FUSSI Newsletter

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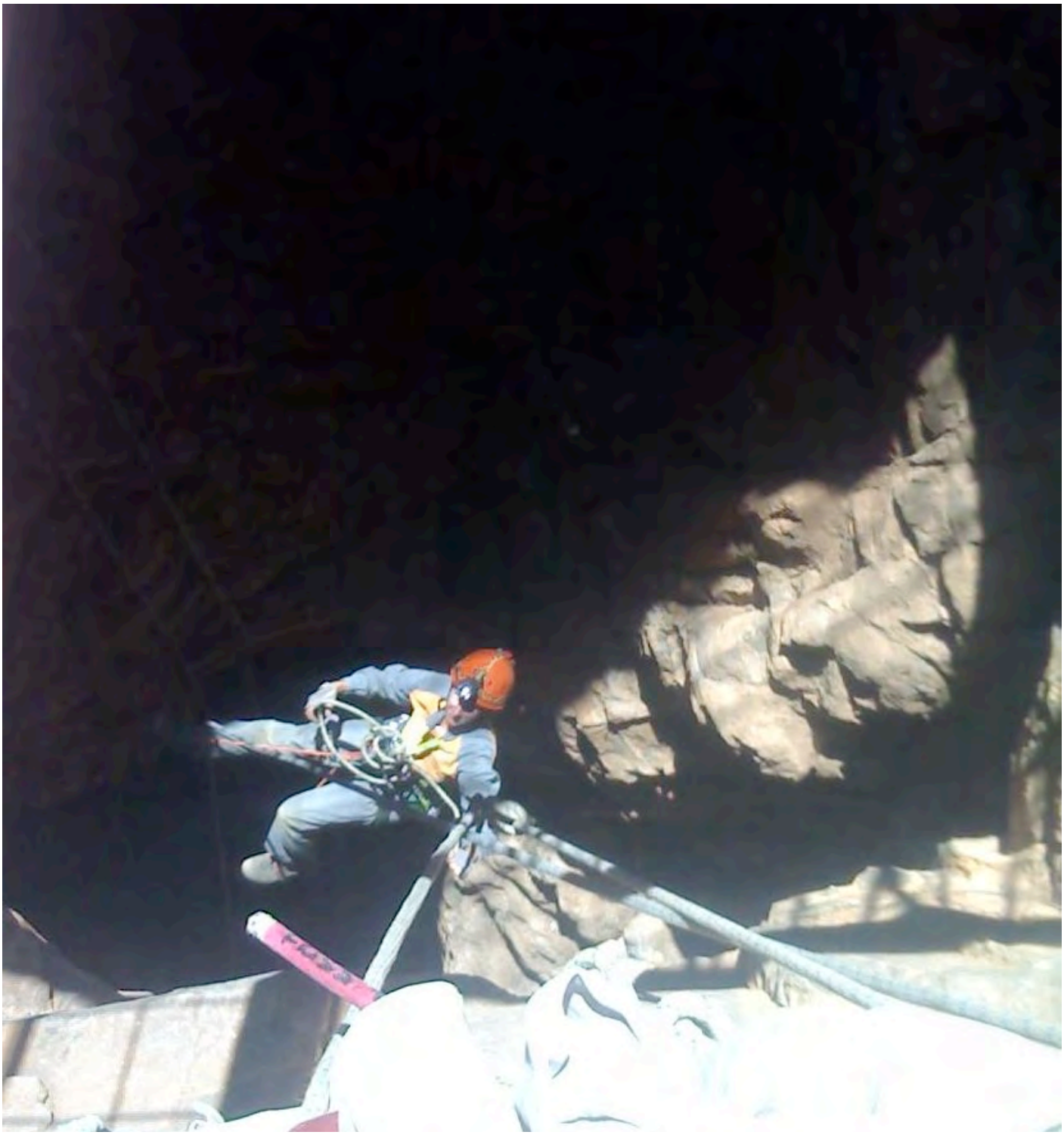

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C O N T E N T S

Front Cover Photo Credit: Michael Meynell-James
Front Cover Photo: Clare sorting out the twists on a hanging rebelay, Maires Cave. Flinders Ranges. Oct. 07.

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NOISY BATS IN THE FLINDERS

Clare Buswell and Heiko Maurer.

