

# **Speleo Spiel #321**



**August – September 2000**

**Newsletter of the Southern  
Tasmanian Caverneers**

PO Box 416, Sandy Bay 7006  
Tasmania, Australia



## STC Officers:

### President:

Trevor Wailes  
Ph: (03) 6229 1382 (h)  
trite@ozemail.com.au

### Vice President:

Hugh Fitzgerald  
Ph: (03) 6223 7088 (h)  
Hugh.Fitzgerald@utas.edu.au

### Secretary:

Liz Canning  
Ph: (03) 6223 7088 (h)  
Liz@dpiwe.tas.gov.au

### Treasurer & Karst Index Officer:

Arthur Clarke  
Ph: (03) 6228 2099 (h)  
arthurc@southcom.com.au

### Equipment Officer and S&R Officer:

Jeff Butt  
Ph: (03) 6223 8620 (h)  
jeffbutt@netspace.net.au

### Librarian:

Greg Middleton  
Ph: (03) 6223 1400 (h)  
gregmi@delm.tas.gov.au

### Scientific Officer:

Albert Goede  
Ph: (03) 6243 7319 (h)  
Albert.Goede@utas.edu.au

### Public Officer:

Steve Bunton  
Ph: (03) 6278 2398 (h)  
sbunton@postoffice.friends.tas.edu.au

### Webmaster:

Hans Benisch  
Ph: (03) 6239 6899 (h)  
hbenisch@netspace.net.au

### Speleo Spiel Editor:

Jamie Allison  
Ph: (03) 6273 8160 (h)  
jamie.allison@sonichealth.com.au

### Speleo Spiel Proof Reader

& Distribution:  
Jeff Butt

### Front Cover:

Jeff Butt ascending a Khazad Dum waterfall pitch

*Photo by: Arthur Clarke*



The views expressed in the Speleo Spiel are not necessarily the views of the Editor, or of the Southern Tasmanian Caverneers Incorporated.

# The Speleo Spiel

*Newsletter of the  
Southern Tasmanian Caverneers  
Incorporated*

*PO Box 416, Sandy Bay, Tas. 7006*

*<http://www.tased.edu.au/tasonline/scaving/>*

*ABN: 73-381-060-862*

## Issue No. 321

## August - September 2000

Editorial.....	2
Upcoming Meetings and Trips.....	2
Club Matters – Notice of the AGM.....	2
VALE, Des Lyons.....	3
The 4th Annual STC Dinner.....	3
Notice of the AGM .....	4
Objections to the Mt. Cripps EL.....	4
Burning Down the House .....	4
AGM Nomination Form & Membership Renewal Form .....	5
De-rigging Khaza Dum .....	6
Scratch Pot Survey .....	7
Exit Cave System Fully Restored .....	8
JF5 AND JF69 – Piecing Together More of the KD Puzzle.....	10
Wolf Hole .....	12
Satan;s Lair.....	13
The P-Hanger Project.....	13
A Complete List of all the Known Mole Creek Caves.....	15
STC Warehouse Sales and Classifieds .....	26

STC was formed from the *Tasmanian Caverneering Club*, the *Southern Caving Society* and the *Tasmanian Cave and Karst Research Group*. STC is the modern variant of the Oldest Caving Club in Australia.

### Copyright 2000 STC

*This work is STC copyright. Apart from any fair dealing for the purpose of private study, research, criticism or review, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from the publishers and the inclusion of acknowledgment of the source.*

## Editorial

Life often dishes up the odd challenge just to mix things up and make things interesting. I have been offered a position with my current employer's parent company Sonic Health Care as an IT Security Specialist. What impact does this have on the club I hear you ask? It means that I have to resign my position as Speleo Spiel Editor due to the considerable amount of time it will consume. So this will be my last issue and we need to find a replacement Editor. If you are interested (even slightly) then check out the info at the bottom of this page and drop me a line. Keep in mind that you are not on your own; there are other club members able to lend a hand if required.

A special thank you goes to Arthur and Jeff for all your help through out the year. Without your assistance my job would have been very difficult indeed. Finally, thank you for the comments and suggestions over the past year. Many people have mentioned that the Speleo Spiel is a great publication. This is only because of the high quality material you submit, so keep on caving and keep on writing.

Jamie Allison (jamie.allison@dspl.com.au)  
Speleo Spiel Editor.

## Club Meetings

General business meetings are held on the first Wednesday of each month (7:30pm for a 8:00pm start). Social gatherings and special events are held on the third Wednesday of each Month starting at 8:00pm. Meetings are convened at the Shipwright Arms Hotel in the area just inside the front door (near the fireplace). All are welcome and encouraged to attend.

Wednesday, 18 <sup>th</sup> October	Social Gathering
Wednesday, 1 <sup>st</sup> November	General Business Meeting
Wednesday, 15 <sup>th</sup> November	Social Gathering
<b>Wednesday, 6<sup>th</sup> December</b>	<b>AGM, 8pm at the Gear Store. Refreshments provided.</b>

## Upcoming Trips and Events

*Please watch the STC List Server for trips and events over the next 2 months.*

Saturday, December 9	STC Annual Dinner, Dover. Please see the advertisement later in this Spiel.
-------------------------	---

## Position Vacant: Speleo Spiel Editor

This demanding but rewarding position requires a self-started who can work to a deadline while producing a high quality publication for STC members and the speleological community. The editor should be proficient with a recent word processing package like Word 2000 and access to a modern computer, printer, scanner and email is essential.

### Duties:

- Seek and collate articles for STC publications (Speleo Spiel and other publications) to give a good coverage of the activities of STC members.
- Produce the Speleo Spiel six times per year.
- Produce an annual publication if enough material / interest is available.
- Co-ordinate the distribution of the Speleo Spiel to all members on the distribution list.

*For more information, contact Jamie on 0409 427 966 or by email  
jamie.allison@sonichealth.com.au.*

## Club Matters

A big welcome to our newest prospective member Anna Greenham. Look for Anna's article on page 4.

## Advance Notice of the AGM

Advance notice of the AGM to be held in the gear store on Wednesday, 6<sup>th</sup> December at 8pm. More information on page 4.

## From the Gear Store

The gear store is now looking a bit more like it should; the vast number of ropes we have recently had 'stored' underground, are now stored back in the rope-rack.

## Helmet Grant Success

STC has been granted a \$500 grant from the office of Sport and Recreation through the Tasmanian Government Community Support Levy. In the near future this money will be spent and new SRT suitable helmets will appear in the gear store.

## Karst Care Group Forming

Through the efforts of the Northern Caverneers, a Karst and Cave group is being formed in the North of the state. This will be a part of the DPIWE WildCare scheme.

## EMP Pot (IB143)

The entrance of EMP Pot (in one of the benches of the former Benders Quarry) was visited on 12/8/2000 and a several large blocks have fallen from the 'dubious stack' above the entrance into the entrance and have blocked it. It may be possible to remove these to clear the entrance, but anyone heading down that way should take extreme care!

## Fruehauf SRT Training

For novices to old hands, learn some new skills and/or refine some old. Commencing in November on the 2<sup>nd</sup> and 4<sup>th</sup> Wednesdays (and the 5<sup>th</sup> Wednesday on November 29) from 6pm at Fruehauf Quarry, South Hobart. Contact Jeff on 03 6223 8620 for more details.

## VALE, Des Lyons – Foundation Member of the TCC

By Albert Goede

In The Mercury on 24 August, 2000, the death was announced of Des Lyons, a foundation member of TCC. Des was a member of the Hobart Walking Club at the time of TCC's formation and joined together with a number of other Walking Club members such as Leo and Jessie Luckman, Peter Allnut, Heather Guilline and Pat Wessing. Des was the eldest son of a former Prime Minister of Australia, Joseph Lyons and Dame Enid Lyons, who was also deeply involved in Australian politics despite bringing up a large family. He was trained in the legal profession and worked as a country lawyer in Northern Tasmania for a number of years before coming to Hobart in the 1950's to teach mathematics at what was then Hobart Highschool.

Des's early efforts at cave exploration were concentrated in northern Tasmania, especially Mole Creek. He was one of those responsible for the initial exploration of caves such as Lynds Cave, Croesus Cave, Kubla Khan, Little Trimmer, Mersey Hill Cave and a number of others. He also carried out some early exploratory work in areas such as Lorinna, Moina, Gunns Plains and Loongana. In western Tasmania he was involved in exploration of karst areas along the Gordon and Jane Rivers. Des was unable to swim and to get across the Mersey River to Lynds Cave in the early days before the river was diverted into the Forth was for him a major undertaking and not without considerable risk. Des was short of stature and carried a lot of weight around the middle but despite this handicap he was remarkably agile and a good climber. After the discovery of The Pleasure Dome in Kubla Khan in 1957 by some of us using rubber dinghies, Des pioneered a high-level climbing route through the stream passage to by-pass the deep pools of the River Alph. The route had such

memorable features as Drum Drop (a fuel drum strategically arranged on a narrow ledge to serve as a stepping stone) and the Stalactite Shuffle.

Des was responsible for naming a number of caves and many cave features in the Mole Creek area. Des could be a difficult and argumentative person and on occasions made more enemies than friends. Thanks to his legal training he would never loose an argument no matter how far-fetched some of the evidence he would advance on occasions. He was a great believer in creationism which did not endear him to the geologists in the club and was strongly opposed to the introduction of decimal currency (but it was introduced anyway). He also nearly caused the club to split down the middle when he marshalled a list of carefully documented points as to why cave maps should be plotted with magnetic north at the top! In 1958 he was elected as TCC's delegate to the Second ASF Conference which was held in Hobart. The appointment was made in order to counter what was seen as the excessive influence of NSW caving clubs in the budding federation! Unfortunately I was in Europe at the time so did not attend but have been assured by many that it was a very lively meeting! Des got the last word by subsequently writing poems about some of the mainland caving clubs. They were published in 1960 in Bulletin No.4 of the Tasmanian Caverneering Club. SSS showed remarkable restraint by not serving him with a libel suit.

A colourful early Tasmanian caver has passed on. Sometimes I cannot help but wonder if he is not still at the Pearly Gates arguing with St Peter for special entry concessions for pensioners. ■

# .....the 4th ANNUAL STC DINNER

(theme: Your Favorite Cave Critter)

It's that time of the year again.....

This years Annual Dinner is being held at Francistown on Saturday December 9th. The venue is Arthur Clarke's place and Robyn Claire has generously offered to do the catering (a repeat deal by the team who made the 2nd Annual dinner so great!)

The damage is \$15 per head, BYOG, but a few local wines will no doubt see the light of day before the evening is over. Those on a tight budget might like to be kitchen hands for a period to help Robyn with either food preparation and / or the big clean-up, so don't get put off if your finances are low!

There is plenty of room for those who wish to crash (some beds, more floor space, tons of great camping), so why not come and make a weekend of it.

Associated caving options are many and varied and may include:

- a trip to Exit Cave,
- a trip to Wolf Hole,
- relaxing at the sleepy Francistown hollow,
- check out the New Hastings Cave Visitors Centre / Swim at the Thermal Pool,
- or something of your own fancy.

**Please RSVP by the AGM to reserve your place.**

## Notice of the Annual General Meeting: December 6, 2000

The 2000 STC Annual General Meeting (AGM) will be held on Wednesday, December 6 at the STC gear store commencing at 8:00pm. Refreshments will be provided.

For those requiring directions to the gear store, it is located at 22 Clutha Place, South Hobart (up the driveway). Please park in Clutha Place itself, rather than blocking the 'slip road'. For more information regarding directions, please contact Jeff on 6223 8620.

Any agenda items for discussions must be presented to the Secretary no later than November 6. If you are unable to attend, you may exercise your vote by completing the Proxy / Nomination form overleaf and forwarding it with you proxy to the AGM, or by posting it to the Secretary, STC, PO Box 416, Sandy Bay 7006.

If you wish to know more about each STC position, grab a copy of the August – September issue of the Speleo Spiel (#315p8-12). If you do not have a copy, please contact Jeff.

