FUSSI





"One good thing about living in this age - all the caves are brand new. "

The Quarterly Newsletter of the

Flinders University Speleological Society Incorporated

it out. The following are a le of simple equations h will give you the ance of the globe. They are e same, in that they will you the resistance value of lobe, they only difference een the equations is indent on what information have on the globe or the et it came in. So whatever iformation you have, you d be able to work out the ance from these equations.

R=V/I or

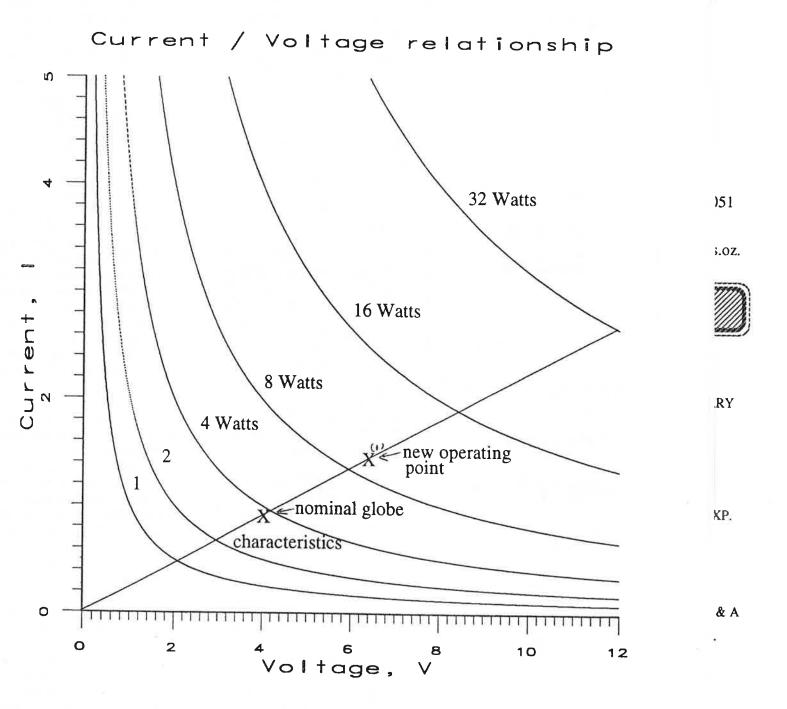
 $R=P/(I \times I)$ or $R=V \times V/P$

Where V, is the Voltage measured in volts, I stands for the current measured in Amps and P is the power of the globe measured in Watts. Unfortunately the manufacturers sometimes quote the current of power in other units to make it sound more impressive, the most common are mA or mW which stand for milli Amps or milli Watts respectively. They can be converted to the

correct units by dividing the associated number by 1000.

As an example I have used a globe from a torch which uses two normal D cells, the globe is rated at; 2.3 volts with a rating of .27 amps Using the formula R=V/I, substituting the values given for V= 2.3 and I= .27, one gets a resistance of 8.5 Ohms.

O.K., now you have the resistance of the globe, lets look at the other parameters which



How to Choose a Light when the world seems at it's darkest.

ont.

will effect the globe.

The globe's current, (I), will be

I = V/R

* for our example globe, it is 2.3 volts divided by 8.5 ohms = .27 amps

...then the globes power can be calculated by

 $P=I^2 \times R$

*which for our example is $.27x .27 \times 8.5 = .619$ Watts

Step 2: Now you know roughly how bright the light is going to be but not how long it will last. You can determine how long the battery will last by dividing the battery capacity (C), which is measured in Amp Hours by the calculated amperage of the globe (I). This may also be shown by the manufacturer in milli Amp Hours. If it is shown in milli Amp Hours then convert it to Amp hours by dividing the given number by 1000. The duration of you battery (D) can be calculated

D = C/I

You now know how bright the light will be, and how long it will last, or do you? Depending on the type of globe, different amounts of light will be produced for different amount of electrical power (P). This also depends on whether the light is over or under voltage, which will produce a colour shift in the light produced and affect our perception of how much light is available since we see some colours better than others. But that gets really complicated very quickly so I'll stop.

There is a better way and that is through doing the calculations on a graph. See diag.. #1.

Start at a point on the graph which corresponds to your globe. Measure out the voltage indicated on the globe, on the horizontal x axis and then place a ruler parallel to the y axis (Current) then read off the point where the current and voltage points intersect for our example it would be 2.3 volts and .27 amps. Draw a straight line through the origin (that's the zero) point and your point where the vertical and horizontal lines meet.. This line that you have drawn describes the characteristics of you globe and you can run your globe at any point along this line (that is the one you have drawn at an angle which starts from the zero point).