Thank you to Dr. Ken Sanderson, Biology Dept of Flinders University for the Analysis

Flinders Ranges. Bagalowie. 19/Oct/07 - 21/Oct/07.

On the latest FUSSI trip, up to Clara, St Dora and Maires caves we took along the Anabat Bat Detector to record the bat activity of the area. We arrived around 9pm on the Friday evening, 19/10/07 to a warm night of around 22 degrees and put the detector out on the western side of Bagalowie hut, about 80m from the hut. It was retrieved around 6am the following morning.

It recorded 125 calls, half from Gould's wattled and chocolate wattled bats, lesser long eared, freetail *Mormopterus* bats and occasional calls from forest (*Vespadelus*) and white striped freetail bats. The bats were out partying and feasting until about half an hour before dawn.

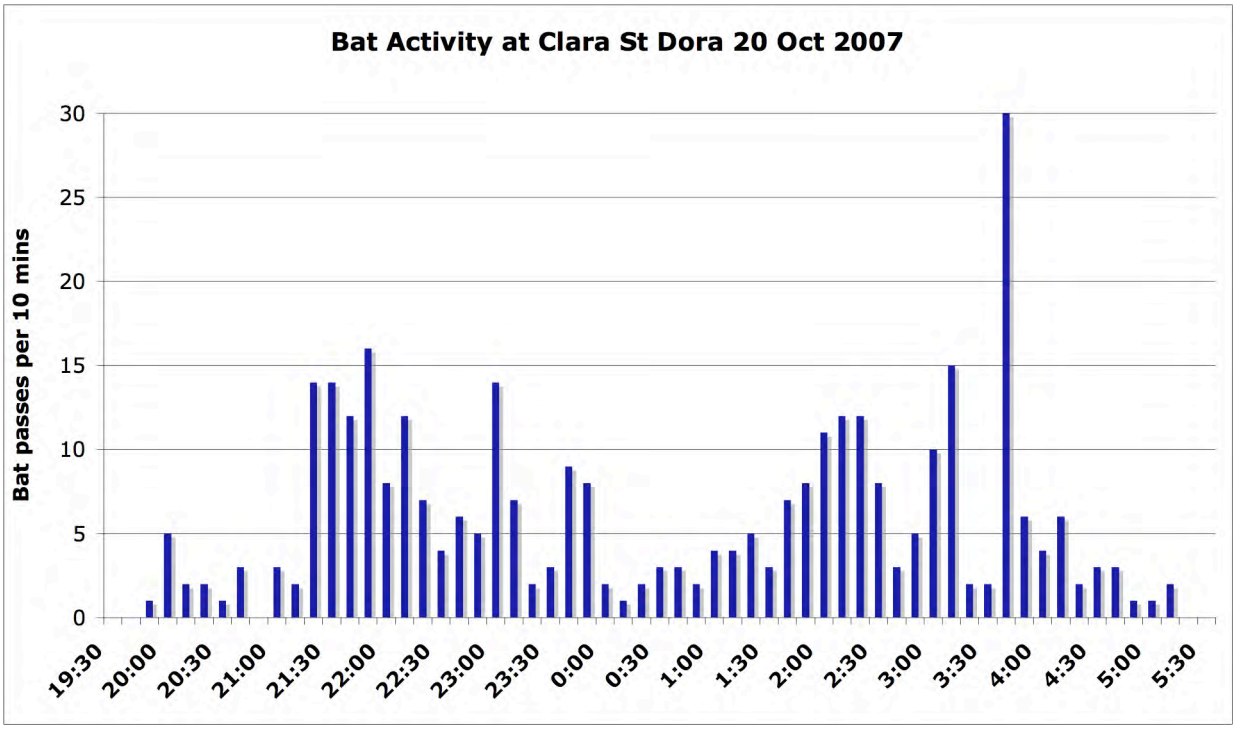
Type of vegetation near Clara St Dora Cave.

The following night, at 8pm, we left the recorder on the eastern side of the shaft entrance to the Clara St Dora cave. Tagged F4 (This is not the adit entrance.) It was about 1.5m away from the shaft, facing towards the creek. It was retrieved at 7am the following morning. The Saturday evening was warm, at 25 degrees and the Sunday that followed got to 38 degrees.

