island, where he died." (4)

Even more creative reports have also been circulated...

"Discretion being even in those days the better part of valour, he surrendered and was removed to Bathurst. At his trial, the greatest difficulty was found in fastening his guilt upon him, and he was eventually convicted of having stolen some clothes, for which crime he was sentenced to two years imprisonment. After serving this period he is said to have lived in Oberon, a free man; but for some reason of other the drop-scene fell on his life – so report has it – within the walls of Goulburn gaol, confessing on his death bed that he had secreted a jar containing the sum of £200 somewhere in the caves, two police, an inspector and a sergeant rode out in search of it." (5)

Are any of these reports close to the truth? As opposed to these newspaper articles, a more definitive account is found in the Convict Conduct Register 1844 held at the Tasmanian Archive indicating that James McKeown "... was again tried at the Qt Session Bathurst 28 November 1836 for horse stealing. Sentence Life committed to 15

years. Transported to Norfolk Island on 4th April 1837." (6, 17)

OF DATES AND TIMES

A common point made in many articles was that McKeown was 'lodged' in the Hartley lock up. Ward L. Harvard (7) highlights however that Hartley Courthouse records only began in 1839 and none mention James McKeown. It is also worthy of note that Hartley Courthouse was not built until October 1837 (8) and therefore, according to the official records, was not in existence when McKeown was captured a year earlier. In fact McKeown was already on Norfolk Island at the time Hartley lock up came into operation.

A similar timing issue is worth noting. Charles Whalan only moved to Bullock Flat to take up his land grant on The Fish River Creek in 1838, (9) which was also after McKeowns transport to Norfolk Island. Similarly, at the time of McKeowns capture in 1836, Charles Whalan was busy getting married to Elizabeth Harper (Figure 1a) and was unlikely to be involved in the direct capture of McKeown, which disagrees with the many other reports on the subject (eg. Figure 1b).

(a)

MARRIAGE,
On Thursday last, by the Rev. J. McGarvie, Mr. Charles Whalan, of Macquarie Park, Prospect, to Miss Elizabeth Harper, of Sydney.

(b)

H.C. (New Farm). — (1) The Jenolan Caves are about 60 miles due west of Sydney. The history of their discovery is, according to the accepted version, as follows: In 1835-8 a convict escapee, McKeown by name (it is also spelt McEwen), used to levy blackmail on the settlers in the area round Oberon, killing their stock and holding up their teams—usually by stealing the ox-bows—unless he was bribed off. After many attempts a settler, Charles Whalan, in 1838, managed to track him into the very heart of the main range, and along a gully on its eastern side, in which his hut was found and he himself captured in it. His captors finding themselves in

Figure 1 - (a) Charles Whalan's marriage notice. Sydney Gazette 9 July 1836. (b) Charles Whalan listed as tracking McKeown in 1838; 18 months after the convict had arrived on Norfolk Island! The Courier Mail, 21st July 1936.

Figure 2 – Records from Darlinghurst Gaol for 1837. James McKeown is noted on line 2.

TRAVELLING COMPANIONS

Following his trial at the Bathurst quarter sessions, James McKeown was housed at the Sydney Gaol in Darlinghurst on the 2 January 1837 (Figure 2). Along with McKeown were 3 others convicted in Bathurst at the same time (6). Convicts Alexander (aka William) Roy, Cornelius Cronin and James McKenna/McCann joined James McKeown in Darlinghurst Gaol before being listed by Major Thomson for transport to Norfolk Island on the convict barque *Governor Phillip* on the 30th March 1837 along with 36 other convicts (10) (Figure 3). Of these three felons, James McKenna has a criminal history most similar to McKeown. McKenna arrived in the colony in 1829 aboard the *Guildford*, having been sentenced to life for highway robbery by a court in County Cavan, Ireland. He was later sentenced in the Bathurst quarter session to transportation to Norfolk Island for stealing a herd of cattle from Mr Cox in Richmond and in doing so, became McKeown’s travelling companion. Tasmanian convict return records for 1844, at the conclusion of McKeown and McKenna’s 7 year sentence see both listed as surviving their captivity and returning to Van Diemens Land for probation (Figure 4).

Name	Ship	Sentence
James McKenna	Guildford	Life
James McKenna	Guildford	Life
James McKenna	Guildford	Life

Figure 3 – Letter No 37/69, dated 30th March, requesting transport of listed prisoners to Norfolk Island on the Governor Phillip. James McKeown identified with red arrow. (ref)

Additional notes from the Tasmanian Convict Conduct records (Figure 5) confirm McKeown’s trial in Bathurst Court was for horse stealing, not clothes. His case was heard before Mr Thomas Kite, one of the original pioneers of the Bathurst region. Of note is the additional record that McKeown was previously tried for sheep stealing by the Sydney quarter sessions for which he was eventually acquitted. Whilst further details of this additional misdemeanor needs to be explored, McKeown criminal history is apparent which, along with being a serial absconder, justified his castigation to Norfolk Island.

Below. Figure 4 – “A Nominal Return of the penal prisoners now at Norfolk Island showing their date of trial and sentence”. Listing #427 notes James McKeown Asia with trial date 28th November 1836. Sentence „Life to 15 years”.

No	Name	Ship	Colonial Conviction		Remarks
			Date of Trial	Sentence	
125	McLoughlin Michl	Bong	2 nd Aug 1836	Life to 15 Years	
126	Murphy Thomas	Govt Ready	7 th Nov 1836	Life to 10 Years	
127	McKenna James	Asia	28 th Nov 1836	Life to 15 Years	←
128	McKenna James	Guildford	28 th Nov 1836	Life to 15 Years	

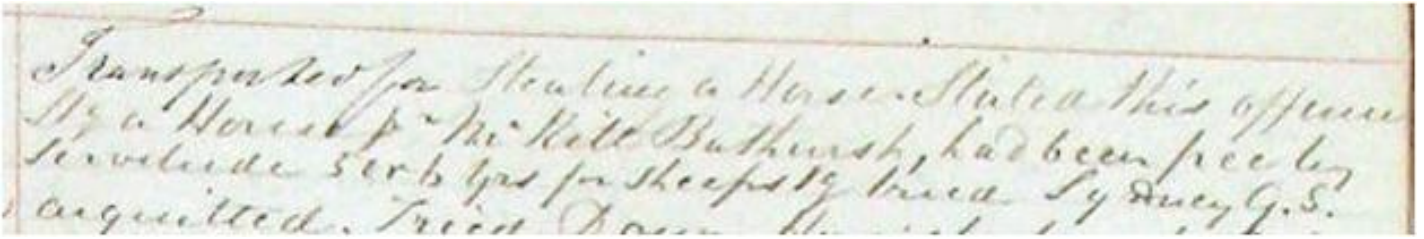


Figure 5 – “Transportation for stealing a horse. Stated this offence slg a horse per Mr Kite Bathurst, had been pcc by servitude 5 or 6 yrs for sheep slg tried Sydney Q.S. acquitted.”, Convict conduct records of male convicts arriving in the period of the probation system. Record Number CON33/1/55 Tasmania Archives (<http://search.archives.tas.gov.au/default.aspx?detail=1&type=I&id=CON33/1/55>)