If you want a particular power then you follow the line to the appropriate power and then simply read off the voltage and current required to generate that power. If you have a particular battery you wish to use then all you have to do is follow the line so that you can drop a line vertically down to the correct voltage and you can read off the amount of power that will be generated and the current that will be drawn. Then when

you check with the battery capacity and you will have a fair idea how long you light will last.

(I would like to thank Matt for some conceptual frame working and Tim Payne for his excellent technical clarity it is certainly clearer than my hazy graphs. Hopefully this will give some idea of how to configure the lights we have come to rely on. In next years issue I will do a compilation of the various common battery capacities, but until then, have a safe chrissy break) regards Keven.

by John Callison

A caving skills weekend loosely addressing the caving Leader Level I notes was held at Cave Park. Those participating were from FUSSI, CEGSA and Robin, a National Parks and Wildlife Service Guide who is currently working at Tantanoola. Prior to the weekend an information night was held, Clare Buswell discussed safe caving and Di. Brinsley discussed the issue of first aid problems that we may possibly FUSSI Newsletter Vol. 5 No. 3&4 1993 P.7

encounter whilst caving. We met at Narracoorte where we worked in three groups, one group as a catch-up, for those whose skills were a bit rusty, while the other two groups concentrated on; rigging with a single and then multiple point anchors, rigging ladders and belaying techniques also with single and multiple anchor points. This was done around the camp site, using what trees and other anchor points that were considered usable. The coordinators were Di. Brinsley, Krunchy, Clare Buswell and myself (John Callison). After the practice around the campsite we finished the rest of the day with rigging

practice, self lining, and belaying in Cathedral and Stick Caves, where what had been learnt on the flat ground was to be put into practice at the lip of the cave. A successful day was rounded off with firewood gathering and feasting, finishing with me proving that Inspector Morse I ain't (but that's another story).

Sunday started rather bleakly.. A

Sunday started rather bleakly,. A group decision was arrived at to rig both entrances of Cathedral, one with ladder and belay line and the other for abseil and ascending rigs. Personal rigging and tuning was carried out on a convenient tree prior to going into the cave. Then it rained..(to be more accurate it poured). A cave visit was

eying and tagging (YTs) or drinking coffee (OFs). Other activities included the odd bit of fencing and visiting the pub (YTs). Just what is this organisation coming

The issue also includes a very good, i.e., easy to understand for those with no back ground in geology, glossary of terms dealing solely with limestone. The article is prefaced with a note on what limestone is, a sedimentary rock, how it is formed, chemically or mechanically and some basic definitions which are used in industry and in geological literature.

Some examples: Chalk, is a soft fine grained earthy limestone consisting largely of the remains of minute organisms: Marble is a metamorphosed, highly crystalline pure to impure limestone. It may be high-calcium or dolomitic in composition. Commercially this term is used to refer to any marble or limestone that on polishing is capable of producing an attractive colour and pattern.

There is a write up of the geology of the **Byaduk** and **Mt Napier Lava Caves**, (Hamilton Vic.). Once again very clearly written for the geologically disadvantaged. It contains notes on a radiocarbon dating of the basalt, around 6235 =/- 120 years, diagrams on lava cave formation and a good set of references to follow up.

CEGSA Newsletter Vol. 38. No 2 1993.

What is this, Fussi members on the front cover and they are disguised as divers! How low can Mavis get!

An interesting reprint of an accident, (lost cavers) in the Naracoorte region in 1935. The headlines of the Border Watch read, "Dog Attracts Attention, Search by 60 Men. Lights of explorers give out." This is big

league stuff! Three people entered a cave at Monbulla with candles and ran out of light. One of them had the keys of the car in his pocket, so the person who did not go underground had a five mile walk to the nearest phone to raise the alarm.

Stan Flavel and Mac
MacDonald and a small cast of
slaves re-build the gate to
Maires 5F3, so that it now has
the gate structure rating of two
Sherman tanks!

Write up of the search and rescue exercise held at Naracoote in March. and they couldn't find the "bodies". But as far as liaison between organisation goes it was not a bad exercise. This issue also contains an index to volume 36, 1991.