**NOTE: ALL ANNUAL SUBSCRIPTIONS are due at the AGM.** Please refer to the advance motion below regarding changes to the subscription fees.

The following Motion from the Treasurer has been received. It was also printed in the last Spiel.

The Treasurer, Arthur Clarke proposes the following two-part motion to be presented to the AGM in regard to a fee rise for the next STC year 2000-2001, and onwards:

(a) The STC fees be increased by \$5.00 for all membership categories (including the affiliation of ASF for Life Members), except that the increase for Household Membership be increased by \$7.50

and

(b) The Speleo Spiel subscription rate be increased to \$25.00.

## Objections to the Mt. Cripps EL Going to Mining Tribunal

By Arthur Clarke

There were originally four organisations opposing the Mt. Cripps EL proposal. Currently the three caving groups are maintaining their objections to the exploration license (EL) where Western Metals - the owners of the Hellyer Mine - are now seeking to establish limestone quarry site/s in the Mt. Cripps limestone (and its karst). The three groups maintaining objections are: Australian Speleological Federation (ASF), Savage River Caving Club (SRCC) and Southern Tasmanian Caverneers (STC).

STC has requested that ASF represent its case in any subsequent action in regard to the objections to EL: 17/99 - the exploration license proposal to establish limestone quarry sites at Mt. Cripps. The EDO (Environmental Defenders Office) has been asked to represent ASF and effectively to represent us (STC) by virtue of representing ASF. The EDO has not given a firm commitment, if only because we have not received a hearing date for Mining Tribunal and they don't have an active solicitor there at present: the last solicitor (Susan Gunter) finished up at the end of the third week in September.

The Mining Tribunal is a regular court hearing - part of Magistrates Court - hence the need for legal representation and we have been advised by MRT to get legal representation. Another reason for legal representation being because under the new revamped *Mineral Resources Development Act* (of 1995) - never tested in a court of law before - there is this new Section 15 (1) or 15 (2) that relates to objectors having to prove their Estate or Interest in an area in order to lodge objections to exploration or mining proposals.

In legal terms that means we have to establish legal standing - to prove our right for our case/ our objections / our point of view to be heard, let alone for us to even be able to oppose the quarry development. So effectively, this is what will happen for first part of our legal proceedings when the case is brought for mention at the Mining Tribunal: establishing our legal standing before the actual case even gets a hearing. At this stage it is anticipated that the case will come forward to the Mining Tribunal in late November or early December. ■

## Burning Down The House 20/8/2000

Party: David Rasch, Adras Galambos, Hans Bernisch, Anna Greenham

By Anna Greenham

This trip was a slightly less masochistic alternative to the Winter Challenge. With cloud down to the valley and drizzle lasting all day, what better place to be than underground? This was my first trip with the S.T.C. and the excitement started before I even got to the cave - travelling in Geoff's 'caving car'. The eagerness with which someone gave up the front seat for me had more to do with the statistics of surviving head on collisions than any chivalry on his part!

After a mercifully short tramp through forestry land, walking on a false floor of vegetation, we arrived at the muddy cave entrance. A short scramble led up to the start of the rock fall chamber. The first more vertical section was aided with a ladder, although the top section was tight enough not to need it. Then followed plenty of grovelling through more areas of rock fall - some of the tighter corners reminding me of my work on the labour ward at the hospital. The cave eventually

opened out to the streamway. We reached the furthest point and, not satisfied with that, Hans scaled a vertical section at the end, hoping to find a lead. The rock was loose and unfortunately petered out into more rock fall with no obvious leads. We retraced our route out, taking time to look at three small skeletal deposits, a rare seven legged Tasmanian cave spider, the more usual eight legged variety, and a large group of cave wetas. We also looked at several side passages and formational areas, but no-one could be persuaded to continue further upstream.

This was a great introductory trip for me and quite similar to my recent New Zealand caving experiences. Were there any differences? The main ones I noticed were using electric lights (making underground group hugs much safer than with carbide), and the use of ladders. Apart from that it seems that caves are dark wet and muddy the world over! ■

## ANNUAL GENERAL MEETING-NOMINATION & PROXY FORM

### Appointment of Proxy for the STC Annual General Meeting.

I, \_\_\_\_\_ appoint \_\_\_\_\_  
as my proxy to vote on by behalf at the STC Annual General Meeting to be held  
on 6th December, 2000.



If necessary/relevant, please indicate any particular ways your proxy should vote on any resolutions under consideration.

---

---

---

### in addition, I would like to make the following nominations.

I wish to nominate \_\_\_\_\_ for the position of \_\_\_\_\_

I wish to nominate \_\_\_\_\_ for the position of \_\_\_\_\_

I wish to nominate \_\_\_\_\_ for the position of \_\_\_\_\_

I wish to nominate \_\_\_\_\_ for the position of \_\_\_\_\_

signed \_\_\_\_\_, dated \_\_/\_\_/2000

**Return this form to the Secretary, STC, PO Box 416, Sandy Bay 7006,  
by 5:00 p.m. on 4/12/2000, or have your proxy deliver it in person to the AGM.**

## Southern Tasmanian Caverneers Inc. Membership Renewal Form



I/We:	Member type*	Postal Address	
		(BH)	(AH)
		(FAX)	(MOB)
		Email:	

(\*Insert “F”, “J”, “H”, “C”, “L-ASF” or “L-AC” as appropriate (see below): Full<sup>1</sup>/ Junior<sup>2</sup>/ Household<sup>3</sup>/ Concession<sup>4</sup>/ Life with full ASF membership<sup>5</sup>/Life with Aust. Caver subscription only<sup>6</sup>)

would like to renew my/our membership, and enclose the appropriate membership subscription. Note, that if payment is forwarded before or no later than 3 months of the ANNUAL GENERAL MEETING (i.e. by 6th March 2001), then the PPD (Prompt Payment Discount) rate is applicable.

The amount of my/our payment (cheque/money order payable to “STC”) enclosed is \$\_\_\_\_\_

Please forward this form and your payment to: The Treasurer, STC, P.O. Box 416, Sandy Bay 7006.

Thanks.

### NOTES

1. Full (for persons 18 years or older) **\$50.00 (\$40.00 PPD).**
2. Junior (for persons under 18 years of age) **\$30.00 (\$25.00 PPD).**
3. Household (for two persons 18 years or older and any number of persons under 18 years of age, all having the same residential address) **\$72.50 (\$62.50 PPD).**
4. Concession (for persons 18 years or older, whom are either Students, unemployed or entitled to some other concession) **\$40.00 (\$30.00 PPD).**
5. Life with full ASF membership (for life members who are actively caving and require ASF Insurance) **\$25.00 (\$20.00 PPD).**
6. Life with Aust. Caver subscription only (for life members who are no longer actively caving and do not require ASF Insurance, but would like to receive the *Australian Caver*) **\$20.00 (no PPD available).**

## De-rigging Khazad Dum: A Trip Down Memory Lane in the Junee-Florentine? – 4/8/2000

Party: Hans Benisch, Jeff Butt, Arthur Clarke, Andras Galambos and Jason Rowe.

By Arthur Clarke

Friday August 4<sup>th</sup> 2000: The title is a bit misleading: I thought this was going to be a trip down memory lane for me, because I thought I had been to Khazad Dum (KD) in the early 1970's, so I was keen to check it out while the cave was still rigged. I was also keen to get some SRT practice in. With an impending trip to SW China coming up and lots of SRT work being on the agenda, I figured that as one of the oldies on this expedition, I needed to keep my SRT skills tuned up.

We convened at Jeff Butt's residence for an 8am getaway in the Magna – a change from the Orana - with a few errands to do for Hans along the way. It all seemed to be going well till AC noticed steam coming out from under the car bonnet and the temperature gauge registering a rather high spot – so it looked as if the Orana was not going to get a day off after all. A fuel stop at local garage in North Hobart soon revealed the problem: the Magna's thermostat had seized – it wasn't opening. Some quick running repairs and a replacement soon saw us on our way heading out of Hobart just before 10am. Apart from some residual water spray on the radiator still emerging as steam from the bonnet, the repair had been successful and we were soon heading up the Junee Quarry Road to our parking site at "Jocks Rock".

The walk through the forest was pleasant enough; Jeff showed us the turnoffs to other well-known caves in the area including the well-reflectorised track to *Splash Pot* – courtesy of Dave Rasch's efforts. While Andras, Hans and Jason went into KD, Jeff and I re-checked the tape measurement of the first leg of a survey from KD to JF69. The trip in was great, but it didn't look familiar to me. The digital camera soon appeared to capture some entrance shots and views of Jeff going through the *Serpentine Route*. We caught up with the others just past the flattner and descended the first few pitches rigged with 11mm, then down the two pitches rigged with 8.5mm: the "*Ninety Foot*" and the "*Seventy Foot*". The bottom end of the rope was extraordinarily slick and polished, not offering much friction for a descender. We followed the main streamway to the start of the waterfall pitches. Jeff and I made a brief detour, then caught up to Hans at the first 7metre waterfall pitch, where I piked – using the excuse that I didn't want to run the risk of getting water in the digital camera! However, some quite reasonable images were had of Hans and Jeff at the waterfall pitch. While the others



Andras, Hans and Jason preparing their gear. Photo by Arthur Clarke



Arthur negotiating a tight section of KD. Photo by Jeff Butt.

continued down to start de-rigging the lower pitches, JB and AC went back to the *Serpentine Route* passage to look for cave beasties... and JB located some dead millipedes. During our lunch break at the junction with the main streamway, Jeff spied another lead, but after a short free climb it soon became apparent that it would be easier to get up than get down again without a rope! Continuing out along the main streamway towards the "*Seventy Foot*", AC found some more beasties on a piece of wood wedged into a crevice: isopods, springtail and a symphylan, plus the beetle that got away!

JB and I ascended the first pitch then continued on at a leisurely pace with the others coming out behind. The others caught up to us while I was preparing to ascend the "*Ninety Foot*" pitch. The rest of the trip out was fairly uneventful, though some packs were a bit heavier than they when they

went in. A few more photo opportunities were had along the way and then just to be different, we abseiled down the *Scaling Pole* pitch back into the main streamway to exit from the main entrance. We emerged in darkness and the two smokers had our celebratory smokes then trundled down the track, though Andras and AC managed to get lost on the way. It was then home via New Norfolk to check out the cuisine at the local pizza shop.

Postscript: I realised I hadn't been to KD before... though parts of it looked sort of familiar. And subsequently, I discovered that our 16 person expedition party to China



Jeff climbing through a section of the *Serpentine Passage*. Photo by Arthur C.