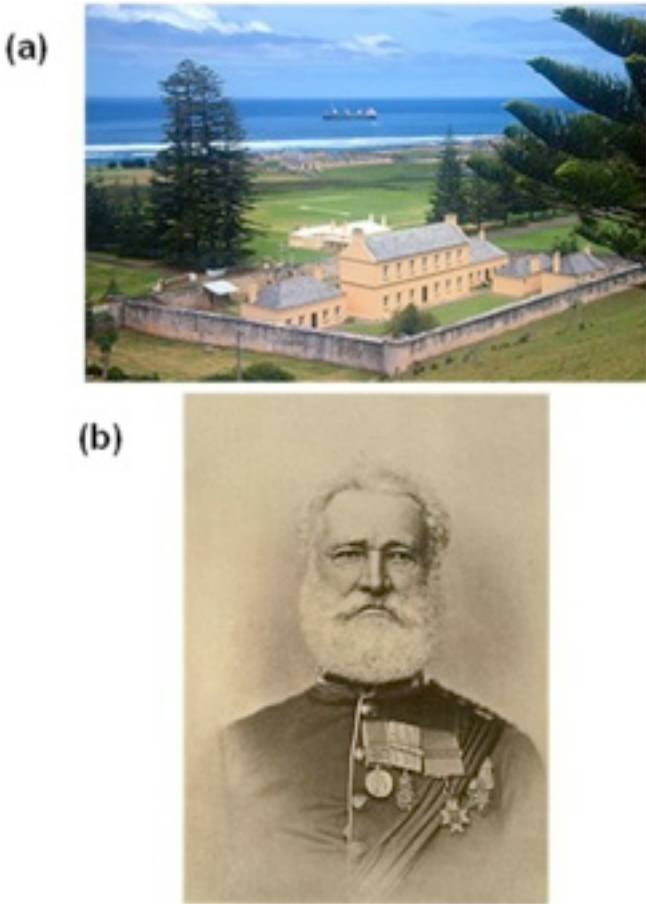
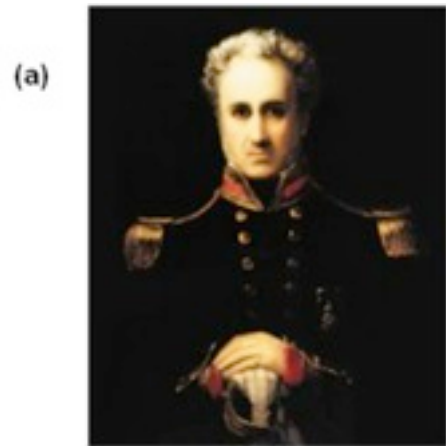


Figure 6 – (a) Convict Station, Kingston, Norfolk Island (http://en.wikipedia.org/wiki/History_of_Norfolk_Island) (b) Lt Col Joseph Anderson ([http://en.wikipedia.org/wiki/File:Lt. Col. Joseph Anderson.jpg](http://en.wikipedia.org/wiki/File:Lt._Col._Joseph_Anderson.jpg))

CHANGES AT NORFOLK ISLAND

There he began a 7 year sentence in a prison colony designed to subdue the most hardened and recidivist of criminals. Norfolk Island was established as NSW ‘place of secondary punishment’ from 1824-1844, control being handed to Tasmania from 1844-1856. From his arrival to Norfolk in 1837 until his departure in 1844, McKeown would have been faced with some of the most barbaric human treatment known to the then civilized world, but



(b) This accumulation of evil consequences rest on the misguided Captain Maconochie. We were all along convinced of the deception practised on the deluded captain; we admonished him, by word and letter, of the dangerous confidence he misplaced in these prisoners, but all to no purpose; he seemed more inclined to follow the knavish suggestions of these consummate villains than our candid and disinterested caution; the result has been to his own shame and disgrace, and to their destruction. If he held a “military command,” he should most certainly be tried by “court martial,” for gross

Figure 7 – (a) Captain Alexander Maconochie (<http://www.geog.ucl.ac.uk:8080/print-version/about-the-department/news/news-archive-2009/june-2009/bloomsbury-maconochie-and-gissing/>),

(b) Example of the critical comment of Maconochie Social Method. Published in *The Australasian Chronicle* 22nd April 1843.

also some of the greatest rehabilitation on offer as major reforms to the penal system were enacted.

Upon McKeown’s arrival at Norfolk Island, the God-fearing Scotsman Major Joseph Anderson was in charge (Figure 6). A firm disciplinarian, Anderson was sent to command Norfolk Island following an unsuccessful convicts’ revolt. He was commandant of the island from March 1834 to February 1839 and among his first duties was the investigation of the revolt on 22 and 23 September 1834 where twenty-nine convicts were

sentenced to death with thirteen executed in public hangings. McKeown therefore found himself in an environment where extensive flogging (1500 lashes issued before breakfast was not uncommon), permanent shackling, feeding like hogs, drinking from buckets, sodomy and fear of brutality for mere trifles were the

THE PROBATION DEPARTMENT.
(From the *Hobart Town Advertiser*.)

[CONCLUDED.]

The stages through which the prisoners will have to pass are five.—

- 1st.—Detention at Norfolk Island
- 2nd.—The probation gang
- 3rd.—The probation passes
- 4th.—Tickets-of-leave
- 5th.—Pardon

THE FIRST STAGE.

This will be the lot of all prisoners transported for life, and also of all guilty of aggravated crimes sentenced to transportation for fifteen years and upwards. Four years will be the longest term of detention, two the shortest; the intervening limits to be pointed out in the case of each prisoner by the home secretary. The governors of New South Wales and Van Diemen's Land will have the power of indicating whether the prisoner transported from the respective colonies shall be sent to Norfolk Island or Port Arthur—the discipline in each being similar. The Queen only can abridge the period; his own misconduct may prolong it until his original sentence terminate.

Norfolk Island will be placed under the V.D.L. government. A superintendent or commandant at Norfolk Island will proceed to that place as soon as practicable, having details or instructions for his guidance. The prisoners there now, sentenced from home, under colonial sentence, are to be removed to Van Diemen's Land, as likewise those convicted in New South Wales or Van Diemen's Land, to whom Captain Maconochie thinks the indulgence may be granted.

Figure 8 - „Changes in Prison Discipline” *Cornwall Chronicles* 10 June 1843 also printed in *The Courier* (Hobart, Tas.), Friday 19 May 1843.

With reports by Lord Normanby of the deteriorating conditions on Norfolk Island, the Molesworth Committee suggested Captain Alexander Maconochie (Figure 7a) be appointed as superintendent of Norfolk Island in March 1840. Maconochie, known as the ‘father of parole’, insisted that the objective of prison was not to punish for past misdemeanors, but to prepare prisoners for the future. His motto - “these convicts are also the Queen’s subjects”. He was a deeply religious man who had experienced life as a prisoner of war during the Napoleonic wars when he served under Nelson. He introduced an educational system and degrees of self determination including freedom to grow their own food, establishing a token economy which would introduce self reliance and determination. McKeown would likely have been right at home in this environment, given his listed trade as a kitchen gardener if he indeed had been allowed to participate in this new system! At Norfolk Island Maconochie introduced a system of ‘marks’ which

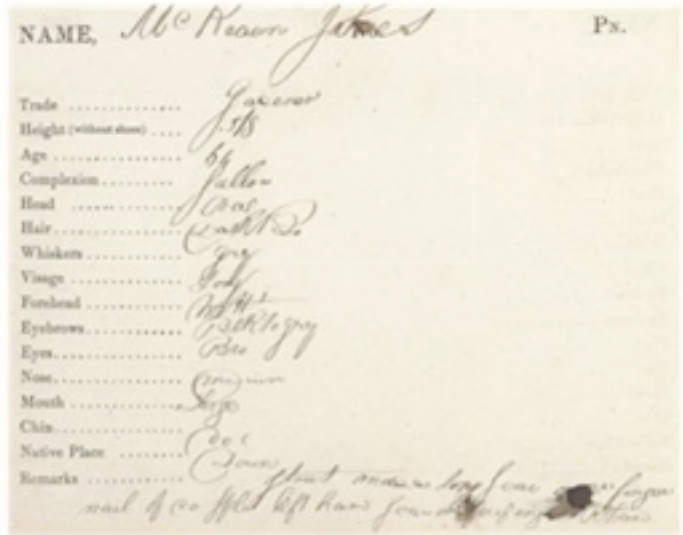


Figure 9 – The Lady Franklin which departed Norfolk Island on the 18 May 1844 arriving Hobart 6 June 1844.

prisoners could receive for positive effort and thrift and which would later earn rewards, including tickets of leave to work their own crafts around the island. However, Maconochie was allowed to only offer these privileges to the 593 newly arrived prisoners. For ‘Old Hands’ like James McKeown, it was to be punishment as usual. Maconochie found managing the two systems unworkable and, eventually proclaimed a single day where all prisoners would be free to celebrate the Queens birthday and roam the island along with the soldiers and their families. Using the music and instruments Maconochie had brought with him the convicts were able to conduct musical performances including the comic opera ‘The Castle of Andalusia’. Maconochie's system of moral reform met with harsh opposition from the mainland gentry, heads of the military and constabulary, with the paper publishing vitriolic articles (Figure 7b). Yet a visit by Governor Sir George Gipps in 1843 declared that the system could work if carried through to its conclusion and should be opened to the Old Hands. (12)

(a)

Name	McKeown Jas
Trade	Gardener
Height	5/8
Age	64...D.O.B. 1780??? (51?)
Complexion	Sallow
Head	Oval
Hair	Dark Bro
Whiskers	Grey
Forehead	???
Eyebrows	brown to grey
Eyes	brown
Nose	medium
Mouth	large
Chin	-
Native Place	Co. Down
Remarks	Stout, scars on fingers,



(b)

become equally demoralized. The manner in which convicts have been trained in New South Wales for the last half century, the neglect of religious instruction and of classification, and their dreadfully demoralized condition, are too well known to need comment; and consequently, such men were not fit associates for those subject to the system.