Illuminations 2 Journal of the Mole Creek Caving Club No. 2 1993

This journal contains material which will not doubt raise a few eyebrows and many questions. In particular the discussion concerning the impacts of caving groups, outdoor experience groups and commercial tour operators on the cave environment. The scientific community also gets a blast. The questions raised are important in getting all groups to think about the impacts that they are having. The real questions is how cavers deal with those impacts.

NSS News Journal of the National Speleological Society USA. June Vol. 51 No. 6. 1993

This issue is given over to a report on the Sea caves of the Channel Islands off the California coast near Santa Barbara. Sea caves lack dripstone formation, but have a variety of intertidal organisms

like sponges, red algae and the odd seal. You also need a boat to get there plus dive gear. The only real hazard is the tide coming in and you are no where near the entrance.

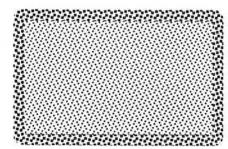
The NSS is getting itself organised for the next fifty years and has brought yet another house and some acreage next door to the current head office in Alabama.

American Caving Accidents 1991. NSS News Journal of the National Speleological Society USA. Dec. 1992 Part 11.

The annual write up of things that go wrong. In 1991 the most common accidents are from cavers falling off things, equipment problems, and rock falls. Six cavers died in the USA, two from using European Vertical Equipment and techniques, two from drowning, one from a rock fall and resultant hypothermia and another from falling down a cliff face after a solo visit to a cave that only went 30 feet. Of the six people who died 3 were members of caving groups.

Journal of the Sydney Speleological Society. Vol. 37 No. 6. June and Vol. 37. No. 7. July 1993.

Both issues contain a report of Russell Bridge's trip to the ASF Conference in Margaret River W.A. A comprehensive report of the caves that were visited on the way home despite Russell burning his foot at Old Homestead Cave on the trip over.



.FUSSI Newsletter Vol. 5 No. 3 Oct. 1993 P.10

the Nullarbor

This was my first trip to the Nullarbor so when we left early on Friday the 16th of July I had many misconceptions about what would be encountered. There were 7 of us travelling in 3 cars. Apart from myself there was Paul, Roger, Russell, Simon, Darryl and Lauren. The intended rendezvous was Port Wakefield. As early as I left, I arrived at the rendezvous over half an hour late. (I was first there.)

The Nullarbor is a not a trip to be taken lightly, its a long way away, and several precautions are necessary, take lots of tapes, by the time we crossed the WA border we had been driving for nearly 2 days with an overnight stay at Ceduna and a meal at the pub. At Eucla we met Clare and Heiko who had been in the Nullarbor for several days and had managed to coat their car in an impressive amount of dirt. Our cars were still clean but we set out to remedy that situation and headed out to Weebubbie to camp the night.

Darryl performed wonders on the campfire as he would on many of the nights and we had a meal that was certainly better than anything I've ever had while camping. After eating, Clare and Heiko returned while the rest of us went to have some fun. Weebubbie contains a lake that is easily accessible thanks to some fixed ladders. The water is crystal clear with a slight blue tinge, Paul probably would have walked straight into the lake without realising if we hadn't stopped to change into wet suits. Yes it's cold and we came prepared, wet suits, mask, snorkel and waterproof torches.

Well almost everybody had wet suits, Darryl contented himself by swimming around the lake while Roger, Paul, Simon and I snorkelled out to the end of the lake. Russell and Lauren also went for a swim but without wet suits their range was less than ours, although not a lot (fools). The next day Clare and Heiko left early for Adelaide, Roger, Paul,

Russell and Lauren returned to the lake for more swimming and several photos, before we set off for our next destination which was Webs Campsite. Rather than brave the escarpment we stuck to the high lands and the dirt and muddy tracks. This is also allowed us to visit Abbracurrie which is a cave far too big to actually see with normal lighting systems. Darryl and I were putting a lot of effort into getting dirty and on the wet clay pans we got plenty of practise driving sideways. We each found ourselves in the scrub once, but after some erroneous navigation we found Abbracurrie. Lunch followed and then we were off again to Webbs

There area number of worthwhile caves accessible from Webbs campsite for example,

Thampanna, Witches, Webbs, Kelly, Purple Goringe.

