



FUSSI

Newsletter

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A Speleothem in Clara St Dora Cave

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C O N T E N T S

Bats Are Back	p. 3
Looking for a Good Friday	p. 6
Caving in Corra Lynn	p. 7
Bits and Pieces	p. 8
FUSSI 2009 Membership List and Future Trips	p. 10

Front Cover Photo:

Clara St Dora Cave: speleothem.

Front Cover Photo Credit:

Clare Buswell.

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BATS ARE BACK

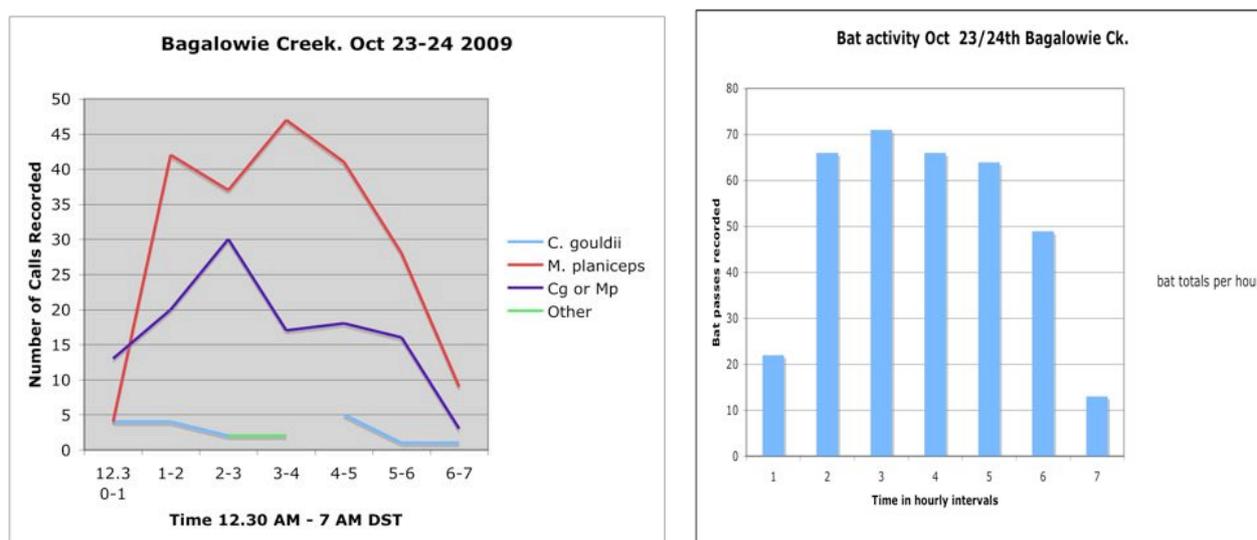
Clare Buswell

Thanks and acknowledgement are made to Dr Ken Sanderson,
Department of Biology, Flinders University,
for analysis of the data.

Flinders Ranges. Oct 23-25th 2009

Almost two years to the day we took some bat detecting equipment back to Clara St Dora and Mairs Caves in the southern Flinders Ranges to see if a year or so of drought had any effect on bat numbers. The argument was that, if the drought had affected the insect population, then bat populations would be down.

We arrived to camp in Bagalowie Ck on the night of Oct 23rd, to a warm 25 degrees. As soon as we had set up camp it was evident that the insect population was in plague proportions as our headlamps attracted them like moths to a flame. So persistent were they that we took to walking around in the faint moonlight, so as to be left alone from the flying insects.



