

# COLLIER



Journal of

*Blue Mountains Speleological Club*



Vol. 16 No. 1 & 2

## OOLITE

Journal of the Blue Mountains Speleological Club.

Post Office Box 37,

Glenbrook N.S.W. 2773

VOL. 16/1 & 2	CONTENT	MAY 1986
	EDITORS REPORT .....	1
	ANNIVERSARY DINNER .....	2
	TASMANIAN TIGER .....	8
	LOO AT JENOLAN .....	9
	PREPARING TO DESCEND .....	10
	BEYOND GRAVE .....	11
	HEAT ILLNESS .....	12
	CLUB HONOURS .....	15
	CAVE EXPLORING .....	16
	COCKROACHES .....	17
	RODENTS .....	20
	TERMITES .....	23
	SPIDER CHART .....	27
	REFLECTING ON B.M.S.C .....	29
	CROSS WORD .....	31
	FANCY DRESS .....	33
	SNAKE BITES .....	34
	RED BACKS .....	37
	CLIEFDEN MAP .....	38
	TRIP REPORTS 1982	
	Billy's Creek, Jenolan, Cliefden,	
	Bungonia, Canomodine, Wyanbene,	
	Wee Jasper, Cliefden '83 .....	42-52
	TRIP REPORTS 1985	
	Cliefden, Jenolan, Borenore,	
	Yarrangobilly .....	55-66
	TRIP REPORTS 1986	
	Jenolan, Cliefden, Wyanbene,	
	Bungonia, Colong .....	68-78

Edited and Published for B.M.S.C. by Paul Sammut.

Subscription and Journal exchange enquiries to be directed to the Secretary, Blue Mountains Speleo Club, P.O. Box 37, Glenbrook N.S.W. 2773.

Publication Date: May '86 for Jan '86 & June '86 editions.

Cover Photograph: Signing of Autograph by Ms Rothery  
at the Cliefden Anniversary Dinner.

# THE EDITORS REPORT

With this edition of Oolite volume 16 I have combined No's 1 & 2 together. As there is not enough material to print two separate editions. This may be the last edition of Oolite unless members send in material.

There is some very good articals in this edition such as, the Anniversary Dinner Report, many newspaper reports, First Aid, Pest Control reports, outstanding 1982 Trip Reports and many, many more.

So sit back read it and enjoy it. It may be your last unless you help and donate material for your next Oolite.

Paul Sammut  
Journal Editor '86



# ANNIVERSARY DINNER REPORT

Date : 25/26/27th January, 1986

Place : "CLIEFDEN"

## REPORT:

As the club was celebrating its 20th year of friendship & safe caving, it was only fitting to hold a special "Caveman Dinner" and invite all our founding, former and present members to get together and reminisce on the past and toast to the future of our club.

The weekend was attended by approximately 80-90 people including past and present members of B.M.S.C., members of O.S.S. and New Caves, Barcoo Rot-Dingis Di-Rovent Re-enactment Bushband, Bushrangers and Troopers and our special guests from the "Cliefden" Homestead, the Rothery Sisters.

Terry, Louise and family and Brian, I and the girls arrived about lunch time on the Friday so that an early start to the preparations could get underway. But, low and behold it was as if someone was trying to keep us away. A ram, somewhat in a terrible state had decided to depart this life on the verandah of the hut, not far from where we had planned to do the Bar-B-Quing the following night. Need I say he was "a little on the nose" and Louise and I decided that the best thing to do was to gather up the kids and head back to Mandurama and purchase the strongest disinfectant we could find. While we were away Terry and Brian had arranged with the farmer to remove the carcass with a front end loader which was most appreciated. After a full bottle of disinfectant, numerous kettles of boiling water and even a drop of port, it seemed relief was in sight.

Late Friday afternoon the party started to arrive with Lionel being first on the list. By Saturday lunchtime, it was pleasing to see that the area which was cleared a few weeks earlier had been converted into tent city.

This was the beginning of a weekend which will be remembered for a long time.

A lot of time was spent organising the food but there was never a shortage of help as everyone was offering their assistance.

The Annual General Meeting got underway about 3.00pm and ran quite smoothly. Ken Pickering was asked to act as returning officer for the elections and once the formalities were over, the meeting closed at about 5.00pm.

From that time on until dinner was served it was great to see all the "oldies" get together and talk over old times.

ANNIVERSARY DINNER REPORT - Con't

The dinner went off without any hitches and to our great delight the quantity was catered for perfectly apart from a little excess meat which wasn't really a problem as everytime it was mealtime, on went the Bar-B and it was open house for everyone. The dinner consisted of a B-B-Q with salad, pre-served by biscuits, cheese and dips as well as fruit dishes and finally ending in pavlova and fresh fruit salad.

After everyone had had their fill, the band began to strum up a few notes. It was to be the first few notes of a great night ahead. Dancing was introduced and it was out youngsters that had to show us older folk how it was done.

Then came one of the highlights of the weekend, the presentations of our Service Awards and the cutting of the Anniversary Cake. The two Service Awards which were presented by our president Brian Skinn, were wooden plaques bearing the clubs emblem and will in time carry the inscriptions so deserved by their recipients.

To LIONEL BAKER & IAN BOGG, congratulations on being the receivers of these awards and may you continue to be part of our club for a long time to come.

Following these presentations, Lionel and Ian were asked to remain up front along with Ken Pickering, Graham Nelson, Brian Marshall as well as our present committee members, Brian Skinn, Terry and Louise Coleborn and Graham Cummings. Together the cutting of the cake was accomplished and a toast to the clubs next 20 years took place with the help of a few bottles of champaign which were supplied for the occasion. The cake was then served to all our guests followed by the drawing of our raffle.

The raffle consisted of 5 prizes. Those being a Copper Etching of the "Hazgul", two large photographs of cave formation, Book (Bushwalking in the Blue Mountains - Greg Powell), and a compass. Congratulations to all winners.

Then came our Dutch Auction, for an original copy of Down Under, Volume 1 No 1 published in 1968. The clubs first magazine ever published. At first things were a little slow until Brian Marshall, using his great wit and character created the atmosphere for a very thrilling and exciting auction which was eventually claimed by Greg Powell.

The night lingered on and Sunday saw a few of our happy folk from the night before treading ever so carefully being sure not to engage in any excitement. At about 9.45am Greg gathered the group together for a brief run down on the history of the "Cliefden" Homestead and area which was to be our next stop. It was a fascinating tour through the homestead and the ladies were just so friendly and helpful. This was to be interrupted by a holdup by the bushrangers who relieved us of all our "gold" by collecting it in "Do the Right Thing" bags. (Who said the bushrangers didn't take part in keeping our country beautiful). Everything seemed hopeless for us all until to our great delight the troopers arrived. It was an exciting battle. Rifles firing when they felt like it. Bushrangers who were able to leap tall buildings in a single bound, Troopers who were more powerful than locomotives. The battle was fierce with the only proper result to be achieved..... NO SURVIVORS.



FINANCIAL REPORT - ANNIVERSARY DINNER 25/26/27-1-86

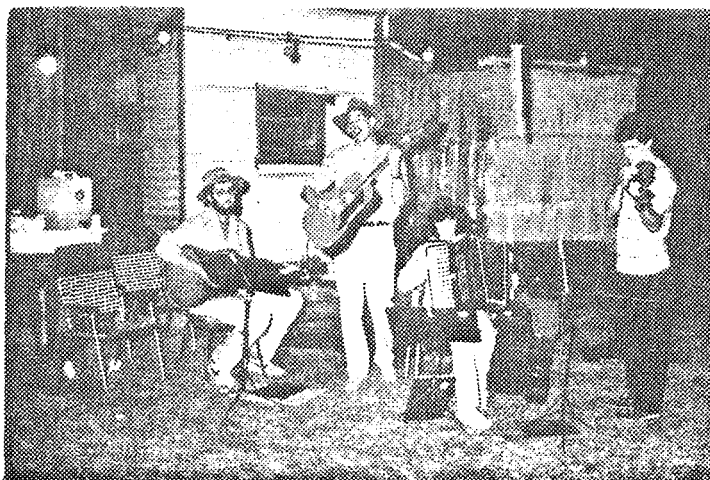
MONEY COLLECTED - \$458-50

EXPENSES

Cake	-\$ 70.00
Meat	-\$145.00
Food & Misc	-\$217.78
Refunds	-\$ 20.00 ( Rob and Cinny Mann)
Thankyous	-\$ 3-75

\$456.53\$456-53\$ 1-97RAFFLE & AUCTION\$111-60PROFIT\$113-57

Rothery Sisters



Bush Band.

AUTOGRAPHS, NAMES & ADDRESSES.

Louise Cole

Jerry Cole

~~Cheryl Cole~~~~Louise Cole~~

ALMA CUMMINGS

GRAHAM CUMMINGS

Natalie Currier

Craig Thomas

Megain Thomas

Elin Wilder

Geoff J. Deane

Ken Pakeny

Kay Thomas

Ron Thomas

Jan - not Cole - on

Greg Powell

Brenda Powell

Benjamin Powell

Adam Powell

Tim Pearson

Donna Amity

Doe King

Rose Rothery

Mete Rothery

Shelly

Jan Linter

Bruce Howlett (Coss)

Laurey Rothery

Chris Bogg

Maureen Bogg

Commander Bogg

Andrew Bogg

David Noble

Paul Baggart

Marie Ellis

Geoff Barts

Paul Samuel

Brian Marshall

Barry Smith

STEVE &amp; RONDA ROSS

BRAD &amp; SALLY TRAVIS

Lionel Baker

Rick Butt

Lyn Ell

A Zimmerman

~~Sharon~~

Carol Skinn (cognate)

Matthew

BARCOO ROT - Dingis D. - Rovert Re-enactment

BUSH BAND

DKS  
Ming  
Xue

Jeffrey

Bogg

andrey Kerner

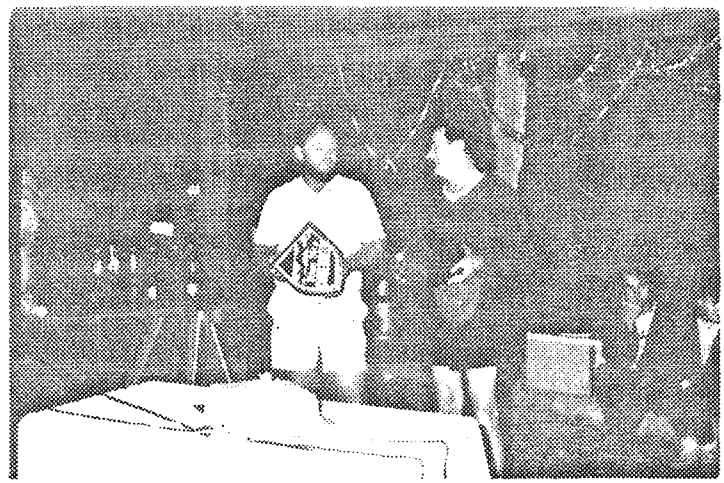




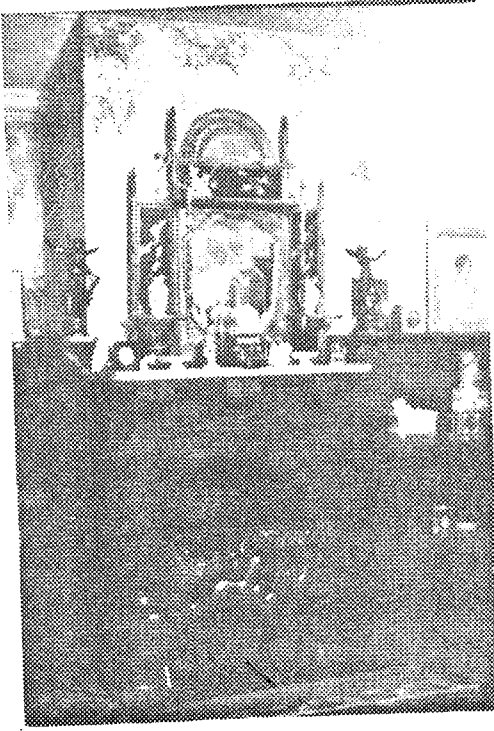
Brian Marshall.



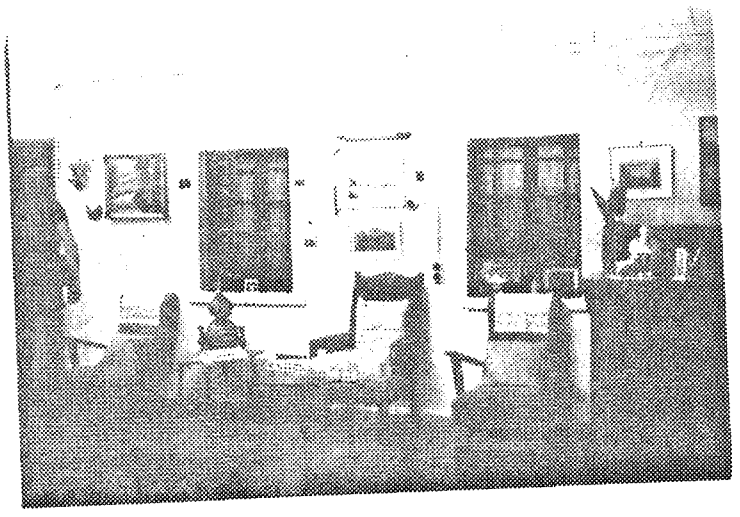
Cutting the cake



Ian Begg & Lionel Baker



children dance.



# Tasmanian tiger bones found in remote animal graveyard

MELBOURNE: In one of Australia's most important archeological discoveries, remains of the Tasmanian tiger, thought to be extinct, have been found in a remote cave in southern Tasmania.

The remains of the tiger, *Thylacinus cynocephalus*, were found in an animal graveyard, which also included many marsupial species and remains of what is believed to be an extinct large wombat.

Remains of at least three thylacines have been identified.

The cave is likely to yield Tasmania's first complete thylacine skeleton, and aid research into the behavioural patterns of the animal, which was last known to exist in 1936, when the remaining captive thylacine died in Hobart Zoo.

The thylacine bones were identified this week by Professor Mike Stoddart, head of the Zoology Department at the University of Hobart.



A thylacine skull found in the Tasmanian cave.

Yesterday he described the discovery as "the most significant mammalian archeological find yet in Tasmania".

He said it was particularly important that the thylacine remains could be studied on site, and in conjunction with the other animal bones.

Professor Stoddart said it had not yet been possible to date the thylacine remains, "but the presence in the cave of what looks to be an extinct wombat suggests they could be very old".

The discovery was made last Saturday by three Tasmanian cave explorers.

They had set out to survey a

cave located five years ago in a collection of uncharted caves in the Lune River area, about 25 kilometres south of the fishing town of Dover.

Once in the cave, entered down a nine-metre-long shaft, the party found a previously unrecorded passage off a floor of mud and rainforest debris.

The first bones were found deeper into the cave, after a difficult 10-metre descent using ropes and ladders.

Professor Stoddart said yesterday isolated skulls had been found previously in a cave west of Hobart, but this was the first time a complete skeleton had been discovered.

Two complete skeletons are held by universities in Glasgow and London, but despite pressure by Tasmanian museums and the National Parks and Wildlife Service, Tasmania has been unable to obtain a complete skeleton for research.

## Hunter out of funds and luck

HOBART: The leading Tasmanian tiger hunter, Peter Wright, has taken a double blow as his search for the possibly-extinct animal enters its second winter.

A robot photographer he developed failed because it was too sensitive, and after spending a total of \$250,000, Mr Wright has run out of funds.

"It's all very disappointing," he said. "We got so close last winter, we were 20 minutes away from

finding it."

A wildlife park operator at Mole Creek in the State's north, Mr Wright has now scaled down the most sophisticated hunt yet mounted for the striped marsupial dog.

Since then many sightings have been reported, most reliably last year when the National Parks and Wildlife Service disclosed that a tiger had been seen by one of its rangers.

But no indisputable evidence

that the animal survives has been presented for nearly 50 years.

Mr Wright is searching an undisclosed area in the bleak Thousand Lakes region of central Tasmania.

He chose to do it in winter because in the snow and sleet a tiger's range is more likely to be confined.

The key elements in his search were to have been seven robot field stations, independently-powered, with listening devices.

## Mountains park grows

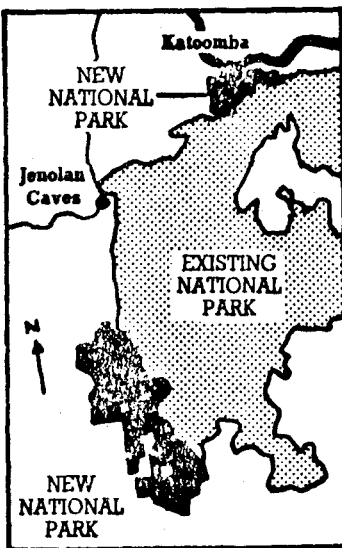
The Blue Mountains National Park has been extended to the edge of the Three Sisters and other famous tourist landmarks with the addition of 30,000 hectares.

The new park lands, which are either Crown or council managed, will bring the park's total area to nearly 250,000 hectares.

Announcing the decision yesterday, the Premier said the move was in line with the Government's continuing commitment to extend and diversify the national park estate in the State.

He said two areas would be added to the park.

The first included all the escarpment land from Wentworth Falls to Katoomba, incorporating the Three Sisters, Katoomba Falls, Leura Cascades, Gordon Falls and the Valley of the Waters. It also includes the Narrow Neck Plateau south-west of Katoomba.



"The escarpment addition runs for about 16 kilometres. It is

one of the most spectacular scenic areas," he said.

The second addition is the Mount Werong area about 60 kilometres south of Oberon.

The Premier said the area contained a diverse range of native plants.

# Loo puts Jenolan Caves in peril

By BRUCE McDOUGALL

**A WOMEN'S toilet is polluting unique limestone formations inside the Jenolan Caves, it was claimed yesterday.**

The toilet is inside the Grand Arch at the caves in the Blue Mountains west of Sydney which attract more than 200,000 visitors a year.

A spokesman for the Jenolan Environment Protection Committee, Mr Bruce Welch, said the toilet was "inappropriate" to the caves.

"The Blue Lake is severely polluted and there have been various recommendations saying the toilet should be removed," he said.

A spokesman for the Tourism Commission of NSW, which runs the caves, confirmed there were "big problems" with toilets in the Grand Arch.

But there had been cases of visitors relieving themselves inside the caves during tours, and elderly people often needed toilets.