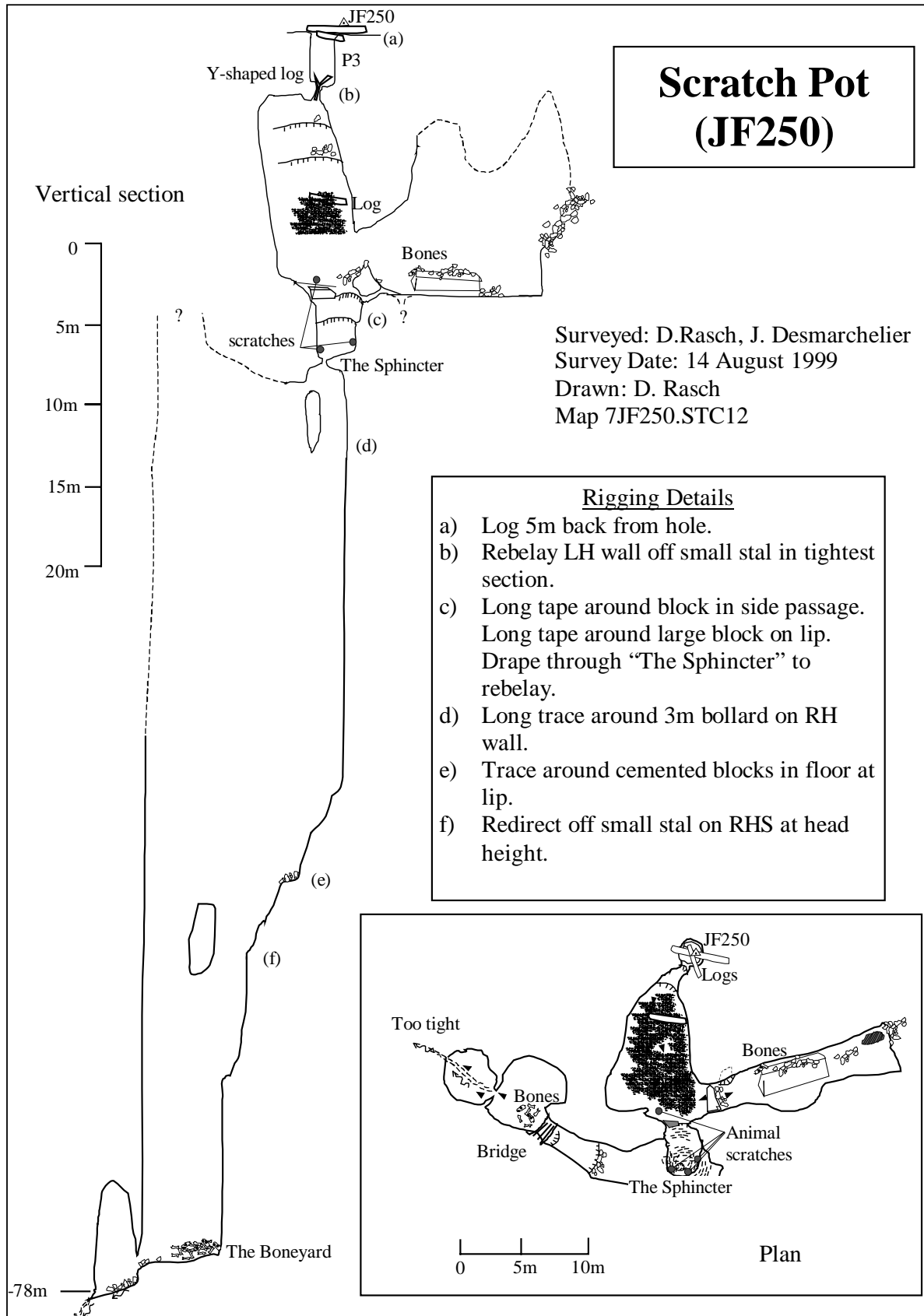


includes four of us in our fifties, plus a 63year old and a 67 year old! ■

## Scratch Pot Survey

By Dave Rasch

Scratch pot was explored and surveyed by Jol Desmarchelier and myself last year, the details are in Speleo Spiel #315, p13-14. Here is the survey of this cave. ■



## Exit Cave System Fully Reserved!

By Greg Middleton

*On 2 August 2000 the Tasmanian Government completed the reservation of the Exit Cave system, begun in 1917, by incorporating the whole of the Benders Quarry site in the Southwest National Park.*

The earliest move to protect the Exit Cave system in the Ida Bay karst of southern Tasmania dates back to at least 1917 when a small reserve (16.2 ha) was created under the *Mining Act* over the entrance to Mystery Creek Cave. This reserve was completely enclosed by a mining lease and did not cover the full extent of the cave (see Fig. 1). So began a process of providing statutory protection for the Exit Cave system which has only now been successfully completed.

The original quarry between Lune Sugarloaf and Marble Hill, Blayneys Quarry, was operated from 1930 to 1959 by Commonwealth Carbide to supply limestone to its smelter at Electrona. Newlands or Benders Quarry, about a kilometre to the east, was started in the early 1950s by Commonwealth Carbide and was taken over by Benders in 1975. Under Benders the quarry continued to supply the carbide works until 1981 but also supplied high grade limestone to EZ's zinc smelter at Risdon and produced agricultural lime and road construction material (Miedecke & Partners 1991). Bender's lease was 'consolidated' in 1982 with an area of 487 hectares.

When the Exit Cave State Reserve was established in April 1979 (Harris 1979) it was limited broadly to the area recommended by Richards & Ollier (1976) and although it included the old reserve at Mystery Creek Cave, this remained a separate portion, cut off by the mining lease, which persisted despite the fact that the quarry within it had not been worked for many years (Fig. 1). The State Reserve covered a total of 440.5 ha

When the original World Heritage nomination for the Western Tasmanian Wilderness National Parks was submitted in 1981 it was decreed that this should only embrace the contiguous national parks (Southwest, Franklin-Lower Gordon Wild Rivers, Cradle Mtn-Lake St Clair, etc). Although the Parks Service had no doubt of the World Heritage significance of Exit Cave, it could not be nominated since the State Reserve did not adjoin the Southwest National Park.

The Helsham Inquiry into the World Heritage values of the Lemonthyme and Southern Forests found (by a majority of two-to-one) that Exit Cave and its environs qualified as World Heritage (Helsham, Hitchcock & Wallace 1988). The Commission was of the view that the area necessary for the protection of the World Heritage values of the cave and its environs was considerably larger than the minimalist position adopted by Richards and Ollier a decade before. The Helsham boundary extended much further eastward, to the summit of Lune Sugarloaf and westward to the then eastern boundary of the Southwest National Park. Nevertheless, the Helsham recommendations overall proved woefully inadequate and much larger areas were actually nominated as World Heritage and, in December 1989, listed.

The Heads of Agreement between the State of Tasmania and the Commonwealth, signed 28 November 1998, regarding the extended area to be nominated, included the following reference to Bender's Quarry:

*The Commonwealth agree that the operation of Benders' quarry within the Exit Cave area nominated for World Heritage listing can continue provided that acceptable limits are set to the scale and development of the operation. Should any financial loss result from any limits placed on the operation, the Commonwealth will pay compensation direct to the company concerned.*

On 27 June 1990 the Southwest National Park was extended to the east, encompassing Exit Cave State Reserve, and extinguishing it. At the same time, the 77 hectare Marble Hill Conservation Area was created (entirely surrounded by the extended national park) to facilitate the continued operation of the quarry. As a pre-existing right it could have persisted within the national park, but this was not deemed appropriate so a separate "conservation area" was proclaimed.

A period of intense arguing followed, with cavers and conservationists pointing out the likely damage being done to the Exit system, and the damage it would suffer in future, from a proposed expanded quarry (Miedecke & Partners 1991) (see, eg Household & Spate 1990, Kiernan 1991, 1993). Ultimately it was established that the quarry could not be conducted without serious impact on the World Heritage values of the Exit system and the quarry was closed down by the Commonwealth in August 1992, with compensation being paid to the former operator. A highly successful, and on-going, rehabilitation scheme was then implemented (Dept. of the Arts, Sport, the Environment and Territories and Dept. of Environment & Land Management 1993, Household 1997).

It took a further eight years after the closing of the quarry for the State Government to be comfortable about incorporating the quarry site in the national park which had surrounded it for ten years. The proclamation of the extended national park under the *National Parks & Wildlife Act 1970* (Statutory Rules 2000 No. 113) was gazetted on 2 August 2000, following tacit approval of the draft by both Houses of the Tasmanian Parliament.

### REFERENCES

- DEPT. OF THE ARTS, SPORT, THE ENVIRONMENT & TERRITORIES AND DEPT. OF ENVIRONMENT & LAND MANAGEMENT 1993 *Rehabilitation Plan: the Lune River quarry, southern Tasmania*. DASET & DELM: Hobart. 26pp.
- HARRIS, Steve 1979 A new State reserve. *Southern Caver*, 10(4):17-19.
- HELSHAM, HITCHCOCK & WALLACE 1988 *Report of the Commission of Inquiry into the Lemonthyme and Southern Forests*. Dept. of the Arts, Sport, the Environment, Tourism and Territories: Canberra; 2 vols.
- HOUSHOLD, Ian 1997 Karst impacts and environmental rehabilitation of a limestone quarry at Lune River, southern Tasmania. [in] Henderson, Household & Middleton (Eds) *Cave and karst management in Australasia 11: Proc. 11th Australasian conf. on cave and karst management*. ACKMA & PWS Tas.: Hobart, pp. 138-175.
- HOUSHOLD, Ian & SPATE, Andrew 1990 The Ida Bay karst study: geomorphology and hydrology of the Ida Bay karst area. Report to Tas. Dept. of Parks, Wildlife & Heritage; Hobart.
- KIERNAN, Kevin 1991 The Exit Cave quarry, Ida Bay karst system, Tasmanian World Heritage Area; a geohydrological perspective. Report to Tas. Dept. of Parks, Wildlife & Heritage: Hobart.
- KIERNAN, Kevin 1993 The exit Cave quarry: tracing water flows and resource policy evaluation. *Helictite*, 31(2):27-42.
- MIEDECKE, John & Partners 1991 *Benders Quarry: quarry development and environmental management plan (draft)*. John Miedecke & Partners: Hobart.

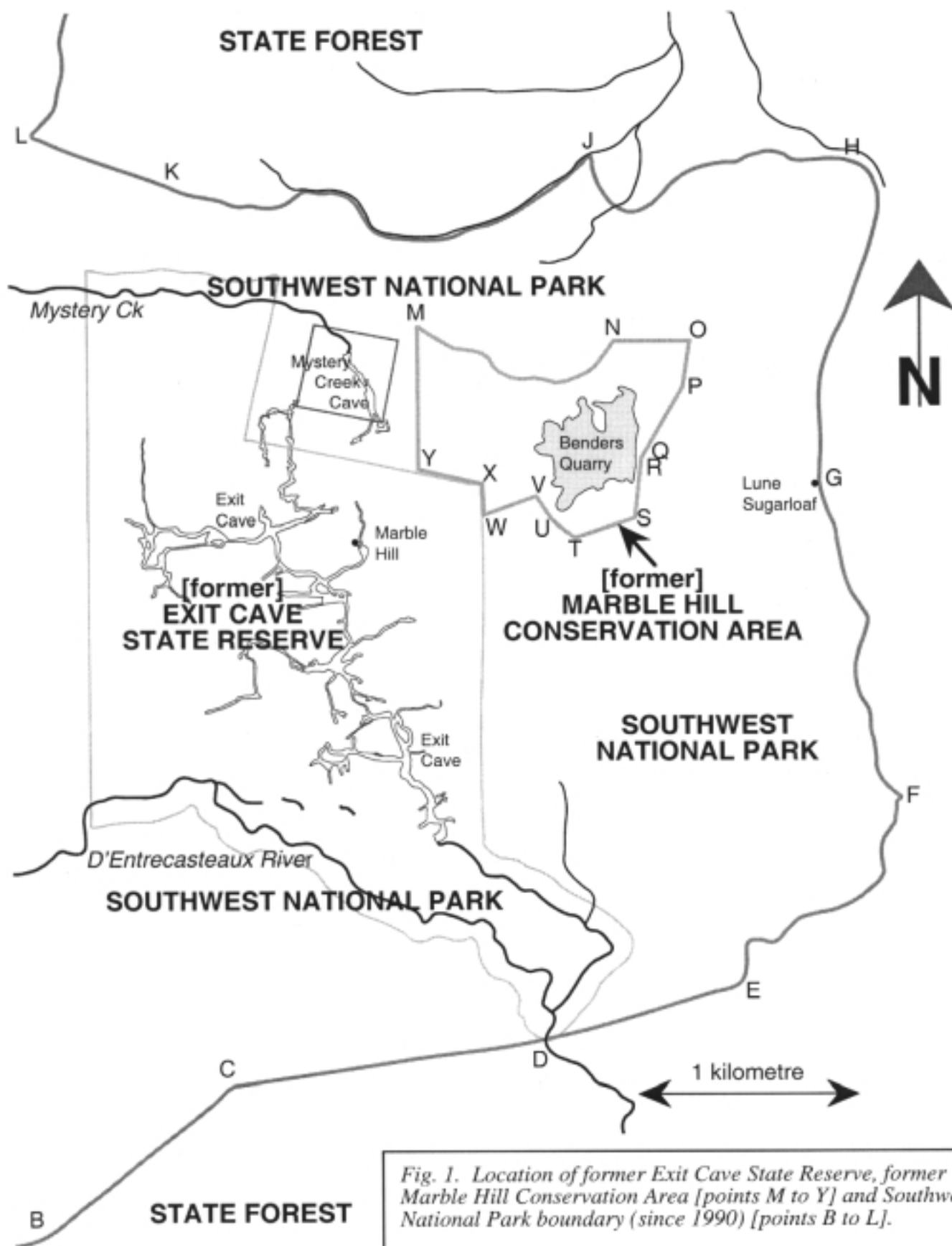


Fig. 1. Location of former Exit Cave State Reserve, former Marble Hill Conservation Area [points M to Y] and Southwest National Park boundary (since 1990) [points B to L].