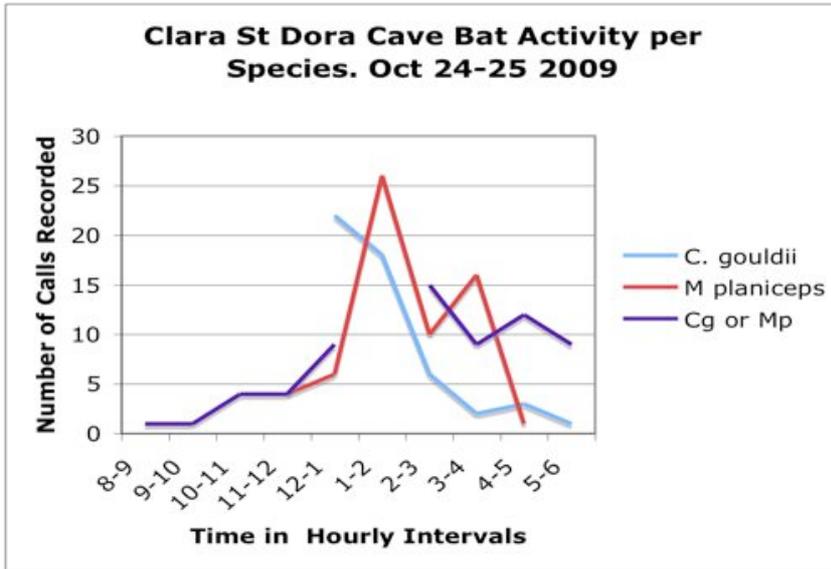
The anabat recorder was set up in the Bagalowie creek bed at 12.30 in the morning and recorded 351 calls over the next six hours. The site was 100 metres away and 50 meters below the shaft entrance of CSD. The calls consisted of mainly *Mormopterus planiceps*, (common name: Little Mastiff bat) 208 calls recorded and *Chalinolobus gouldii* (Gould's Wattled bat) 17 calls definitely identified as such. There were another 117 calls that could be either *Mormopterus planiceps* or *Chalinolobus gouldii*. The other bats recorded were a forest bat, *Vespertilio*, 4 calls and *Chalinolobus morio* 5 calls. As the graphs above illustrates, most activity was between 2 and 5 in the morning.

The Saturday night the 24th both recorders were put to use. One at the shaft of Clara St Dora cave Tagged F4. This is not the audit entrance. It was placed in the same position as it was in two years previously. The second recorder was placed facing away from the shaft of F3 Mairs cave, pointing south towards Bagalowie Ck. See photo. Both sites face onto Bagalowie Ck and are 500 metres from each other.

The temperature on the Saturday night was cooler, 15 degrees getting down to 10 degrees, windy with light rain later in the evening. Bat calls for both sites were considerably lower than the previous night or in the case of the Clara St Dora site half the number from the recordings obtained on Oct 19th 2007: 186 calls Oct 09 vs. 400 calls in Oct 07. There was also a wider number of species present in 2007, although the numbers recorded were low: 9 calls from *Tadarda australis*, (white-striped Mastiff bat) 4 calls from *Nyctophilus geoffroyi*, (lesser long-

BATS ARE BACK

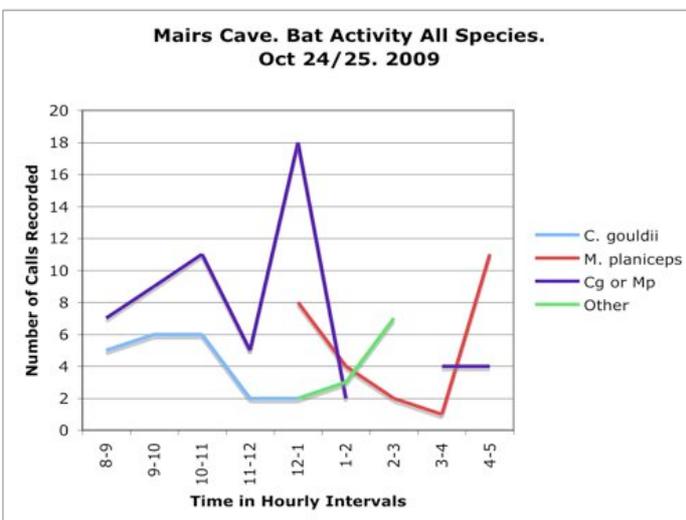
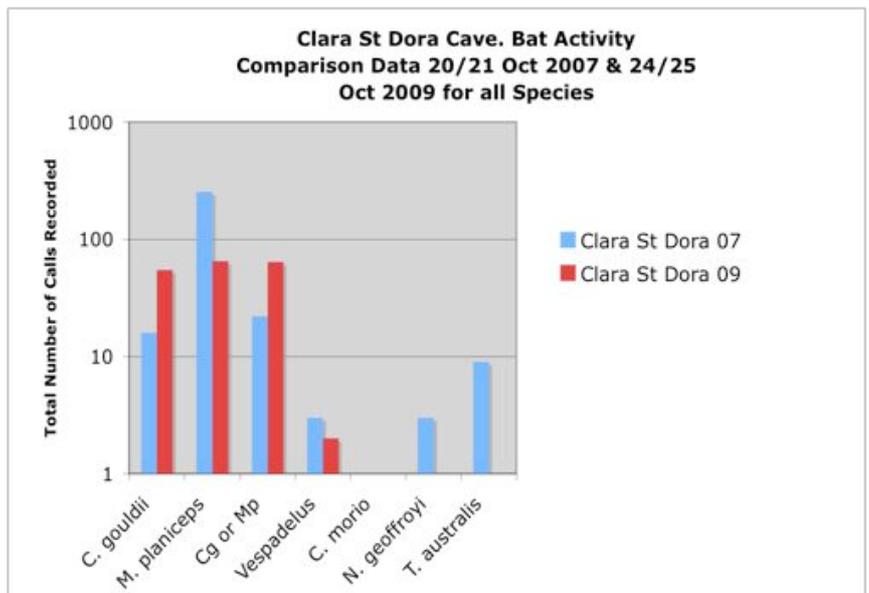
eared bat), and 4 calls from forest bats, (*Vespadelus*). There were 19 unidentified calls. See graphs below.