The Grand Arch toilet was linked to a sewerage and water reticulation system on which \$1 million had been spent over the last two years, the spokesman said.

## Inquiry

The Jenolan Protection Committee says the commission is "systematically destroying the area" through over-development.

It wants a public inquiry, environmental impact studies and a plan of management for the area.

"The caves are threatened by rats which breed in a nearby rubbish dump and Aboriginal sites have allegedly been destroyed during construction of an amenities block," said Mr Welch.

The Jenolan Caves Historical and Preservation Society is also concerned about development.

## I say, old man!

**PEKING:** Chinese scientists have discovered rare fossils of a forerunner of man, a giant ape up to 10 million years old.

The fossils, a species of giant primates from the Pleistocene era, were found in a cave 800 metres above sea level with 20 species of fossilised mammals and reptiles.

## 2,100-YEAR-OLD TOMATOES

**CHINESE** archeologists have succeeded in growing tomato plants from seeds found in a 2,100-year-old Han Dynasty tomb.

The discovery has caused scientists to re-examine the history of the tomato, previously thought to have originated in Latin America about 400 years ago, the official Peking review reported today.

## 'OLDEST-EVER' DINOSAUR

A **DINOSAUR** skeleton more than 225 million years old has been found in Arizona's Painted Desert and researchers said today the remains are the oldest ever found in North America and possibly the world.

The well-preserved bones are of an animal believed to be about the size of a German Shepherd dog but with a long neck and tail, said Rob Long, leader of a team of paleontology researchers from the University of California at Berkeley.

## New graves for Chinese bones

**JAKARTA, Wednesday:** Around 40,000 skeletons will soon be removed from a Chinese cemetery in south Sulawesi because the land lease has expired, the official Antara news agency said yesterday. Relatives of the dead had been offered compensation and could rebury the remains on a larger site nearby. The agency did not say what the old cemetery, 11 kilometres from Ujung Pandang, would be used for. — Reuter

## Ancient Spanish wreck found

**DUBLIN, Wednesday:** The wreck of a ship from the Spanish Armada sent to invade England in 1588 has been found off the coast of Ireland, the Government said yesterday. A team of British divers found the wreck, thought to be that of the *Juliana*, over the weekend buried in sand off the coast of Sligo, north-west Ireland. The director of the expedition, Mr Colin Martin of St Andrews University in Scotland, said the find was one of the most important archaeological discoveries of the century. Three bronze cannon described as being in excellent condition and a cannonball have already been recovered from the wreck. — Reuter

# PREPARING TO DESCEND



PICTURE shows cavers preparing to enter the vertical entrance to Tuglow Caves in the Kanangra Walls area.

An active but little known group in the Blue Mountains is seeking new members — specially young women.

The group is the Blue Mountains Speleological Club, whose main activity is caving.

Club publicity officer, Mr. Greg Powell, said members were dedicated to the sport and science of exploring underground caves.

Weekend trips were made to Orange, Abercrombie, Burgonia, Tuglow and Jenolan.

"Many people have visited the tourist caves at Jenolan, but only members of a speleological club may gain permission to explore the dozens of other caves in the area," he said.

Some were more beautiful than those open to the public.

Some extended for many kilometres underground.

"New members are welcome, specially young women," he said.

"Many women members have already made good cavers."

Anyone over the age of 16 years can join the club, which owns specialised gear and a large library.

Further details can be obtained by phoning president, Mr. B. Richard, on 30 2015.



# Mayans speak from beyond the grave

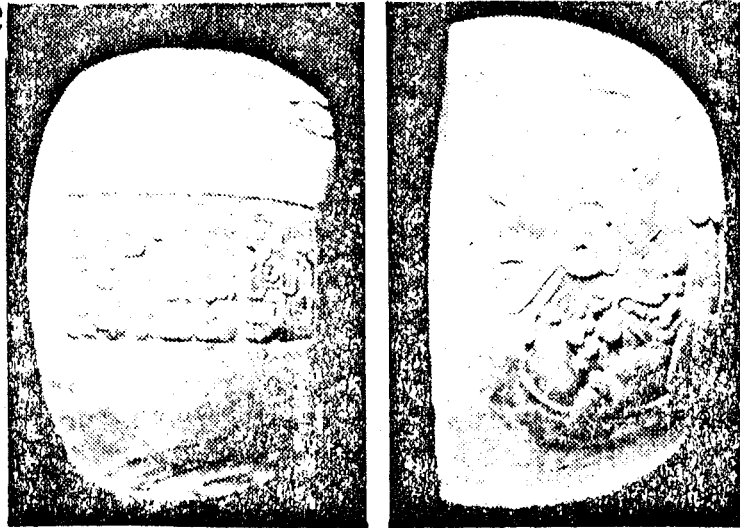
WASHINGTON, Monday: The discovery of graves of two Mayan rulers who died 1,000 years apart has contradicted the notion that ancient Central American civilisation declined before the Spanish conquest.

Archaeologists who unearthed the intact skeletal remains of high-ranking officials and accompanying artefacts, say they show the Mayan people retained an advanced political and economic system up to the time the Europeans destroyed them.

A sophisticated civilisation flourished until the invasion of the Spanish Conquistadors in the 16th century, the archaeologists said in a report to the National Science Foundation, which supported the work and announced the discovery.

Arlen and Diane Chase, a husband-and-wife team of anthropologists from the University of Central Florida, said the burial places found in Belize last month are strong evidence that the Mayan culture was not in decline during its final centuries from 1350 to 1530 when the Spanish arrived.

After this historic period, most native Americans were killed by disease brought over from Europe, Diane Chase said in a telephone interview. There were massive epidemics, and as many as 90 per cent



These two pottery pieces were among items discovered in the burial places of two Mayan rulers.

of some populations are estimated to have died of disease.

Because entire native American empires fell to relatively few Spaniards, some historians argue that the civilisations which built huge pyramids and stone cities in Central and South America had fallen into decadence and decay by the time the Europeans arrived.

During its height between 300 AD and 900 AD, known as the Classic period, the Maya empire covered much of what is today Mexico, Belize and Guatemala, and

parts of Honduras and Nicaragua.

At an archaeological site called Santa Rita, located on a sea bluff which circles Corozal, the third-largest urban area in Belize, the scientists found a large stone tomb and an earthen grave, less than 1.6 kilometres apart.

The ornate 1,500-year-old tomb, containing the remains of a Mayan king, was discovered under the floor of what was once a large building. The chamber is more than four metres long, 1.8 metres high and 1.2 metres wide.

The skeleton lay on its back, resting on the debris of a wooden pallet. The figure wore jade ornaments, including a set of jade and mica-inlaid earflares, large earring-like jewellery which covered the entire ear.

The other burial site was that of a provincial ruler who reigned more than 500 years ago.

The remains of the ruler were adorned with elaborate jewellery. The researchers said these included a pair of gold earflares inlaid with turquoise and jade, a necklace of shell and jade and a bracelet of red sea shells not native to the area.

Arlen Chase said the discovery is the first find of remains of a ruler of the late post-classic period, spanning 1350 to 1530. It shows there was both commerce and authority at the time.

The earflares were clearly traded in the area, as metal does not occur naturally in the Maya lowlands, Mr Chase said.

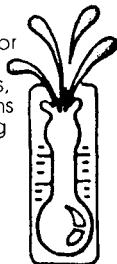
The importance of the ruler is underlined by the presence of a second body in the grave. The unadorned individual was a sickly, elderly person whom the researchers think may have been involved in a blood-letting sacrifice for the dead sovereign.

The second body was riddled with 13 sting-ray spines and a long copper needle, all used in ritual blood-letting by the Maya elite, the archaeologists said.

The New York Times

Heat waves are spells of unusually warm weather for the time of year. They cause epidemics of heat illness, and also a sharp increase in deaths from other causes, especially heart attacks and strokes. Most of the victims are elderly people in poor health, typically those living in substandard conditions in the hot inner suburbs of large cities.

Many of the harmful effects of heat waves can be avoided. This pamphlet shows how these effects arise, who is at risk, and how to recognise, treat, and prevent them.



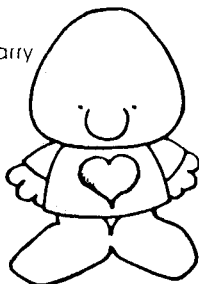
## How adverse effects of heat arise

Most adverse effects of heat arise either from overloading the body's cooling system or from not giving it the support it requires.

The human body has an excellent cooling system: it needs it. The heat produced by the muscles and internal organs is 70 watts — the same as an electric light bulb — at rest but can rapidly rise to more than 1,000 watts in strenuous exertion. This heat is carried to the skin by the blood stream. During heat waves hundreds of watts more are gained from sunlight and hot winds. To rid ourselves of these great heat loads we rely entirely on sweating, which is a superbly efficient mechanism for cooling the skin by evaporating water from it. The amount evaporated can be as much as 10 litres (2½ gallons) in 8 hours.

To maintain the correct body temperature three things are essential:

- ① The circulation must be able to carry to the skin all the heat produced in the body;



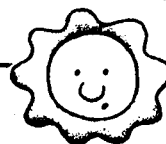
- ② The skin must be able to produce the necessary amount of sweat; and

- ③ The sweat must be able to evaporate.

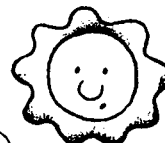
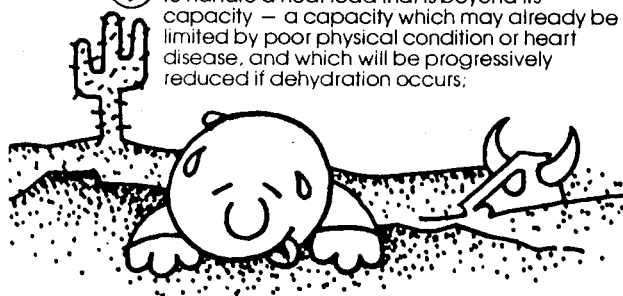


The failure of any link in this chain of heat transfer will cause body temperature and heart rate to rise. But the successful operation of the system will also lead to its eventual failure, unless the progressive dehydration caused by sweating is corrected by drinking sufficient water.

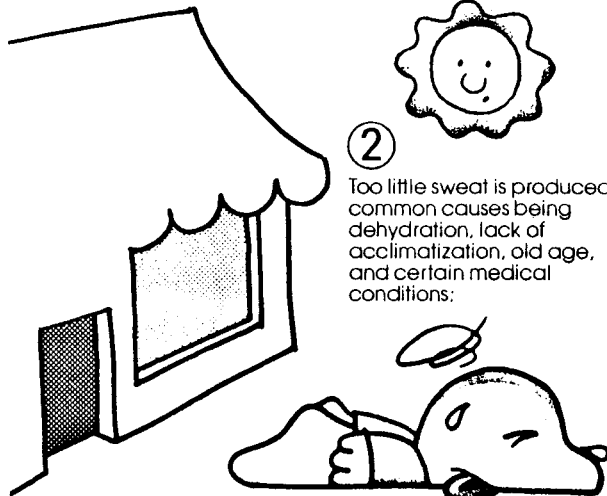
These are some common reasons why each link in the chain may fail:



- ① The circulation is overloaded by trying to handle a heat load that is beyond its capacity — a capacity which may already be limited by poor physical condition or heart disease, and which will be progressively reduced if dehydration occurs;



- ② Too little sweat is produced, common causes being dehydration, lack of acclimatization, old age, and certain medical conditions;



- ③ The sweat cannot evaporate freely enough to do its job of cooling properly, because of too much clothing, too little air movement, or high humidity.





## Who is at risk?

Most healthy people have little trouble in coping with heat waves, especially if they become acclimatized by warm weather in the preceding weeks. Adverse reactions, when they occur, are usually in those who are:

- Dehydrated — commonly from not drinking enough water to replace sweat losses, but also from vomiting, diarrhoea, dieting, and alcoholic hangovers;
- Overweight and/or unfit;
- Unacclimatized to heat;

- Feverish, from infections or vaccinations;
- Suffering from diseases that impair temperature regulation or sweating, or taking medicines (such as certain tranquilizers and travel-sickness remedies) that can have these effects; or
- Wearing unsuitable clothing.

In addition, there are some groups of people who are particularly liable to suffer adverse effects in heat waves. They are

- 1 Elderly people, particularly those in poor health,

- 2 Infants, the mentally or physically handicapped, and others who cannot make known or effective their need for extra water; and

- 3 People engaged in prolonged strenuous exertion outdoors, such as "fun runs" or military exercises, who are unable or unwilling to rest when they feel ill.

## How to recognise and treat heat illness

The most common adverse responses to heat are to feel weak, dizzy, or sick. These symptoms are the result of overloading the circulation by some or all of the stresses of unsuitable clothing, exercise, hot surroundings, and dehydration. As might be expected, the symptoms rapidly disappear when their causes are removed — by discarding surplus clothing, resting in a cool, shady, and well-ventilated place, and taking frequent drinks of water or fruit juice.



### WARNING Heat exhaustion

If a person ignores the warning symptoms and keeps on working in the heat he or she may collapse. Usually the skin is cool and sweaty, the body temperature is less than 39°C (102°F), and the patient is conscious and rational. He soon recovers when treated as described above, although in some cases he may need to be taken to hospital and given fluids by vein. This is the condition known as heat exhaustion.

### Heat stroke

Occasionally a person who collapses in warm conditions may have the far more dangerous condition of heat stroke (also known as sunstroke). Before collapsing the heat stroke patient may have become irritable, confused, or apathetic. He may have fits, or lose consciousness. Body temperature is usually more than 40°C (104°F), and the skin is usually (but not always) hot and dry because sweating has stopped.

Everyone who behaves abnormally or loses consciousness in conditions of heat stress must be regarded as a possible case of heat stroke. His body temperature must be measured without delay — in the rectum, because mouth temperature can be misleading and such a life-threatening illness must not be overlooked.

If the rectal temperature is 40°C (104°F) or more the patient must **immediately** be cooled to a rectal temperature of 38°C (100°F) — by placing him in a cool and shady place, removing all his clothes, and spraying him with cold water while fanning him vigorously to encourage evaporation. His body temperature must be reduced to 38°C or less before he is moved to hospital. Every minute's delay in cooling him increases the likelihood of death or permanent injury.



### Salt deficiency

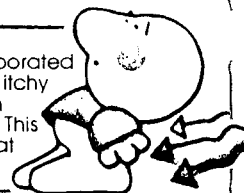
People who have been sweating heavily for many days and not eating normal meals may develop salt deficiency, which can result in cramps, lethargy, and the symptoms of heat exhaustion.

The treatment is to drink salty fluids (e.g. tomato juice with added salt) until recovered and then to resume a normal diet, with extra salt at mealtimes if necessary.



### Prickly heat

Prolonged wetting of the skin by unevaporated sweat can cause prickly heat, an intensely itchy red rash. The best treatment is to let the skin dry off for at least some hours of each day. This is done by avoiding heat and helping sweat to evaporate, as described overleaf.



# How to prevent heat illness

The adverse effects of heat waves can largely be prevented if we avoid unnecessary heat, help sweat to evaporate, and replace sweat losses by frequent drinking. Effective ways to achieve these aims are outlined below. Finally, a few safety precautions are recommended.



## Avoid unnecessary heat

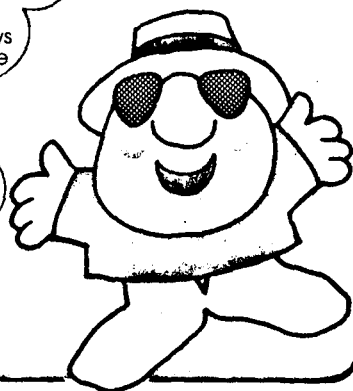
The two greatest heat sources in normal life are physical exertion (up to 1,000 watts or more) and sunlight (up to 500 watts). Resting in the shade avoids both. If exertion is unavoidable then try to schedule it for the cooler times of day, make use of shade, and take frequent rest pauses for cooling off.

Even if you tolerate heat well, try to get relief for at least some hours of the day, preferably at mealtimes and during sleep.

Avoid hot winds.

Keep indoor temperatures down by closing all windows and doors, and drawing the blinds, as soon as it feels hotter outdoors than indoors. Reverse the process in the evening when it is cooler outdoors.

Place infants, and those who are elderly or infirm, in the coolest place available — if possible in an air conditioned room. Give them frequent tepid or cool baths.

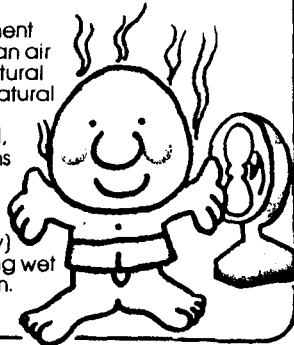


## Help sweat to evaporate

Wear as little clothing as possible. Small children do not need any. Whatever clothing you wear should be light and loose to let air circulate.

Use fans to increase air movement over the skin. They are cheaper than air conditioners and do not impair natural acclimatization. Make full use of natural cross ventilation from windows and doors when the breeze is cool, but close the windows and use fans instead when the breeze is hot.

When necessary increase evaporative cooling (especially for infants, invalids, and the elderly) by frequent sponging, or by leaving wet cloths on the skin and fanning them.



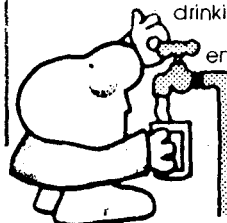
## Replace sweat losses

Keep adequate supplies of cooled water always within reach, and drink some at least every hour.

**What to drink.** The best drink is plain water, cooled to between 15 and 20°C and flavoured or not as desired. Take your normal drinks (tea, coffee, etc.) as well, but avoid excessive alcohol which can itself cause dehydration. Do not take salt tablets or salted drinks ('electrolyte replacers') unless your doctor orders it. Too much salt is harmful, and the normal diet contains enough salts to replace what we lose in sweat.

**How much to drink.** There is no fixed requirement for extra water in heat waves — it depends on how much we sweat, and that in turn depends on how much heat stress we experience. But few people ever drink enough, because thirst is always satisfied before fluid losses have been fully replaced.

The best guides to our need for extra water are changes in body weight and in the urine. If we lose weight from one day to another, or pass dark and scanty urine, it usually means we are becoming dehydrated and should be drinking more.



Make sure that babies and infants drink enough. They need extra water but they cannot tell you so. Offer them watery drinks at frequent intervals, and dilute any cow's milk given.