# JF5 and JF69 - Piecing Together More of the Khazad Dum Puzzle: 17/8/2000

Party: Trevor Wailes and Jeff Butt.

By Jeff Butt

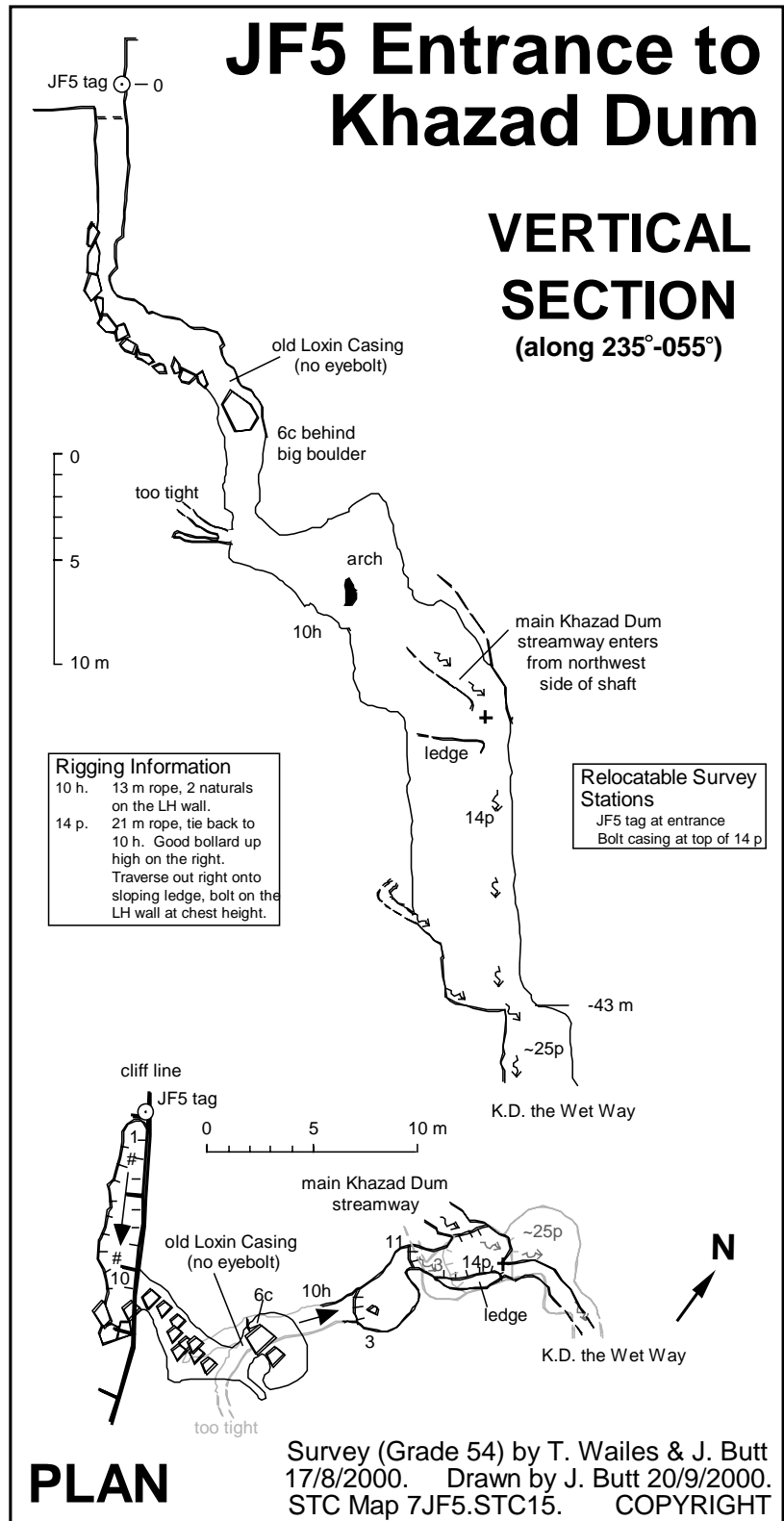
The aim of the day was to visit JF5, re-survey it and have a thorough explore. I was thinking that maybe it will provide the key to a connection between Khazad Dum and Splash Pot. I was also quite interested in seeing what JF5 was like and where it actually joined into K.D. If time permitted, we also planned to check out JF69, which is situated a similar distance from the JF4 entrance of K.D., but on the other side of the gully.

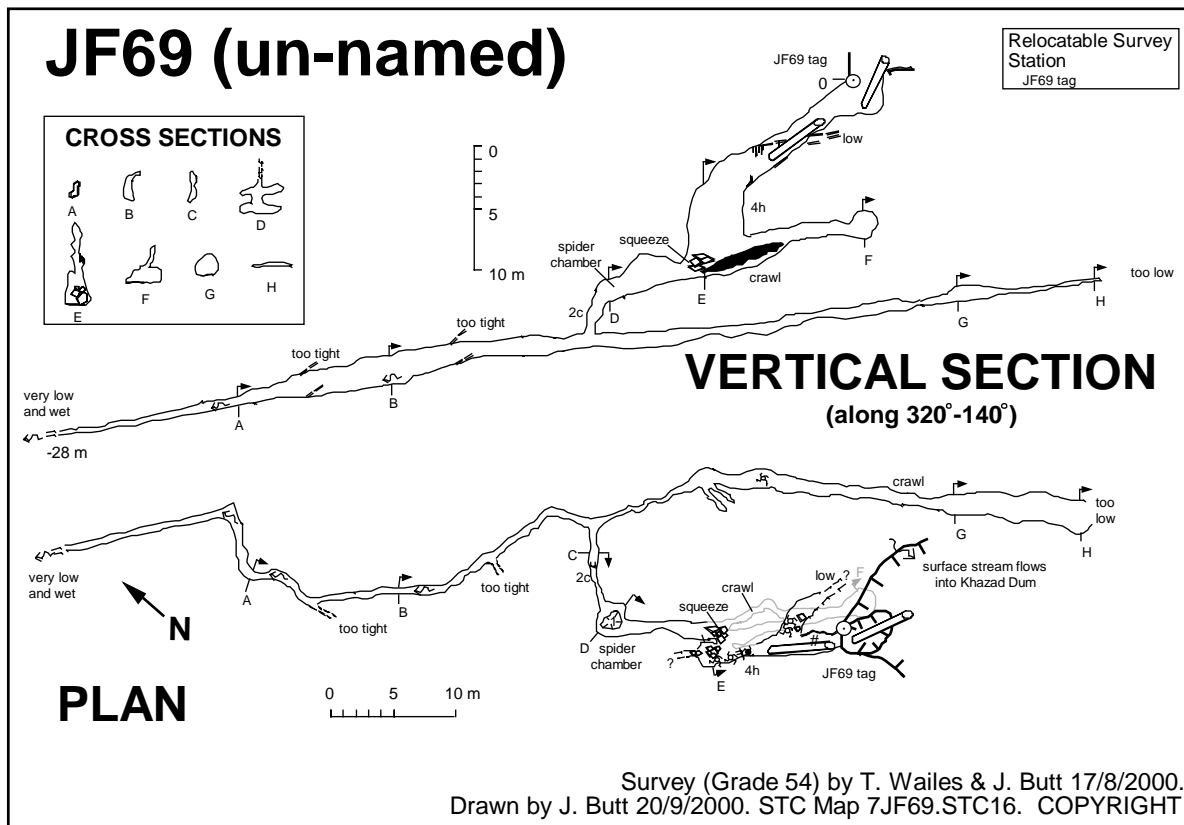
## JF5

We cruised in, down the entrance slope to a small chamber, climbed down behind a large boulder and down a rift (6c). Whilst I was rigging, Trev looked at a couple of small passages here but these soon choked out. Continuing down another short steep slope (with a short rope as a handline anchored to a couple of jugs on the left hand wall) led to a small chamber and the first pitch proper. A convenient bollard up high on the right (where we started a 21 m rope) allowed me to tension traverse out along the right wall to a small sloping ledge where a bolt marker (on the opposite wall) was situated. The nylon bolt marker was screwed hard in and was very difficult to extract. Under the spanner it flexed wildly but wasn't keen to budge. After 10 minutes of stuffing around with it and avoiding penduluming off the sloping ledge, I managed to remove it and get a hanger in to secure my position. (NB: there is no need to screw bolt markers into the hilt, a couple of turns will do.)

At the bottom of the pitch (and on the knot in the end of the rope), I was in standing on a ledge between waterfalls of 'the Wet Way' of K.D. I had a bit of a look around for bolts or natural anchors, but nothing useful could be found. Straight down the next pitch was very wet, but if one headed out the rift along the right hand wall and found a suitable anchor, one would have a dry descent.

Anyway, we had sussed out where JF5 joined JF4 and so surveyed our way out. The survey of JF5 is shown below, basically JF5 heads directly towards K.D. and directly away from Splash Pot. JF5 has a surveyed length of 60 m, and at a depth of 43 m joins into K.D., i.e. at this point you are standing in 'the wet way' of K.D. It would be good to return to do K.D. the wet way during a dry period; this is the only part of K.D. (apart from the Depths of Moria) which are yet to be added to our re-survey. It wasn't long and we were on the surface, the day was still young so we headed over to have a look at JF69.



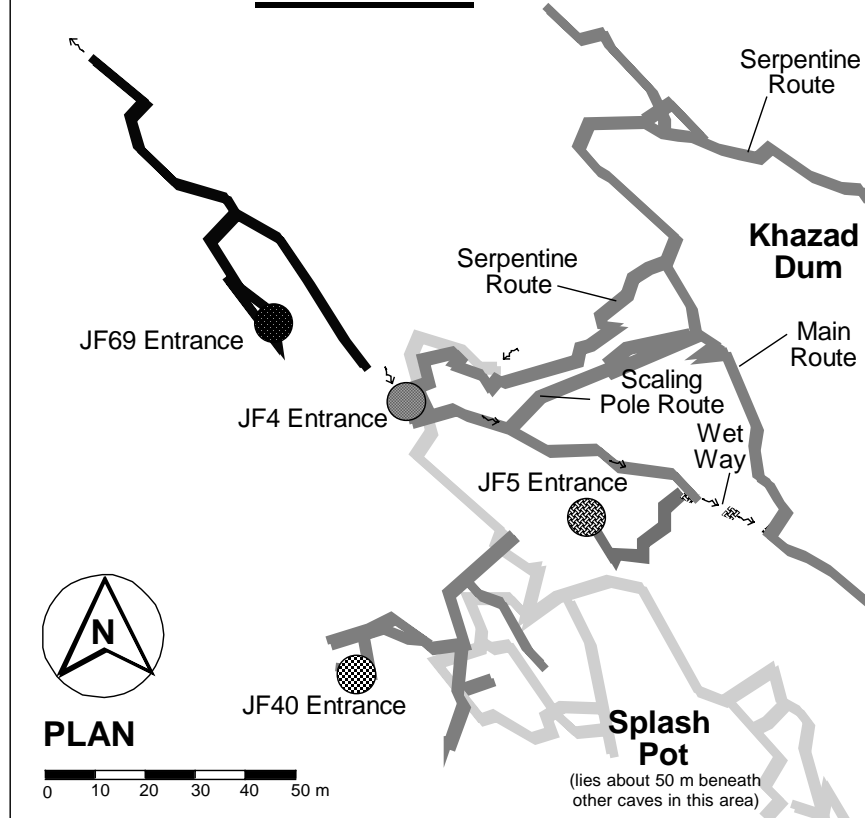


## JF69

Again, we decided to explore on the way in and survey on the way out. About 15 m in a short climb (4c) is reached, we added a handline for convenience. Beyond that a large chamber is reached with several ways on. Some thrutching around by both of us in separate directions eventually found us back at the same point in a small passage which soon intersected a small streamway. We followed this 'good Yorkshire style cave' down for quite a way, it became wetter and lower as it went, and eventually became too low and soaking to be bothered pushing. So, we surveyed our way out. Upstream passages headed back towards the K.D. entrance and under the surface stream.