Thampanna has a smooth blow hole which regularly blows a gale, although on our visit the breeze was quite tame, though still able to support the weight of an empty pack or gloves. The passages go off in two directions, we explored the main passages thoroughly and spent quite a while ferreting around looking for a way through some of the boulder piles. The other direction consisted of what appeared to be an endless crawl. The map marked it as a crawl which became a series of dotted lines indicating that it went on and on and on. We verified that it did in fact go for ever and gave up due to boredom, exhaustion and sore

We also had a look at Thylacine Hole and Kelly's Cave. Kelly's is filled with lots of strange formations, along with large regions where delicate white salt crystals were attached to the roof and pilled on the floor. It was at about this time that my exhaust developed a large hole which later became so large that what was left of the exhaust broke into two bits. This was fixed by Paul as I don't fit under my car as easily as FUSSI Newsletter Vol. 5 No. 3&4 1993 P.11.

Paul. With some classic bush maintenance and an old Emu Export can and various grades of fencing wire. The repair was so good that it is still holding several

months later. While exiting from Webbs, which is filled from wall to wall and ceiling to floor with speleotherms, we met some CEGSA people who escorted myself, Lauren and Russell to Purple Goringe while the remainder had a go at another portion of Webbs. Purple Goringe is an extremely pretty cave like the others in the area: however it seems to have had less traffic and most of that has been confined to paths laid out using string by the locals which was removed by cavers who placed reflectors which have since been removed by the locals, etc, etc. Our next destination was Mullamullang and we drove there with no problems and set up camp. Our first visit to Mullamullang was to be a short excursion into the Easter extension, Russell had woken up with a neck strain, so he and Lauren remained behind. We missed the first entrance to the Easter extension, but entered through the second, with the intention of doing a round trip and exiting out the first. However the extension is made up of a maze of passages which are connected by crawls, squeezes, climbs and some great scenery. After six hours we believed that we were getting closer since the numbers on the survey markers were becoming smaller, but this turner out to be wrong since the markers really indicated the size of the next squeeze. When we read the number 3 squeeze we decided to turn around and exit the way we had come. It took a surprisingly short time to exit and after 8 hours we reached the surface, emptied our bladders and then returned to camp where Russell and Lauren were preparing to enter the cave to look for us. Luckily they had also cooked so we ate, drank and then collapsed exhausted. The next day was a rest day so we

went to do a small cave by the name of Kestral 2

Kestral 2 is notable mainly because of the 40 metre abseil into the doline. The cave is full of bat bones and shell fossils but takes very little time to explore since it is quite small. We abseiled in, had a look, and the Jumared out. We were to spend the final day in a hard slog to the end of Mullamullang, but decided instead to enter the first entrance of the Easter extension and try to find our way into familiar passages to see where we went wrong previously. We didn't find the connection through to the second entrance, but we saw the great coffee and cream and the salt cellars before we ended up in yet another maze of tunnels which we explored in a cursory manner before exiting.

The next day we were homeward bound with only the pleasure of a shower and counter tea at Ceduna to

break the monotony of the journey.

History repeats itself in Blackberry Cave

Ah YES! Blackberry Cave, U8. Steve Milner was organised to survey and photo monitoring work in Blackberry, including trips beyond the gate. We put our hands up for the two last places for a trip to survey in "Butterfly Extension" and then photo monitoring of the gated section.

Arising at 5am, departing at 6.20 and stopping in Naracoorte for supplies, we got to the Reserve at 9.45 to be told that they'd given us until 10 to get there. They being Steve plus 5 CEGSA members. They looked an ominous group - skinny, fit, well equipped and strong (Steve 'does' trialthons and caves worldwide - you get the picture). Me with four stitches and throbbing pain in my foot. (Clare drove the car, I sat up the back with the foot on pillows and snoozed quite a pleasant arrangement!). So it was nought to it but tog up and get down. The entrance passage provided a 'nice' letterbox squeeze as a sign of things to come.

We split into two parties of four and went to work surveying two leads in Butterfly Extension. The passage was reasonably crawly and surveying is always arduous underground, but we finished the two sections, investigated any possible leads and tied up the loose ends, getting out at 5.30 after seven hours underground and dying for a drink - it was hard work and the rocks had been previously shaped to sharp points.

The foot held up well. Perhaps the extra circulation from exer-

tion helped?

The shower was welcome, supplies were got, prepared tea ate, a fire lit and tales told (bunch of druggies them cegsa mob!)

Late rise (due to Daylight Saving) to much moaning over aching limbs and the prospects of wonders untold (the gated section) as reward for the previous day's good work (-200m mapped to grade 5). Aching limbs resigned themselves to the pain of the entrance passage, followed by much cursing. 30 mins of work got the gate undone, and we were off. The gate was much wider than I remember and the rocks had been especially sharpened to a painful degree. But soon we were through the black passage (where was the white crawl? - it seems to have been trogged out by Adventure Tours).