This year there were 65 calls from *Mormopterus planiceps*, (255 in 2007): *Chalinolobus gouldii* 55, (16 in 2007) and 64 calls that could have been either *Mormopterus planiceps* or *Chalinolobus gouldii*, (22 in 2007). Only two calls were recorded of *Vespadelus* in 2009 and no calls from *Tadarida australis*, (White-striped Mastiff bat) or from *Nyctophilus geoffroyi*.

The data from the Mairs cave

site is the first data that we have recorded from this site. The shaft entrance is 17 metres deep and is a dug shaft, as the cave was mined for guano in the 1920s (as was Clara St Dora cave). Below is the data from this site with 138 calls being recorded. Once again *Mormopterus planiceps*, 43 calls and *Chalinolobus gouldii* 23 calls were the most common, totalling 56 identifiable calls and another 60 calls that could have been either species. There were 6 calls from forest bats, (*Vespadelus*), 2 from *Taridia australis* and 2 from *Chalinolobus morio*.



There are a number of variables that could influence the differences in the results between the two recordings for CSD cave. The night temperature differences would be highest on the list. In Oct 2007 the night temperature was around 25 degrees with the following day temperature getting up to 38 degrees. The night temperature this Oct was closer to 15 degrees and getting down to 10 degrees over the course of the night. It was also windy with some light rain later in the night. It is well known that some bats do not get out of bed if the temperature

BATS ARE BACK

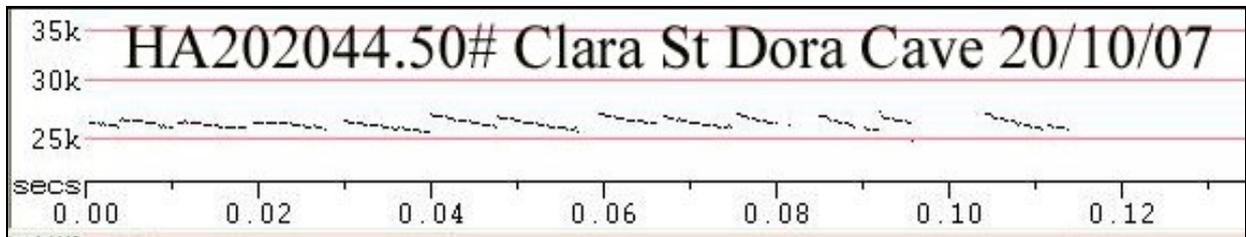
overnight is low. This is attested to by the fact that a month previous to this on the night of Sept 26/27 09 we took bat recordings in the same spots and got very little data. In fact, only a single recording of a white striped mastiff bat, *Tadarida australis* at 8:36 pm and nothing further. The night temperatures on that weekend were 10 degrees around midnight on the 26th and windy and on the 27th daytime temperature got to around 18 degrees.