We recorded 335 calls from the shaft entrance consisting of over 260 calls from *Mormopterus Planiceps*, (common name: Little mastiff bat) 26 calls from *Chalinolobus gouldii* (Gould's wattled bat,) 9 calls from *Tadarda australis*, (white-striped Mastiff bat) 4 calls from *Nyctophilus geoffroyi*, (lesser long eared bat), and 4 calls from forest bats, (*Vespadelus*). There were 19 unidentified calls.

NOISY BATS IN THE FLINDERS

The following graph shows the bat activity for the Saturday night when the detector was placed at the shaft of Clara St Dora.

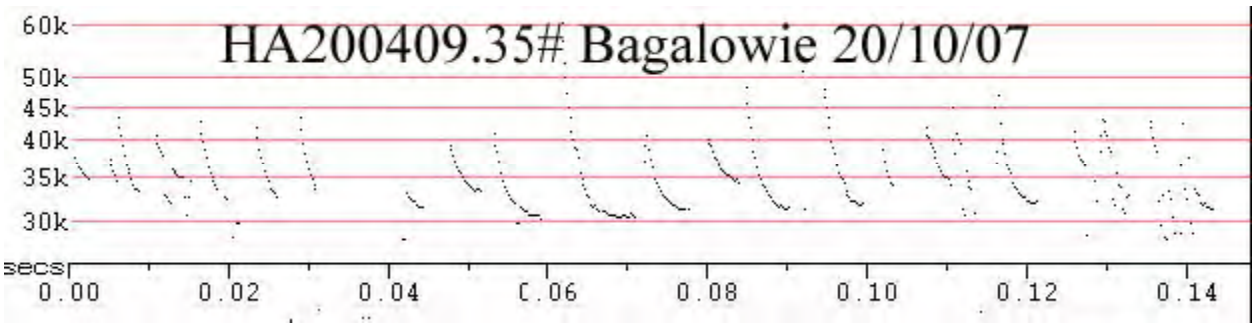


If you are interested in becoming involved in the study of bats, the Mammal Club of the Field Naturalists' Society of South Australia (Inc.) is a good starting place. For more information about bats, visit the Australian Bat Society website at

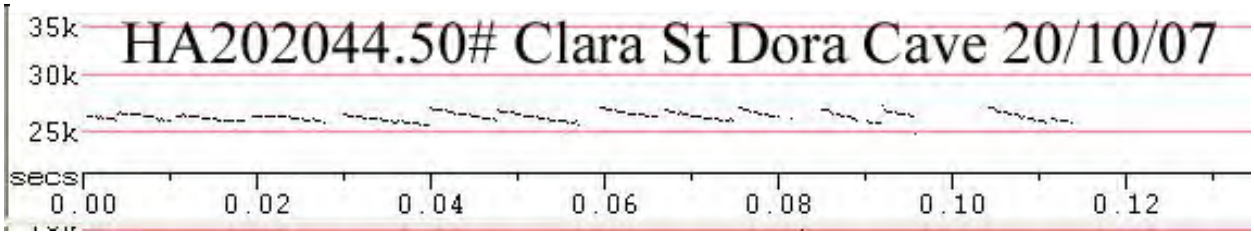
http:/batcall.csu.edu.au/batcall/abs/home.htm

Gould's Wattled Bat. *Chalinolobus gouldii*
Photo: Reardon T. & Flavel S., *A Guide to the Bats of South Australia*. p. 45.