Into the first chambers were quick and (relatively) painless. The possum droppings I remembered were more numerous and still sprouting silvery, grass like fur about 4 inches high. We again split into two, the first stayed for photo monitoring, we headed FURTHER IN (three cameras in tow). I can confirm the uninviting nature of the passage beyond, miles and miles of low crawls, stooping at best, with a couple of nasty squeezes to negotiate through rock piles. The first was a tight vertical slot which I could jam myself in if I breathed in. The gravity assist meant that the return would be more difficult. The second was

definitely tight! Helmets off and breathe IN!. Fortunately it was wide enough to have hands free, and a few heaves got me through. Clare didn't even touch the sides! I got my revenge though: being a true gentleman, I let her carry her own gear which typically meant pushing it in front of her flat out crawling on her belly (would you let a hippy carry your valuable camera gear?)

Past the very tight bit is an almost immediate sharp right and up over more rocks which had also been honed to a keen edge. The other squeezes were awkward rather than totally tight and often entirely new areas of anatomy were heard to complain with pitiful spreading bruises. Fortunately, the totally loony gung-ho brigade were in the other group, and our lot was soon giving voice to request for time off for good behaviour following yet another crawl (side on, a la Bandicoots By-pass!) and no sign of any chamber, decoration or even an end to the torture.But there was light at the end of the tunnel: the passage opened up and the decoration shone forth.

Once through the mass of rock piles, the possum poo stopped, the chambers got quite spacious and the decoration started resembling Easter Cave - lots of white straws and helectites with flow stone of various colours and some very impressive columns. Well, people started flashing everywhere; which got a trifle boring for those holding the flashguns and shining torches to frame a shot. The long straw is quite im-

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History repeats itself in Blackberry Cave Cont.

pressive, being out on its own in the front of a six metre high chamber filled with lots of other decoration, including other long straws, stals and columns. Most of the photography took place here, but there was plenty to see.

Having seen it, (and Easter and Kublai Khan) I wonder whether it deserves its no access policy, as it is certainly pretty in parts, but by no means unique, nor is the decoration extensive as in Jillabenan in Yarrangobilly. It is certainly worthwhile and very little is mapped beyond the first chamber, so further discoveries are possible.

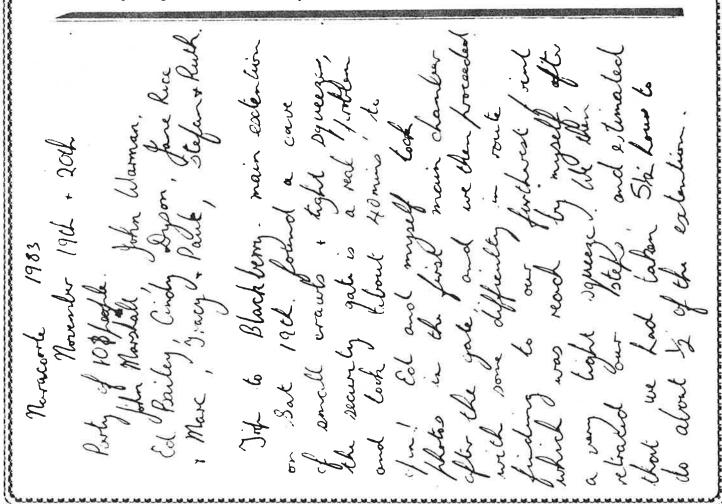
Our fearless leader, having distributed the Mars Bars, counselled a move back to the entrance which we did via the shortcut, the only bit of crawling in this part of cave. We met the photo monitoring group here and we set up more shots while they went to the last of their monitoring points. When they came back and we were still clicking away (much to the annoyance of our f:1), there was just a little concern over our tardiness as it was now 4:15 and we had to be out by 5 to return the keys.

We again split up as some of us wanted to get back before midnight, as we left the photographers to their fate. Steve led and soon disappeared from view. We followed more slowly, stopping occasionally to let the second group catch up, though they never did (and they emerged an hour after us). The trip back was quick and we managed to avoid any wrong turns. The squeezes were a little harder (or were we more stuffed?), and the quick retreat had us sweating profusely.

We got to the gate to find Steve had taken 20 minutes to get there! We negotiated that easily enough but, what seemed like an easy trip from the entrance to the gate, took ages to negotiate and the long suffering knees were considering Hari-Kari to escape further punishment when daylight, and the showers, food and drink revived the spirits while we waited for the last group (they had to lock the gate) to return safely. Home and a fitful nights sleep. It's amazing how lumpy mattresses get when your body is a mass of bruises.