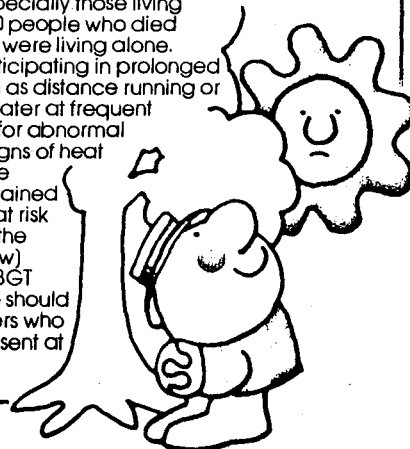
Babies are particularly vulnerable to dehydration, and they have died in heat waves from this cause alone.

## Safety precautions in heat waves

Look out for warning signs of heat intolerance (weakness, dizziness, nausea, abnormal behaviour, reduced sweating) in yourself and others. If such signs appear, stop what you are doing and treat them as recommended above.

In nursing homes and hospitals, inspect elderly people every few hours to detect any reduction in sweating, a common sign of impending heat stroke. Try to call in daily on elderly neighbours, especially those living on their own. Of the 280 people who died in one heat wave, 74% were living alone.

If organizing or participating in prolonged strenuous exertion such as distance running or route marches, drink water at frequent intervals, and be alert for abnormal behaviour and other signs of heat intolerance. Experience has shown that highly trained marathon runners are at risk from heat stroke when the WBGT index\* (see below) exceeds 25°C. If the WBGT exceeds 28°C the race should be called off. For runners who are less fit the risk is present at lower temperatures.



\*WBGT index: a widely used index of heat stress that takes account of air temperature, humidity, wind, and radiant heat. Details can be obtained from the Environmental Health Section, School of Public Health and Tropical Medicine, University of Sydney 2006.



PLAQUE TO BE INSTALLED IN CAVE

# Club honours former member



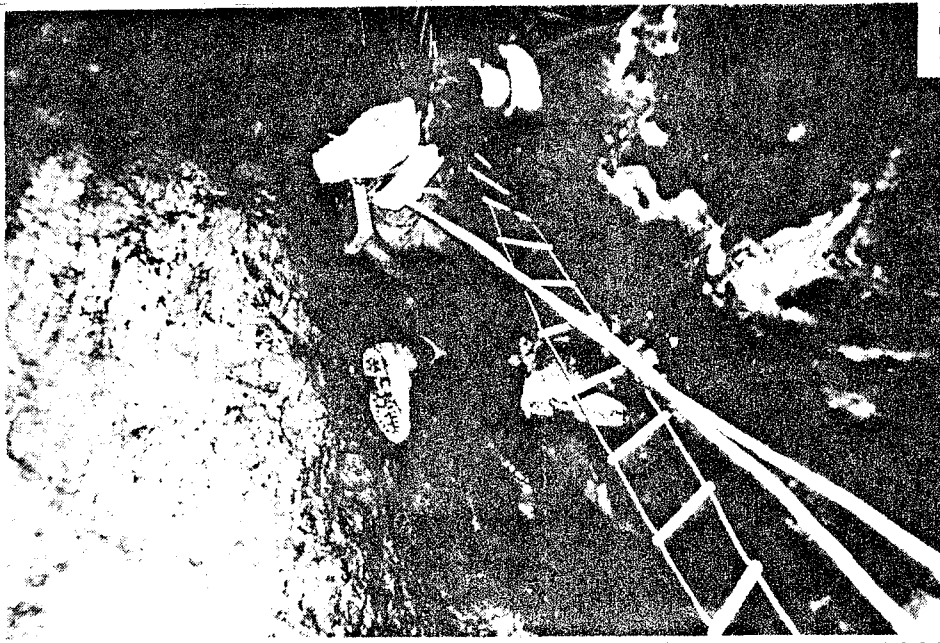
Members of Blue Mountains Speleological Club will install a small memorial plaque in the Cliefden Cave near Carcoar in the memory of a former member, Phillip Coburn, who was killed in the Granville train disaster.

Phillip, 23, of Blaxland as well as being a member of this club, was a member of 1st Moorda (Lower Blue Mountains) Rovers Scout crew.

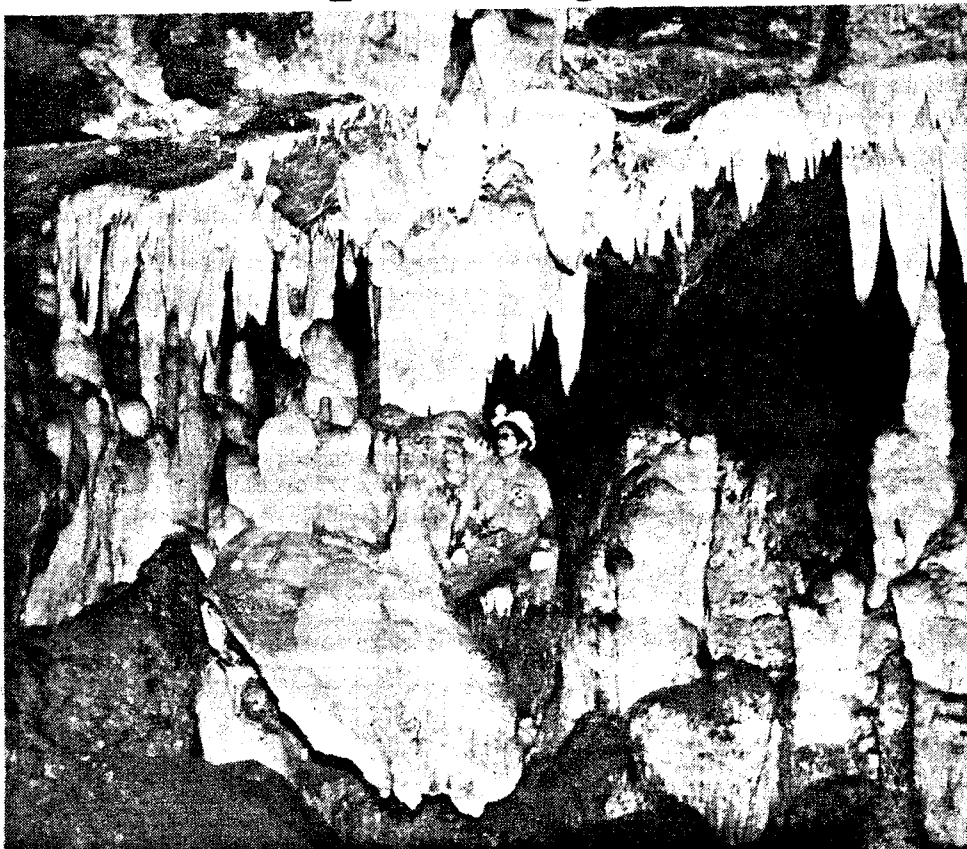
He had gained his Queen's Scout Award and had completed his Baden Powell Award just prior to the Granville smash.

Top picture shows the late Phillip Coburn descending a cave by abseiling down a rope. A wire ladder hangs nearby to ascent out of the cave. Phillip was quite proficient at this caving skill.

LEFT: Picture shows Phillip's parents Les and Shirley Coburn, accepting his Baden Powell certificate from the State Governor, Sir Roden Cutler, at a recent ceremony at Government House, Sydney.



# Members spend spare time exploring caves



The Blue Mountains Speleological Club is an active group on the Mountains, dedicated to the science and enjoyment of caving.

Members enjoy weekend trips away exploring beautiful underground caverns, the likes of which can never be experienced on the surface.

"Dark caverns come to the life as the caver enters, relying on his head lamp to illuminate the vast underground wonders," a club spokesman said.

"For a time strange colours and shapes surround the explorer as he marvels at their beauty, then all is dark again as he moves on in search of further glories.

"Sometimes the caver can simply wonder through a cave while at other times he must use ropes and ladders to explore further chambers. The club has a fine safety record, never having had an accident in its 10 year history."

Caves which the club visits include Cliefden and Walli near Bathurst, Burgonia, Wyanbered and Bendethera near Goulburn and unique caves at Jenolan and Aber-

crombie which are not open to the general tourist.

As well as underground trips the club also holds walking weekends where the surface of new areas is explored for possible cave entrances.

The club has also an active social secretary who arranges family days and social outings such as visits to Paradise Gardens, Thirlmere Steam Museum, Joadja Historic Village, Picton Lakes, winery visits and film and slide nights. In the near future the club intends to visit the Ben Hall Festival at Carcoar, Jenolan Caves, Abercrombie Caves and Yarrangabilly Caves in the Kosciusko National Park.

Monthly meetings are held, where new members are always welcome. Anyone who is interested in the variety of activities enjoyed by the club may contact P.O. Box 37 Glenbrook.

The photo shows a club member inspecting formations prior to a cleaning operation aimed at restoring some of the original lustre of the limestone.

— Photo by R. Sparkes.

## COCKROACHES

Among the most ancient of all insects, cockroaches and all their associated problems have always pestered mankind.

It is thought that most pest species originated in the hot, steamy jungles of tropical or sub-tropical regions and then migrated all over the world as a result of trade. They are a problem in the galleys of aeroplanes and ships as well as on dry land.

Only a small number (perhaps less than 1%) of the many thousands of known species have become adapted to homes, restaurants and wherever man lives. This is because these areas provide warmth, shelter and moisture. These few varieties however, are among the most persistent and health-endangering pests known to man.

### Nocturnal Scavengers

Cockroaches definitely prefer the "night life". By day they shield themselves from light, predators and the drier daytime conditions by hiding in the smallest of devices. Because of their tropical origins cockroaches prefer the warmer areas often found around the kitchen.



Under the sink and around the hot water system and the kitchen sink and behind stoves, refrigerators and dishwashers are ideal locations.

At night they emerge to search for food and water. They feed on virtually anything—from starchy materials and sweet substances to meat and dairy products.

### Health Hazard

They are quite indiscriminate in their habits—feeding on garbage and sewage and then crawling over food meant for human consumption, cooking utensils, plates, etc. Contamination can also be caused by their droppings and regurgitation and the foul odour that accompanies large infestations.

Cockroaches are known to harbour a wide variety of pathogenic organisms. Some of these, and their associated diseases, are shown in the following table.

### Diseases

DISEASE OF MAN	SPECIES OF BACTERIUM
Lesions and infections of urinary tract	<i>Pseudomonas aeruginosa</i>
Boils, abscesses	<i>Staphylococcus aureus</i>
Infections of genital/urinary tract and intestine	<i>Escherichia coli</i>
Enteric fever and gastroenteritis	<i>Salmonella schottmuelleri</i> , <i>S. bredeney</i> , and <i>S. oranienburg</i>
Gastroenteritis	<i>Salmonella morficans</i>
Intestinal infections	<i>Salmonella anatis</i>
Food poisoning	<i>Salmonella typhimurium</i>
Typhoid fever	<i>Salmonella typhosa</i>
Dysentery	<i>Shigella alkalescens</i>
Summer diarrhoea in children	<i>Shigella paradysenteriae</i>
Bubonic plague	<i>Yersinia pestis</i>
Leprosy	<i>Mycobacterium leprae</i>

### Methods of Infestation

Usually infestation begins with cockroaches entering premises through unscreened windows, under doors, other openings and from the sub-floor areas.

Another means of transportation onto premises is in cartons, packing cases, food, etc. which may contain eggs or adult cockroaches.

### Main "Pest" Varieties

There are six species which are the main cause for concern. They are listed in the following table together with details of their appearance and habits.

### Common "Pest" Cockroaches

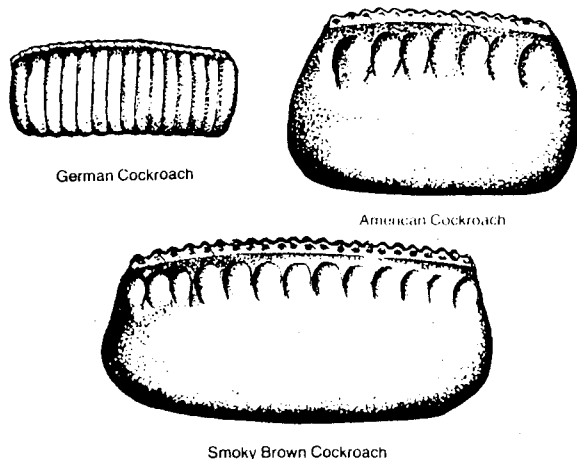
COMMON NAME	SCIENTIFIC NAME	ADULT APPEARANCE	HABITS
German cockroach	<i>Blattella germanica</i>	Small (10-15 mm) Medium brown. Winged.	Warm dry places with access to water. Common in kitchen where it can breed in small cracks and crevices.
American cockroach	<i>Periplaneta americana</i>	Large (30-45 mm) reddish brown, with yellow edge to pronotum. Winged.	Warm damp places e.g. sewers, basements, wall cavities. Found in gardens in warm areas.
Smoky brown cockroach	<i>Periplaneta fuliginosa</i>	Medium (30-35 mm) dark brown. Winged.	Warm humid conditions. Frequently establishes in gardens in warm areas and invades house from there.
Australian cockroach	<i>Periplaneta australasiae</i>	Medium (30-35 mm) mid-brown. Marked yellow edge to Pronotum and yellow edge at front of wing.	Found in warmer areas where it can establish in gardens.
Oriental cockroach	<i>Blatta orientalis</i>	Medium (20-25 mm) dark brown to black. Wingless.	Can withstand cooler conditions than the other cockroaches and it is rarely found in the humid tropical areas. Found in basements, cellars, service ducts and sewers.
Brown Banded cockroach	<i>Supella longipalpa</i>	Small (13-15 mm) light brown with two yellowish bands across body.	Warm dry places. May be throughout premises. Not so dependent on a source of water as the other species.

**REMEMBER: One Flick and they're gone!**

## Life Cycle

The cycle of all six follows a similar pattern. After mating, the female encloses the eggs in a purse-shaped capsule which protects the eggs (see illustration). The capsule may contain anywhere between 16-40 eggs. In some species the egg capsule is carried around by the female until just before the eggs are ready to hatch, while in others it is deposited in a safe place just prior to hatching.

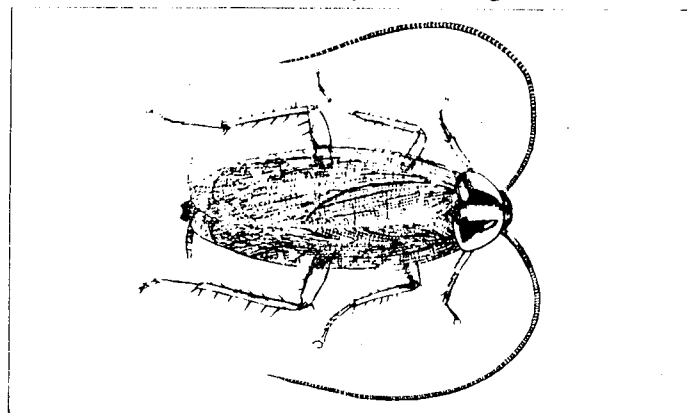
### EGG CAPSULES



When they emerge from the capsule the young cockroaches, or nymphs, are the same general shape as the adults, except that they are smaller and do not have wings. After some months and several moultings, they turn into adults and are ready to mate and start the cycle again. This relatively short maturation period explains why an infestation of only a few cockroaches can, if not promptly treated, become a major problem.

Three species, the German, American and Smoky Brown are the most troublesome:

### 1. German Cockroach (*Blattella germanica*)



This is the most common variety in kitchens and other food handling areas, and is the only household species which carries its egg capsule until hatching. This protection of the eggs by the female may be one explanation for the success of the species. Because of their small size and the lack of wings, the nymphs are often not initially recognised as cockroaches and may be ignored until a heavy infestation has built up.

#### APPEARANCE:

**Adults:** Pale brown with two dark stripes along pronotum. Size 10-15 mm. Males and females have wings but rarely fly.

**Nymphs:** Darker in colour with a single light stripe down the middle of back, no wings and are smaller than adults.

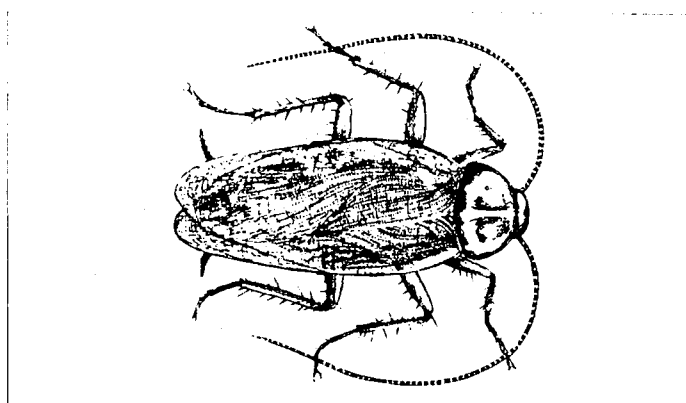
#### LIFE HISTORY:

Number of egg capsules produced by female	4-8
Egg capsules carried or deposited	Carried until ready to hatch
Number of eggs per capsule	30-40
Time taken for eggs to hatch	16-30 days
Time taken for nymphs to mature	1½-5 months
Life span	6-12 months

#### DISTRIBUTION:

The most serious cockroach pest. Common wherever man lives.

### 2. American Cockroach (*Periplaneta americana*)



This is the largest of the pest cockroaches — the adults reaching a length of 45 mm. The female may either drop the egg capsule in a safe place (e.g. A dark cupboard or basement) or she may attach it to a solid surface by means of a sticky secretion. Because of its large size this cockroach is not so well established in kitchens. They are much more common beneath cupboards, in service ducts, drains and underfloor areas — entering the house at night in search of food and water. They are particularly common in sewers and therefore have a great potential for spreading disease.

#### APPEARANCE:

**Adults:** Reddish brown with yellow border around pronotum. Size 30-45 mm. Male and female have wings and can fly.

**Nymphs:** Uniform reddish brown, smaller than the adult and wingless.

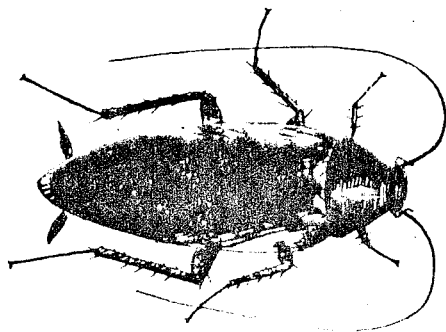
#### LIFE HISTORY:

Number of egg capsules produced by female	15-90
Egg capsules carried or deposited	Deposited
Number of eggs per capsule	14-16
Time taken for eggs to hatch	1-2 months
Time taken for nymphs to mature	5-15 months
Life span	1-2 years

## DISTRIBUTION:

Found in most areas. Tends to be more troublesome in warmer locations.