The survey (see above) shows that JF69 heads Northwest, back under the contact. It reaches a depth of 28 m and has a length of ~165 m. The south-eastern most passage of JF69 extends to about 10 m of the K.D. entrance, some pushing/digging may result in a connection being made with K.D. right at the JF4 entrance.

## Caves around the Khazad Dum Entrance



In the Serpentine route of K.D. (see the line diagram below) there is a small tributary coming in from the Northwest; it had been hypothesised that this was the JF69 water. From the lie of the limestone beds (dipping down to the Northeast), this does seem quite likely. It is worth noting that there are other streamways of similar magnitude very close by, e.g. the one flowing down at the bottom of JF40, and the one flowing in at the distant end of Splash Pot. A bit of dye-tracing would be helpful to determine the continuity (or otherwise) of these small streams in the area.

Back on the surface, it was still daylight and we enjoyed a leisurely stroll back to the car. We hadn't had a big day, but had achieved what we set out to do. Gradually we are shaping out the pieces of the Khazad Dum jigsaw puzzle and are slowly piecing them together. ■

## Wolf Hole: 13/8/2000

Party: Hans Benisch, Steve Phipps, Dave Rasch, Jeff Butt.

By Jeff Butt

Another survey trip back to 'old Wolfie'. For variety Dave and Hans took a bee-line from the car to Wolf Hole, which was shorter in distance and about the same in time as the round-about track.

Anyway, down in the cave we spent a bit of warm-up time having a look at the area Steve, Hugh and Liz surveyed on 29/7/00 and tidied up a couple of loose ends (near station 217) before heading for some 'new country'.

We surveyed from station 92 downstream back toward the main entrance. With Steve, Dave and I surveying, Hans was free to expend lots of energy climbing around rifts in the ceiling and a lot of ground was covered. The streamway became too small and other passages led off to a hole at the base of the humus slope from the main entrance. A few legs from the other side of the small hole allowed us to close yet another loop in the Wolf Hole survey.

We then made a start on the area to the south-west of the entrance (from station 152), and by the end of the day had totalled 440 m of survey, bringing the tally to around 2.5 km.

Looking at the survey, Wolf Hole has a vertiable maze of passages around the entrance collapse, in fact there seems to be very little holding up the walls of the entrance shaft! Another enjoyable trip, topped off by Franklin Pizza en-route home. ■

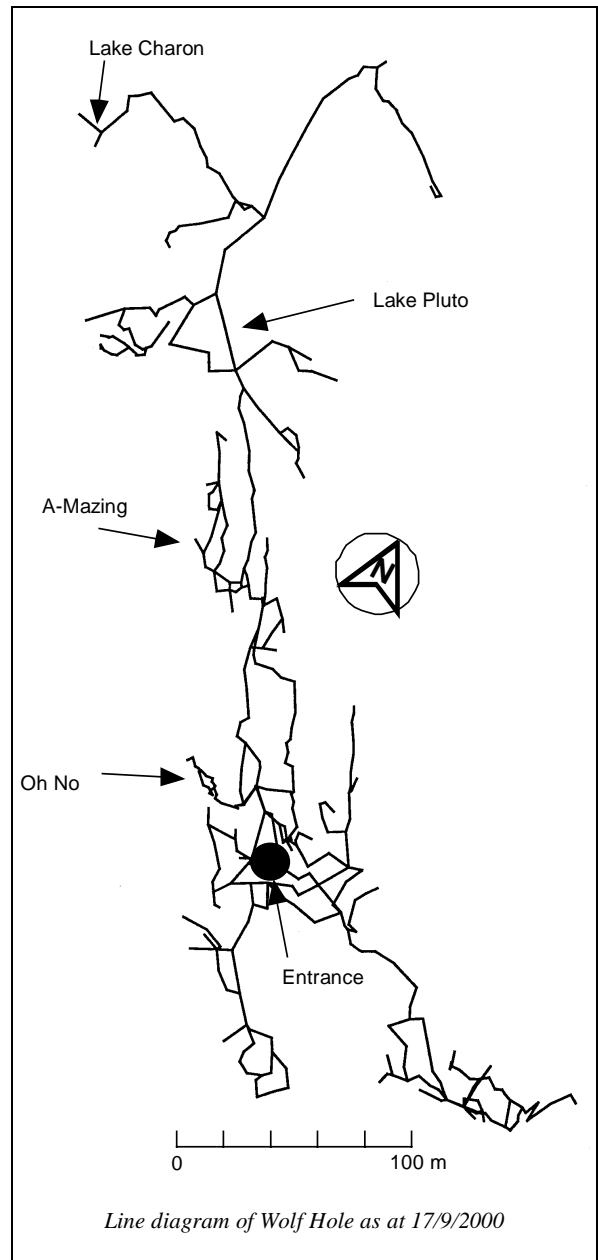
## Wolf Hole: 17/9/2000

Party: Dave Rasch, Jeff Butt.

By Jeff Butt

Another trip to add to the surveying of Wolf Hole. We again took the direct route up to the entrance, just branch up the hill about 50 m in from the road. In the cave, Dave was keen to check out the passage beyond station 78, where we had 'suspended' the survey at the top of an exposed 5 m climb. Some long-legged manoeuvres allowed the climb to be negotiated and we were soon into some narrow passage of a somewhat Splash Pot nature (thus we called this area: "Oh No...it's like Splash Pot!", or "Oh No" for brevity). We continued on through this quite narrow stuff doing a couple more interesting down-climbs and eventually reached a 'rope needed' down-climb. Back-tracking at one right angle 'on your belly' bend Dave noted a small hole off to one side. He removed a couple of rocks and squeezed through to some virgin cave. We surveyed another series of legs through this breezy region; the cave is very maze like here, there were holes heading up in the ceiling and all over the place. We were again stopped by a 'rope needed' down-climb. With some effort we retraced our steps back to larger (and friendlier) regions. This little two hour detour was somewhat sporty; this fact being attested to by our 25 surveyed legs only adding about 70 m of length to the cave.

We next headed to the maze of side passages passed on the way to Lake Pluto. We surveyed a loop from station 95 back to station 91 before heading to the next maze near station 100. This part of the cave was extremely maze like ("A-Mazing") and led us to a sizeable streamway the neither of us had been to before. There were leads going off everywhere, so we made a start on fleshing out the 'main drag'. The 'main drag' seemed to follow a fissure in the ceiling that was admitting quite a lot of drips and minor inlets along it's length. After a distance we passed a 'floor divide' and upstream now became downstream. The passage took a turn for the worse, low and wet and we 'parked' the survey there, opting to flesh out some of the easier leads first! We made more loops and six hours after entering the cave deemed it time to head home.



For variety we decided to follow the old blue tapes; they head steeply back to the road, reaching it about 100 m further along from where the current track starts.

The day's efforts added 360 m of length to the cave, bringing the tally to 2.86 km (406 survey legs). It was a fun trip, finding some virgin cave, and quite a bit of cave that was 'new' to both of us. I'd hazard a guess that we've probably now surveyed something like 75% of the 'cave'....but that is only a guess. We don't know of too many 'large sections' of the

cave that have yet to be surveyed....but indeed there may well be!

A line diagram of the survey as it stands at the moment is included here (you might like to compare this with that shown in Speleo-Spiel 320). As we survey more and more, it becomes apparent that Wolf Hole is a network of passages developed within an ~50 m wide by 500 m long band of the dolomite, oriented NNW-SSE. ■

## Satan's Lair: 6/8/2000

Party: Alaric Bennett, Jeff Butt and Steve Phipps

By Steve Phipps

This particular Sunday got off to a slow start for the author, who was suffering from the after-effects of a highly enjoyable, but very alcoholic, barbeque the night before. Still, my years as a student caver had taught me that caving is a great hangover cure, so I resisted the temptation to stay in bed and gradually got my gear together.

I could probably have done without a ride in the back of Al's Land Rover, but Jeff and I gamely took it in turns and shared the turbulence. Fortunately, we were soon heading up Chrisp's Road, where we encountered our first obstacle - a number of trees that had been blown across the road. The Land Rover came into its own here and we were able to pull all but one out of the way. The last one refused to budge, leaving us with an extra kilometre to walk to Satan's Lair.

Carrying on up the road by foot, we soon faced our next obstacle - some particularly dense regrowth forest. On a previous trip, Jeff had managed to get a fix on the entrance using the GPS, which was to prove invaluable. On that trip, it had taken Jeff three hours to locate the cave. Even with the GPS, it took us an hour to negotiate the 500m from the road to the entrance, an obscure slot hidden behind some ferns.

Without the GPS, the cave would have been virtually impossible to locate and so I can only assume that it was initially discovered after the area was logged. It really does make you wonder how many entrances remain to be discovered in Tasmania's forests... To help future visitors, Al taped the middle section of the route. It had been taped at some point in the past; we located the old tapes shortly before

reaching the entrance. Heading down the cave, I gained my first taste of rigging a Tasmanian cave. Satan's Lair descends in a series of short pitches and climbs, many of which are loose and so must be descended with care. On one of the climbs, a wrong move would probably result in several tonnes of rock being deposited on the caver in question.

The cave ends with a lovely 21m pitch into a medium-sized chamber. We reached this point using every single piece of rigging gear we had brought with us and without there being more than a spare metre of rope on any of the pitches, a particularly fine piece of packing by Jeff. Future visitors should consider taking a few chocks with them though - in our case, this would have avoided some slightly minimalist rigging whereby the backup belay on one of the pitches was a knot wedged into a crack! We explored the final chamber, enjoying some impressive straws at the back and with Al finding an archaeological artefact - a tube of Nestle condensed milk that we estimated to date from around 1970. After lunch we headed out, making a rapid exit and reaching the surface five hours after we had begun our descent. All in all, an enjoyable trip. And yes, the author's hangover had receded by the end of the day (although wet caves are a more effective cure!).

### Jeff's Rigging information:

We had the following ropes, used in the following order (if my memory serves me correctly): Entrance pitch (21 m plus a 7 m shorty to lead to the 2nd pitch), 14 p (16 m), 8p (11 m), 12p+6c (13m +6 m tied together, it was useful to have a rope for the top of the 6c), 4c, 5c, 6p (11m), 9 p (13m), 22p (28 m).

## The P-Hanger Bolting Project - A Report of Some Progress and a 'Field Trip'-12/8/2000

By Jeff Butt

You may recall that there has been talk of re-bolting Midnight Hole for some time. We had an initial play with some hardware in 1999, as reported in Speleo-Spiels 311 (page 3), and 312 (page 3). Several obstacles then appeared and the project effectively stalled.

However over the previous few months some key obstacles, to wit:

- DMM Eco-hangers (the 'P' hangers used in the UK), and in fact any breed of P-hangers proved to be difficult to procure. However in June a shipment of 40 (purchased by Parks and Wildlife) finally arrived.
- A local supplier (Reid Constructions Pty. Ltd. in Sydney) of a 'glue' (Swiftchem 3 Plus 3) deemed to be equivalent to that used in the UK (Exchem Resifix 3 Plus) was located. The people from Reid's were very helpful, a recent visit by one of their representatives allowed us talk about the job at hand, and Reid's subsequently donated a sample of Swiftchem and installation gun/nozzles to the project.

With these obstacles overcome, we were in a position to move to doing some test installations. Our first field trip for this purpose occurred on August 12th.