From Heiko

If you are able to screw your heads at ninety degrees from your perpendicular you may be able to make out a Log Book entry detailing the FUSSI groups activity in Blackberry. Yes folks it was almost 10 Years ago to the day that an intrepid group from FUSSI were last in the fabled Blackberry. It seems that while FUSSI did not have access someone else had been honing those selected armour piercing rocks. A blast from the past!!



How to choose a Power cell

The first question that has to be asked what do I want to power and for how long? The following Info. has been gleaned from a fact sheet supplied by The Battery Bar and City Globes.

Disposable Battery type:

Carbon / Zinc- Each cell is 1.5 Volts. A short life disposable, single use with a reasonable performance tail. Performs well in long tern low draw applications. Does not perform well in Halogen Torches

Alkaline- Each cell is 1.5 Volts. A long life disposable, single use, with a long performance tail. The multi purpose battery.

Lithium- Each cell is 3 Volts. Very high energy density which equals a lot of power in a very small battery. It has the highest power to weight ration of all batteries.

Rechargeable Battery type:

Sealed Lead Acid- Each cell is 2 volt in value. Trouble free operation in any position. Overcharging gasses are reabsorbed. Rugged leak proof construction. Long life, up to 1200 cycles of charge. Low internal resistance which provides high discharge current from low capacity batteries. Deep discharge recovery is achieved by advanced composite plate design, specially designed fibreglass woven separators and unique electrolyte system.

Characteristics; Charge rates; not higher than 25% of the rated capacity. Life expectancy; dependent on the speed of discharge and the capacity taken from the battery. Generally the greater the discharge depth the lower the number of cycles. A S.L.A. battery which is fully discharged each cycle would last around 300 cycles while if 30% discharged each battery would last 1200 cycles.

Nickel Cadmium (Ni-Cad)

Nickel Cadmium batteries currently form the basis of most portable rechargeable power cells. Ni-Cads will be replaced by Nickel Metal Hydride batteries (Ni-MH) because of environmental considerations once reliable stocks become available. Metal Hydrides have the same characteristics but a larger capacity.

Characteristics,; Not reliable, in that they have a short performance tail and have a tendency to self discharge so are not recommended to long term storage or for occasional use reliability. But for caving purposes they are okay provided the are kept in peak condition and a sufficient number of them are taken into the cave to allow for an extended stay. I have had experience with Ni-Cads where they go very suddenly but once turned off and rested they will come back to their original voltage, but alas only for a short time.

Recharging Guidelines; To improve the battery life- *completely discharge the battery periodically by leaving the unit switched on or by not placing it on the charger after each use. This practice breaks up what is known as a 'memory effect'. With repeated discharge and charge rates of a consistent nature the battery builds up an internal resistance and fails to fully charge to its original amp hour rating. *Only charge at the recommended rate of no more than 10% of batteries rated capacity and for a new batter completely discharge and then charge the battery several times. Hints; if old and new batteries are mixed the battery of the lowest capacity will determine the duration of power.

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IIITrip Report of "the Hollowolina Buckalowie areas of the Flinders Ranges.

Sat. 2nd.. - 4th. October 1993

Present- Matt, Clare, Heiko, Scott, Eric, John, Di, Dave, Sharon, Mark, Adam.

Caves Visited- Arcoota Creek, Mount Simm's, Mairs Cave and Clara St. Dora.

CAVEX were visiting Mairs Cave but we all worked in well together to ensure we had use of the entrance for an abseil

In Clara St. Dora, we again found spiders and again tried to get a sample. My attempt was unsuccessful but we will try again.

Mount Simm's- The gate is till damaged but we had a good trip down to the water (no frogs).

Arcoota Creek was smelly, and dusty but it is still worth a visit.

Other visits- We confirmed standing and flowing water at

Bubbling Springs and Matt water, a pleasant walk along the creek bed. We also discovered snakes at Bubbling Springs, probably chasing frogs.

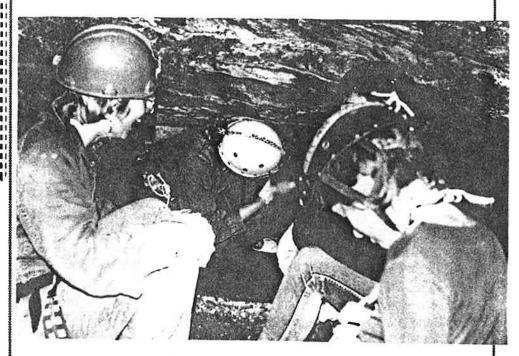
The weather was reasonably wet and windy, fortunately all tents held up and no dismal tragedies.