Figure 10 (a) Indents of male convicts arriving from Norfolk Island Record No. CON17 (<http://search.archives.tas.gov.au/default.aspx?detail=1&type=I&id=CON17/1/1>) (b) The Australian, 13th March 1843

DEPARTURE FROM NORFOLK ISLAND: A NEW SYSTEM

Despite the hostile response to Maconochie’s social reforms, he still had his supporters. Indeed, the entire transportation-based penal system was under scrutiny with Maconochie’s experiment, among other reports, sparking the establishment of a new system of probation in Van Diemens Land (Figure 8). In 1844 Maconochie was recalled to Van Diemens Land and subsequently returned to the United Kingdom (12,13). At this time he had discharged over 1400 prisoners, including James McKeown. In May 1844, McKeown boarded the Lady Franklin (Figure 9) for Wedge Bay, Hobart where he entered this new probationary system. He had left the old system, designed to neglect moral values and utterly demoralize these desperate men (Figure 10b). His personal indent from his arrival in Hobart lists McKeown as being 64 years old (Figure 10a), making his date of birth around 1780. This contrasts with his indent from his arrival in the colony in 1825 listed his date of birth as 1793 (14) making him 51years old in 1844. Is this a typo, or the cumulative effect of 20 years in the Australian penal system aging him? My next article in

this series will follow McKeown’s footsteps across Tasmania as he passed through the 5 stages of probation listed in Figure 8 to hopefully reach some sense of redemption.

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Further details on costs, closing date for abstracts, program and events will be advised shortly. Please visit www.asfconference.org.au/2013 for more information and registration details.

THE FOSSILS OF CORRA LYNN CAVE

Steve Bourne

Caving friends had often invited me to visit Corra Lynn Cave on Yorke Peninsula, however I never seemed to be able to get there on their proposed trips. It seemed like I might never see this cave, and having heard many stories and seen images of cavers stuck in small tunnels, thought that it might be a good thing anyway. In April 2011, I was asked if I would undertake an assessment of the cave for potential listing on the South Australian State Heritage List. Although the timeframe was short it was too good an opportunity to miss.

I enlisted the assistance of Graham Pilkington, who knows the cave better than anyone else and who has been responsible for many discoveries in Corral Lynn Cave. Graham recommended we also take Paul Harper, who like Graham has many hundreds of hours experience in the cave. Graham and I travelled to Yorke Peninsula meeting Paul at Curramulka. First stop was the Curramulka Quarry, an enormous limestone quarry on the edge of the property containing Corra Lynn Cave. Quarrying operations have revealed some small fissures filled with fossils, but have not located any significant caves. This is a little surprising given the quarry lies between Corra Lynn Cave and Town Well Cave within Curramulka.



Curramulka Quarry

We met up with owner Andrew Slater who unfortunately had not been notified by the Heritage Branch of the purpose of the trip to assess the cave for possible heritage listing. Andrew had concerns that heritage listing affect his ability to undertake his farming activities and have an adverse impact on the way he currently manages cave access. He has developed a strong working relationship with CEGSA and is strongly advised by them in the management of the cave. I advised that heritage listing recognises the significance

of a site and provided activities such as farming are not affecting the values identified, operations could continue as per normal.

Andrew Slater has been very effectively managing the cave in cooperation with the Cave Exploration Group of South Australia (CEGSA). The cave is locked and keys are held by CEGSA (the key holder and site coordinator), and Andrew himself and local emergency agency services.

Corra Lynn Cave is a maze cave in the Cambrian limestone of the peninsula. The known cave is 14 kilometres long on three levels, making it one of the longest caves in South Australia. All of this is within a surface area of about a 400 square metres, which shows just how complex this cave is.



Corra Lynn Cave entrance

The cave entrance is located in the base of a doline virtually on top of a large hill. This is fenced protecting the entrance from the effects of farming activities and has been planted with local vegetation. The stability of the entrance is affected by rabbits which graze the vegetation and burrow, creating erosion issues. The fence is 90% rabbit proof and if rabbits were completely excluded it will improve stability in the entrance doline. On this visit there was also a mouse and rat plague, and these rodents were also removing vegetation and creating some erosion issues. The cave is gated and like any good cave gate is difficult to unlock requiring contortion of arms and wrists to access the padlock.



Graham Pilkington in a passage in Corra Lynn Cave

The first afternoon we inspected the “old” part of the cave. This section has been known for well over 100 years and is the main part of the cave used for recreation. After negotiating the Wombat Run I was not looking forward to the Bandicoot Bypass, knowing this is a much smaller marsupial. So it was with the cave passage too which is certainly not for the faint hearted - a truly awful tunnel!

The following day was to be the big day, my first trip to “Dreamland”. After the previous afternoon’s caving and having been told that accessing Dreamland is difficult, I was starting to wonder what I had let myself in for. To access this one must first negotiate the “Letterbox” (one of the smallest cave letterboxes I have encountered) and then through “Alberta”. This is the bottom level (if you discount where Graham is currently digging) and is a long, at times very narrow passage. Some of this is a most interesting morphology, with the passage almost perfectly round which makes it difficult and uncomfortable to wriggle along. One section is labelled “The ##!*” on the map! The passage finally opens once you reach the “Portal”, the access point to Dreamland which requires a short 7 metre climb up and through a squeeze. Graham and others have been excavating at the Portal for some time cleaning out a downward passage, convinced more cave lies deeper. I admire the tenacity of

those working on this dig, it’s a reasonable crawl just to get to this point.

Paul climbed first and then I made it up. Unfortunately Graham hurt his arm as he started to climb and decided to stay behind. That left just Paul and me to find our way to Dreamland fossil sites. We located the first site fairly quickly but then missed a key intersection and spent some time back-tracking and trying to decipher the map. It is not a comfortable feeling knowing that one person who knows that section of the cave well enough to find you should we have an issue had a sore arm and could not climb up to mount a search! Onwards and further in we came to the “Graveyard”, accessed through yet another small uncomfortable squeeze. I made it through and was busy taking photos and making notes on the fossils when I noticed after a while still no Paul. Sometime later he eventually appeared, near naked as he had to remove his overalls to get into the fossil site!

The fossil accumulations are really interesting, mostly in a breccia on the walls and ceiling. Small macropods (kangaroos), snakes (similar in appearance to *Wonambi* from Naracoorte), bettongs and koala bones and teeth



*Top: Paul Harper in the Graveyard
Below: Small kangaroo dentary*



Access to the Graveyard is via this tight squeeze

were all visible. Cavers collected material for the South Australian Museum some of which was described by Neville Pledge. I am unaware of any palaeontologists visiting this site, which is a real pity, it's a great fossil site. Gavin Prideaux, palaeontologist from Flinders University, is a competent caver and has worked in a number of sites not easy to access, including Tight Entrance Cave in Western Australia. By some strong coincidence, Gavin's wife Rachel and her family owned the Corra Lynn property for many years but had sold it prior to Gavin and Rachel meeting. I provided Gavin with a copy of the photos and maybe he will be inspired to undertake some research here. A number of other species remain undescribed from this site. The fossils are thought to be Miocene to Pliocene in age, a period generally poorly represented in the fossil record. After photographing as much as I could, we set off for another fossil site at the other end of this level.