### 3. Smoky Brown Cockroach (*Periplaneta fuliginosa*)



This species is similar to the American cockroach but somewhat smaller. Both male and female have wings which extend beyond the body and are quite accomplished fliers. The Smoky Brown cockroach is more common than is generally realised because the species is often confused with the American cockroach.

## APPEARANCE:

**Adults:** Uniform brownish black. Size 30-35 mm. Winged. Good fliers.

**Nymphs:** Smaller than adult, brownish black and lacking wings. Feelers have white tips.

## LIFE HISTORY:

Number of egg capsules produced by female	17
Egg capsules carried or deposited	Deposited
Number of eggs per capsule	22-26
Time taken for eggs to hatch	5-10 weeks
Time taken for nymphs to mature	6-12 months
Life span	9-15 months

## DISTRIBUTION:

Found in most areas. Also prefers warmer locations.

## Control

The control of a cockroach infestation can usually be divided into three stages — inspection, treatment and sanitation. To be effective, the first two stages must be carried out by skilled specialists. Flick & Company have been in the business of professional pest control for over sixty years. Their reputation for safe and efficient control methods is well known. Their wide experience and vast resources mean that they can tailor a specialised cockroach program to suit any situation.

### 1. Inspection

A qualified Flick inspector will call at a time to suit you, to carry out a thorough inspection. Specialised training and experience in the field mean that he knows just what to look for. He will be able to identify

the cockroach species and size of the infestation, their food and water sources and, most importantly, exactly where they are hiding and breeding. All these factors are taken into account when he determines what methods and chemicals will be used for control. He will provide you with a comprehensive obligation-free quotation for treatment. This of course carries the Flick Warranty — if re-infestation occurs during the warranty period, additional treatment will be provided free of charge.

### 2. Treatment

The treatment will be carried out by an experienced Serviceman. He will selectively apply insecticides — gaining penetration right into the areas where the cockroaches live and breed. If required, the Serviceman can call on the specialist assistance of the Biologists and Entomologists of the Company's Technical Services Department.

In every case the method used is tailored to the situation. The safety of humans and pets and the non-contamination of food and other materials is paramount. The control method is always determined with these factors in mind.

### 3. Warranty

In most cases, cockroach treatments carry the Flick Warranty — if re-infestation occurs within the warranty period, additional treatment is provided free of charge.

### 4. Sanitation

Sanitation is a key measure and cannot be overlooked. All areas must be kept thoroughly clean so that food particles and rubbish do not encourage an infestation. Food should be stored in containers with tight-fitting lids and should never be left out overnight. Opened food should be kept in a refrigerator. Similarly, dirty crockery, cutlery and cooking utensils should be washed and stored away as soon as possible after use. Garbage should be stored in bins with close-sealing lids.

One method of introduction of an infestation can be via goods delivered to the home or commercial premises. All goods, especially the cartons and packages should be closely checked for live cockroaches, their droppings or egg capsules (see illustrations).

Entry from outside the premises can be limited by checking the seals on doors and windows, fitting mesh on drains and checking that there are no gaps around service pipe entry points. Normal maintenance will also help to eliminate their vital breeding places. Cracked or loose tiles, laminates and wall coverings should be all re-adhered or replaced. All gaps and crevices, even the smallest, should be completely sealed.

### Commercial Premises

In many businesses the storage and handling of food and other materials make them particularly susceptible to a cockroach infestation. If an infestation is particularly heavy or left untreated there is the risk of heavy fines imposed by Health Authorities and embarrassing court appearances. Flick Pest Control operate a specialist Commercial Services Division to cater for the unique needs of businesses. This Division can provide a complete Pest Control Management plan for any business, large or small. All Inspectors and Servicemen have received special training and have experience in the control of pest problems in commercial premises and use specialised equipment and chemicals.



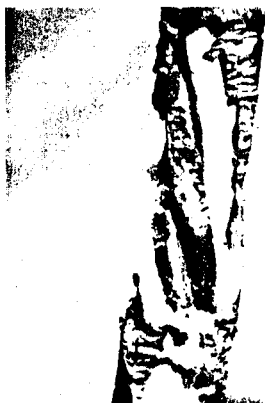
## RODENTS

Rats and Mice have been a persistent problem to man ever since, as a pre-historic nomad, he learned to store seeds and other foods. History records the vast damage and suffering caused by these pests over many thousands of years. The most devastating of these is no doubt the spread of Bubonic Plague throughout Europe in the 14th century—a disaster which it is estimated, claimed 25 million lives.



### Damage Caused by Rodents

Rodents are responsible for many millions of dollars worth of damage each year. Huge amounts of agricultural produce, both in the field and in storage, are consumed by rodents. Only sophisticated and skilled prevention and control procedures keep losses from being even greater.



Discoloration and contamination caused by their droppings and constant urination are unsightly and of course, a real danger to health. Stored products contaminated in this way must almost always be destroyed ... a very costly exercise.

Rodents need to gnaw on hard materials to wear down their rapidly growing front teeth (incisors). These razor-sharp incisors can easily cut through lead, aluminium, cardboard, wood, soft asphalt, mortar and most plastics ... resulting not only in damage to packages and containers, but also the possibility of floods and leakages of dangerous materials. Even electrical and telephone cables are part of the rodent's diet!—and the obvious risk here is fire.



Structural foundations can be undermined by rodents tunnelling to gain access to buildings for food and shelter.

### A Threat to Health

Perhaps the most serious problem with rodents is their danger to health. Their reputation as carriers of the "Black Death" plague has already been mentioned. Thankfully Australia is free from this disease but it continues to take many lives each year in Asia.

Rats are indiscriminate in their habits. They will frequent sewers and rubbish heaps and then make themselves quite at home in roofs or kitchen cupboards.

Many disease organisms are carried by rodents, the most notable in Australia being those that cause food poisoning, the Salmonella group. This bacteria is carried in their urine and droppings and transmitted to humans by the rodent's constant uncontrolled urination.

### Table of Diseases associated with Rodents

DISEASE	CAUSAL ORGANISM	COMMENTS
Bubonic Plague	<i>Yersinia pestis</i>	Transmitted to man by the Oriental Rat Flea.
Murine Typhus	<i>Rickettsia typhi</i>	Transmitted to man by the Oriental Rat Flea.
Trichinosis	<i>Trichinella spiralis</i>	Caused by a roundworm parasite of swine, rodents and man. Transmitted by eating poorly cooked pork.
Salmonellosis	<i>Salmonella typhimurium</i> <i>Salmonella enteritidis</i>	Contamination through human contact with infected droppings.
Lymphocytic Choriomeningitis		Transmitted to man through contaminated food or dust.
Rickettsialpox		Transmitted by House Mouse Mites.
Rat-Bite Fever	<i>Spirillum minus</i>	Transmitted by the saliva in the bite of a rat or mouse.
Ringworm	<i>Trichophyton</i> , <i>Microsporum</i>	Spread from mice or cats which have been in contact with infected mice.

## Three Species

The order of rodents includes animals such as beavers, squirrels and all species of rats and mice. Although various species of rodents may be troublesome in specific areas, the most common as pests are:

### 1. The Norway Rat (*Rattus norvegicus*)



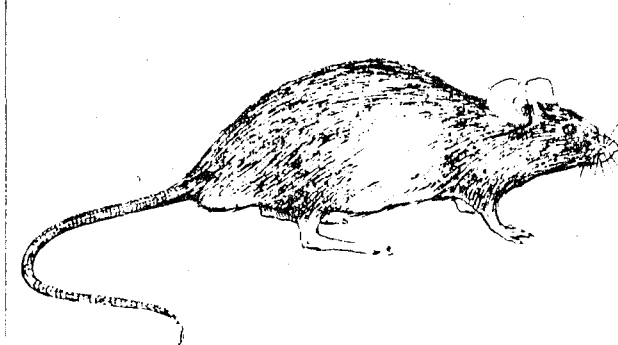
This is a large, heavy-bodied and aggressive rat which tends to live at ground level in burrows, basements, sewers and drains. It prefers dry foods, such as cereals and cooked meats, but will eat a wide range of other materials.

### 2. The Roof or Black Rat (*Rattus rattus*)



Smaller and more slender than the Norway Rat, this species is a skilled climber. They can be distinguished by a long tail which is usually longer than their body. Prefers moist foods such as fruit and raw meats but will also eat cereals, etc.

### 3. The House Mouse (*Mus musculus*)



The House Mouse is much smaller—usually only achieving a maximum weight of 15 gms. It often lives outside, but in cooler weather will venture indoors to become very troublesome.

When hungry the House Mouse will consume a wide range of foods but generally it prefers grains and cereals.

#### Characteristics

	NORWAY RAT	ROOF RAT	HOUSE MOUSE
Weight	450 g	260 g	15 g
Body	Heavy set	Slender	Slender
Length	260 mm	200 mm	100 mm
Nose	Blunt	Pointed	Pointed
Fur	Coarse	Fine	Fine
Ears	Small, fine hairs	Large, almost hairless	Large hairy
Eyes	Small	Large	Small
Tail	Shorter than body	Longer than body	Equal to body

All three species build a nest which is usually protected and well hidden. It is constructed of practically any soft material which can be chewed or torn into small bits to make a loosely matted mass.

#### Habits and Capabilities

	NORWAY RAT	ROOF RAT	HOUSE MOUSE
Activity	Suspicious of new foods, bait trays, traps and environment changes for several days.		Immediately inquisitive and exploring of any change.
Territories	Social animals living in colonies. Nest and feed together. Will travel 40-50m to food or water.		Male sets up a territory 3 to 10m across for himself and several females.
Nesting	Burrows in soil under slabs usually less than 50cm deep.	Usually above ground in dense vegetation, trees or buildings. Rarely in burrows.	Usually at ground level near food. Burrows rare. Not in sewers.
Drinking	Water needed daily unless food is very moist 20-30 ml/day.	Water needed daily unless food is very moist 15-25 ml/day.	Do not need water unless food is very dry. 1 ml/day.
Feeding	Will eat a wide range of food but only after several days sampling new food. Will then feed exclusively on it. Prefer sheltered feeding.		Inquisitive nibblers eating a wide range of foods in one night but not more than 3 g.
	Prefer 20-30 g/day of high protein foods, e.g. meat, cereals.	Prefer 15-25 g/day of fresh fruit and vegetables.	
Physical Capabilities	Squeeze—through 12mm hole Climb—inside a 40-100mm pipe Crawl—along pipe, conduit or wire. Jump—horizontally 2.5m, vertically 1.0m Drop—vertically 15.0m without injury. Burrow—70-100 mm diam. 3.0m into soil Swim—1.0 km in open water. Poor swimmer. Dive—through sewer traps. Gnaw—aluminium or lead sheet, plaster, wood, shipboard. Running—9.5 km/h.		Through 7mm hole. Brick walls, up or down. 70cm. 20-30mm diam. Reluctant though strong swimmer. 6.5 km/h.

Rodents reach sexual maturity quickly and from then on are prolific breeders. One pair can be responsible for up to 1000 offspring in only 12 months. This helps to explain why the fight to control an infestation must be concentrated and continuous.

## Life Cycle

	NORWAY RAT	ROOF RAT	HOUSE MOUSE
Time until sexual maturity	2-3 months	2-3 months	1-1½ months
Adult life span	12 months	12 months	12 months
Time until young born	Averages 23 days	Averages 22 days	Averages 19 days
Number of young	Av. 8-12/litter	Av. 6-8/litter	Av. 5-6/litter
Number of litters	Av. 4-7/year	Av. 4-6/year	Av. 6-10/year

## Senses

**Sight:** Poor, colour blind. Movement and light intensity changes are important.

**Smell:** Keen, used in food and mating search. Not repelled by human odours.

**Taste:** Good (some compounds detected at 0.5 ppm). Repelled by tainting of food by solvents and petrol.

**Hearing:** Acute. May initially be repelled by random noise but they will readily adjust.

**Touch:** Very important. Whiskers and guard hairs sensitive to touch and used in tracking along walls, beams, etc.

Rats and mice have highly developed senses of taste and smell. They use smell to find food and their taste perception enables them to detect and reject foreign compounds. This illustrates the need for careful choice and formulation of the various baits so that they will be both attractive and effective.

Remarkable agility is another reason for their persistent survival. They can jump and climb well—scaling vines, pipes and rough walls to gain access to food and shelter.

## The Tell Tale Signs

There are many things that indicate an infestation of rodents. Some are quite noticeable while others will only be evident to the keen eye of a professional pest controller.

Rats tend to develop regular routes and therefore produce well-defined "runways". Outside, the soil on these runways will be well packed and free from vegetation. Inside, the runways will be free of dust in otherwise dusty areas.

Using a highly developed sense of touch, rodents run close to walls. This enables them to move quickly in the dark and explains the grubby, oily smears often seen around the edges of a room.

Droppings, teeth marks, urine stains and many other signs all help to identify the particular species of rodent and the size of the infestation.

## Control

The effective control of an infestation of rodents is a job for skilled specialists. W.A. Flick & Co. Pty. Limited have been in the business of controlling all forms of pests for more than 60 years.

The Company's expertise, built through training, modern equipment and materials and vast experience enables Flick to tailor a control program to combat any rodent problem.

There are a number of stages essential to an effective control program:

### 1. Inspection

A qualified Flick Inspector will call, at a time convenient to you, to carry out a thorough inspection. Years of experience in the field and specialised

training have equipped him to know just what to look for. He will identify the rodent species and the size of the infestation, their food and water sources and method of access. All these are essentials that must be known to decide the best control measures.

He will provide you with a comprehensive obligation-free quotation for treatment. This, of course, carries the Flick Warranty—if re-infestation occurs during the warranty period, additional treatment will be provided free of charge.

### 2. Sanitation

Sanitation and hygiene are absolute musts if the control program is to be effective. The elimination of rat harbourage locations, food and water sources and the general cleanliness of the area are all essentials. Garbage heaps, old machinery, timber piles, weed growth and general litter should be removed. Garbage must be kept in rat-proof cans with tight-fitting lids and a well-organised and supervised cleaning and maintenance plan must be adhered to.

Here again, the Flick inspector can help. He will provide expert advice on the action required to minimise the risk of re-infestation.

### 3. Treatment

The suspicious and cunning nature of rodents can result in the actual treatment being a very specialised process.

Most treatment methods involve the laying of special baits depending upon the type, size and food source of the infestation. Other methods such as tracking powders and traps may also be used.

Flick Pest Control has developed a wide variety of bait types, which have all been thoroughly tested in the field and proven successful. In situations where the rodent is not taking the bait or appears to have a resistance to it the Biologists and Entomologists from the Company's Technical Services Department develop a "tailor-made" treatment method to suit the particular situation.

The safety of humans and pets and the non-contamination of food and other materials is paramount. The control method is always determined with these factors in mind.

### 4. Proofing against Re-entry

In most cases proofing is a vital part of the control process. If the infestation is geographically wide-spread it is often the only way to keep them from your own property. Entry points around doors, windows, drains, pipes and vents must all be rectified. Here again, Flick can help by showing you what needs to be done, or if you wish, by actually carrying out the proofing work.

### Special Problems in Commercial Premises

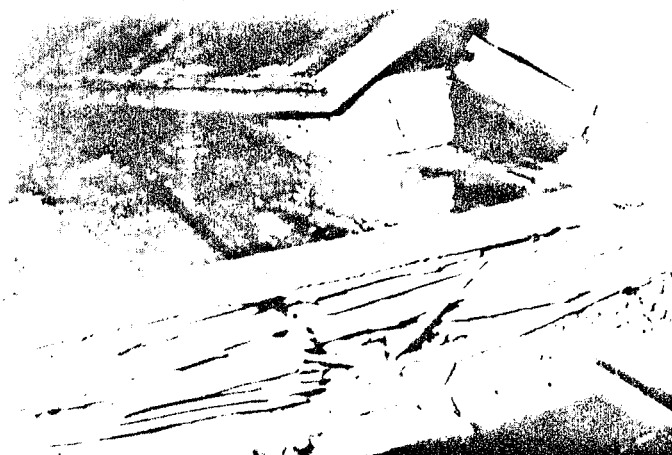
In many businesses, the storage and handling of food make them particularly susceptible to rodent infestation. If an infestation is left untreated there is the risk of heavy fines imposed by Health Authorities and embarrassing court appearances. Flick Pest Control operate a specialist Commercial Services Division to cater to the needs of businesses. This Division can provide a complete pest control management plan for any business. All Inspectors and Servicemen have received special training and have experience in the control of pest problems in commercial premises and use equipment and chemicals designed specifically for these jobs.



### TERMITES

Few pests have caused more damage to the property of Australian families and businesses than termites or "white ants" as they are commonly known.

Almost all areas of Australia are "home" to at least one of the termite species and the damage they cause runs into many hundreds of thousands of dollars each year.



A graphic illustration of damage caused by Subterranean Termites to flooring support timbers.

The pest control industry in this country had its birth in the struggle to find an effective termite control method. Until this discovery was made by William Flick the founder of W.A. Flick & Co. Pty. Limited the plight of the owner of an infested house or property was generally considered hopeless...the only solution being to patch up the damage as best as possible and sell out.

Nowadays, effective control measures are available and so, if a termite infestation is detected and treated properly, control can be achieved.

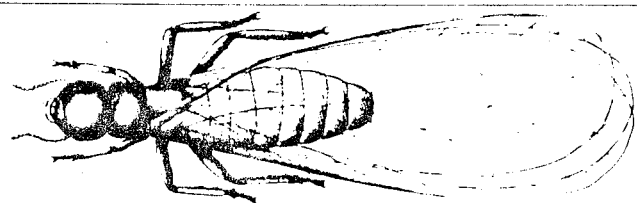
## SUBTERRANEAN TERMITES

### Social Insects

Subterranean Termites are social insects — every colony observing a strict caste system. This social community, where every effort of each individual seems directed toward the common welfare and survival of the colony, is among the most sophisticated in the insect world. Each group has its own well defined function — building, defending, propagating or feeding — and continues to carry this out for the whole of its life.

#### 1. The Reproductive Caste (Alates)

At a certain time each year, a quantity of eggs for the reproductive caste (Alates) are laid by the Queen termite. These are the only sexed termites and the eggs



Winged Reproductive or Alate.