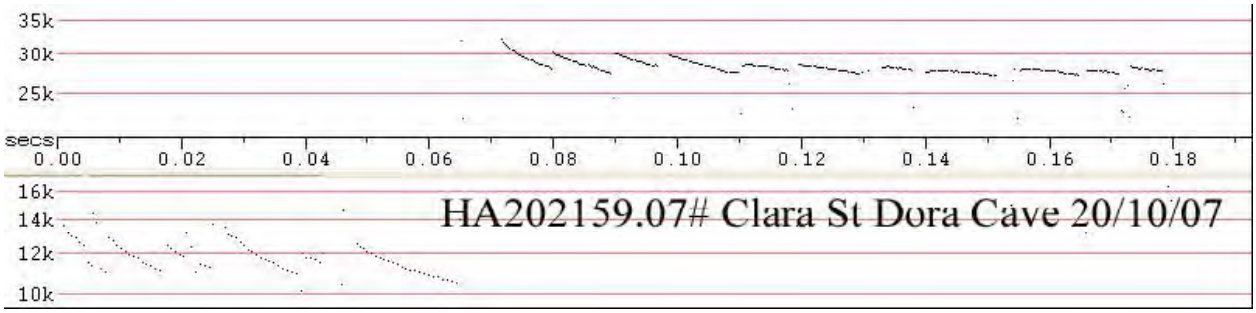
NOISY BATS IN THE FLINDERS



The diagram above shows the call of Gould's Wattled Bat. *Chalinolobus gouldii*



The diagram above shows the call of *Mormopterus Planiceps*,
(Little mastiff bat)



The diagram above shows the call of *Tadarda australis*, white-striped Mastiff bat and *Mormopterus Planiceps*, Little mastiff bat.

HOW TO MAKE ROPE WASHERS THAT WORK AT A REASONABLE COST

Clare Buswell

I would like to thank Ivan Riley for his experiments with all of this.

How many of we mainland cavers trundle off to Tasi, and spend heaps of time scrubbing ropes in streams with a hand held scrubbing brush? It is a real pain in the hands as the creek is usually freezing and it all takes forever. So a couple of years ago some experiments turned up the following. I have tried to make the instructions as simple as possible and hope that anyone can follow them.

Introduction.

1) Things to know about plumbing bits.

Firstly, plumbing bits come in different colours and in the real world of plumbing these colours are associated with different purposes. For these rope washers, grey, white and black is used. In Plumbing land, grey is used for sewer or down pipes. White is for high pressure and is used for internal plumbing, and on pools etc. Black is poly pipe and is used in the garden for setting up sprinkler systems etc. The high pressure stuff is the most expensive.

All plumbing bits have a size and a production ID number on them. I have given these numbers/IDs here to aid in getting the right bits. The components used in these rope washers are from four plumbing manufacturers: Hardie, Iplex Philmac and Hansen. All of the plumbing bits used here you can get from you local hardware store. Set aside a good bit of time in the hardware store if you are not familiar with the plumbing trade. Don't be afraid to put bits of this together as you shop.

When gluing sewer and high pressure pipe to other bits, use solvents and glue known in the trade as "pink and blue". Pink is a cleaner/primer, which roughens the plastic and so makes for a better binding surface, before gluing with blue. When using Pink and Blue, wear gloves and do it outside. You will not need a great lot of Pink and Blue so, unless you are going to do some plumbing at home buy small containers of it.

ONLY glue things together when you have *all* the components and have *experimented* with how it all works.

2) Brush Makers

You will find them listed in the Yellow pages.
You will need to spend time demonstrating and talking with the brush maker about what you want and how long you want the brushes to be. Do not be afraid to canvas the skills of a couple of brush makers. So shop around. Importantly, the length of the brushes that they make is contingent on the length of the wire that they twist to make up the brush.

Rope Washer For the Creek or the Bath Tub.

This is for used with two people, to wash ropes in a creek or bath tub. One person stands/holds the rope washer under water and the other person pulls the rope through the washer. When I have used this, I generally pass the rope through it twice. Once in either direction, but it depends on how dirty the rope is.

HOW TO MAKE ROPE WASHERS THAT WORK AT A REASONABLE COST

The Creek Rope Washer.

You will need the following:
1) Black poly: 2 X reducing bushes 40mm/25mm (1½ inch X 1 inch). These are also known as nipples and the type I have used, are made by Philmac. Cost $3.15 ea

2) A length of grey sewer 40mm pipe. It is the size that fits D cell batteries. The piece I have is 15 cm long, so I can stand on it in the creek.

3) Grey sewer: 2 X female threaded coupling 40mm. Iplex AS/NZS.1260. DWV 112.40. DO674040. Cost $2.80 ea

Components of the Creek Washer

4) Glue only ONE end as: a) YOU NEED TO BE ABLE TO FIT THE ROPE AND BRUSHES INTO IT.
b) You will find that friction will keep the other end in place as you pull the rope through it. Also you only ever pull the rope through the glued end.