In spite of out frequent trips it is always a friendly place to visit with its good camping spots.

John Callison

Caving, Cookies and Canoeing

Sounds like another glorious women's camp to me



Each time I embark on a trip with the Women On Campus group, I find myself attempting something new-something I wouldn't normally have the courage or opportunity to try. This camp was no different. I found myself twisting and crawling underground in the Naracoorte Caves. How a claustrophobic managed to get several feet underground in spaces often only a couple of feet wide still leaves duce the Women On Campus group to a me confused. It must have been the supportive and caring environment always pervasive at any Women On Campus

event. It also helped that our guides, Clare and Tania, were as patient and supportive as any one could hope for. These women never criticised our ability to conquer any cave in a single bound or grew impatient with our stumbling feet groping for the loops in the ladder Clare had created. Clare Buswell and Tania Wilson willingly gave their time to introsport not normally open to amateurs and possibly even less to women. THANK YOU VERY MUCH

CLARE AND TANIA

Naracoorte Women's Caving Day. Present: Leaders: Tania Wilson, Clare Buswell plus 7 children and 8 other adults. (Some of which choose not to go caving)

I would like to address a couple of issues raised in the article on the women's camp and their caving experience at Naracoorte. Firstly the issue of opportunity to get into caving and secondly the level of support offered by Tania and myself.

This is the second time I have been involved in organising women's only caving trips in this State. I organised these trips for a number of reasons.

Firstly, women are under-represented in caving in the state and the country. Secondly, caving with only women makes for a different type of caving trip. Thirdly, Fuss is in a position as a university club to offer such an activity without some of the liability hassels that are beginning to effect other caving organisations.

The public perception of caves as claustrophobic inducing grotty holes in the ground means thankfully, that caving is not up there in the lastest fad sport ranks, though the increasing number of commercial operators may change all that. Getting prospective members to carry on in the "sport" is, as all caving clubs know difficult.

XVomen/Caving/and/Opporting

Lets face it, a weekend of caving leaves some of us looking as if we had been bashed up in a dark alley. Not something easily hidden if you are going to put on your favourite mini skirt and go to work the next day. Further, a trip to the Nullarbor for ten days drastically reduces your chances in the keep yourself nice stakes.

So to start with ,caving draws from a very narrow base. Given the pressures placed on women by society to spectate rather than participate in sports, to accept that they can't do something because they are female, and even when they do find the courage to do something outside accepted norms, they are often subject to ridicule and / or a lack of support, as a result the base becomes even narrower.

Added to this caving can be difficult for people to access due to long travelling times, the increasing paper work and liability problems,

and equipment expenses involved in vertical work. Most clubs try to provide a structure in which to deal with the paper work, and gear to help off set some of the expenses involved. To provide two opportunities in three years for women to go caving on their own, is a minute acheivement in many ways. However even that would have not occurred without the moral and organisational support offered by fellow Fuss members, the Women on Campus Group and the Women's Officer of the Students Association, For that I am thankful.

For Tania or myself to critise the way in which people went up and down a ladder or they way in which people placed themselves, would have undermined the self esteem that was being built up. The support the women offered each other reinforced their self esteem and gave them the courage to attempt something else. For myself watching the growing realisation by

with their bodies and increased confidence associated with the skills they gained was a great reward.

Some of the women I have taken caving find overcoming the portrayal of what they are supposed to do, or be, or look like, or the criticism associated with stepping outside the norm as big a psychological barrier, as those first ever steps taken abseiling into darkness. For other women the task of getting to the caving area is a feat in itself. Of the women who attended the day at Narcoorte three had children with them under the age of 8.

If one is to involve more women in caving, then one has to attend to the reasons why women are not there in the first place, and try to provide opportunities to overcome those difficulties. Providing women only weekends is one way of doing it. Subsidizing the costs of those week ends is another. Having women who are prepared to act as role models is equally important. Ask Di Brinsley about her involvement in the SES and why that organisation values her contribution.

Putting women who are aware of the constraints on women's involvement on committees of policy making is important but they must have support within the structure if they are to acheive anything. (Has anyone stopped to think about what effect for example, the National Leadership Scheme will have on women's ability to participate in caving? Why was it that of the 90 participants who attended the NORLD weekend here in Adelaide three or four weeks back only 13 of them were women?)