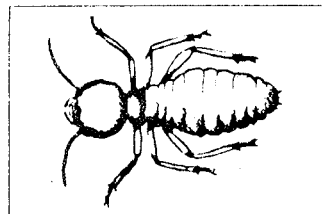
are laid so that they will mature at just the right time of year for swarming — usually in the warmer more humid months. They are dark brown, have a longer flatter body (11-15mm in length) than the Worker termite and possess four long, narrow wings.

Usually after the first summer rains the Alates take to the air in their millions to establish new colonies. During the flight, a heavy toll is taken by natural predators such as birds or spiders. Only a very small number, perhaps 1 to 2% survive. Following the hazardous flight, the survivors drop to the ground, shed their wings and mate. Soon the female (or Queen) becomes little more than an egg laying machine. Her body is grossly enlarged, sometimes up to 7cm in length. In some species, the Queen can live more than 25 years producing upwards of 2000 eggs a day.

The eggs develop into the nymphs of either Workers, Soldiers, Alates or Supplementary Queens. Should the original Queen die, these Supplementary Queens are then available to carry on the egg laying thus ensuring the survival of the colony.

#### 2. The Worker Caste

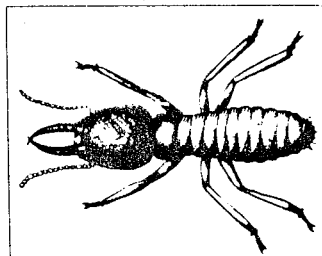
This is by far the largest caste in any termite colony and the one that does the actual damage. The Workers undertake all the labour — constructing tunnels,



excavating chambers, obtaining food, feeding the young and the other castes and cultivating fungus gardens. Approximately 3-4mm long, they are creamy white, thin skinned, maggot like and wingless — probably giving rise to the often used misnomer "white ants". The specially adapted heads of the Soldiers and the huge size of the Queen make it impossible for them to feed normally. The Queen, King and Soldiers are fed by the Workers who forage in and around the nest and workings, bringing back partially digested food for the others to eat.

#### 3. The Soldier Caste

The Soldiers have a fearsome, armoured head. It is usually brownish, & equipped with two large jaws to protect the colony against its natural predators such



**REMEMBER: One Flick and they're gone!**

as ants. Some species develop a long snout-like head through which a sticky substance can be ejected in a fine stream.

The sole purpose of the soldier caste is that of defence. If a termite tunnel or chamber is breached they quickly form a guard around the hole while the workers repair the damage.

## THE FOOD OF TERMITES

Termites feed primarily on wood or wood related products. Some varieties of timber are definitely more attractive than others but few are immune from attack. The cellulose content of the wood is the actual food material and so many other items containing cellulose such as paper, cotton, crops, carpets and leather can also be attacked.

Protein is another important ingredient in the termite diet. One readily available source is the bodies of dead termites. Another is the product of the unique fungus gardens often found in a termite nest. Inside these galleries, combs are constructed of the termite faecal matter (droppings). The relatively high humidity and temperature in these enclosed areas are ideal conditions for fungal spores to develop — providing the essential food supplement.

## NESTS AND COLONY EXPANSION

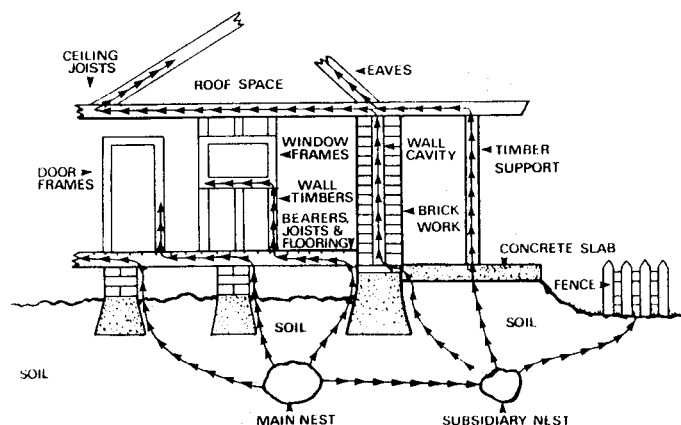


Diagram showing the typical growth of a Subterranean Termite nest and the areas of a building that can be attacked.

After swarming, the Alates pair off and search for a suitable place to commence a new nest. A warm moist area, such as a buried fence post or the base of an old tree stump are likely locations. A totally controlled environment is required so they will burrow down and seal the entry point. The nest is expanded with countless tunnels and chambers — the Queen's chamber being deep and central. In times of drought the nest may be developed deeper into the ground to preserve the humidity and temperature. It is thought that the growth of the spores in the fungus gardens also helps to regulate these environmental factors.

As the original food source diminishes, tunnels are built underground in search of new stumps, logs etc. This is the stage of real threat to buildings, fences and other property. In their quest for food, the termites will build covered "runways" from the ground over foundations and ant-capping and along pipes. Sometimes the runways



Nest of the *Nasutitermes walkeri* variety. Often found in the forks of trees up to 30 metres above ground. This species can cause damage to hardwood timbers in buildings.

are even free-standing to reach above-ground wood sources.



A free-standing termite tunnel provides a protected "runway" from the subterranean nest, past the building foundation to the food source.

These runways are enclosed to preserve the atmosphere of the nest, shield the termites from light and protect them from natural predators. They are built of a mud-like substance which is in fact the faeces of the termites tightly compacted and moulded by the Workers.

Termites will follow minute cracks and flaws in concrete slabs or piers and it is known that they will penetrate a surprising variety of materials in order to reach wood. Sometimes the Workers generate a corrosive secretion which can actually eat through metal ant capping thus allowing them better access to the wood beyond.

Once new wood is located the colony virtually excavates the whole of the inside leaving only a honeycomb of tunnel walls and the outer layer which preserves the controlled atmosphere. The destruction is devastating and can be remarkably quick.

## CONTROL

The control of an infestation of Subterranean Termites is a highly specialised job involving three distinct activities... Inspection, Treatment, and Preventive Measures. Mr W.A. Flick, pioneered the successful treatment of Subterranean Termites in Australia. The method he discovered back in 1918 was a world first and is



A termite nest located in the sub-floor area of a building.

considered the most effective means of control. This basic procedure has been developed and refined by Flick and is in use in the Company's operations in many parts of the world.

### 1. Inspection

A qualified Flick Inspector will call at a time to suit you. Experience in the field and specialised training have equipped him to know precisely what to look for. He will thoroughly inspect the interior of the building, the sub-floor area and inside the roof. The area surrounding the house will also be examined, paying special attention to trees, fences, outbuildings etc.

A report is compiled giving details of present and past termite activity and full recommendations of the

treatment required. This will usually involve two stages as prescribed by the Australian Standards Association (AS 2178)

## 2. Treatment

The first is to kill off the colony or colonies that are currently attacking the property. This is achieved by the application of a specially formulated insecticidal powder. It is carefully injected into the tunnels, workings and chambers of the infestation. Due to the termites' habit of constantly grooming each other the insecticide is eventually distributed throughout the colony, killing most of them, including the Queen.

With the Queen's death, no more eggs are produced and the colony quickly dies off. This treatment simply deals with the current problem and of course carries no warranty against re-infestation.

The second stage is the setting up of a protective chemical barrier to guard against further infestation. This involves the treatment of all sub-floor soil, including where necessary, drilling small holes in concrete slabs and pathways and injecting chemicals through them into the soil below. This is really the only effective means of protection and carries the Flick warranty which provides for free treatment should a re-infestation occur, to any treated area, during the warranty period.

## 3. Preventive Measures

As with most forms of pest control there are certain things the property owner can do to lessen the risk of termite infestation:

- Piles of timber or firewood under or stacked against the house are an open invitation and should be moved to a location away from the building.
- Any timber or formwork left under the house by the builder should be removed. This can often provide a natural path for the termites from the ground to the sub-floor.
- Adequate ventilation beneath a suspended floor is also important. This helps to reduce moisture and humidity in the area and therefore makes it less attractive to termites. Here too, Flick can be of assistance in installing the correct type and number of ventilators to rectify the problem.
- Keep the area under and around the building tidy and free from rubbish so any termite activity can be easily located. A regular inspection (at least every 12 months) by a Flick expert is strongly advised.
- Never disturb what you think may be a termite nest or workings. This will only prompt them to move elsewhere in the building and may make detection and subsequent treatment more difficult.

## A WORD ABOUT NEW BUILDINGS

The most effective way to protect new buildings from Subterranean Termite infestation is for a chemical barrier to be placed in the soil of the sub-floor area during the early stages of construction. For a concrete slab floor the barrier is applied just prior to pouring the slab and, in the case of suspended timber floors, after the foundations have been completed and the bearers and joists fixed in place but before flooring timbers are laid down.

The chemical barrier is a liquid which is applied to the whole sub-floor area, according to the strict Australian Standards Association guide lines (AS 2057)

# THE RANGE OF FLICK PROPERTY PROTECTION SERVICES

W. A. Flick & Company Pty. Limited have provided specialised property protection to both homes and industry since 1918. The Company's activities have been expanded over the years so that now the range of services offered is amongst the most comprehensive in the world.

## PEST CONTROL

- Specialised treatments for all Hygiene, Structural and Nuisance Pests.
- Domestic Pest Control Services.
- Commercial and Industrial Pest Control.
- Pre-building Chemical Soil Treatment.
- Pre-purchase Inspection Service.
- Bird Proofing and Deterrent Systems.
- Possum Removal and Proofing.
- Bee Swarm Control.

## WEED CONTROL

- Domestic Weed Control Services.
- Commercial and Industrial Weed Control.
- Broad-Acre Crop and Channel Spraying.

## BUILDING SERVICES

- Commercial and Industrial Building Constructors and Developers.
- Design and Construct.
- Project Management.
- Specialist Building Services.

## TREE SURGERY

- Treatment of Disease and Insect Infestation.
- Storm Damage Repair, Lopping, Felling.

## SUB-FLOOR DAMPNES

- Sub-floor Ventilation.
- Wood Rot and Fungi Treatment.

## ODOUR CONTROL

- Integrated and Portable Odour Control Systems.

## FUMIGATION

- Bowling & Golf Green Fumigation.
- Building, Grain and Timber Fumigation.
- Ship and Cargo Fumigation.

## INSULATION

- Solar Control Tinted Window Film.
- Fibreglass Batts and Blanket Ceiling & Wall Insulation

## CLEANING SERVICES

- Specialised cleaning of roofs, garage floors, patios, walls, paths and all exterior surfaces.

## ROOF AND SURFACE COATINGS

- Protective coatings for exterior surfaces and tile, fibro and iron roofs.

*The complete range of services may not be available in all areas. Please contact your nearest Flick Branch or Agent for details.*

## ANY DIFFERENT VARIETIES

ere are many varieties of Subterranean Termite in Australia. The following table gives tails of those that cause the most damage:

VARIETY	APPROXIMATE LOCATION	CHARACTERISTICS	FOOD PREFERENCES	NESTING HABITS
<i>Mastotermes darwiniensis</i>	New Guinea, Northern Territory, Queensland, Western Australia.	Most destructive termite in Australia. Does not like high rainfall areas.	Most timbers, vegetables, bones, hides.	Usually below or just above ground level in stumps or the base of trees.
<i>Coptotermes lacteus</i>	N.S.W., Victoria and South Queensland.	Sometimes emits white milky secretion from a gland on the head as a form of defence.	Hardwood, softwood, brush timbers.	Large, light clay coloured conical mounds, sometimes up to 2.7 metres high.
<i>Coptotermes frenchi</i>	South Australia, Victoria, N.S.W. and Queensland.	As above	Hardwood, softwood, living trees.	Subterranean or in trees or stumps.
<i>Coptotermes acinaciformis</i>	Whole of Australia except south-west Tasmania.	As above	Hardwood, softwood, living trees.	Nests almost anywhere. Mound builder in northern tropical Australia and tree dweller in other areas. Also sometimes subterranean. Very versatile.
<i>Schedorhinotermes intermedius</i>	N.S.W. Victoria, Queensland, Western Australia, Pacific Islands. Scarce in South Australia.	Two Soldier castes (large & small) with a pig like snout. Unpleasant odour given off as a form of defence when disturbed. Frequently creates cavities around each nail in flooring boards.	Mainly hardwood.	A fragile, delicate nest in buried timber such as an old stump.
<i>Heterotermes</i>	Australia in general.	Straight sided head with sabreshaped mandibles with curved tip.	Hardwoods and imported softwoods.	Small nests, often under stones.
<i>Nasutitermes exitiosus</i>	New South Wales.	Dark chestnut brown. Syringe shaped head.	Hardwood and softwoods.	Domed mound up to 1.2 metres high and 1.3 metres diameter at base.
<i>Nasutitermes walkeri</i>	Coastal from Sydney to Townsville.	Syringe shaped head. Dark brown colour. Soldiers shoot sticky liquid as a means of defence.	Hardwoods and softwoods.	Hard, dark brown to black nest in trees, usually in forks or limbs. Can be up to 30 metres above the ground.

This table shows the characteristics of the main pest varieties of Dry & Damp Wood Termites:

VARIETY	APPROXIMATE LOCATION	CHARACTERISTICS	FOOD PREFERENCES	NESTING HABITS
<i>Porotermes adamsi</i> <i>Calotermes</i> ● <i>insularis</i> ● <i>iridipennis</i> ● <i>rufinotum</i> ● <i>oldfeldi</i>	Throughout Australia, New Guinea and the Pacific Islands.	All closely related in habit and appearance, the main differences being variations in size and colour. Rarely attack a house but frequently found in sheds, barns, etc. No true Worker caste.	Living or dead trees or stumps. Mostly forest timbers. In Victoria the underfloor timbers of buildings with poor sub-floor ventilation can be attacked.	Lives in slit-like galleries tunnelled in the wood.
<i>Cryptotermes</i> ● <i>primus</i> ● <i>brevis</i> ● <i>queenslandicus</i>	Victoria, N.S.W. Queensland, New Guinea.	Require very little moisture. Slow breeders. No true Worker caste.	Dead or dry timbers. Furniture and building timbers included.	Lives in slit-like galleries tunnelled in the wood.

## DRY WOOD TERMITES

These differ from the Subterranean variety in that they have no true Worker caste and do not require such a controlled atmosphere to survive. Some warmth and humidity is required and this is why in Australia, they are normally found only on coastal areas, especially in Queensland.

They also swarm at certain times of the year but commence a new colony by entering a minute hole or crack in a piece of timber. Colonies are smaller in both number and size than the Subterranean. Dry Wood Termites generally tunnel in the timber rather than eating it out completely.

Small holes are made from the tunnel to the surface of the wood and through this the termites push their accumulated faeces. These tell tale piles of minute droppings found on skirting boards, picture rails etc. are often a very good means of detection.

The *Cryptotermes brevis* variety has a voracious appetite and can cause a surprising amount of damage in a short time. The other varieties generally are slower workers than the Subterranean Termite, however, because they are more difficult to detect they can go unnoticed for a longer period.

## CONTROL

The treatment method used to control Dry Wood Termites involves total fumigation of the infested timber, furniture or building. The item or area is covered completely with special gas proof sheets. These are sealed tightly at all joints and at ground level and then a specially developed insecticidal gas is injected into the enclosure. This gas works its way through all the timber areas, and into the nests of the termites killing the adults and eggs. This process takes 24 hours after which the covers are removed and the gas quickly dissipates. The whole operation is strictly controlled and carried out exactly in accordance with the relative regulations.

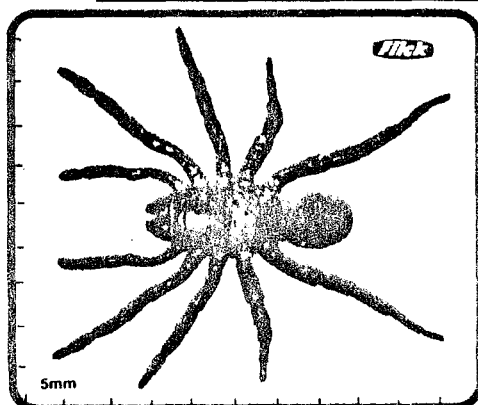
An alternative method which involves locating each colony and injecting it directly with an insecticide liquid may sometimes be used.

Neither of these treatment procedures involve the setting up of a chemical barrier and so do not carry any warranty against re-infestation.

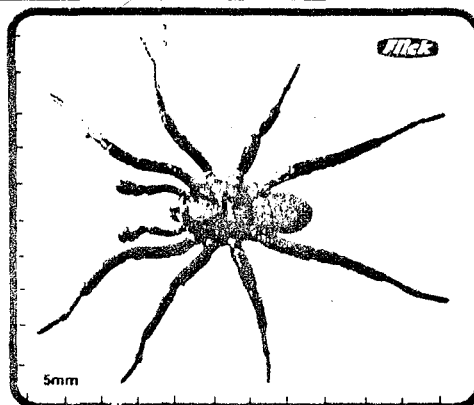
In all forms of termite treatment the safety of human and pets and the non-contamination of food and other materials is paramount. The control method used by Flick is always determined with these factors in mind.

# SPIDER CHART

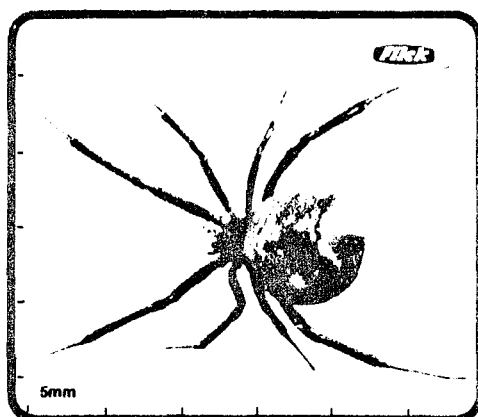
**AUSTRALIAN SPIDERS:** The majority of spiders in Australia are relatively harmless although most can inflict a painful bite which can cause infection. The venomous spiders (those which can cause death) are the Funnel Web (male and female) of which the male is the most deadly, and Red Back Spider.