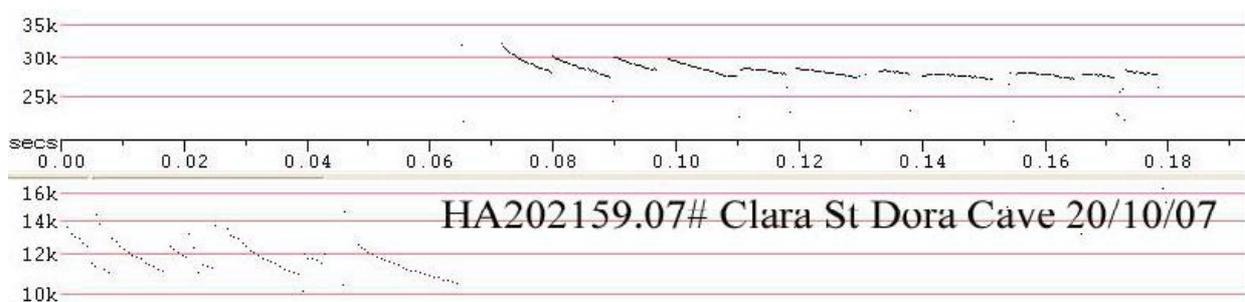
The data alone gives us an indication that the bat population of these two caves is reasonably healthy. As these two caves receive considerable human visitation a longer term study involving temperature data and mist netting would be useful in helping to determine the species range and its stability.

We would like to thank both Dr Ken Sanderson and the Department of Heritage for the loan of the equipment.

The Mairs Cave Site.
Bat box was placed next to post where the person is sitting.



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



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

LOOKING FOR A GOOD FRIDAY

Alison Thompson

On October 23rd 2009 a small contingent of FUSSI members, six in all, returned to the lower pastoral region of the Flinders Ranges for a weekend of caving and camping.

High on the list of “To Do’s” was to find the elusive Good Friday cave, for which GPS coordinates and a map were on hand, yet not useful on the previous trip, and almost not useful on this one. After several hours of bushwalking, including coordinated grid searches as if looking for a missing body, the exploration almost reached its end again without success. Fortunately Thomas had a strong desire to search another hill – low and behold, there was a crack in the surface of rocks that proved to be the entrance of Good Friday. After much

walking it turned out to be a good Saturday and new GPS coordinates were recorded, along with a description of landmarks and photographs to ensure easier access in future.



Sam Contemplating What Lies Below

After a hearty lunch most of the group visited Clara St Dora cave, conveniently located a stone’s throw from our dried creek campsite. This cave proved interesting for physical traversing, with several windows and L-shaped corridors that opened up into large caverns full of decorations. The most difficult aspect of moving through the cave was ensuring one did not inadvertently break any formations during the less than graceful ‘wiggle’ of arms, hips, legs and feet. Each tight, yet careful, squeeze was rewarded with beautiful cave formations – including an abundance of crystal, stalactites and cauliflower decorations on many stalactites and walls.

Another task on the “To Do” list for Saturday was to set up the Bat Boxes on loan from the Flinders University School of Biology. These devices record the sound of bats as they leave and enter the caves, providing an estimate of bat traffic in the area. They were set up above the entrances used by the bats near Clara St Dora and Mairs.

All but ‘your humble narrator’ dropped in on Mairs Cave the following day. Clare and Matthew spent Sunday morning setting up the elaborate rigging required to ensure a safe entrance and exit. Whilst the team toured Mairs cave, and by all accounts had a dark and dirty good time, I ever so slowly packed my outdoor home. By early afternoon we were ready to head back to civilisation ... flushing toilets and showers.

There are so many ways to measure the success of a trip such as this, but the one I like most is illustrated by Sam’s question on Saturday night: “So, when’s the next caving trip?”

So, when is the next caving trip? Flushing toilets and showers are overrated, and getting dirty underground can be such fun.

CAVING IN CORRA LYNN

Clare Buswell

July Trip: Michael Meynell-James, Vicki Whelan, Clare Buswell, Bronya Alexander, Matt Meynell-James and Alison Thompson.

August Trip: Adrian Hekel, Michael Meynell-James, Vicki Whelan, Clare Buswell, Bronya Alexander, Stuart Reedman and the drag mat.



The gang at the entrance of Corra Lynn with drag mat torture in mind.

beyond.

More map reading and finger pointing as to where we thought we were. The usual map reading words were uttered: 'the map is drawn wrongly', 'no, this is that there and that corresponds to this', "I don't think we have come that far at all", 'Yes, we have. This is definitely that, 'cos I've just come around there" ... So on it went. But that is the nature of not getting bushed in a maze cave.