The holotype of a new species of koala from Corra Lynn



Gypsum crystals

This next fossil site was as equally impressive; one of the first fossils I noted was a *Palorchestes* incisor lying on the surface, particularly rare animal in the deposits at Naracoorte. I would guess this site was more Pleistocene in age, more of the species were recognisable to what I am acquainted with from Naracoorte. Once I had



A new species of sthenurine kangaroo named after Cave Exploration Group of South Australia (CEGSA). Members collected material for the SA Museum.

completed my documentation of the site, Paul and made our way back to the Portal to meet up with Graham, who had spent the six hours usefully cleaning up around his dig site. Just another one and half hours and we were out.

PICCANINNIE PONDS COLLABORATIVE RESEARCH PROJECT

Peter Horne and Dr Richard Harris

BACKGROUND

by **RICHARD HARRIS**

Piccaninnie Ponds Conservation Park in South Australia's lower southeast is the home of a unique wetland and subaquatic cave system locally referred to as "Pics". The cave system in the conservation park is interesting in many respects, not least because it is one of the few coastal spring-fed features in the area with morphology that varies greatly from the classical solution-collapse cenotes that are endemic to the Mount Gambier karst. As a possible anchialine cave (i.e. an inland cave with probable subterranean connections to the ocean), it also represents a unique ecosystem with enormous biodiversity.

Piccaninnie Ponds was one of the first caves to be extensively dived in the region during the early 1960s, and rumours very quickly developed of the presence of a near-bottomless chasm. Unfortunately it was also the site of three fatalities during the early days of Australian

cave diving and so it was soon regulated by the then National Parks and Wildlife Service with a permit system and a maximum allowed diving depth of 36.5 metres for qualified members of the Cave Divers Association of Australia (CDAA) Inc. Over the years, most divers who have visited Pics no doubt wondered what secrets lay in the depths of the cave. It is also likely that many clandestine dives were made to explore the deeper sections, and in more recent times with the advent of mixed gas diving, rumours of a passageway at over 90-100m have been propagated. However by making illegal dives, individuals risked not only their own lives but also the access rights of the law-abiding divers who represent the vast majority of the divers in the Association.

Like everyone else, I for many years wanted to explore the bottom of Pics. Finally in 2006, I put together my



Peter Horne in the very picturesque First Pond

first proposal for a mapping and research project using mixed gas technology. Not surprisingly, the CDAA was initially not enthusiastic about the concept; I learnt that other groups had put forward similar proposals in recent years and all had been rejected. Not being one to give up easily, I decided I needed to find more information to support my quest, so the next two years were spent on a fact-finding mission, reading up on the hydrology, geology and biodiversity of the region. Soon my simple "quest for the bottom" was replaced with a genuine interest in answering many of the mysteries of the ponds ... Where did the water come from? How was the cave formed? Was there a connection with the ocean, and what undiscovered life-forms might live deeper in the system?



(L-R) Team members Richard "Harry" Harris (Project Coordinator), Grant Pearce (Project Manager), Gary Barclay, Linda Claridge, John Dalla-Zuanna and Ian Lewis discuss the dive plan on the walkway to the First Pond. Photo: Peter Horne

With this renewed interest I approached the Department for Environment and Heritage (DEH). At that time there was increasing interest in groundwater use and the potential impact of industry and agriculture on the aquifer; Piccaninnie Ponds was already showing signs of stress and there were plans afoot to study these changes.

Suddenly the idea of deep-water sampling and tracking of water flow became much more appealing to the DEH; the development of the National Water Initiative also meant that water was politically red hot with monies becoming available for research. It would, however, take a further 18 months of negotiations, and with the assistance of local cave diver and environmental scientist Grant Pearce the final permissions were granted in early 2009. The last issue was resolved when the CDAA kindly

agreed to indemnify the dive activities as a Special Project.

PROJECT GOALS

by **PETER HORNE** and **RICHARD HARRIS**

With the intention of commencing the first-ever collaborative project between the DEH and volunteer cave divers, it was important to have some clear goals. Good baseline studies of such variables as water quality ("nutrient flux"), flow rates and sources, biodiversity and temporal trends had been performed in the Piccaninnie Ponds complex during the last 30 years, and the DEH expressed their desire to further develop a better understanding of all facets of the hydrology of the system.

None of the above issues could be studied without understanding the morphology of the site, so the production of a map of the complex was the first task. A mapping project coordinated by fellow project team member Peter Horne had been undertaken in 1984/5 and this provided good detail to a depth of approximately 50m in the chasm and 40m in the Cathedral, so the



Grant Pearce and John Dalla-Zuanna preparing to dive with Colleen Bernie in the background. Photo: Ken Smith

current research team thus aimed to provide detail from greater depths, along with information about temperature, water flow, geology and any fossils or fauna seen.

TRIP 1 PROJECT ACTIVITIES: 2-4 MAY 2008

The divers involved in the initial dives were Richard "Harry" Harris, Grant Pearce (Access Coordinator, mapping & support) and John Dalla-Zuanna (aka "JDZ", taking video). Before the diving commenced, a shot line was placed in the Chasm with emergency and



Looking down along the Sandy Track

decompression gases attached; careful placement also ensured that there was minimal disturbance to the aquatic plants. The dives are described below to give readers a feel for how the discoveries unfolded.

Friday 2nd May

Grant (on open-circuit trimix) first performed a dive in the "Bathtub" area at the bottom of the "Cathedral" in order to search for reported leads into deeper sections of the cave, and several potential areas for further exploration were identified. JDZ and Harry (both on trimix rebreathers) dived in the "Chasm", laying a line from the tie-off peg at approximately 36m down the "Dog Leg" to the "Saddle" at 53m. At this point the Dog Leg passage narrowed and they had a choice of two holes, right and left. The right hole dropped into a small chamber that connected laterally to the space beneath the left, while the left hole continued down and further left (east) into a vertical slot at 56m. Through that slight restriction they entered "The Sandy Track"; a more gently-sloping, tube-like passage one to two metres across and about a metre high with a silty rock floor (which also contained a number of very old, discharged photographic flash bulbs).

This passage continued down to the south-east at a slope of about 45 degrees to a depth of 70 metres, where they entered a small room running approximately north-south. The floor here was at a depth of 73 metres, and to the right, a narrow fissure ("The Cascades") dropped to 80 metres.

JDZ paused here while Harry entered the fissure. At 80 metres, a white guideline was found tied off to the wall, and a large mass of loose line caused him some delay with his descent while he gathered it up before dropping towards the bottom of the fissure. Harry then followed

the white line to a depth of 90m in a more open but very silty chamber (probably the long-rumoured "Subway Station").



The Cascades at about 70 metres. This is like a miniature version of the Saddle in the Dog Leg. The way on is via the tight fissure on the right.

At this point, the dive was turned and they both surfaced safely after their decompression at 180 minutes. JDZ also recorded a video of this dive, and on reviewing this it appeared that there was definite flow coming up out of the fissure at 75m, where rising silt could be seen.

Saturday 3rd May

JDZ and Harry dived in the Chasm again and quickly followed their line to the top of the fissure at 74m. Harry dropped through the fissure to the old white line and followed it down to 90m noting a horizontal passage approximately 15m long heading west towards the Cathedral side of the system. At 90m the white line ended in a tie-off on the eastern wall. No other line was found in this area, so after tying off a new line Harry pushed down and to the west slightly until at a depth of



Looking straight down into the deepest known area of Piccaninnie Ponds (110 metres) in several silty holes in the floor of the Subway Station.



Harry's first glimpse of the Chamber of Secrets took his breath away!

105 metres the floor came into view, containing several holes roughly 2 x 1m across. Harry dropped into the last of these, but the very friable chalky silt quickly enveloped him and all visibility was lost. He did, however, note that the soft silt floor was at a maximum depth of 110m.

Rising above the silt, Harry then noticed that any further exploration to the west appeared to be blocked by a large boulder. However as he ascended he realised that there was a passable gap between the top of the boulder (which he called "Sentinel Rock") and the ceiling of the Subway Station room. Swimming over the top at a depth of 96 metres, he entered clear water again and the gap between floor and ceiling increased. Suddenly, Harry found himself "...staring into space, my light barely illuminating the opposite wall of a large chamber! For me, this was a once-in-a-lifetime moment of pure joy as all the work of establishing the project was rewarded, with interest!" This fabulous room is now known as the "Chamber of Secrets".