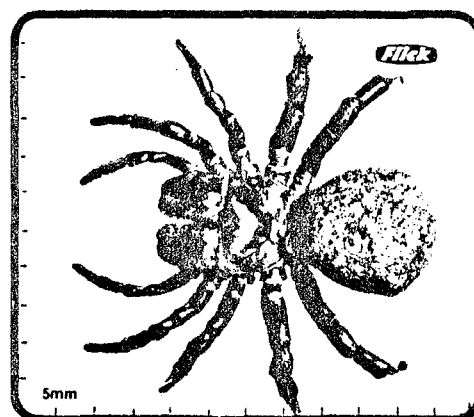
**Trapdoor (Female).** Approximately 25 to 35mm in body length. Dark brown in colour. Constructs a burrow in firm soil occasionally fitted with a lid. Identification points: Head section patterned with light honey colour; if visible, spinnerets are blunt and broad. Painful bite



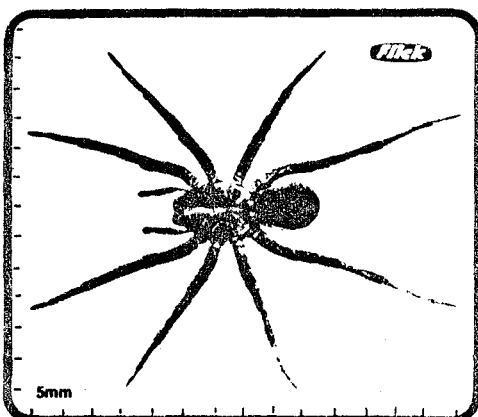
**Trapdoor (Male).** Approximately 20mm in body length. Dark brown in colour. Identification points: Similar appearance to female, except for smaller abdomen and large palps resembling boxing gloves which are located between head and first set of legs. Painful bite



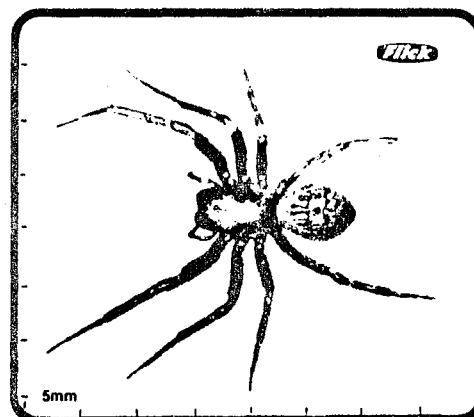
**Red Back.** Approximately 12mm in body length. Black to brown in colour. Constructs a loose tangled web around rubbish, sheds and under houses. Identification point: The top of the abdomen usually features a red flash, however in some instances it is indistinct or non-existent. Bite may prove fatal



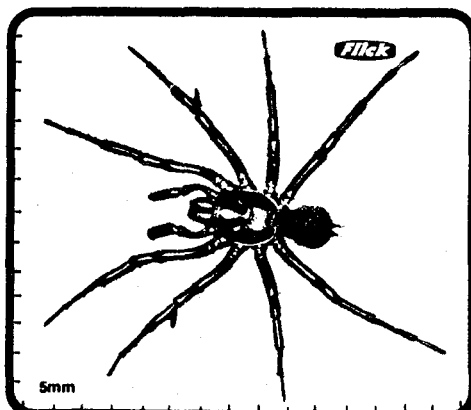
**Mouse Spider (Female).** Approximately 20 to 30mm in body length. Black to dark brown in colour. Constructs burrow with silken lid to a depth of 1 metre. Identification point: Much broader head section than female funnel web which it otherwise resembles. Painful bite.



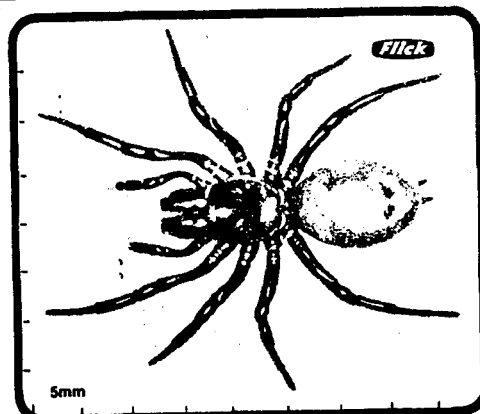
**Wolf Spider.** Approximately 20 to 30mm in body length. Many related species ranging from light to dark brown in colour. Lives in holes, often covered by leaf litter. Identification points: Variation of light and dark markings on body and abdomen; very fast running movements. Bite may cause infection



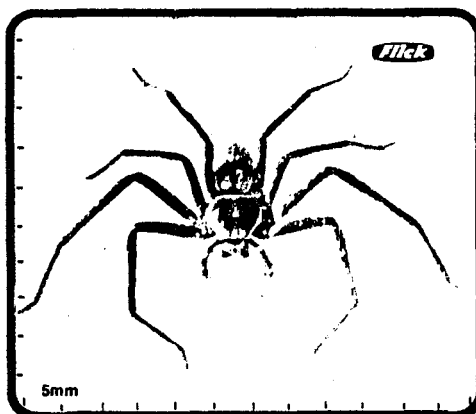
**Black House Spider.** Approximately 12 to 18mm in body length. Dark brown to black in colour. Constructs dense, funnel-shaped webs around windows, doors, etc. Identification point: Very distinctive grey or cream mottling on abdomen. Bite can cause severe discomfort and nausea.



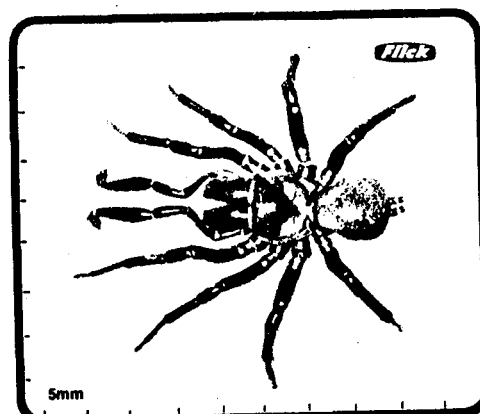
**Funnel Web (Male).** Approximately 25mm in body length. Black to very dark brown in colour. Identification points: Spur on second front legs, long slender spinnerets on rear of abdomen, shiny surface on the head and front section of the body. One of the world's most deadly spiders.



**Funnel Web (Female).** Approximately 30mm in body length. Black to very dark brown in colour. Each egg sac may contain up to 120 spiderlings. Constructs burrow in moist soil under houses, in rockeries, compost heaps etc. Identification points: Very similar in appearance, but more robust than male; has no spur on second front legs. Extremely venomous.

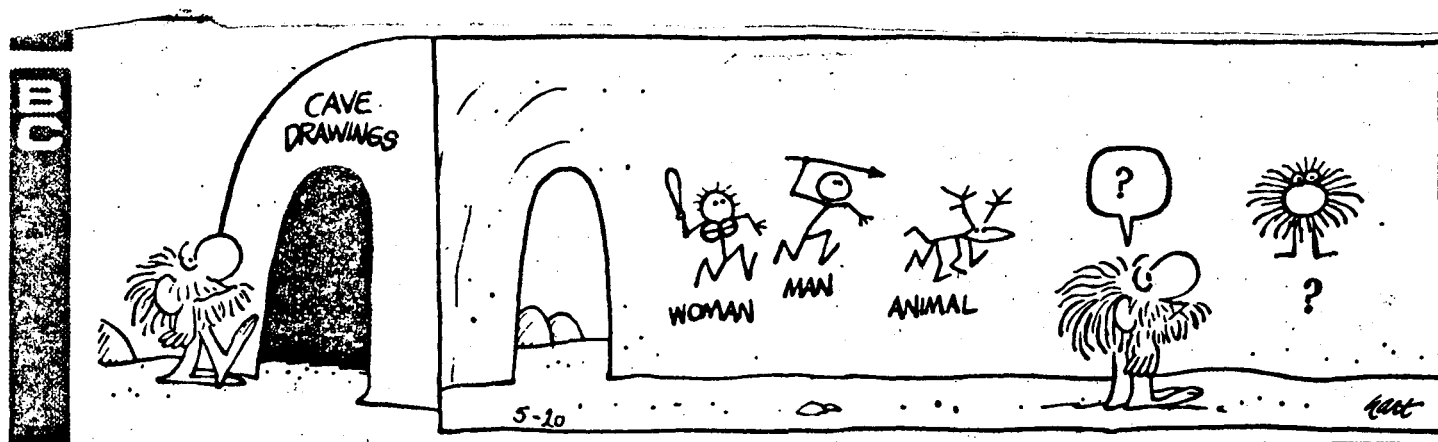


**Huntsman.** Approximately 20 to 35mm in body length. Light grey to dark brown in colour. Often confused with the "Tarantula" which is not found in Australia. Shelters in cracks and crevices. Frequents interior ceilings and walls. Identification points: Flat body; very long legs, quick moving. Bite is rare but painful.



**Mouse Spider (Male).** Approximately 20 to 35mm in body length. Dark blue to black in colour. Can be found some distance from burrow. Identification points: Forward body section can either be bright red or black; Sometimes a light blue patch can be evident on the forward part of the abdomen. Painful bite.

**FIRST AID:** All spider bites should receive prompt medical attention. If the bite is suspected to have been caused by a Funnel Web Spider, immediately apply a broad constrictive bandage (preferably a wide elasticised bandage). Bind directly over the bite then along the limb towards the body as far as possible. Apply at the pressure used to bind a sprained ankle. Keep the patient calm and still. Immobilize and do not elevate the bitten area. Transport patient to the nearest hospital. Try to capture the spider to enable identification which aids in the treatment of the bite.



REFLECTING ON B.M.S.C. By G. POWELL  
 \*\*\*\*\*

NEWCASTLE is a great place in which to live. Plenty of mountains, forests, rivers, beaches and lakes but there is a definite shortage of caves. Quite often I get to thinking about the old days with the BMSC and the good times and interesting places that we visited.

I recall the carefree days at Abercrombie, bedding down on the floor of the old Treharne place on the top of the hill. George lived at the Kiosk then. I remember mysterious night inspections following happy hours around the camp fires, often visited by 'Old' wombat. I remember Phil and myself hanging by our fingernails to replace light globes near the "palm tree". I'll always remember Gwen "daintily" forcing herself up through "Mother in-laws breath". Abercrombie was ours in those days. The ground trog to Copperhania proved fruitless but it was a beautiful area. The old lady who feared for her daughters chastity, as we trogged through her property, need not have worried. Even the most armorous B.M.S.C. male would not have given the girls a second look. Perhaps it was the chaff bag dresses that they wore.

Wyanbene was always wet. Barry drownd his Holden in the crossing and that made him get a Land Rover. Frustration Lake was always worth getting to and someone would always skimp down for a swim.

Bungonia was fun and apart from a few gates, no rules applied. The Oddessey was always popular and we used to do it with ladders only.

Jenolan was a happy place with drinks and chats with the staff in the common room after a hard days caving. Upper Oolite was the best, even if the getting there nearly killed you. Mammoth Flat was a great camp site and handy to the caves.

We didn't find any caves at Hollander's River but we had some nice walks. We discovered a sick kangaroo which died, even after a pampered night in the rear of a Land Rover. We also discovered that Lionel has a district dislike for cattle. This also becomes evident at Kempsey.

The Kowmung in flood defeated our first attempt to reach Church Ck. by walking from Kanangra. We made it next time through the snow with Graeme's Suzuki.

I recall the "day of the thistles" at Walli where I had to stand on the roof of the car to find out where I was.

Cliefden has so many memories its difficult to write about them all. There were wet days, magniticent caves, losing the 'Boot', grass skiing, Womans Weekly, cold water, sheep, thistles,

mud, Phil, kids, loaded beds, loaded floors, loaded verandahs, history, cold keys, muddy locks, frozen hands, and on and on and on.

Can you remember the spotted jocks in upper Oolite, the phalactites in Wyanbene, the table dance at Cliefden, Bushrangers at Abercrombie, All in the pool at Monica's Restaurant, The Ghost House, Budthingaroo, The Sewers, the Spanish Inquisition, Floodlights in Cliefden, getting lost in the Boot Room, the AGM on the dance floor at Abers., getting lost in the mist at Boyd River, Barrington Guest House, Pilchers Hill, Freeze dried samples, cheap Bluewater, plastic belts, Good times with B.M.S.C. !!!!!





SO YOU THINK YOU'RE SMART -

If your ego needs to be brought back to earth try the following puzzle. It may not make sense at first reading but the entire puzzle is completely logical and solvable. It requires no special information or knowledge other than what is given in the general information. If you can solve this in under one hour you may be a candidate for Mensa (the high IQ society).

GENERAL INFORMATION

The puzzle concerns a farm that has been in the Dunk family for some years. A part of the farm is a rectangular piece of ground known as Dog's Mead. Additional background information: The year is 1939 : 4840 square yards = one acre : 4 roods = one acre : twenty shillings = one pound. No answer begins with a zero.

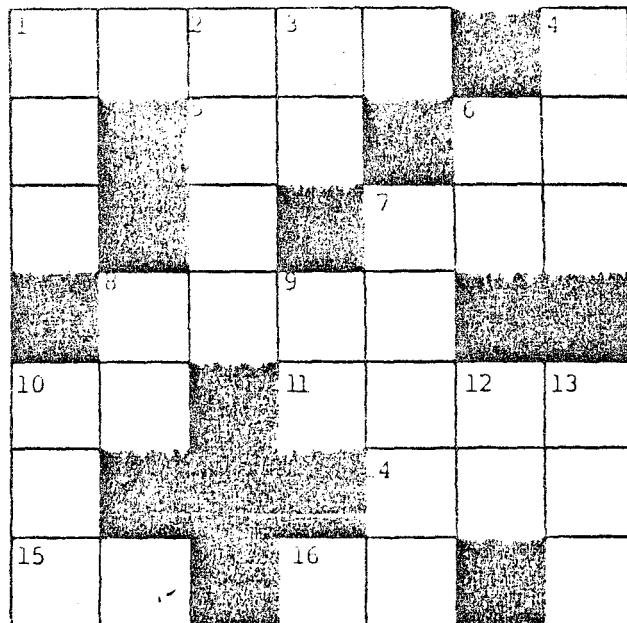
GOOD LUCK - YOU'LL NEED IT!!!

Across

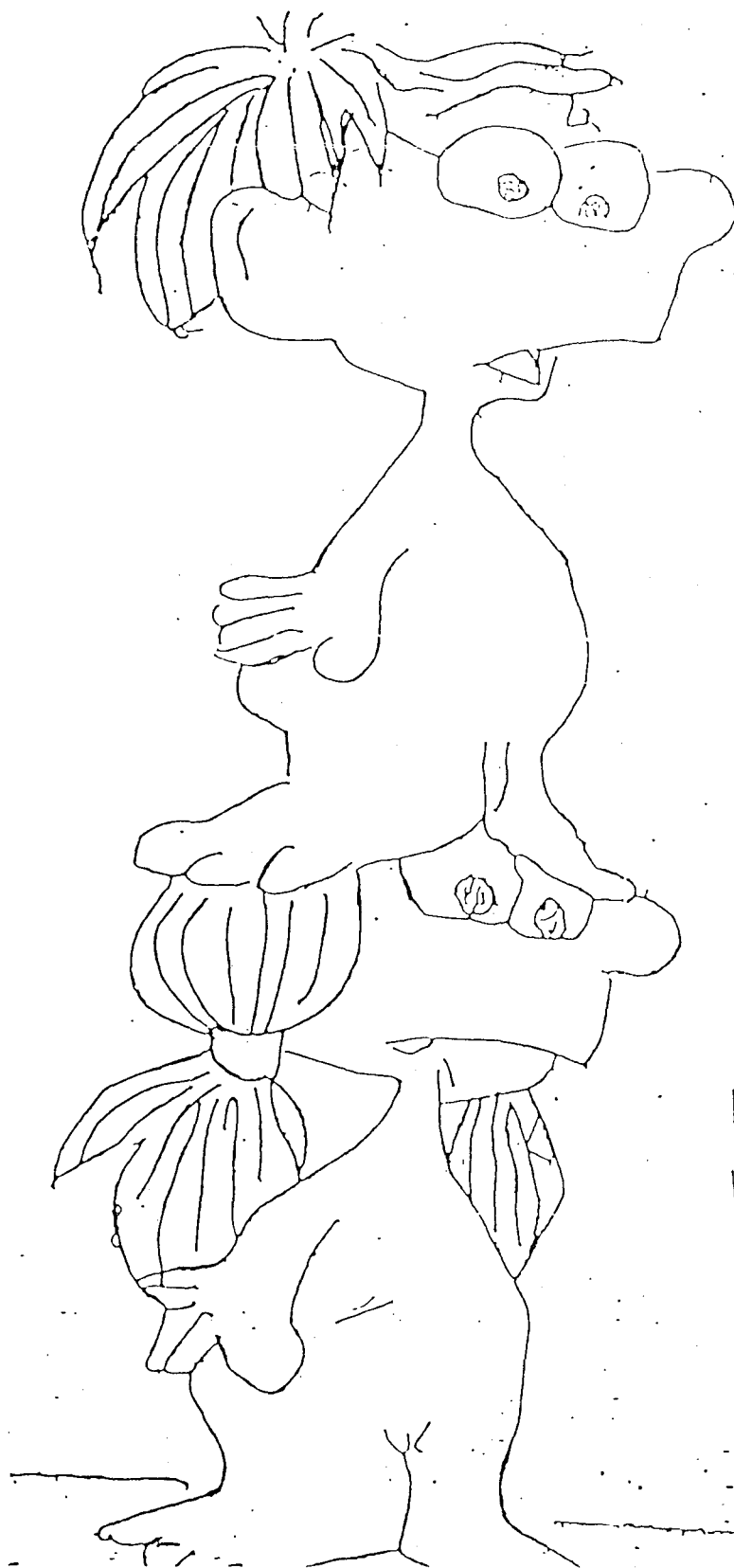
1. Area in square yards of Dog's Mead
5. Age of Martha, Father Dunk's aunt.
6. Difference in yards between length and breadth of Dog's Mead
7. Number of roods in Dog's Mead times 8 down
8. The year the Dunks acquired Dog's Mead
10. Father Dunk's age
11. Year of Mary's birth
14. Perimeter in yards of Dog's Mead
15. Cube of Father Dunk's walking speed in mph
16. 15 across minus 9 down

Down

1. Value in shillings per rood of Dog's Mead
2. Square of the age of Father Dunk's mother-in-law
3. Age of Mary, Father Dunk's daughter
4. Value in pounds of Dog's Mead
6. Age of Ted, Father Dunk's son, who is twice the age of his sister Mary in 1945
7. Square of the breadth of Dog's Mead
8. Time in minutes it takes Father Dunk to walk  $1\frac{1}{3}$  times around Dog's Mead.