Anyway just for a bit of variety the crew thought that they would take their revenge on the long suffering FUSSI secretary, tie her into the drag mat and take her for a spin. So trussed up like a chicken we hauled an ever-trusting Bronya around numerous bends, and up and over uneven floors. The task was really about letting people know how bloody difficult cave rescue processes are. The fact is that you will need lots of people, and it will take lots of

Plus Neprurus Mili who took up residence at the base of the stairs. (I wonder what happened to the two pigeons that used to live on the ledge next to the door and would fly out and frighten the bejesus out of you as soon as you opened it.)

August sometime.

This was the second trip to Corra Lynn Cave on the Yorke Peninsula in about a month, so the basic map of this three level maze cave was beginning to gell in everyone's mind. On the previous trip, the bastard of a trip leader, (who shall remain nameless) decided to introduce the crew to the meaning of the slogan on the back of the FUSSI logo, by taking a trip down Bandicoots Bypass. This was just after a romp along the other well, known body-hugging crawl known as Beard Squeeze. So in the interests of re-acquainting ourselves we went in the opposite direction and took a trip out to the Wombat runs, the Crystal chamber, and finally to Bushwalkers Chamber and



The Things You Do!

CAVING IN CORRA LYNN

time. The next time we do this practice let's hope we have a lightweight, compact stretcher and not a bloody, great piece of conveyor belt. Anyway the basic idea was conveyed to all. Adrian



A New Cave Salamander in Corra-Lynn Cave Y1?
No! It's *Neprurus milii*. (Barking Gekko)

the qualified medico on the trip was introduced to the concept of 'confined space medicine'. (Now those are weasel words.) Can't really say that he was impressed with the idea. Instead, I think he really wanted to go down something big and walkable, like Kubla rather than Corra-Lynn. (Next time Adrian!)

On both trips a good time was had by all, and the current batch of FUSSI members were introduced to South Australia's longest cave, 14 km and still going! It is a great place to practice some of the hard core caving skills, with lots of climbing, crawling and inhalation of dust! For interesting vertical stuff we will all have to convince the local Minlaton Shire Council that the collapsed entrance to Town Well Cave can be safely dug out and the shaft below it safely entered.

(Insurance companies will not have a bar of it! But then why should we live our lives by the dictates of insurance companies!)

OTHER BITS AND PIECES

Our Gear and library has been shifted yet again and this time most of the library is sitting on the floor. Our gear is in a state of disarray. This is caused by the fact that very little storage space was provided. No shelving in the form of a compactus is available and the club is now on the hunt for any bookshelves or cupboards of a reasonable depth. So people, put such things on your Christmas list.

In view of the above, the club is having a large sort out and clean up day on **Dec 8th**. Meet outside the wholefood shop at Uni at **5.30 PM**. BYO something to munch on! etc.

The Club is still hunting for grant money to buy our own set of bat detection equipment, GPS stuff and new LED caving lights. LED stuff can only become cheaper and more efficient as time goes on. We note that Scurion has now brought out a number of new lights. A light of 700 lumens at CHF 731.00. A 900 lumens light at CHF990.00 and another of 1200 lumens also at CHF990.00 Anyone got any spare Swiss Francs? The last time I looked the exchange rate the AU\$ was buying around CHF 0.90cents.

High on the list for discussion at the forthcoming ASF Council Meeting will no doubt be the outcome of the court case regarding the mining of caves in Timor in NSW. FUSSI donated \$200.00 to help fund the fight. South Australian cavers have been in a similar situation in 1993 when Southern Quarries (now Adelaide Brighton Cement) based at Sellicks Hill, blew up a newly