With the clock rapidly ticking towards his maximum bottom time, Harry reeled out approximately 30m across the chamber, intermittently tying off on the silty floor boulders. The chamber curved to the right before slowly narrowing and ending in a sheer wall. The maximum depth at the end of the chamber was 107m, and several promising leads were noted around the perimeter. At exactly 30 minutes he made his final tie-off and swam out of the cave, surveying the line on the way out. In places, fossil scallop shells were noted embedded along the walls, and what looked like large "yabbie" tracks (?)



John Dalla-Zuanna at the end of the Chamber of Secrets.

Cherax sp.) were also noted in the floor silt. There were no signs that anyone had ever visited this area of the cave previously (although naturally this possibility cannot be completely ruled out), and Harry's total dive time, like many of the dives to follow, was around four and a half hours.

Sunday 4th May

JDZ and Harry again visited the deep section at the bottom of the Dog Leg, with the intention of taking water temperature measurements in different areas of the cave and to video the new sections. JDZ led while Harry followed with the video-camera, and with a permanent line now installed, the dive to the end of the new large chamber was easily completed in 20 minutes. Grant also dived to 80m and collected some water samples in the cave.

The outcomes from these first very exciting dives clearly showed that further dives and more detailed mapping involving the use of RDF "pingers", tapes and compasses was required to enable us to better understand the geomorphology of the Piccaninnie Ponds system. Some promising leads were found in the Chamber of Secrets, the Subway Station and at the bottom of the Cathedral, and along with more water sampling and biodiversity studies a detailed evaluation of the water flows in the Cathedral and the 75m fissure also needed to be carried out.

SUMMARY OF INITIAL FINDINGS

1. A significant amount of deep passage and chambers were found to exist beneath the chasm, trending in the general direction of the Cathedral. Video and preliminary survey data was also recorded.
2. There is apparent flow into the cave at depth, and this water may be welling up through the fissure into the Chasm and hence supplying much of the pond system. A point source has not yet been located.
3. The cave is extremely tight and silty in parts below a depth of around 74m, with the walls and rocks all covered in a thick coating of very friable "cheesy" silt. Much of the dive between 74 and 95 metres is spent in very low or zero visibility.
4. Fossils were found below 90m.
5. Tracks (most likely "yabbie", Cherax sp.) were observed in silt at approximately 105m.
6. Water temperature was recorded via depth gauge-mounted digital thermometers as being a consistent 16 degrees C from just below the surface to the maximum depth of 110m.
7. While some researchers have speculated that a seawater-based halocline may have infiltrated the deeper areas of the Chasm, no related changes in water visibility were observed anywhere in the system.

TRIP 2 PROJECT ACTIVITIES: 27-29 JUNE 2008

The divers involved in the second mapping and research trip formed two teams: Team One (the "deep" team) comprised May 2008 project members Richard "Harry" Harris, Grant Pearce and John "JDZ" Dalla-Zuanna as well as Linda Claridge (mapping & support) and Ken Smith (mapping, support & photography) who utilized both rebreather and open-circuit (scuba) trimix technologies to explore the deepest areas of the Chasm and Cathedral areas of the Ponds, and Team Two (the "air" team) comprised Ian Lewis (mapping & support/geomorphological documentation) and the author (mapping & support/video & photography), who undertook other mapping and research work in the shallower areas using scuba (air only). Gary Barclay was unfortunately unable to dive, but he still provided an invaluable support role in many ways (as did his partner Linda), including refilling scuba cylinders and supplying much-appreciated heat-packs and warm drinks for the often-chilled members of the dive teams.

The key objectives during this trip included:

- the continuation of the exploration and mapping of the deepest areas of the Chasm (The Chamber of Secrets etc), incorporating Ken's radio-location "pingers"
- videotaping these areas to aid both mapping and research activities
- exploring and mapping the deeper areas underneath the Bathtub in the Cathedral

- evaluating possible water flow areas (including a "Hot Spot" previously reported in the Cathedral) and recording temperatures etc of same
- collecting samples of water, rock and silt from specific areas
- noting and sampling fossils and general biodiversity aspects, and
- linking the 1985 "shallow" survey to the new "deep" survey.

SUMMARY OF SECOND WEEKEND FINDINGS

These dives resulted in a number of very interesting observations. Perhaps most importantly, the deepest areas of the Dog Leg passage (i.e. the Chamber of Secrets etc) were more thoroughly explored and visually-captured for the first time on high-quality (three-chip CCD) videotape, and it was determined that no major passages were found leading off or going deeper than the presently-known Piccaninnie Ponds system, although numerous possible leads still await further exploration. The observations of apparent water flow and temperature variations in the system, especially in the Cathedral and the Hot Spot, require much more extensive investigation using a range of techniques to measure these aspects. A number of aspects requiring more detailed mapping in relation to omissions made during the 1985 project (e.g. the northern wall of the Chasm being much more complex and ragged than has been recorded previously) were also noted.



The unexplored main rift in the NW corner of the Chamber of Secrets with its interesting strata and morphology.

The team was also very fortunate during the weekend to (literally) receive a "drop-in" visit by internationally-renowned cave diving explorer and film maker Andrew Wight, who parked his sleek blue helicopter in the paddock at the end of the carpark track and very kindly took Ian, Linda and Peter for an extended flight over the entire wetlands system. This valuable excursion resulted in the discovery of a number of interesting pools and lakes which Peter videotaped using Harry's video-camera so that they could be accurately located and explored later in this study.

TRIP 3 PROJECT ACTIVITIES: 29 OCT – 1 NOV 2009

The third trip once again involved a considerable amount of research and other work. The party on this occasion comprised Richard "Harry" Harris, Grant Pearce, John "JDZ" Dalla-Zuanna, Ken Smith, Ian Lewis and Peter Horne, along with new team members Liz Rogers, Chris Edwards, Dean Chamberlain and Jim Arundale, and (non-diving) Department of Water, Land and Biodiversity Conservation (DWLBC) staff Dave Sturges, Paul O'Connor and hydrogeologist Claire Harding. Grant's son Aaron also helped in various ways, including shuttling gear to and from the pontoon.

Because so much new information and mapping data had been collected about the deeper areas of the Piccaninnie Ponds system, JDZ was able to produce a stunning computerised 3D representation of the known system which not only enabled the research team to showcase Pics to members of the CDAA but also to the Department for Environment and Heritage and scientists/resource managers at the Department of Water, Land and Biodiversity Conservation. Very importantly, Grant was also able to utilise this new information to plan the placement of hydrogeological monitoring devices by the team's divers to facilitate a longitudinal study of electrical conductance at three locations in the system, and it is hoped that the data obtained from these instruments over the next few years will greatly increase our understanding of this important groundwater-dependent ecosystem.

The primary goals of this 4-day diving period included:

- the installation of three hard-wired water quality data-loggers in areas that best represented possible water outflow and mixing areas in the spring system;
- obtaining temperature, pH and EC data from multiple levels using a water sampling device drawn through the water column, and obtaining water samples from different locations and depths for more detailed analysis;
- continuing the exploration and mapping of the Cathedral side of the system; and
- exploring and assessing selected areas of the surrounding swamps and wetlands for undocumented yet potentially significant flooded karst features.