9. The number which, multiplied by 10 across gives 10 down
10. See 9 down
12. Addition of the digits of 10 down plus 1
13. Number of years Dog's Mead has been in the Dunk family.



OKAY, WE TOOK OFF  
OUR CLOTHES... I GOT  
ON TOP OF YOU... HOW  
SOON TIL IT STARTS  
FEELING GOOD?

I DON'T KNOW, BUT  
I'VE GOT A HEADACHE  
ALREADY!

# Fancy Dress

Reported by Carol Skinn, May 1985.



I would like to start this report with a BIG THANKYOU to all our members who attended the recent screen printing and Fancy Dress party and games night.

There was a various array of characters, ranging from little rabbits and clowns to BIG rabbits and clowns. The great JC, Robin hood and Maid Marion were there and also the Black Widow, a Hula Dancer ( Skirt only;; ), a member from our Defence Forces and to ensure that the party was kept in order from the gangster and cowboys we had a Japanese Ninja and a Black Belt Judo representative.

The games night was a lot of fun. Everyone tried their hand with such games as Charades and Blankety Blanks, which proved to be quite interesting at times.

All in all the night was a great success. Thank you to our hosts Steve and Rhonda for allowing their home to be used for such an occasion. Brave people if you ask me.



# Snake Bite

By Terry Coleborn

An effective bite from a venomous snake if untreated with specific antivenene, will result in death in a high proportion of cases, depending on the type of snake involved. For example a bite from a Taipan will be fatal in practically every case, where as a Tiger snake has about a 45% fatality rate. Occasionally, victims die because of either geographical isolation from medical aid or because they receive massive sudden envenomation with the snake striking into highly vascular tissue, or into large veins.

Australian snake venoms are amongst the most complex in the world and are particularly rich in potent nerve poisons ( neurotoxins ). Tiger snake venom for example, has at least 3 distinct and seperate neurotoxins. These venoms can produce:-

- a. paralysis of respiratory muscles,
- b. desintegration of red blood cells, and
- c. internal bleeding.

The primary reason for death of snake bite victims are:-

- a. Ineffective or no First Aid,
- b. no support of respiration, where respiratory failure occurs,
- c. failure to report to a Doctor for treatment, or
- d. no antivenene available or not administered by hospital staff.

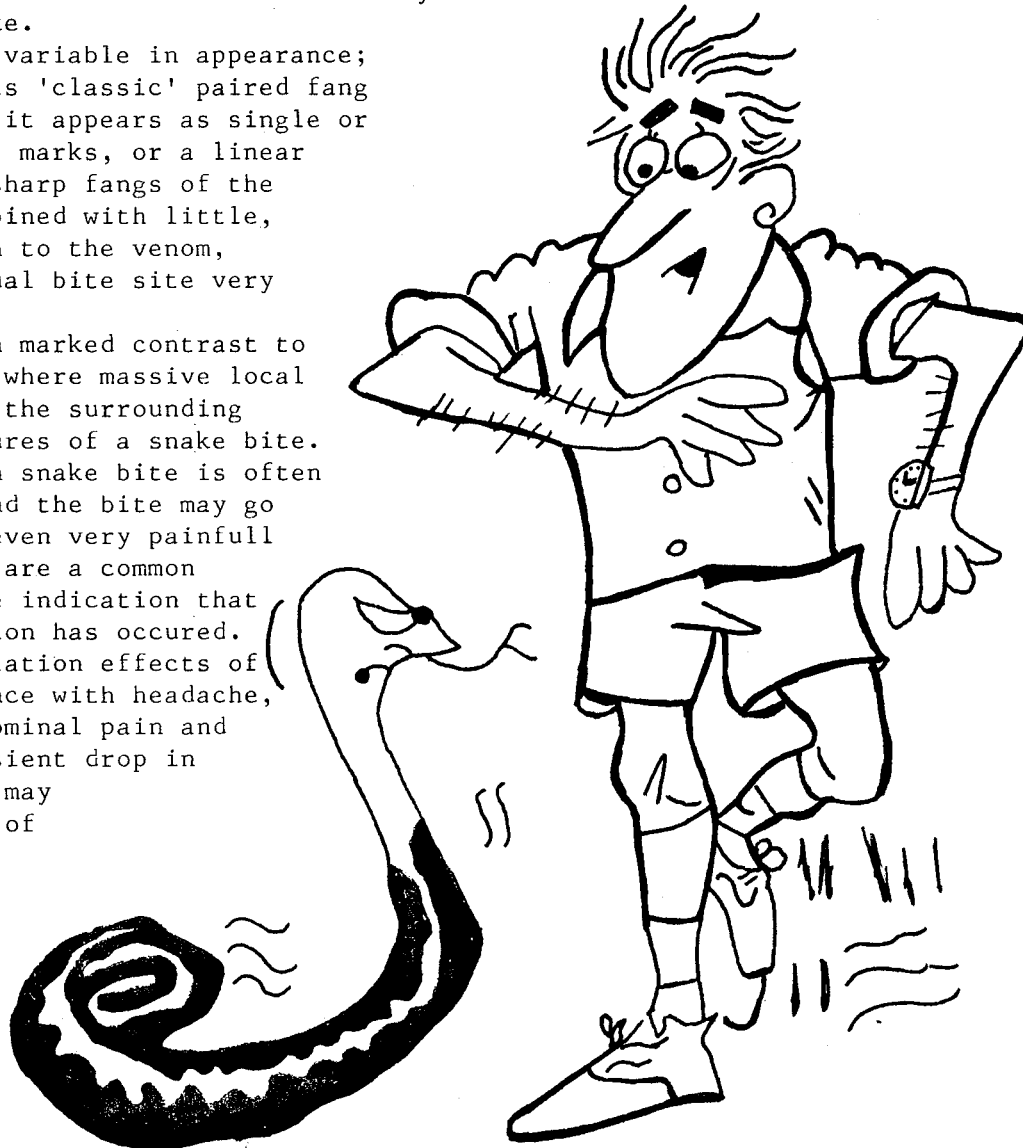
The indication of snake bite are many and varied and no two cases are exactly alike.

The bite site will be variable in appearance; sometimes it appears as 'classic' paired fang marks, but frequently it appears as single or multiple ( up to six ) marks, or a linear laceration. The find sharp fangs of the Australian snakes combined with little, if any, local reaction to the venom, often renders the actual bite site very difficult to find.

This is in marked contrast to many overseas snakes, where massive local reaction and death of the surrounding tissue are often features of a snake bite.

Australian snake bite is often relatively painless and the bite may go unnoticed. Tender or even very painfull regional lymph glands are a common feature and a definite indication that significant envenomation has ocured.

The circulation effects of snake venom may commence with headache, nausea, vomiting, abdominal pain and a sudden perhaps transient drop in blood pressure, which may cause a partial loss of consciousness.



Neurotoxic effects are usually first apparent as difficulty in opening the eyes, blurred or double vision preceeding other facial paralysis. Widespread muscle weakness often occurs and the diaphragm may be progressively paralysed. Abdominal pain if it occurs, may be quite severe due to a combination of factors such as lymph gland involvement, direct effect on the gut muscle or the abdominal muscle, haemorrhage and changes in the excretory activity of the kidneys.

Alcohol and snake bite are a bad combination because alcohol tends to mask the symptoms of the snake bite and the real reason for the patients' condition may not be discovered in time. The stories of drunks and snake bite abound and one true tale tells, of a drunken fellow who was bitten by a Brown snake, so he returned the compliment. He arrived in casualty holding a well chewed snake and promptly collapsed, having succumbed to the combined effects of alcohol and snake venom.

Road accidents that occur for no apparent reason are at times the result of a snake bite and the treatment of such an accident victim can be very difficult.

Most Australian snakes with the exception of the Death Adder, are shy and tend to discreetly take cover if they are approached. However, if they are threatened they will attack with speed and accuracy. Thus a sleeping or a retreating snake should be left alone and in fact every effort should be made to avoid any snake, and the collecting or killing of snakes is best left to the experts.

Most snakes tend to laze in the sun during the day and hunt during the cooler hours, there for extra care should be taken when camping, in particular protective footwear should be worn and ones' hands should never be put into logs or long grass without prior inspection.

At least 70% of snake bites occur on the limbs, while bites to the head, neck and trunk are rare. The venom is deposited on and under the skin and spreads locally quite rapidly. Experiments have shown that the old treatment of cutting the bite area removes very little venom and only complicates the problem.

Time is a factor to be considered with snake bites. The majority of patients are admitted to hospital within 2 hours of the bite and at this stage their condition is not usually critical. In the days before antivenenes, at least 2 out of 3 cases which ended fatally survived more than seven (7) hours after the bite.

Further experiments have shown that if a bandage was wrapped firmly around the limb, where the venom was injected and the limb was kept still very little venom would move up the limb. The venom is trapped under the bandage and stays put while the bandage is in position. This bandage could be left on for hours if necessary and causes neither pain nor damage to the limb.

#### THE FIRST AID FOR A SNAKE BITE VICTIM IS AS FOLLOWS:-

- a. Apply a BROAD pressure bandage over the bite site as soon as possible ( don't take off jeans as the movement of doing so will assist venom to enter the blood stream. Keep the bitten leg still).
- b. The bandage should be as tight as you would apply to a sprained ankle, and you should extend the bandage as high as possible.
- c. Apply a splint to the leg and bind it firmly to as much of the leg as possible.

- d. Reassure the patient to reduce apprehension and fear. Anxiety left uncontrolled increases blood pressure and again risks the release of venom into systemic circulation.

NOTE:- If washing the area of the bite will help to calm the victim then by all means do it but it is no longer a necessary first aid step.

Washing the area will not effect the chemical identification of the snake venom as it is possible for the doctor to discover the type of snake venom by one of several means;-

1. From the clothing near the bitten area.
  2. At the bitten area itself.
  3. In the blood.
  4. In the urine.
- e. DO NOT INCISE OR EXCISE THE BITTEN AREA. Since venom is rapidly diffused in the tissues, it is usually no longer in the area of the bite by the time the instrument is located to perform the incision.
  - f. Transfer the casualty safely and calmly to the nearest hospital. If possible alert the hospital to the situation to enable them to prepare.
  - g. Maintain constant observation of the casualty for signs of respiration failure. The early effects of the venom will cause paralysis of the respiratory muscles. If respiration fails, commence expired air resuscitation to support breathing.

No longer is it necessary to delay transportation of the casualty so as to kill the snake for identification. This is now possible at the hospital with a 'Venom Identification Kit'.

#### Bibliography:

St. Johns Ambulance Association & Brigade; First Aid:

Sutherland, Dr. Struan K; 1982: Venomous Creatures of Australia, A Field Guide with Notes on First Aid;

Sutherland, S.K.; 1980: "The Biochemistry and Actions of Some Australian Venoms with some Notes on First Aid: Chemistry in Australia; Vol. 47, 51-6:

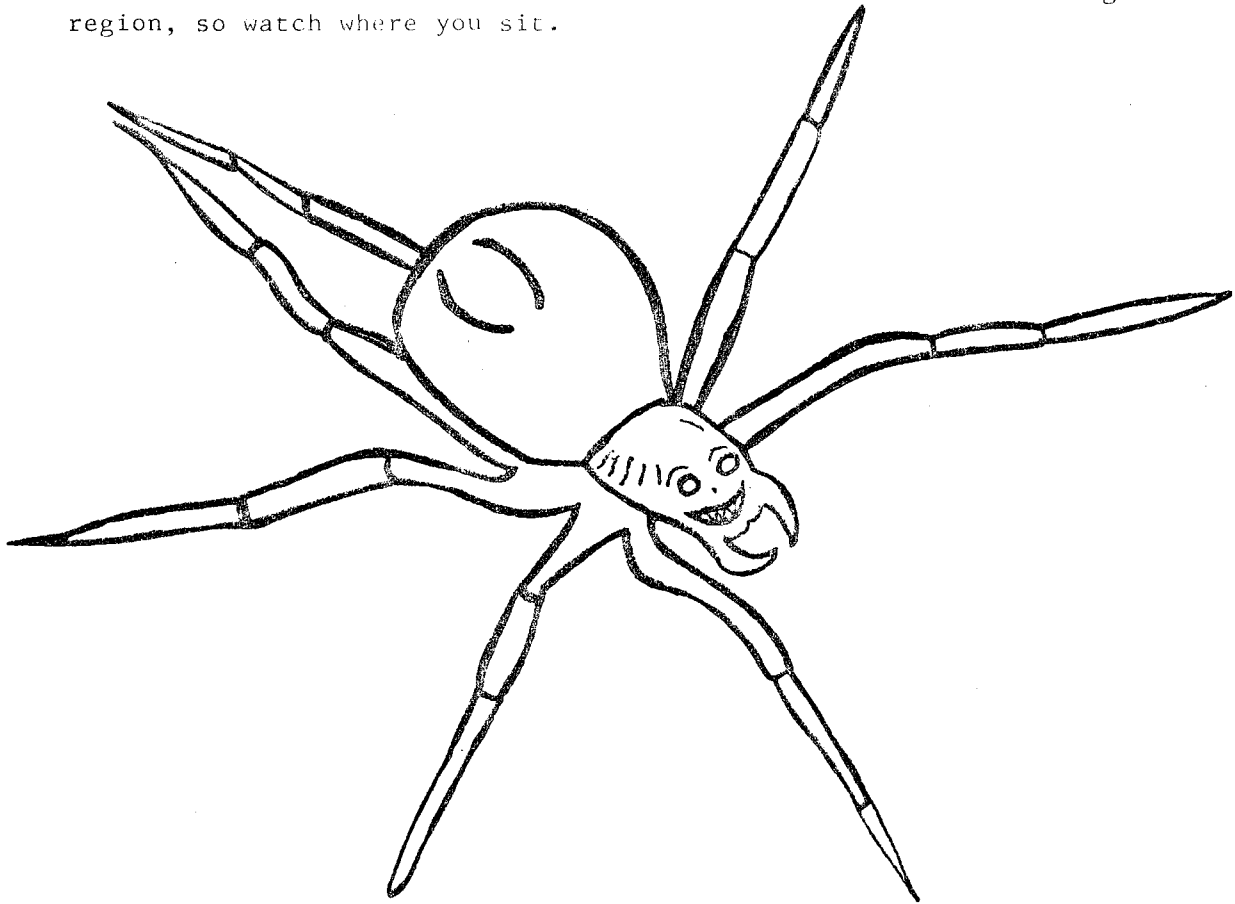
# Red-Back Spider

By Terry Coleborn

The Red-Back Spider is a close relative of the 'Black Widow' and the Katipe ( which is a New Zealand spider) and it is found in all States of Australia.

Only the female is potentially dangerous as the male is quite small and relatively harmless. The Red-Back spider is not normally aggressive and will only bite when cornered or when guarding her egg sacs.

A national average of 230 cases per year makes the Red-Back spider bite a common occurrence in Australia with the greatest number of bites occurring during the Summer. The majority of bites occur on the extremities at 65.3% and another 21.9% occur on the buttocks and genitals region, so watch where you sit.



The bite is usually very painful and the pain frequently spreads to the whole limb. The second, common feature, is perspiration which commences at the bite area and progresses to become generalized. Nausea, vomiting and signs of generalized venom spread, including progressive muscular weakness may develop.

Children and the frail or elderly may die if specific anti-venene is not administered, while a healthy adult will be very sick from the bite but will probably not die even if antivenene is not administered.

## FIRST AID:-

The venom of this spider moves very slowly and any attempt to slow it down further increases pain so no restrictive bandage should be used.

Seek medical aid at once and if possible take along the spider in a jar for positive identification.

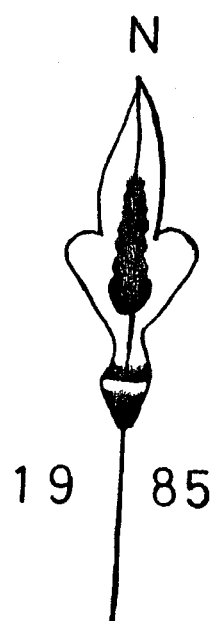
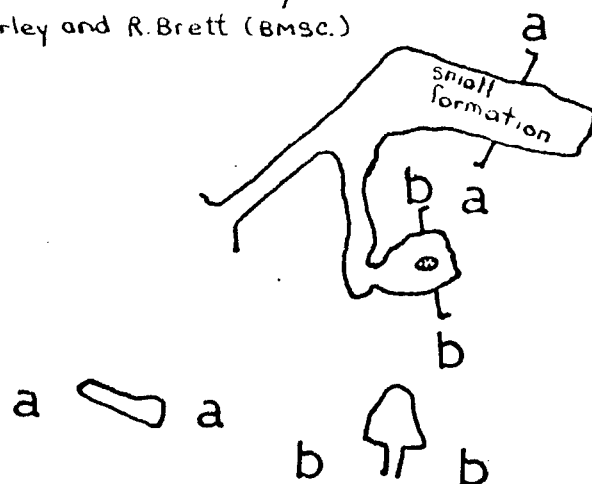
Iced water made by mixing ice and water in a plastic bag applied to the bitten area may reduce the pain - but do not freeze the skin.

## CLIEFDEN N.S.W

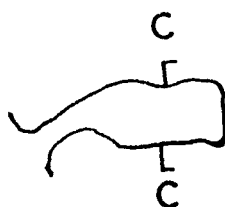
Scale 1:200

## CL 97 Northgate

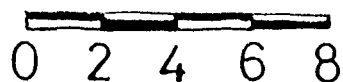
Entrance discovered May 1981  
by J. Chorley and R. Brett (BMSc.)



## CL 19 Eyrie



Metres



Surveyed by R. Brett and  
K. Coleborn, APRIL, 1985.  
Drawn by R. Brett and  
L. Coleborn June 1985.