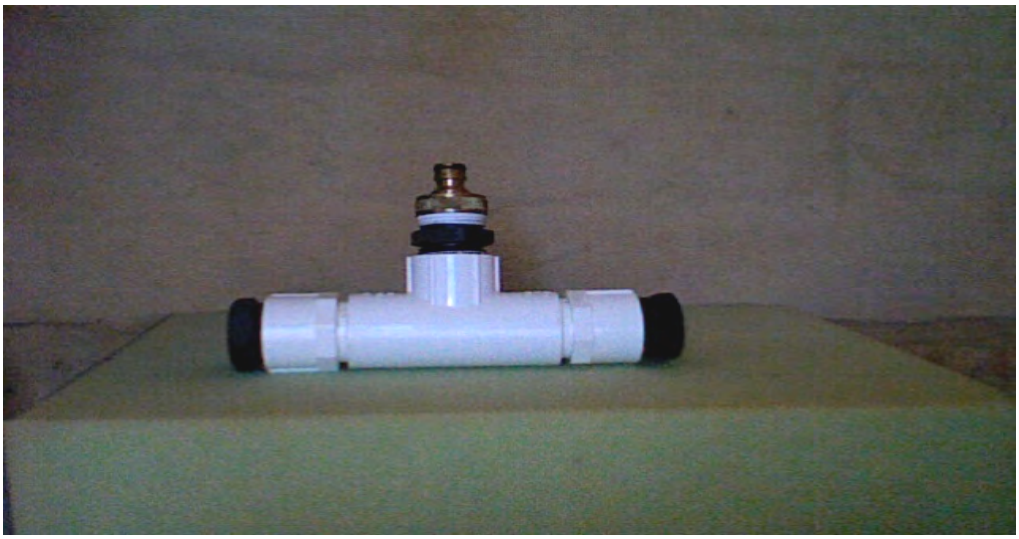
HOW TO MAKE ROPE WASHERS THAT WORK AT A REASONABLE COST

Creek washer with one end glued. Leave the other end unglued.

5) The total length of this washer is 28cm.
The brushes are 13cm long and I use 6 brushes on 11mm rope.

Rope washer attached to the garden hose.

The best way to use this beast is to run the rope between a couple of poles/trees/cavers or whatever else is at hand and tension it with a couple of ascenders. Then it is just a simple matter of connecting the hose and running the washer up and down the rope a section at a time.



The hose washer assembled.

You will need the following:
1) Brass or plastic clip-on hose fitting. Screw fitting on one end and clip fitting on the other.
2) 1 X 25mm (1") Nipple. Black Poly. Philmac. Cost: $1.90

3) White high pressure, 1 X female Tee Faucet reducer. 32mm X 25mm. PO213225. PN18 AS/NZS.1477. Hardie. Cost: $9.50. This is threaded so the hose fitting can go into it.

4) White high pressure. 2 X female Faucet adapter 25 X 32mm. No18/3. AS1477. CLI8. Hardie. Cost: $3.70 ea. (Plain on the male end: - 25mm, and threaded on the female end: - 32mm.)

The Hose washer components

5) Black poly. 2 X Hansen SRB3220. 1¼" X ¾" poly bush. Cost: $2.95 ea. Philmac also make this but I don't know the part number so look around for them if you can't find the Hansen ones.

6) When you have the brushes then glue only ONE END TOGETHER as below, and screw the rest into it.

7) Total length of this washer is 17 cm.

The hose washer with ONE end glued and the other
ready to be assembled and which is NEVER glued.

HOW TO MAKE ROPE WASHERS THAT WORK AT A REASONABLE COST

The Brush Maker.

Take the **un glued** rope washers to the brush maker with a piece of 11mm or what ever rope diameter that you use the most. Ask him or her what is the longest brush they can make. The brushes for mine are 13cm long. (You should be able to get a brush longer than this.) The brush width is 5mm either side of the wire. Total width including the wire in the middle is 14mm. I have six of them because the sewer pipe is 40mm and the hose washer is 32mm, internal measurement. In the hose washer I use five brushes and the creek uses six. The 10mm Edelrid washes better in the hose washer than in the creek washer and the 11mm Blue Water 2 Plus washes better in the creek washer. Demonstrate to the brush maker what you want and leave the whole lot with them so they can experiment with it and make up brushes to suit.

A Brush in scale with the creek washer.

This is what the brushes look like.

HOW TO MAKE ROPE WASHERS THAT WORK AT A REASONABLE COST

Comments.