### August 12th Field trip:

Participants: Dave Rasch, Hans Benisch, Ian Houshold, Steve/Kathy/Grace Bunton, Jeff Butt

Our group (loaded down with all sorts of 'this might be useful hardware') headed down to the X-Benders quarry and lugged all our gear up to some of the benches to be used as our test site. There were several aims for the day, including:

- to test a spit removal device, and to see how easy it was to re-drill the old spit hole to take a P-hanger,
- to install a test bed of a dozen P-hangers using the Swiftchem resin,
- to gain some experience with the whole process in an above ground site where any blunders, spillage etc. wouldn't cause any damage to the cave environment.
- to do a Midnight Hole pull-through trip to discuss the installation sites for the bolts at each pitch-head (catering for both pull-through and SRT trips).

**Here's a summary of what went on in relation to each of these aims.**

#### **Spit Removal.**

The spit removal device consists of an 8 mm diameter, 20 mm long high tensile steel machine bolt which has been ground down so that the first 5 mm was about 5 mm in diameter. As this modified bolt is screwed into a bolt casing, the end contacts the inside of the cone, subsequent turning of the bolt pushes the cone out of the end of the casing and also pulls the casing outwards. When the bolt head was about 5 mm from the rock, the casing was loose enough so that it could be pulled/levered out and then the cone recovered. A jemmy bar or similar would make the levering out a little easier. Thus it is possible to reasonably easily remove any dud bolt casings. Our simple tool worked remarkably well. It was educational to see how easily a properly placed spit could be removed!

#### **Hole Drilling.**

Re-drilling the old spit hole (10 mm diameter, 30 mm deep) to take a P-hanger (18 mm diameter, 110 mm deep) was accomplished using the Parks and Wildlife Ramset 24 Volt hammer drill. There were no problems over-drilling the old spit hole to take a P-hanger. This is very handy, as often old spits are located in the best position and thus replacing them with a P-hanger gives a highly durable anchor, and also allows a defunct spit to be removed from the cave. (This would not be the case for the Loxins in Midnight Hole, as the old Loxins aren't well situated for ropework, and the hole they occupy is 7/8" in diameter, which is too large for the P-hangers. We have yet to experiment with removal of the old Loxin casings, but the plan is that they will be removed and the hole grouted with resin. Rubbing some rock dust into the surface of the resin should make the filled hole blend better with the surrounding rock.)

We soon learned that both the batteries for the Parks Drill are in very poor condition; we only managed one and a half holes before both batteries gave up the ghost. To save the day we sourced a couple of 12 Volt gel-cells (7 Amp-Hour) locally and made up a rough battery pack, this allowed us to get seven and a half holes drilled. So, for any serious re-bolting trip, an external 24 Volt battery pack (~15 Amp-Hour capacity) would be a good idea. The limestone in the area we chose for testing seemed to be really hard with a high silica content, a sharp drill bit would also be advantageous! In order to get representative results the test holes were drilled over a large area in different layers in the limestone beds.

To complete each hole, the STC hammer drill with a 12 mm bit was used to make a 'key' so that the lower part of the P-hanger could be set into the surface of the rock so as to help resist any rotational movement. To allow for this, the main hole needs to be 120 mm deep. It would be good to get a 12 mm bit to fit the Parks drill, so that only one drill needs to be used. The STC drill is too puny to handle drilling the big holes required for P-hangers.

We found it necessary to have one 'see if it fits' hanger available for testing the hole depth and key shapes. This hanger thus did get well handled, and thus was kept separate from the hangers to be installed. It is interesting to note that even with a dry hole the test hanger was sometimes difficult to remove; which augurs well for the holding power of these sorts of bolts!

#### **Hole Cleaning.**

Successful bonding between the glue and the rock relies on the removal of all rock dust prior to installing the hangers and resin. After drilling, the holes were cleaned thoroughly using various combinations of brushes, blowing tubes and water sprays. Swiftchem sets under water, and so the presence of

moisture presents no problems. To test this to extremes, one cleaned hole (in the quarry floor) was filled with water prior to installing the hanger. It appears to be easiest to clean the holes dry, as when the dust gets wet, it tends to bind together making it more difficult to remove. The use of 'breath powered' blow tubes does tend to moisten the dust too, so a 'lung free' blower brush would be better. Our test results might shed more light on which method/combination of methods works best.

#### **P-hanger installation.**

Prior to the field trip, the P-hangers were brushed with a wire brush and degreased in caustic to ensure that all grease was removed. Any grease present would prevent a good glue-bolt bond from occurring. We were careful to only handle the hangers by the eye so as to avoid contaminating the 'legs' with finger grease.

The temperature on the day was about 15°C, which gave a gel-time for the resin of around 8 minutes (at cave temperatures the gel time lengthens, e.g. 20 minutes at 5°C, 1 hour at 0°C etc.), so we did have to 'keep' moving. As the resin is expelled, the two components are mixed in the nozzle (equipped with a dozen mixing baffles), when properly mixed a uniform pink colour results. Resin was expelled to waste till this colour was achieved, a small sample of resin was taken in a film container (to be kept to check for setting). Each hole was filled to about two-thirds its depth as the glue nozzle was withdrawn; this sounds easier than it is. For the first hole insufficient resin (~ half filled hole) was used, so the hanger was removed and extra resin added prior to re-insertion. This is not a recommended procedure.....but it will still be useful to test this hanger to see what effect it has on the ultimate strength. A smear of glue was placed on each side of the P-hanger, and this was worked into the join between the two 'legs' of the hanger using an ice-cream stick. The hanger was then pushed slowly into the hole. Excess resin was then trowelled off using the ice-cream stick and wiped off with newspaper and added to the rubbish bag. As the day progressed our installation prowess improved and there was less waste. All up the seven hangers we installed used about two-thirds of our glue cartridge. With practise one should be able to get around 15-18 hangers installed per 380 ml tube of Swiftchem.

Installing each hanger only took a few minutes; it was a breeze compared to drilling the holes!

According to the Swiftchem specification sheet the cure time was an hour. We certainly found that the waste glue hardened quite quickly. After we had finished installing the bolts, we examined the first of them and found it to be quite solid. At 20°C the recommended cure time (i.e. before loading) is 40 minutes, this lengthens to 2 hours at 5°C. In the UK at 24 hours is the minimum time allowed before use to ensure that curing is complete.

#### **Midnight Hole placement discussion.**

Because of the 'technical difficulties' with the drilling the holes time was against us and so the Midnight Hole bolt-planning trip did not happen on the day.

#### **Overview.**

We learned quite a lot during the day, particularly with respect to having enough battery power to get enough holes drilled, and gained some valuable experience with using the Swiftchem resin. At the quarry we had an abundance of tools. For an underground bolting trip, we would need to prune this gear down somewhat. The Swiftchem was quite easy to use and work and there is a minimum of mess (especially once one is a little practised!). The longer cure times in an underground environment would make life easier in terms of having enough time to get down a pitch to the next P-hanger



site. It is obvious that on any re-bolting trip that all the drilling should be done first before any glueing occurs.

The next steps with this project are:

- to test these trial hangers to give us some numbers and statistics in relation to the reliability of our installation methods. The strength of the actual hangers and 'glue' is well quantified already, but our installation procedures are yet to be proven! We will probably use the remaining resin to install a few more test hangers that can left for an extended period (~ 3-5 years) for future testing.

- to re-bolt Midnight Hole in accordance to a devised bolting plan.

It is hoped that the next hurdles will be overcome somewhat more quickly than they have in the past and that the next Spiel will reveal some results of testing.

#### Acknowledgements:

Many thanks to Reid Constructions Pty. Ltd. and Tasmanian Parks and Wildlife for assisting us with this on-going project.

## A Complete List of the Known Mole Creek Caves

By: Arthur Clarke

Following on from the previously published lists of caves at Hastings, Ida Bay and North Lune (Clarke, 1999 in *Speleo Spiel* #312) and the more recent list of Junea-Florentine caves (Clarke, 2000 in *Speleo Spiel* #318), following is a tabled list of the 360 known and documented caves at Mole Creek.

In the following list the acronyms given in the data columns under "was Number", caving "Group" and "Info Source" are:

1985 KI = Australian Karst Index 1985 (edited by Peter Matthews for ASF);

(E) = Entrance: this relates to instances where a cave has one or more recorded entrances;

KK or "KK-89" = Kiernan, K. (1989) *Karst, caves and management at Mole Creek, Tasmania*. Dept. of Parks, Wildlife & Heritage, *Occasional Paper*, No. 22. 130pp.;

MCCC = Mole Creek Caving Club;

SRCC = Reference to a private, unpublished database on the "Mole Creek Caves" prepared by Bevis Dutton and members of SRCC: Savage River Caving Club;

SCS = Southern Caving Society;

TCC = Tasmanian Caverneering Club;

TCC(NB) = Tasmanian Caverneering Club (Northern Branch) – fore-runners to NC;

NC = Northern Caverneers;

SE or "SE Report-91" = Eberhard, S.M., Richardson, A.M.M. & Swain, R. (1991) *The invertebrate cave fauna of Tasmania*. Zoology Dept., University of Tasmania. 172pp.

Cave	"was" number	Cave Name	Group	Info Source
MC-1		Kubla Khan (Lower Entrance)	TCC	1985 KI
MC-2		Crack Pot	NC	1985 KI
MC-3		Pyramid Cave System (Top Hole)	TCC	1985 KI
MC-4		Execution Pot	TCC	1985 KI
MC-5		The Arch	TCC	1985 KI
MC-6		Diamond Cave	NC	1985 KI
MC-7		T-Bone Cave	NC	1985 KI
MC-8		Red Water Pot	NC	1985 KI
MC-9		Devil's Earhole	TCC	1985 KI
MC-10		Haile Selassie	TCC	1985 KI
MC-11		Un-named	NC	1985 KI & SRCC
MC-12		Queen Of Sheba	NC	1985 KI
MC-13		Croesus Cave	NC	1985 KI
MC-14		Lynds Cave	NC	1985 KI
MC-15		Marakoopa 2 Cave	NC	1985 KI
MC-16		Glowworm Cave	TCC(NB)	1985 KI
MC-17		Cyclops Cave	NC	1985 KI
MC-18		Soda Creek Cave	NC	1985 KI
MC-19(E)		Pyramid Top Hole	NC	1985 KI
MC-20		He-Hi	TCC	1985 KI
MC-21		Quarry Cave	TCC	1985 KI
MC-22		Little Gem	NC	1985 KI
MC-23		Maze Puzzle	NC	1985 KI
MC-24		Un-named	TCC	1985 KI & SRCC
MC-25		Hidden Cave	TCC	1985 KI

Cave	"was" number	Cave Name	Group	Info Source
MC-26		Horries Hole	NC	1985 KI
MC-27		Rubbish Heap Cave	NC	1985 KI
MC-28		Howes Cave	TCC	1985 KI
MC-29(E)		Kubla Khan (Upper Entrance)	TCC	1985 KI
MC-30		Grunter Catrun 1	NC	1985 KI
MC-31(E)		Howes Cave	NC	1985 KI
MC-32		Baldocks Cave	TCC	1985 KI
MC-33(E)		Baldocks Cave	TCC	1985 KI
MC-34		Grunter Catrun 2	NC	1985 KI
MC-35		Scotts Rising	NC	1985 KI
MC-36		Grunter Catrun 3	NC	1985 KI
MC-37		Un-named	NC	1985 KI
MC-38		Genghis Khan	NC	1985 KI
MC-39		Little Trimmer	TCC	1985 KI
MC-40		Grunter Catrun 4	NC	1985 KI
MC-41		Girions Entry	TCC	1985 KI
MC-42(E)		Grunter Catrun 3	NC	1985 KI
MC-43(E)		Croesus Top Hole	NC	1985 KI
MC-44		Honeycomb 3	TCC	1985 KI
MC-45(E)		Honeycomb 3	TCC	1985 KI
MC-46(E)		Cow Cave (Pyramid Link)	NC	1985 KI
MC-47		Un-named	NC	1985 KI
MC-48		Un-named	NC	1985 KI
MC-49		Ho Hum	TCC	1985 KI
MC-50		Un-named	NC	1985 KI & SRCC
MC-51(E)		April Fools (Croesus Cave)	NC	1985 KI
MC-52		Scotts Cave	TCC	1985 KI
MC-53		Union Cave	TCC	1985 KI
MC-54(E)		Union Cave	TCC	1985 KI
MC-55(E)		Union Cave	TCC	1985 KI
MC-56		Wallaby Cave	NC	1985 KI
MC-57		Ashdowns Cave	NC	1985 KI
MC-58		Un-named	NC	1985 KI & SRCC
MC-59		Un-named	NC	1985 KI
MC-60		Toboggan Cave	NC	1985 KI
MC-61		Joe's Rifts	NC	1985 KI
MC-62		Joe's Lair	TCC	1985 KI
MC-63		Mill Cave; Tailender 1	TCC	1985 KI
MC-64		Tailender Cave	TCC	1985 KI
MC-65(E)		Lynds Cave (Top Entrance)	NC	1985 KI
MC-66		Lime Pit	NC	1985 KI
MC-67		Sheep Dip	NC	1985 KI
MC-68		Side Door	TCC	1985 KI
MC-69		Un-named	NC	1985 KI & SRCC
MC-70	was MC-X68	Training Cave	TCC	1985 KI
MC-71	was MC-X30	Jawbone Cave	TCC	1985 KI