BITS AND PIECES

opened cave in their quarry. They had an arrangement with some SA cavers to explore this cave when it was first discovered in 1991. The cavers over the course of nine trips into the cave over 1991, surveyed and photographed it. They found that the cave was extensively decorated containing some rare, for SA caves, aragonite crystals and possible fossil deposits. The quarry then denied the cavers any more access. On the eve of the 1993 State election (10th Dec 1993) the quarry owners blew up a section of the cave known as the Big Room. The lack of a Ministry left the cavers with no immediate avenue to pursue the Company, as for the week after the election there was no ministry allocated. It was not until a vigorous media campaign, that an 'Inquiry Into the Facts' was held. This inquiry was, as are a lot of government inquiries, ignored. (Remember, Yes Minister, with Sir Humphrey telling Hacker, "that you do not hold inquiries unless you know their findings before they are held!") In the end, South Australian cavers with the help of cavers all over the country raised \$20,000.00 to fund a court case. We took the minister to court in the hope that he would uphold an injunction which attempted to heritage list the cave and to stop any continued mining. We lost. See Australian Caver No. 136. 1994, or FUSSI Vol. 6. No.1. 1994. We wait the result of the Timor court case that starts on the 29th of November and goes for ten days.

The ASF is holding its annual Council meeting on January the 2nd at Bankstown in Sydney. See notice below. This is the meeting at which clubs get together and discuss issues that concern we troglodytes. FUSSI has one representative at the council meeting, so if anyone in the Club would like to go, let Bronya know. It is an opportunity to meet up with other cavers and find out about all sorts of interesting things. Of interest to FUSSI members is a rise in the student rate of membership to the ASF by \$7.00. That means that the student rate will go from \$61 to \$68, including ASF Public Liability insurance.

The other big discussion will no doubt be around the review of the ASF Cave Safety Guidelines. I remember the last time these were reviewed, the meeting spent the best part of an hour discussing the word "wallow." One is not allowed wallow in the mud in Gloop. It is against the ASF safety guidelines! Will this be the case again! Will cavers be barred forever from wallowing in their favourite haunts.

Beal has just brought out a new rope just for cavers. 8mm static with a very abrasive resistant outer core. The European Speleological Federation sent the following news around about the rope with the associated web addresses.

"It is a complex polymerization process called UNICORE that enables the binding of the sheath of the speleo-rope to the core, while all the other qualities of the rope are kept and even reinforced. This specific process that Beal have patented enables us to have an 8.5mm rope that has all the qualities of the Spelenium 9mm rope with which we are used to. Like this, we gain in weight and in resistance of the sheath of the rope. For those who need type A ropes, the Beal Unicore Spelenium rope exists also in diameters of 10.5 and 11mm.

You can access to the bilingual press release specially in preview on the FSE website (pdf file of 300 ko):www.eurospeleo.org/beal-unicore.pdf

And the videos in 5 languages of the comparative tests between Unicore and classic rope technologies are accessible on : <http://beal-planete.com/spelenium/>

Should you have technical questions or suggestions about the Unicore technology, please send them to contact@eurospeleo.org and you will receive an answer from BEAL."

Finally get your friends to buy you a plain T shirt, with no logos or front pockets on it for our FUSSI T Shirt painting and end of year bash. The colour of the T shirt paint will be black. So don't buy a dark coloured T Shirt.

FUSSI MEMBERSHIP LIST

ALEXANDER, Bronya		
BUSWELL, Clare		
DIXON, Kevin		
HEKEL, Adrian		
MAURER, Heiko		
MEYNELL-JAMES, Matt		
MEYNELL-JAMES, Michael		
PHELAN, Vicki		
Sam		
SCHULZ, Eric and family		
CLARKE, Kylea and family		
THOMPSON, Allison		
VARGA, Thomas		
XU, Jiamin		
ZHAO, Feng		
ZUIDERDUIN, Sylvia		

WHAT'S ON

Yorke Peninsula	Dec 4 th	Trip co-ordinator: Bronya CANCELLED DUE TO FIRE BANS
Club gear clean up arvo	Dec 8 th	Co-ordinator: Clare. Meet outside the Wholefood Shop at 5.30 pm. If you are able to come but later then ring Clare the night before for directions as to where the clean-up will be.
ASF Council Meeting	2 nd Jan 2010	Bankstown. Sydney
End of year dinner	Jan 17 th	T shirt painting and other crazy things. Location will be advised.
LSE	March 14/15 th	Co-ordinator: Bronya
Nullarbor	April 2010	Co-ordinator: Michael. Around Easter.
Training days	TBA, over Uni Holidays	Uni footbridge and other sites

Aug 2010. 15th International Symposium on Vulcanospeleology
 Undarra Lava Tubes, Qld and Mt. Eccles Victoria. Contact: ozspeleo@bigpond.net.au