When you are in the hardware store, fit all the plumbing bits together. You can, if you want, make up a washer using larger diameter pipe. It is really personal preference, as is the length of the washer. The six brushes that I had made up cost $30. So that works out at $15 for brushes for each washer. Stainless steel wire was used in my brushes so the cost could potentially be reduced by using ordinary mild steel or galvanized wire, but considering the intended use, it is worth the extra to invest in stainless. It is also important to smooth off the ends of the brushes with an angle grinder, rub them on rough concrete or whatever to remove the risk of rope damage from any sharp edges.

In terms of cost, the creek washer cost $15 for the brushes and $11.50 for plumbing bits, plus a bit of 40mm sewer pipe I had hanging around in the shed. So around $27.

The garden hose washer cost around $40, mainly due to the cost of high pressure fittings. I expect that these rope washers will never wear out. By way of comparison, the Dobi rope washer that is commercially available retails for around $44, does not fit onto a hose and is not as sturdy. Have fun.

BITS AND PIECES

Many thanks, to Paul and Deb for hosting yet another FUSSI end of year din dins. As usual, heaps of food and wine were consumed, and a particular loaf of bread was dissected in a very calculated manner.

Our gear and library storage area has moved. This has made access easier, although we have less room for all our gear. We need to have a working bee to sort through some old library files and have a bit more of a throw out of junk!

Thankyou to all those on the Buchan trip who returned the gear clean and in good condition. We will have to do a bit of work on the 6 volts so as to stop the cable from coming loose from the bum bags. Any volunteers and ideas welcome.

The up coming library foyer display will be important for the club as a possible membership drive, so we need any posters, photos, bits of caving history, old lights, etc. Help is also needed in setting it up. The more hands on deck the quicker it will be put up. So keep a night free on the 23rd of April for this activity.

Other general caving news. The Gate to the entrance to Kubla Khan cave in Tasi was ripped off some time in the latter half of last year and the cave was entered as a result. The gate demolition job would have taken some doing, as the location of this gate is not easy to find, and getting it off would have also taken lots of time and energy.

The ASF is holding its annual council meeting on the long weekend in January in Sydney. It will be interesting to see what eventuates.

FAIRY CAVE AND WIND CAVE, SARAWAK, BORNEO

Ehon Chan

I'm currently back home in Kuching, Sarawak, Malaysia – on the island of Borneo – and I thought what better ways to kill a boring day than to visit our local caves?

The journey to the Wind Cave took about 40 minutes and because it is now a national park, the cave has walkways all through the cave. There's water dripping everywhere and I think it was the bats' breeding season because there were tons of baby bats (and their crap)!! And it isn't surprising that it is called the Wind Cave because there were breezes all through our journey.

The Exit of Wind Cave

It was an approximately 30 minutes' walk with stairs before reaching the end, where a platform surrounded by lush green rainforest, and a river welcomed you. We took a quick look around, left the cave and headed for Fairy Cave!

Fairy Cave is only about 10 minutes away from Wind Cave, and the cave was named 'fairy' because there's a rock structure that looked almost like the Goddess of Mercy in the Buddhist teaching.

The "hall" of Fairy Cave

In order to get to the main entrance, we had to climb up a few flights of stairs, probably about four stories high. This cave is relatively more challenging, because of the slipperiness and tiny walkway. I honestly think that climbing through caves without walkways is much easier than with walkways because it can be so much more slippery, you don't know if the plank will break (none did!), and the stairs' steps were very tiny too.

The end of the walkway is an enormous, majestic hall! I had a 2 minutes jaw-drop moment just looking at it and how nature can produce something so majestic! We walked around and found the "statue", and many more interesting rock formations which looked like a "dragon, ballerina and an old man"!

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FUTURE TRIPS

General Meeting	Feb 28th	Union building. 6 pm.
Fairday. On Campus	Mar 5th	Contact Michael to help out.
15/16th March:		**South East.** New members welcome! Contact Bronya: alexander.bronya@saugov.sa.gov.au

Mid semester break: 14-25 April.

Library display. April 25th – May 16th.

Anzac day long week end: 25-27 April	**Flinders Ranges**. Arkaroola For those interested, contact Bronya.
Annual General meeting. May 1st.	
Week long interstate trip:	Nullarbor, in September