Cave	"was" number	Cave Name	Group	Info Source
MC-72		Number NOT USED	####	1985 KI
MC-73		Den Cave	NC	1985 KI
MC-74		Number NOT USED	####	1985 KI
MC-75		Mersey Hill Cave	NC	1985 KI
MC-76		Un-named	NC	1985 KI & SRCC
MC-77		Un-named	NC	1985 KI
MC-78		Gillam Cave	TCC	1985 KI
MC-79(E)		Gillam Cave	TCC	1985 KI
MC-80(E)		Gillam Cave	TCC	1985 KI
MC-81		Un-named	NC	1985 KI & SRCC
MC-82		Un-named	NC	1985 KI & SRCC
MC-83		Malodorous Cave	TCC	1985 KI
MC-84		Honeycomb 1	TCC	1985 KI
MC-85(E)		Honeycomb 1	TCC	1985 KI
MC-86(E)		Honeycomb 1	TCC	1985 KI
MC-87(E)		Honeycomb 1	TCC	1985 KI
MC-88(E)		Honeycomb 1	TCC	1985 KI
MC-89(E)		Honeycomb 1	TCC	1985 KI
MC-90(E)		Honeycomb 1	TCC	1985 KI
MC-91(E)		Honeycomb 1	TCC	1985 KI
MC-92(E)		Honeycomb 1	TCC	1985 KI
MC-93(E)		Honeycomb 1	TCC	1985 KI
MC-94(E)		Honeycomb 1	TCC	1985 KI
MC-95(E)		Honeycomb 1	TCC	1985 KI
MC-96		Sassafras Cave	TCC	1985 KI
MC-97		Un-named	NC	1985 KI & SRCC
MC-98		Martins Cave	NC	1985 KI
MC-99		Un-named	NC	1985 KI & SRCC
MC-100		First Outing	NC	1985 KI
MC-101		Un-named	NC	1985 KI & SRCC
MC-102		Un-named	NC	1985 KI
MC-103(E)		Sassafras Cave	NC	1985 KI
MC-104		Elsies Cave	NC	1985 KI
MC-105		Un-named	NC	1985 KI & SRCC
MC-106		Un-named	NC	1985 KI
MC-107		Honeycomb 2	NC	1985 KI
MC-108(E)		Honeycomb 2	NC	1985 KI
MC-109(E)		Honeycomb 2	NC	1985 KI
MC-110		Number NOT USED	####	1985 KI
MC-111		Number NOT USED	####	1985 KI
MC-112		Number NOT USED	####	1985 KI
MC-113		Number NOT USED	####	1985 KI
MC-114		Kohinor	TCC	1985 KI
MC-115		Number NOT USED	####	1985 KI
MC-116		Number NOT USED	####	1985 KI
MC-117		Number NOT USED	####	1985 KI

Cave	"was" number	Cave Name	Group	Info Source
MC-118		Number NOT USED	####	1985 KI
MC-119	was MC-X32	King Solomons Cave	TCC	1985 KI
MC-120	was MC-X39	Marakooa Cave (Tourist Cave)	NC	1985 KI
MC-121(E)		Marakooa Cave (Tourist Cave)	NC	1985 KI
MC-122(E)		Marakooa 2	NC	1985 KI
MC-123	was MC-X49	Pudena Pot	TCC	1985 KI
MC-124	was MC-X46	Pearl Pot	TCC(NB)	1985 KI
MC-125	was MC-X48	Prohibition Cave	NC	1985 KI
MC-126		Depression Cave	NC	1985 KI
MC-127	was MC-X1/-X12	Devils Drainpipe (Atlantis Cave)	NC	1985 KI
MC-128(E)		Marakooa 2	NC	1985 KI
MC-129(E)	was MC-X35	Marakooa 2 (Lakes Entrance)	NC	1985 KI
MC-130	was MC-X13	Devil's Pot	TCC	1985 KI
MC-131(E)		Devil's Anastomosis	NC	1985 KI
MC-132(E)		Devil's Anastomosis	NC	1985 KI
MC-133	was MC-X33	Kiwi Pot	TCC(NB)	1985 KI
MC-134		Paste Pot	NC	1985 KI
MC-135		Un-named	NC	1985 KI & SRCC
MC-136		Rat Hole	NC	1985 KI
MC-137(E)	was "MC-17"	Glowworm Cave	TCC	1985 KI
MC-138(E)	was unused no.	Execution Pot	NC	NC
MC-139	was MC-X38	Long Drop	NC	1985 KI
MC-140		Number NOT USED	####	1985 KI
MC-141	was MC-X43	My Cave	TCC(NB)	1985 KI
MC-142	was MC-X6	Cobbler Cooler	TCC	1985 KI
MC-143		Un-named	NC	1985 KI
MC-144		Wet Cave	NC	1985 KI
MC-145(E)		Wet Cave	NC	1985 KI
MC-146(E)		Wet Cave	NC	1985 KI
MC-147(E)		Honeycomb 2	NC	1985 KI
MC-148		Blackberry Swallet	NC	1985 KI
MC-149	was MC-X03	Blackberry Hole	NC	1985 KI
MC-150		Un-named	NC	1985 KI
MC-151		Un-named	NC	1985 KI
MC-152	was MC-X29	Ivans Cave	NC	1985 KI
MC-153		Harry's Creek Cave	NC	1985 KI
MC-154		Un-named	NC	1985 KI
MC-155	was MC-X55	Shish Kebab	NC	1985 KI
MC-156	was MC-X27	Honeycomb 1.5	NC	1985 KI
MC-157(E)		Honeycomb 1.5	NC	1985 KI
MC-158	was MC-X44	Nut Bath Cave	TCC	1985 KI
MC-159(E)		Un-named (Pyramid-Cow system)	TCC	MCCC
MC-160		Un-named	NC	NC
MC-161		Aquaduct Swallet	NC	NC
MC-162		Kutna Hora	NC	NC
MC-163		Terra Kotta Pot	NC	MCCC

Cave	"was" number	Cave Name	Group	Info Source
MC-164		***** Status Unknown *****	*****	
MC-165	was MC-X22	Elderberry; (Gurrs Cave)	NC	NC & MCCC
MC-166		White Rabbit	NC	NC
MC-167		***** Status Unknown *****	*****	
MC-168		Un-named	NC	NC & MCCC
MC-169		Number NOT USED	NC	
MC-170		Moss Palace	MCCC	MCCC
MC-171		Mozzie Rift	MCCC	MCCC
MC-172		Impressive Hole	MCCC	MCCC
MC-173		Big L Pot	MCCC	MCCC
MC-174		Lunar Landing	MCCC	MCCC
MC-175		Our Cave	MCCC	MCCC
MC-176		Bone Rift	MCCC	MCCC
MC-177		Runaway Rift	MCCC	MCCC
MC-178		Grassy Rift	MCCC	MCCC
MC-179		Surprise Rift	MCCC	MCCC
MC-180		Nova Rift	MCCC	MCCC
MC-181		Heeler Hole	MCCC	MCCC
MC-182		Poodle Pot	MCCC	MCCC
MC-183		Thirteen Second Pot	MCCC	MCCC
MC-184		Green Stump Pot 1	MCCC	MCCC
MC-185		Green Stump Pot 2	MCCC	MCCC
MC-186		Kennel Cave	MCCC	MCCC
MC-187		Antigravity Shaft	MCCC	MCCC
MC-188		Un-named	MCCC	MCCC
MC-189		Un-named	MCCC	MCCC
MC-190		Diggers Cave	MCCC	MCCC
MC-191		Bear Trap	MCCC	MCCC
MC-192		Renaissance Cave	MCCC	MCCC
MC-193		Paddys Rift	MCCC	MCCC
MC-194		Moon Crevice	MCCC	MCCC
MC-195		Roof Urn Pot	MCCC	MCCC
MC-196		High Pool	MCCC	MCCC
MC-197		Dog Leg Rift	MCCC	MCCC
MC-198(E)		Dog Leg Rift	MCCC	MCCC
MC-199		K9 Cave	MCCC	MCCC
MC-200		Mad Dog Pit	MCCC	MCCC
MC-201		Georgies Hall	SCS	1985 KI
MC-202	was MC-X25	Herberts Pot	SCS	1985 KI
MC-203(E)	was MC-X65	Wet Cave	SCS	1985 KI
MC-204		Un-named	MCCC	MCCC
MC-205		Three Arm Pit	MCCC	MCCC
MC-206		Un-named	MCCC	MCCC
MC-207	was MC-X31	Kellys Pot	SCS	1985 KI
MC-208		Snailspace	SCS	MCCC
MC-209(E)		Snailspace	SCS	MCCC

Cave	"was" number	Cave Name	Group	Info Source
MC-210		Splits Pit	MCCC	MCCC
MC-211		End Slot	MCCC	MCCC
MC-212		Midas Cave	MCCC	MCCC
MC-213		Trident Pit	MCCC	MCCC
MC-214		Feeble Fissure	MCCC	MCCC
MC-215		T-Bone Drop	MCCC	MCCC
MC-216		Their Cave	MCCC	MCCC
MC-217		Peanut Pot	MCCC	MCCC
MC-218		Un-named	MCCC	MCCC
MC-219		Un-named	MCCC	MCCC
MC-220		Mayberry Rift	MCCC	MCCC
MC-221		Antimatter Grotto	MCCC	MCCC
MC-222	KK-84	Deewun Cave (= Flyover Cave??)	MCCC	MCCC
MC-223		Possum Palace	MCCC	MCCC
MC-224		Fourarm Cave	MCCC	MCCC
MC-225		Wombat Warren	MCCC	MCCC
MC-226	was MC-X17	Flowers Pot	TCC	MCCC
MC-227		Glowworm Inflow Cave	MCCC	MCCC
MC-228		Un-named	MCCC	MCCC
MC-229		Un-named	MCCC	MCCC
MC-230	MC-X1 in SE	Bayards Rising	NC	NC
MC-231		Number NOT USED	NC	
MC-232		Number NOT USED	NC	
MC-233		Number NOT USED	NC	
MC-234		Number NOT USED	NC	
MC-235		Number NOT USED	NC	
MC-236		Number NOT USED	NC	
MC-237		Number NOT USED	NC	
MC-238		Number NOT USED	NC	
MC-239		Number NOT USED	NC	
MC-240		Number NOT USED	NC	
MC-241		Number NOT USED	NC	
MC-242		Number NOT USED	NC	
MC-243		Number NOT USED	NC	
MC-244		Number NOT USED	NC	
MC-245		Number NOT USED	NC	
MC-246		Number NOT USED	NC	
MC-247		Number NOT USED	NC	
MC-248		Number NOT USED	NC	
MC-249		Number NOT USED	NC	
MC-250		Slime Slot	MCCC	MCCC
MC-251		Hole Of Hope	MCCC	MCCC
MC-252		Un-named	MCCC	MCCC
MC-253		Un-named	MCCC	MCCC
MC-254(E)		Sassafras Cave	MCCC	MCCC
MC-255(E)		Un-named (entrance to MC-228)	MCCC	MCCC