Providing opportunities for women to participate in caving is important and I am glad that Fuss members are activily involved in that process but we have a long way to go.

C. Buswell.



The Encouraging Face of a Role Model

You Know You've Been Caving Too Much When....

By Tony and Leslie Cunningham

You forget the name of the cave you are in.

The laundromat owner greets you at the door with a shotgun.

You think you recognise someone on the street and ask then what grotto they belong to.

Brown is now your favourite colour.

You're late for your grandmothers funeral and you find yourself in dress clothes in a sinkhole because you thought you saw an opening from the car window.

A snowball whizzes past your head and you duck and think "Bat"!!

A gourmet meal consist of dinner mints mixed with peanuts and M&M's.

You get a great deal on a used car, but don't buy it because it clashes with your bat sticker.

You are the only person in your office who will use your chair because everyone else thinks it is hard as a rock.

Yo-yos are your friends.

You think of garbage bags as something warm and dry to wear.

You actually believe that the six hours wandering lost in the woods was a perfectly acceptable activity referred to a "ridgewallking".

Your are the only one left from your high school class who feels it necessary to apologise to you parents for the type of people you hang out with.

You have more money invested in topographic maps than stereo gear.

You go to buy a four-wheel drive vehicle and explain to the salesman that you have no interest in carpeting or plush seats because they won't hose clean.

You never worry about getting your feet wet in a rainstorm

You glance in the mirror and wonder what's wrong with your legs, then realise that your knees aren't bruised.

You swim in Lake Michigan and it seems warm and clean.

You start a phone-chain when K-Mart has a special on AA batteries.

You volunteer to crawl under your parents' house to check the plumbing, even though your mom is sure you wouldn't want to do something that dirty on you vacation.

You have absolutely NO clothing that is actually white.

There is mud in your refrigerator and you don't know, or care, how it got there. You actually believe that hoisting your shoulders up out of the stream onto somebody else's boots is keeping you "warm and dry".

You find virgin passage and try to buy the cave from the landowners the following week.

You realise that you have just traded a vehicle which runs, for a carbide lamp.

You breed mosquitoes in your yard so the bats will have enough to eat.

Your rope has a name "Hey Gus, will you pack Wally to the pit if I carry the rope pads".

You exit a cave and you honestly don't know what day it is.

You actually LIKE the smell of carbide.

You do a four-mile midnight hike to check out a gated cave.

You want to try clothes on at the mall shopping centre and you strip down besides the clothes rack.

You know in your heart that absolutely anything can be repaired with Canvas Grip or Gaffa tape.

^{*} Borrowed from Michigan Caver Vol. XiX No.3 via NSS News November 1992.

FUSS EVENTS for the next couple of months

28th Nov.

Trip to the Yorke Peninsula Caves. Unwind from the exams.

Contact: Eric Schultz C/- Clubs & Socs.

Dec 4th Annual Helmet Dinner Party. BYO gourmet food to share and ditto

with the fruit of the vine. You don't get in unless you've got the hat and

finger nails are clean. 6.30pm. Jenny Laidlaw's house. 52 Main St

Henley Beach. 353 6018

Dec 16 South Australian Speleological Council Meeting and Xmass drinks.

7.30 Scout Headquarters Norwood. Contact: Jenny or Heiko: 201 3138.

Jan 1- Jan 15 ASF Exit Cave Survey Project. Dover. Tasmania.

Contact: C Buswell. 388 6685

Jan 28th Mavis' birthday.

Don't worry she'll be Overseas.

Jan 29th- 30th ASF Council Meeting. Canberra. This is more fun than Question Time.

All welcome.

Contact: Kevin Dixson or Clare Buswell.

Jan 29th to Feb 10th 94.

Yarrangobilly, and Bungonia. Eric Schiltz and Clare Buswell

organising. Vertical skills and thermals necessary.

March, 94.

Mt Gambier.

Richard Ewart organising.

Membership Fees: Due again.

\$10.00 for Flinders University Students.

\$35.00 for Staff and Workers

Membership of Fuss is open to anyone outside of the university community.

A special thanks is extended to the sturdy ten who helped with the label sticking ,it was a great effort. The club will be financialy well rewarded and the individuals who stuck at it can now boast of having another skill to put on the CV. There is a rumour that there may be another label opportunity in the future. We will keep you posted. Stay safe and I will nodoubt see all of you in the new year, regards Keven.