CONCLUSIONS

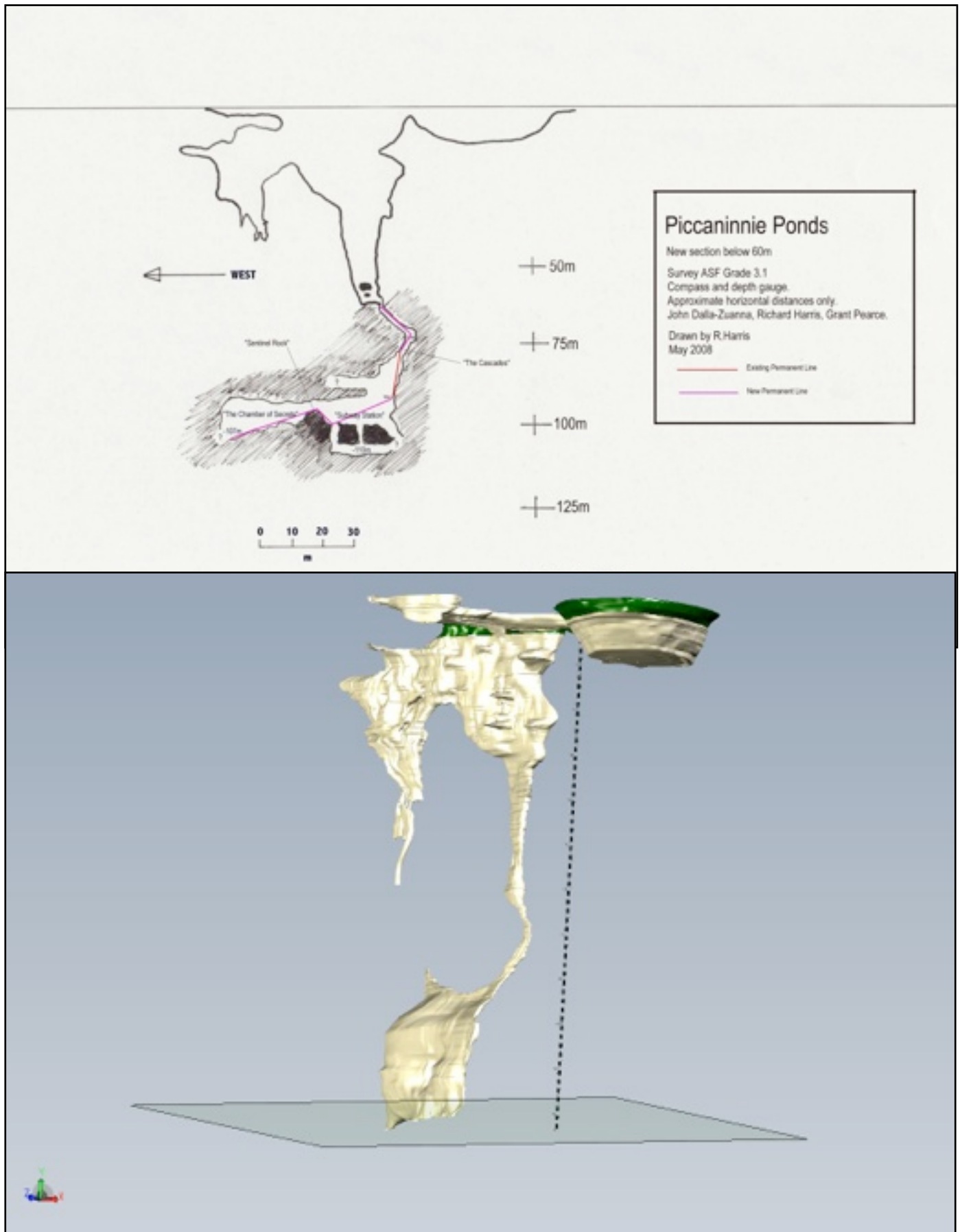
This first paper describes the cave diving research activities in Piccaninnie Ponds which were undertaken in 2008 and 2009. For the study participants, the opportunity to start to unveil some of the secrets of this world-class groundwater dependent ecosystem has been tremendously exciting. As with many such projects, every answered question and every new discovery has led to even more questions and more theories about the genesis of this unique site. We are just scratching the surface in terms of understanding the hydrogeology of the Piccaninnie Ponds spring system and we await with eager anticipation the results of the many water and rock samples that we have helped source.

Ian Lewis also utilised his geomorphological knowledge and experience during this project to more thoroughly record the physical structure of Piccaninnie Ponds. From underwater observations and measurements he made of wall features as well as our underwater images, Ian found that significant water level fluctuations and flow regimes appear to have occurred over at least 20,000 years, reflecting sea level changes and some past climatic indicators. Furthermore it is possible that the system contains old water level features and some geological features that extend back more than 125,000 years (perhaps to 220,000 years) which are the two lowest Ice Age sea levels prior to the most recent episode.

As this first phase of the study concludes, we embark on the second phase which should prove equally productive. The longitudinal analysis of water chemistry now commences thanks to the positioning of the data loggers in the spring, and ongoing maintenance of this equipment will provide the opportunity for further dives. Numerous parts of the system also require further exploration, including the Bathtub area of the Cathedral, the horizontal rifts between 85m and 100m in the bottom of the Dog Leg, and some small karst features in the surrounding wetlands. Ian and Grant also feel that these features may hold vital clues to the possible volcanogenic genesis of the system.

This study has also been groundbreaking for CDAA divers from the point of view of collaborative research with government departments. A great deal of effort has gone into organising a framework within which volunteer divers can work alongside the DWLBC and DEH, and we hope this may open the door for other similar collaborative studies in the future. Deep technical cave diving carries a small but real risk, and it is a credit to the CDAA's training proficiency and to the professionalism of all the divers that the project has been conducted without any significant incident.

We would thank Steve Bourne and the DEH, Grant Pearce, Peter Alexander and the DWLBC, and the directorate of the CDAA for their assistance with the project thus far. Our thanks also to all of the divers involved and the technical staff who have donated their time and energy to assist with the safe conduct of the project.



A sketch of the new deep section of Piccaninnie Ponds and a 3D version produced by John Dalla-Zuanna

WCPA - IUCN CAVES and KARST SPECIALIST GROUP NEWS

Jay Anderson - Caves and Karst Specialist Group

A few people have asked how things are going with the Caves and Karst Specialist Group – well, things are ticking along with the usual Invitations to attend meetings and several requests for support from our International cave and karst management colleagues.

I have been invited to the World Commission on Protected Areas Steering Committee Annual Meeting, which is being held in Senegal, Africa during February. I would love to attend, however, as a volunteer, cannot afford the travel costs associated with attending the special annual meeting. As part of my role I will submit a report for this annual meeting.

Later in the year (September) is the IUCN World Conservation Congress, being held in Korea. With the support of a number of other karst colleagues around the world, I had put together two proposals for karst management related workshops at the Congress.

“How resilient are karst systems as protectors of water resources and biodiversity?”

“Karst Ecosystem Management – best methods and practices”.

I was also approached by Fauna & Flora International to partner with them in the development and presentation of their proposed workshop, which was an excellent initiative. This was in relation to “Reducing the impact of industry on karst”, and focussed on the Asian cement and karst quarry industry and impacts on karst biodiversity.

Unfortunately, none of our 3 karst related workshop proposals were accepted for the Congress Program. We were informed that the Technical Review Panel of the IUCN World Conservation Congress was pleased to receive more than 800 session proposals. And, that given the high quality of the proposals, the task of identifying those which will collectively deliver the most interesting Congress was challenging. So, our sessions were not chosen to go into the program. I had been optimistic that someone would see the importance of karst and the Congress would have presented an excellent opportunity to engage with many people.

I was also contacted in relation to a European disaster. This involved the shooting of the Hollywood production *Expendables 2* in Devetashkata Cave, northern Bulgaria. The movie production led to a dramatic disturbance of big bat colonies, which hibernate in this cave. Under the provisions of the national Biodiversity Act, all bat species in the country are strictly protected!

The cave is one of the top three most significant underground habitats of bats in Europe and a very

significant bat hibernacula in Bulgaria, where colonies of up to 60,000 bats roost in winter. From the information I have read, there are around 13 species of bats, which either use or hibernate in this cave. I was informed that this cave is a Protected Natural Landmark designated under the national Protected Areas Act (European Union Habitats Directive). It is included within two sites of the NATURA 2000 European environmental network. According to the latest assessments of bat populations in Bulgaria, the Devetashkata Cave is a roost of international importance, covering all criteria set for this category by the EUROBATS Agreement.

During November, a huge decline of the *Miniopterus* colony was observed. From about 35,000 bats, there was only about 8,600 left in the cave. The noise disturbance due to construction, is reported to be so great that while standing under the colony you can hardly hear a normally talking man. It seems that the disturbance was for around 6 weeks, involving over 100 people and much machinery (Alexey Zhalov pers comm).