Cave	"was" number	Cave Name	Group	Info Source
MC-256		Womble Moondrop	MCCC	MCCC
MC-257		Gimli's Grotto	MCCC	MCCC
MC-258		Aven Lady	MCCC	MCCC
MC-259		Triangle Drop	MCCC	MCCC
MC-260		The Orifice	MCCC	MCCC
MC-261	was MC-X80	Dead Cow Pot	MCCC	MCCC
MC-262		***** Status Unknown *****	MCCC	
MC-263		***** Status Unknown *****	MCCC	
MC-264		Traces Trump	MCCC	MCCC
MC-265		***** Status Unknown *****	MCCC	
MC-X2		Benboe Cave		1985 KI
MC-X4		Blue Moon Cave	NC	1985 KI
MC-X5		Caterpillar Cave		1985 KI
MC-X7		Cork Hole	SCS	1985 KI
MC-X8		Dangerous Hole	SCS	1985 KI
MC-X9		2-4-D Cave	TCC(NB)	1985 KI
MC-X10		Dead Dog Hole	SCS	1985 KI
MC-X11		Deception Cave	TCC(NB)	1985 KI
MC-X14		Devils Sewer	TCC(NB)	1985 KI
MC-X15(E)		Dogs Head Hole (MC-X10)	NC	MCCC
MC-X16		Drop In		1985 KI
MC-X18		Fred's Folly	SCS	1985 KI
MC-X19		Fuzz Pot	SCS	1985 KI
MC-X20		Gobi Pot		1985 KI
MC-X21		Grunter Swallets		1985 KI
MC-X23		Harry Youngs Hole		1985 KI
MC-X24		Harveys Hole	SCS	1985 KI
MC-X26		Hole 48		1985 KI
MC-X28		Intimate Chamber		1985 KI
MC-X29(E)		Kubla Khan Resurgence	TCC	1985 KI
MC-X36		Leech Pot	TCC	1985 KI
MC-X37		Lillians Rift		1985 KI
MC-X40		Marakoopa 3		1985 KI
MC-X41		Maxs Folly	SCS	1985 KI
MC-X42		Mouse Cave		1985 KI
MC-X45		Owl Pot		1985 KI
MC-X47		Pig Sty Hole	TCC	1985 KI
MC-X50		Rabbit Trap		1985 KI
MC-X51		Ration Tree Cave		1985 KI
MC-X52		Red Rock Shaft		1985 KI
MC-X53		Roaring Hole		1985 KI
MC-X54		Rock Drop		1985 KI
MC-X56		Split Canyon Cave		1985 KI
MC-X57		Sun Cave	SCS	1985 KI
MC-X58		Swiss Cheese Cave		1985 KI
MC-X59		Underground Cave	TCC(NB)	1985 KI & SRCC

Cave	"was" number	Cave Name	Group	Info Source
MC-X60		Valve Cave	TCC(NB)	1985 KI
MC-X61		Warren Cave	TCC(NB)	1985 KI
MC-X62		Waterworks Cave		1985 KI
MC-X63		Well Pot		1985 KI
MC-X64		Westmoreland Cave		1985 KI
MC-X66		Wombat Cave	TCC	1985 KI
MC-X67		Un-named		1985 KI
MC-X69	"MC-cave" in SE	Un-named	TCC	SE Report-91
MC-X70		Alph Cave	SCS	SRCC & KK-89
MC-X71		Antarctic Rift	SCS	SRCC & KK-89
MC-X72		Beehive	SCS	SRCC & KK-89
MC-X73		Blackwood Hole	SCS	SRCC & KK-89
MC-X74		Boulder Drop	SCS	SRCC & KK-89
MC-X75		Boulder Hole	SCS	SRCC & KK-89
MC-X76		Brendans Pit	SCS	SRCC & KK-89
MC-X77		Currying Flavour Pot	SCS	SRCC & KK-89
MC-X78		Dairy Plains Cave	SCS	SRCC & KK-89
MC-X79		Damp Space	SCS	SRCC & KK-89
MC-X81		Dip Shaft	SCS	SRCC & KK-89
MC-X82		Disappearing Creek Cave	SCS	SRCC & KK-89
MC-X83		Dribblewheeze Pot	SCS	SRCC & KK-89
MC-X84		Drill Cave	SCS	SRCC & KK-89
MC-X85		Excursion Hole	SCS	SRCC & KK-89
MC-X86		Fault Spring Cave	SCS	SRCC & KK-89
MC-X87		Fibre Optics	SCS	SRCC & KK-89
MC-X88		Flake Shaft	SCS	SRCC & KK-89
MC-X89		Glowworm Creek Inflow	SCS	SRCC & KK-89
MC-X90	"Cave M1" in KK	Hanging Cave	SCS	SRCC & KK-89
MC-X91		Lacework Pot	SCS	SRCC & KK-89
MC-X92		Log Rift	SCS	SRCC & KK-89
MC-X93		Loggers Lair	SCS	SRCC & KK-89
MC-X94		Lost Prospect	SCS	SRCC & KK-89
MC-X95		Low Lair	SCS	SRCC & KK-89
MC-X96		Lumberjacks Shaft	SCS	SRCC & KK-89
MC-X97		Mackies Cave	SCS	SRCC & KK-89
MC-X98		Petes Pitch	SCS	SRCC & KK-89
MC-X99		Pig Sty 2 Cave	SCS	SRCC & KK-89
MC-X100		Possum Cave	SCS	SRCC & KK-89
MC-X101		Re-Entrant Shelter	SCS	SRCC & KK-89
MC-X102		Rockfall Hole	SCS	SRCC & KK-89
MC-X103		Rongnumba Cave	SCS	SRCC & KK-89
MC-X104		Rushton Rift (Atilas Shaft)	SCS	SRCC & KK-89
MC-X105		Sassafras 2	SCS	SRCC & KK-89
MC-X106	"Cave M4" in KK	Shakey Shaft	SCS	SRCC & KK-89
MC-X107		Short Hole	SCS	SRCC & KK-89
MC-X108		Smedley Shaft	SCS	SRCC & KK-89



Cave	"was" number	Cave Name	Group	Info Source
MC-X109		Sufferers Cave	SCS	SRCC & KK-89
MC-X110		Talus Cascade	SCS	SRCC & KK-89
MC-X111		Tatana Magra	SCS	SRCC & KK-89
MC-X112		Tin Pot	SCS	SRCC & KK-89
MC-X113		Trackside Hole	SCS	SRCC & KK-89
MC-X114		Triagain Pot	SCS	SRCC & KK-89
MC-X115		Upper Rift	SCS	SRCC & KK-89
MC-X116		Valley Rift	SCS	SRCC & KK-89
MC-X117		Varve Cave	SRCC	SRCC & KK-89
MC-X118		Waterfall Cave	SCS	SRCC & KK-89
MC-X119		Waynes Warren; Binkies System	NC	SRCC & KK-89
MC-X120		Un-named	SCS?	SRCC
MC-X121		Un-named	SCS?	SRCC
MC-X122		Un-named	SCS?	SRCC
MC-X123		Un-named	SCS?	SRCC
MC-X124		Un-named	SCS?	SRCC
MC-X125		Un-named	SCS?	SRCC
MC-X126		Un-named	SCS?	SRCC
MC-X127		Un-named	SCS?	SRCC
MC-X128		Un-named	SCS?	SRCC
MC-X129		Un-named	SCS?	SRCC
MC-X130		Un-named	SCS?	SRCC
MC-X131		Un-named	SCS?	SRCC
MC-X132		Un-named	SCS?	SRCC
MC-X133		Un-named	SCS?	SRCC
MC-X134		Un-named	SCS?	SRCC
MC-X135		Un-named	SCS?	SRCC
MC-X136		Un-named	SCS?	SRCC
MC-X137		Un-named	SCS?	SRCC
MC-X138		Un-named	SCS?	SRCC
MC-X139		Un-named	SCS?	SRCC
MC-X140		Un-named	SCS?	SRCC
MC-X141		Un-named	SCS?	SRCC
MC-X142		Un-named	SCS?	SRCC
MC-X143		Un-named	SCS?	SRCC
MC-X144		Un-named	SCS?	SRCC
MC-X145		Un-named	SCS?	SRCC
Mc-X146		Un-named	SCS?	SRCC
MC-X147		Marakooa 0.5	NC	NC
MC-X148		Flyover Cave	NC	NC
MC-X149		Hangover Cave	NC	NC
MC-X150		Boomer	NC	NC
MC-X151		Carnac	NC	NC
MC-X152		Sprite Cave	NC	NC
MC-X153		Scrawnies; Devils Advocate	NC	NC

# STC Warehouse Sales

## Publications

- “Caving Safety 1 Manual”, 92 pages, covers Planning, Safety, Maps, Gear, Rigging, Emergencies etc. \$15.00
- Back Issues of Southern Caver, Speleo-Spiel. There are various issues available. Please contact the Librarian, Greg Middleton (gregmid@ozemail.com.au) with your requirements. ~\$1 each

## Gear

- CAVE PACKS, 25 litre volume, made from Heavy duty yellow PVC material, double thickness material at wear points, strong seams, drain holes, large diameter eyelet's, adjustable straps. Good Value. \$55.00 each
- Aluminium Bars for Rappel Racks. \$5.00 each
- 5 cm (2") plastic Tri-glide buckles, ideal for battery belts, cave packs etc.) \$0.80 each
- BATA full-length Gumboots, Size 6, Green with Orange Sole, and steel toecaps. **LAST PAIR >>** \$25.00

## Tape

- Edelrid 25 mm tubular tape. Ideal for rigging, chest harnesses etc. (White) \$2.00 per m
- 5 cm (2") flat tape (ideal for harnesses, rigging, gear bags, belts etc.) (Blue) \$1.50 per m

## Safety

- Rivory 10 mm dynamic rope (for cows tails, safety loop) **NEW STOCK >>** \$4.00 per m, e.g. Cowstail \$11
- Space Blankets (don't be caught underground without one!) \$4.00 each
- Miracle Body Heat Packs (20 hours of portable heat, 50 gm sachets, carry a couple) **NEW ITEM >>** \$2.00 each

## Lighting

- Yuasa Gel-cells, 6 Volt, 7 Amp-Hour \$24.00 each
- Metal Lamp Brackets, complete with fixing rivets and cable keeper \$7.50 each
- Plastic Lamp Brackets, used but in good condition. comes with fixing screws \$2.00 each
- Alkaline 4.5 Volt 'flat-pack' batteries (for Petzl Zoom's etc.) **SPECIAL >>> \$7.00 each**
- Eveready 6 Volt, 0.5 Amp Flange Mount Bulbs #1417 (for HIGH Beam) \$2.00 each
- Tandy 6 Volt, 0.3 Amp Screw Base Bulbs #50 (for LOW Beam), blister packs of 2 \$2.00 each
- Jets (21 litres/hr) for Petzl kaboom (just a couple left) \$5.00 each

## Tow Ropes/trailer tie downs/yacht mooring lines etc.

- RETIRED CAVING ROPE, no longer safe enough to use for caving purposes, but more than adequate for many other purposes. Available in various lengths. \$1.00 per m, less for the stiffer stuff

If you need any of the above please contact Jeff Butt on (03) 62238620 (H), or jeffbutt@netspace.net.au, or write to us: SOUTHERN TASMANIAN CAVERNEERS, P.O. BOX 416, SANDY BAY 7006.

## Reminder....2001: A Cave Odyssey

The 23rd Biennial Conference of the ASF Inc. is being held at Bathurst, NSW over December 28, 2000 to January 2, 2001. You all received a copy of the conference information with your last Australian Caver, why not dig it out now and consider coming along and joining in with the caving and fun with a whole mob of mainland cavers.

Information at this stage is best pursued via asf2001@rutco.com.au and / or <http://www.rutco.com.au/asf2001>

**STC** has caving lamps and helmets available for hire to Schools, Scouts and other groups with responsible caving leaders. Contact our Equipment Officer: **Jeff Butt** on **03 6223 8620** for details.