Go to [http://greenbalkans.org/show.php?language=en_EN&id=1270&cat_id=35-11th Nov 2011](http://greenbalkans.org/show.php?language=en_EN&id=1270&cat_id=35-11th%20Nov%202011) for more information. Of particular concern, is that the resulting human disturbance meant that the bats are not in torpor and many were observed flying around in the cave. The weather is too cold and there are almost no insects flying at night, which has led to the death of a significant number of bats in this cave. It is so hard to believe that this situation was able to occur!

Well, I hope that everyone had an excellent Christmas. Here's wishing all who read our ACKMA Journal, a very “Happy New Year”. I'm looking forward to another busy year.



Infrastructure being erected in Devetashkata Cave, Bulgaria. Photo: www.greenbalkans.org

POOLE'S CAVERN, BUXTON and the UK PEAK DISTRICT

Miles Pierce

In the course of a recent trip to Europe and the UK, Rhonwen and I visited Poole's Cavern, located on the edge of Buxton in the heart the Peak District in Derbyshire. The cavern is believed named after an outlaw from the 15th century, although it is not known whether he actually utilised the cave as a hideout. Visits to the cave by notable public figures date back to the late 1500s. The cave was formally opened for public visitation in 1853 by its then owner, the Sixth Duke of Devonshire who appointed a Mr Frank Redfern as the cavern's first official custodian.

Redfern set about developing the cave by enlarging the low entrance, installing internal pathways and steps and arranged a series of 'huge candelabra'. The latter candle based illumination was replaced by Redfern in 1859 with gaslights connected to the town gas supply. This was an innovative venture at the time and Poole's Cavern is claimed to be one of the first – if not the first - show caves to be so lit. One of the original gaslight posts with remnants of its gas lantern is still in-situ, along with soot staining of the cave ceiling due to the gas lighting that would have used the then typical fishtail burners. Gaslight illumination continued to be used up until 1965 when the cave was closed down.

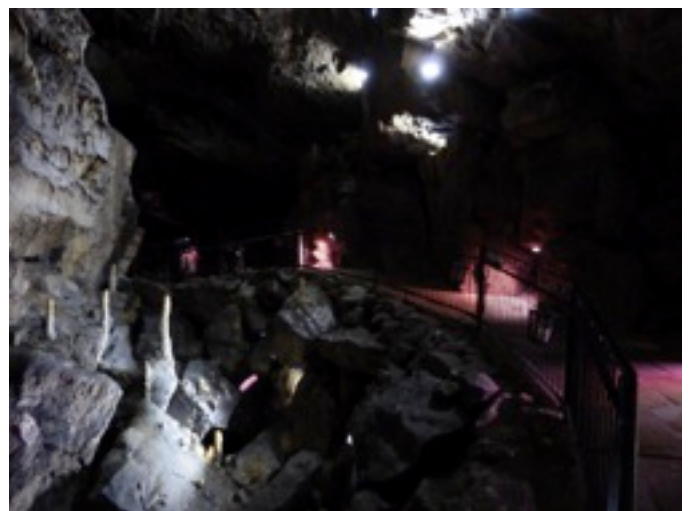
Poole's Cavern was relit with electric lighting and reopened to the public in 1976 by the Buxton and District Civic Association. The 1976 electric lighting was in turn superseded by LED luminaires installed throughout the cave in 2009. The latter are typically five LED strip type luminaires and although generally effective, there is clearly room for improvement, particularly in terms of shielding some of the fittings to minimise adverse glare, a factor which is made more critical because the return tour path is the reverse of the inward trail. The use of some other styles of LED luminaires could also be potentially advantageous for feature lighting in this cave.

Poole's Cavern is formed in the Peak District Carboniferous age limestone and after a low entrance arch comprises a generally spacious upward grading passage of around 300 m in length to a terminal rock choke. An intermittent stream traverses part of the cave passage. Major excavations were made through sediments on the cave floor during the Victorian era to facilitate visitor access and in the process revealed evidence of early human occupation of the cave. More formal archaeological excavations conducted by the

Peakland Archaeological Society in the 1980s confirmed the previous evidence of Roman era occupation as well as some artifacts attributed to earlier Iron Age, Bronze Age and Neolithic periods. Evidence of the 1980s archaeological excavations in the form of a dug pit and marker pegs can be observed in the so-called 'Roman Chamber' of the cave.

The cavern is not particularly well decorated, however it does have a prominent expanse of white flowstone with associated gours on one side of the streamway beneath the Cavern's signature broken stalactite formation. This is followed by some further attractive flowstone coated rockfall and large stalagmite bosses close to the terminal chamber. Elsewhere, there are intermittent areas of speleothem development, some with occasional early graffiti markings. Although not flowing at the time of our visit, the cave stream would add to the visitor experience when it is active, albeit not in flood. Similarly, the presence of water on the flowstone and its gours would enhance the appearance of this feature.

The Visitors Centre at the cave entrance is well appointed with a good interpretive display relating to the Cavern's formation, archaeology and recent history. The centre also includes a small shop and café facilities. A well illustrated 24 page Souvenir Guide booklet of 'Poole's Cavern and Buxton Country Park' is available for purchase.



General view of cave passage

A further feature of interest is the Grinlow Woods wherein the cavern is located and the nearby summit of Grin Low (437m). This limestone hill was the site of extensive limestone quarrying from the 16th to the 19th century with the rock being 'burnt' on site in simple 'pudding pie' kilns to produce lime for mortar and for agricultural uses. A stone tower, named Solomon's Temple after the local farmer who built it in 1896, surmounts the Grin Low summit, affording a panoramic view of the town of Buxton and the surrounding hinterland.

In all, although not one of the 'must see' show caves, if one is visiting the attractive town of Buxton in Derbyshire's Peak District, a visit to Poole's Cavern and its adjoining Buxton Country Park offers a rewarding experience.

Castleton, to the north-east of Buxton also has a number of show caves that are related to the lead mining in the district. We took a guided tour of Treak Cliff Cavern which bills itself as the 'Home of Blue John Stone'. The first section of this cavern started as a lead mine and later was exploited for its blue to purple calcium-fluoride mineral deposits known as 'Blue John' and used for jewellery and ornaments. A natural cave passage is accessed from the underground mine workings with a separate exit tunnel out to the hillside overlooking the village of Castleton. An interesting but – at the time of our visit – a decidedly low-key tourist operation in need of a clear vision and a capital injection to upgrade its infrastructure.



Prominent flowstone and gours alongside streamway

BUNGONIA NATIONAL PARK: CAVE INSTALLATION

Reproduced with permission from www.bridgeweb.com

THE FOSSIL-HOGANS BRIDGE SAGA

Foreword by Andy Spate

I think it was Armstrong Osborne who suggested to me at least two or more decades ago that potentially important sediments in Fossil-Hogans Cave at Bungonia were being damaged by cave users. Gravel deposits such as the ones in this cave clearly have a story to tell – but we don't necessarily have the keys to understanding such deposits. So we need to keep them intact so that future workers can possibly find ways to unravel this aspect of cave history.

The Fossil-Hogans Cave sediments in question are an approximately 2-3 m deep sequence of well-rounded stream gravels in a fine silt/sand matrix – suggesting both a flood deposit and a long transport period for the rounded gravels. Strange ...

To the saga – there were many discussions and inspections over many years – many ideas were tossed about. But eventually Dirk Stoffels from the Canberra Speleological Society took charge of the project – and assisted by others – took it to fruition.

My thanks to them all – but especially to Dirk! And hopefully his efforts with his colleagues will mean that this sedimentary sequence will be preserved – and maybe ultimately add to our understanding of the Bungonia karst system.

THE INSTALLATION

A team of 26 experienced cavers spent a weekend installing a bridge and ladder system to prevent visitors

from inadvertently damaging a cave in Bungonia National Park in New South Wales, Australia. The cavers worked with NSW National Parks and Wildlife Service (NPWS) to carry out the delicate task of installing the bridge and ladder structure to protect the fragile ecosystem.

NPWS Area Manager, Graham Bush, said today that the job of designing and installing a bridge and ladder in a cave was a difficult operation.

“The B4-5 cave system, also known as Fossil Cave and Hogans Hole is popular amongst recreational cavers, taking two to three hours for a group to navigate. “Unfortunately, constant usage was taking its toll on some of the more important values of these caves resulting in degradation.

“However a team of experienced cavers came up with the solution, which was to install a specially designed bridge and ladder to reduce the erosion caused by people. Members of the Highlands Caving Group, Canberra Speleological Society and the NPWS collaborated on the design and fabrication of a final bridge structure.

“A mock PVC pipe side section of the structure was made within the cave system to see how it would work and fit. It was then removed in sections and later helped with the fabrication of the final bridge sections.

“Once the bridge and ladder were constructed, a team of twenty six experienced cavers installed the bridge over a weekend. The cavers were from six different Australian Speleological Federation caving clubs. It was a difficult job in really cramped conditions.



Cavers working to instal the bridge and ladder (left) and the completed installation (right).

FROM FIRES TO AWARDS

Jayne Hatcher

What an eventful few months it has been in Margaret River; from the devastating Prevelly and Gnarabup bush fires, to the Jewel Cave Preservation and Redevelopment Centre winning Gold in the Western Australian Tourism Award for Tourism Attraction, to the Jewel Cave open day and then the launch of our very own attractions book "Wonders of the Margaret River Region" it has been an eventful and exciting few months for our team at CaveWorks.

Margaret River Bushfires. - As many of you would have heard on the news, a blaze in the Prevelly and Gnarabup areas of Margaret River, (believed to be a prescribed burn by the Department of Environment and Conservation) got out of control, destroying 32 homes and nine chalets. The fire devastated the seaside community of Prevelly, however the town has rallied around this community holding many local fund raising and charity initiatives to support those affected as they get back on their feet.

The local caves on the Leeuwin Naturaliste Ridge were not affected, thanks to the amazing efforts of the fire brigade. The bush fire was headed toward Mammoth

and Lake Caves and as a precaution we were evacuated for 4 days. It was great to see our fire management plans in action and see that they were successful, but the effects of the fire were felt throughout the town and community, with many of my staff directly impacted by the fires. The effects of the fire have been felt in so many ways; from loss of homes, water damage, smoke damage, loss of utilities (electricity, phones and sewerage), loss of business for local operators (accommodation, restaurants etc.) and a down turn in tourism due to the perception that Margaret River has been burnt. We will have a hard year ahead and the best thing I can say to anyone travelling this way is please come and support the town. If you would like to support the people of the Margaret River bush fires, donations can be made through the Lord Mayor's fund - <http://www.amrshire.wa.gov.au/>

Western Australian Tourism Awards - On the 26 November 2011, the Western Australian Tourism Awards were held at the Burswood Hotel in Perth. The Jewel Cave Preservation Centre took out the Gold Award for Tourist Attraction and Silver for Ecotourism and has been nominated for The National Tourism Awards to be



A view of the newly relit Jewel Cave. Photo: Lindsay Hatcher

held in Cairns in March. It was such an exciting evening, a time to celebrate; with the unique building and cave lighting being delivered on time and budget, it was an exceptional project that we are so proud of. We must give great thanks to the team that helped and assisted throughout the project, they all worked tirelessly; giving up many of their own hours to ensure the project was delivered to a high standard. At the National Awards we will have some stiff competition with Jenolan Caves competing in the same category. I think this would be the first time 2 cave sites have competed at the awards. Any ACKMA members in WA are encouraged to visit and see our new building and cave lighting; it is world-leading and a totally new experience that we would love to share.

Jewel Cave Open Day – To celebrate the building and lighting being completed at Jewel Cave and the recent Gold Award for Tourism Attraction, we held an open day for the local community. Free tours, balloons and lolly bags were offered, and the open day was a huge success with over 800 locals attending, some who had not visited

for over 20 years. We were able to showcase the new building and lighting with visitors blown away by the improvements at the site and the environmental initiatives that had been adopted. It was extremely encouraging and very positive and showed how the project has delivered on its objectives.

New Cave and Lighthouse Book – “Wonders of the Margaret River Region” The production of this book is very exciting as the Margaret River Caves have not had a dedicated souvenir book for over 10 years. We developed the stunning new book and launched to our visitors just in time for Christmas. The book is A5, contains 40 pages with spectacular new images and is selling for \$9.95. We offer all ACKMA members 20% off (cost of \$8.00). If you would like purchase one please contact me by email – jaymehatcher@margaretriver.com and we can arrange payment.

Editor’s note: This booklet is reviewed by Andy Spate on the following page.



A page on Thylacines from the new Cave and Lighthouse book

WONDERS of the MARGARET RIVER REGION

Reviewed by Andy Spate

Published by the Augusta Margaret Tourism Association (AMRTA). Paperback, 42 pages + covers, 'landscape' format, text unattributed, photography by Lindsay Hatcher with additional photography from David Wilcox, Lloyd Robinson and Leighton De Barros. Price \$10 (\$8 with a cave or lighthouse ticket).

This nice little booklet deals with the four attractions operated by AMRTA on the Leeuwin-Naturaliste Ridge. There is also a page dealing with the biodiversity of southwest Western Australian and another on the marine diversity of the region. The four AMRTA attractions are, of course, the three caves – Mammoth, Lake and Jewel – and the Cape Leeuwin Lighthouse which illuminates both the Southern and Indian Oceans with its essential warning to mariners.

The caves are developed within the very young (by geological standards) Tamala Limestone which here is thought to be around one million years old. These limestones consist of fragments of corals and shells blown from the sea floor at times of low sea level during

glacial periods to accumulate as huge carbonate sand dunes. As the dunes hardened to form limestone caves started to develop – hence the term 'syngenetic karst' – caves and rocks were forming at the same time!

Mammoth, Lake and Jewel Caves are spectacularly different as this booklet makes out. All well- worth a visit as the booklet demonstrates. There is text dealing with the history, features, environment and development of the caves. The booklet is profusely illustrated with images from Lindsay and others – unfortunately the image captions do not identify the photographer. The images range from fantastic to a little ordinary. I wish I had an image as good as the *Zygomaturus* jaw bone!

The booklet emphasizes the fine work of AMRTA and several grant organisations in environmentally works at the AMRTA sites.



ACKMA 2013

WAITOMO CAVES NEW ZEALAND

The next ACKMA Conference will be hosted at Australasia's leading cave destination - Waitomo Caves, New Zealand.

The 2013 conference will kick off on the evening of Sunday 12 May, running through to the following Friday 18 May. The general format will be papers in the mornings and local activity options in the afternoons and evenings.

The last ACKMA visit to Waitomo was in 1997. A lot has changed since then, with major new cave developments for the Spellbound, Ruakuri and Caveworld products, and a 'wow' new entrance complex at the Waitomo Glowworm Cave.

Waitomo has some unique features as a cave tourism destination. There's a large mature adventure caving sector primarily based on 'black water rafting' in river caves. And of course there is the beautiful rolling green scenery. There's also a very high level of private sector investment in cave products compared to many cave destinations. Reflecting this, the Conference theme is the Triple Bottom Line. How can caves deliver economically while maintaining environmental and social outcomes?

The Conference organising committee invite you to join us in 2013.

Waitomo – two landscapes, twice the fun!



Waitomo Glowworm Cave new entry complex



Spellbound Glowworm Cave

Waitomo Conference Facts

Start	Late afternoon Sunday 12 May 2013
Finish	Late evening, Friday 18 May 2013
Transport:	At least one transport run from and to Auckland and Hamilton International Airports will be provided at each end of the Conference
Accommodation:	Waitomo has a wide range of accommodation within walking distance of the conference venue. Backpackers, campground, bed and breakfast, caving club and a hotel are all there.
Amenities:	Waitomo village has a general store, tavern, cafe and information centre. Regular rides will be available into the nearby towns (15 mins away) for supermarkets, banks, pharmacies, and hairdressers.
Pre-conference	Wild caving based in Waitomo on 11 & 12 May
Post-conference	Back to Auckland via the karst of the western Waikato. Kawhia and Raglan Harbours, Bridal Veil Falls, Lake Disappear polje, Nikau Cave, Port Waikato. End with some lava caves in Auckland including beautiful Rangitoto Island. Likely to be 2-3 days with limited places.
And ...	Hosting a geologically interested mob in a geologically interesting country, we will organise a pre- or post- trip to the Rotorua geothermal areas and/or the Taupo volcanoes. Details to follow.

Sarawak Chamber, Mulu National Park, Sarawak