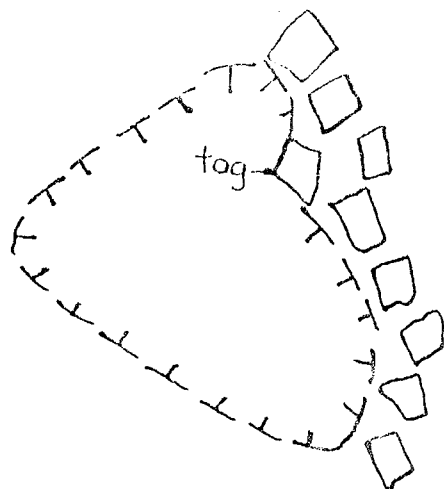
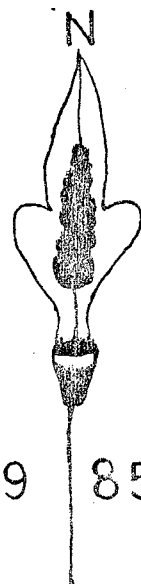


CLIEFDEN N.S.W

Dolines on Transmission  
Bluff

Scale 1:200

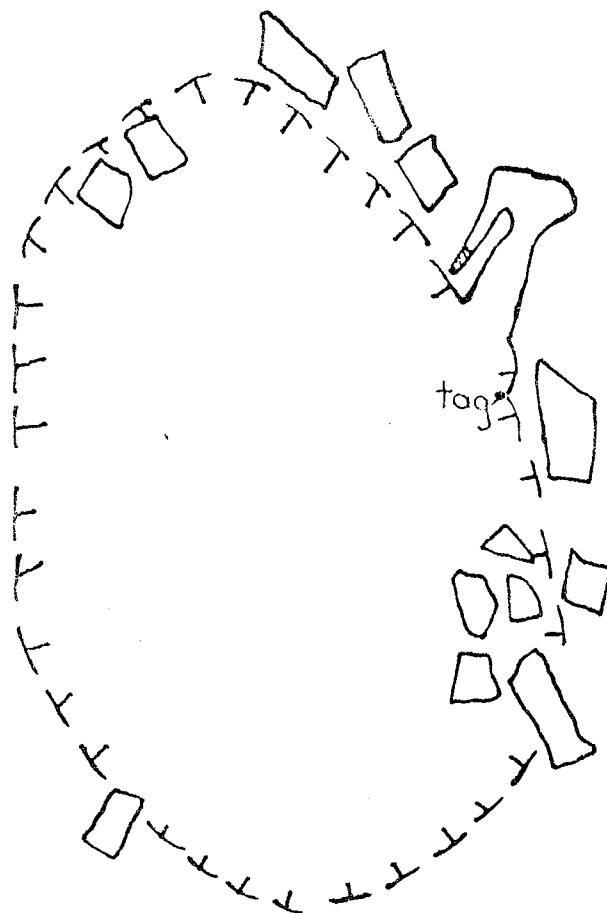
19 85



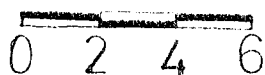
CL 23 Doline

CL 22 Doline

Surveyed on 6-4-1985  
by members of B.M.S.C  
Drawn 11-4-1985 by  
T. Coleborn and L. Coleborn



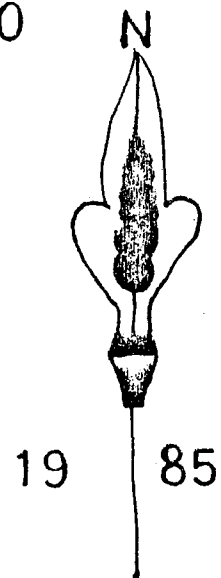
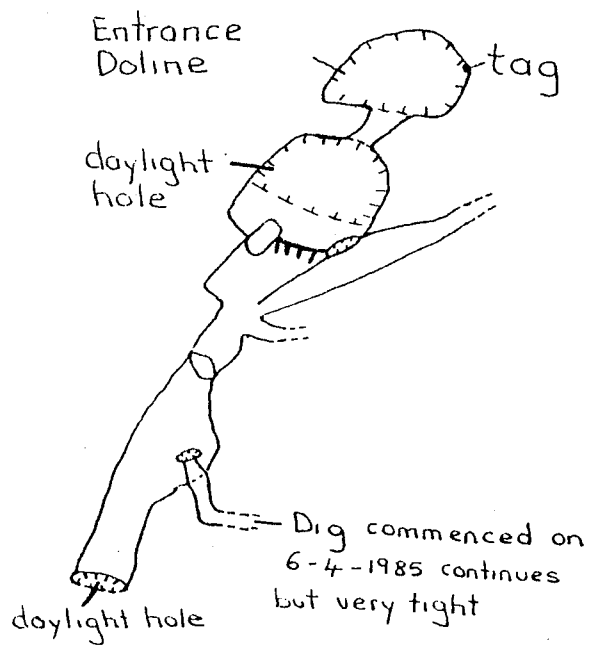
Metres



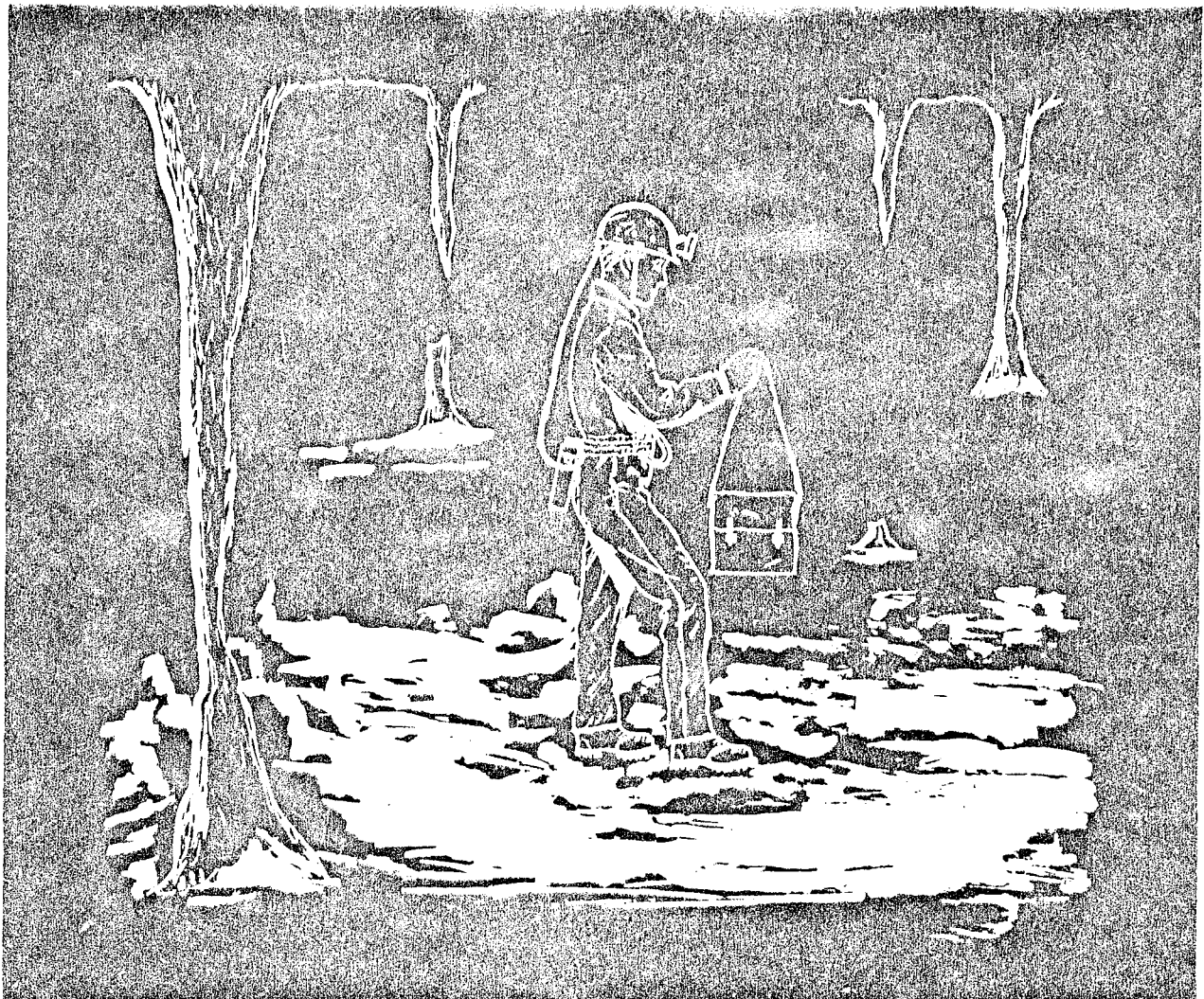
## CLIEFDEN N:S:W

CL 21

Scale 1:200



# TRIP REPORTS.



UNLESS THE AUTHOR OF A TRIP REPORT IS SPECIFICALLY MENTIONED,  
AUTHORSHIP MAY BE ASCRIBED TO THE TRIP LEADER.

BILLYS CREEK CAVES

Date: 30th January - 1st February, 1982.

Aim: Investigation of Billys Creek Area.

Members Present: G. Cummings, T.L., J. Charley, R. Brett.

We walked into the cave area previously found by myself via Colong Saddle from Colong Swamp and set up camp. This is upstream from the area marked on all maps, which on investigation appears to have no caves. The only sign of limestone is a ridge of limestone coming from Mt. Billy down and across the creek and up the far side.

Below the second limestone site there appears to be an efflux issuing from under a limestone bar across the creek. Above this bar there is no water in the creek but below the creek begins to flow.

Along the base of the limestone bluff there are a number of obvious cave openings which we proceeded to check out. The ones of any importance we numbered for our reference.

The first BC2 was entered but due to the presence of water in a duck-under was not explored far. The second BC1 was entered only to find passages filled with earth. This was successfully removed to gain access to a cave of a fairly extensive nature, possibly never before entered by man.

There were numerous other small openings in the base of the bluff which were either too small or petered out.

The next morning was spent surface trogging, but except for one cave BC3 high up on the hillside there appears to be nothing of any significance. There appears to be many possible holes, dolines etc but on closer inspection are nothing. After lunch we reentered BC1 armed with cameras and proceeded to explore further with Jack braving the cold water to see if there was any way on past the lake, but to no avail. After leaving we entered BC2 again and after going through the water in the duck-under we found another lake, possibly connects with BC1, but once again were unable to find any way on due to the high level of water. When I was here earlier the water was right down and there appeared to be a passage leading off from the far side of the lake. We decided to return at a later date after a dry spell to explore further. On reaching the surface we were greeted by rain.

The next morning it was still raining so we decided to move out and return to the car. We left for home with detour via Yerranderie for a quick look at the old mining areas.

This cave area will require a return visit at a later time in order to survey and further explore the caves found. A full description and location details will be available when this is completed.

JENOLAN

Date: 20th March, 1982.

Aim: Gating Survey.

Members Present: T. Ellis, T.L., T. Matthews, J. Charley, R. Brett.

For one reason or another the trip was reduced to one day and we arrived at the Guides Office at approximately 9.30 am.

After discussions with John Cully it was decided to descend past the Fire Brigade Building and follow the newly erected fence which form the Wallaby Enclosure. This leads to a small gully which opens just to the downstream side of Alladdin Cave.

We first inspected Alladdin. Removal of loose stones to the left of the gate showed that it was possible for average sized adults to gain entrance to this cave. The gate itself seems adequate.

Next inspection of Rho Hole showed that an adult or medium sized child would not be able to pass the gate.

A look at Glass entrance suggests that the gate is secure but the size of the chain seems inadequate.

Then Ian Carpenter Cave was inspected and a design for its gating formulated. Seen while inspecting same were the names V. Wirburd and Cooke ..93.

At approximately 6.30 pm., after filling in the book at the guides office and further discussion with John Cully we left for home.

XXXXXXXXXXXXXXXXXXXX

CLIEFDEN

Date: 1st - 2nd May, 1982

Aim: Continue survey in Taplow Maze.

Members Present: T. Coleborn, T.L., L. Coleborn, B. Skinn, C. Skinn, R. Brett,

Ricky, Louise and myself arrived Friday night. Carol and Brian arrived on Saturday morning.

Saturday was spent in the O. Section where we have now completed the detailing of this section. Sometime was spent on the dig which added another 6 metres of passage to the cave. We were unable to find any likely way on but as the map shows it is only a short distance from O. Section to the large chamber at the end of H. Section.

Before returning to the hut Brian got out his divining rods to see if they work on underground passages. It seemed to work on some of the sections as where he said there was a cave, matched with our surface survey to the main sections of the cave carried out the month before.

After tea we went outside and tried the divining rods on the underground pipes. Divining seemed to work for all but Louise and Carol. Brian said it didn't work for them because they were disbelievers but to me it is quite logical it didn't work because there females.

On Sunday I had some business in Blayney so Brian, Ricky Kevin and Louise set out for Taplow. They had been given the H.Section to survey. There is method in my madness, they spent the next six hours crawling and grovelling in mud surveying the low passages. You could easily tell it was muddy you should have seen the survey they gave me when I got back.

XXXXXXXXXXXXXXXXXXXXXXX

CLIFDEN

Date: 12th - 14th June, 1982.

Aim. Continue Taplow survey.

Members Present: T. Coleborn, T.L., L. Coleborn, R. Brett, B. Skinn, C.Skinn, J. Charley.

Due to a heavy storm during the night it was necessary for us to walk from the hut and thank God there weren't any of those B..... thistles.

Underground we headed for the Railway Tunnel and commenced the surveying and detailing of the S.Section now known as 'Snake Hole' and also a passage running parallel to the Railway Tunnel.

We then headed to the M.Section where we had some unsurveyed passage. Due to a designed fault in this passage, it wasn't my size, so Rick, Jack and Kevin had to do the survey, while I crawled back to the C.Section to wait for them.

While exploring in the M.Section in a small hole running underneath Taplow Station we found our long lost tree frog, which now has been marked and will be referred to as Litoria caerulea 1-2. He is looking very skinny compared to the first time we saw him in June, 1981, we will have to make a concerted effort to find his source of food, if any.

That evening was spent around a huge bonfire which the kids had built during the day and we enjoyed our cracker night which is almost a Cliefden tradition for B.M.S.C.

Sunday I sent Louise in with a party to detail the K and G Sections and they are now completed. I have never been to these sections but I must have a look as they came back with such names as 'Impossible Dream', Jutt Point, Pot Belly, and Rat-a-combs. They reported that they had found a lizard skeleton in a small alcove between K1 - K2.

It has come to my notice that with the hours Ricky Breet has spent underground this weekend he has become eligible for Trip Leader Status. Therefore I would like to have the pleasure of nominating him for acceptance by the Committee as a Trip Leader.

Ricky has been on 13 trips which I have led as a Trip Leader over the last eighteen months. He has shown that he is a very dedicated sensible and reliable member of our club. He has shown me he possesses all the skills required to be a competent Trip Leader and I am sure all other members who have caved with him will agree.

CLIEFDEN

Date: 3rd - 4th July, 1982.

Aim: Continue the Taplow Survey.

Members Present: T. Coleborn, T.L., L. Coleborn, R. Brett, J. Leonard.

Saturday morning after a late start we made our way to the Railway Tunnel to complete the detailing. John and Ricky checked out the roof of the tunnel, unfortunately it doesn't seem to go. But I would say "Thank Heavens" because I for one would find it impossible to repeat John's climb. Ricky climbed above the Saddle to check a lead and discovered some very large and unstable boulders that didn't like being pushed around. They are still up there but I would not advise anyone to tamber with them.

After completing this area we then detailed the number line back to Stat. 20 and then headed out for the day.

Sunday we spent the day detailing the J.Section now named Land of Mordor. The J.Section is very variable, some areas are extremly muddy while other areas are about 20cm's deep in loose coarse sand and calcite, which is hard on the knees.

The sump at J19 is dry and the surface is covered with thin calcite rafts. The sump at J13 is also dry at present but it did have water in it at this time last year. There is a small alcove at the end of the passage from J9 which has a small group of very tiny helictites, the largest being only 3mm. in length. There is also a possible extension in the rift area above the Throne Room.

Before leaving for home we replaced the burnt out element in the stove at the hut, which was removed the previous survey weekend.

XXXXXXXXXXXXXXXXXXXXX

JENOLAN

Date: 10th July, 1982.

Aim: To explore Great North Cavern and Twiddly-Om-Pom.

Members Present: Jack Charley, T.L., Ricky Brett, Graham Cummings, Geoff Baxter, Ted Matthews, Tony Ellis, Richard Hyslop,

Visitors: Teresa Brett and Janelle Comerie.

Arrived at the Guides Office by 8.30am and checked in, trogged up and headed off for the Mammoth Cave entrance. We all went through to the Railway Tunnel where we split into two groups, Ted took Tony, Richard and the girls into Naked Lady Chamber, then south and ended up at Lower River and then out with seven hours credit. I took Rick, Graham and Geoff in the opposite direction and we walked, crawled, slithered and slid our way along the torturous passages that led to Great North Cavern. We searched for about an hour for the entrance to Twiddly-Om-Pom and at last Graham was successful, a well disguised hole behind a rock with a difficult squeezey entrance.

Then when we finally got down into it, what a disappointment, just a couple of passages with stream bed floors, some feasible digs but only to be blocked again by water action on silt and pebbles. on the way out I could not get past the entrance squeeze on the rope, Graham tried and was just able to get through, then he repositioned the rope and helped us out.

We had left food at the Dry Siphon to nourish ourselves on the way out and it was great, hot soup and coffee was delicious. Eventually we came to the surface 11.5hrs. hence very tired and muddy. We all headed back to Barry Richards and spent the night.

XXXXXXXXXXXXXXXXXXXXXXX

#### CLIEFDEN

Date: 30th, 31st July - 1st August, 1982.

Aim: Photography and Surveying.

Members Present: Lionel Baker, T.L., Brian & Carol Skinn, Ricky Brett, Tony Ellis, Ted Matthews, Terry & Louise Coleborn.

Visitors: M & C Murray, John Leonard, Richard Hyslop, Mark Warburton, Kris Warburton, Peter Kuypers, Gary McGuigan, Allan McClellan.

Saturday morning saw one party head off to Trapdoor for survey work in a new passage which they had found, while the rest of us went into Main where photos were taken and a bit of exploring was done. On the way out we met Carol leading the new members in to meet us.

Sunday saw one party off to Malongulli while I lead a party into Main for continuing exploration. Sunday night some of us went over to Trapdoor to get some photos of the Blue Lake. On the wall of the passage to the right were marked the names R.E.Davies, Acadia via Orange, A.W.H.Davies, which I didn't see last Christmas when we were in here.

Monday with most of the group gone home for work, the rest of us headed down for a trip through Murder.

XXXXXXXXXXXXXXXXXXXXXXX

#### CLIEFDEN

Date: 7th- 8th August, 1982

Aim: Continue the survey on Taplow Maze.

Members Present: Terry Coleborn, T.L., Louise Coleborn, Ricky Brett,

Visitors: Rodney Cochrane, Kevin and Gary Coleborn.

We were underground by 8am. and headed straight for the Q.Section. This meant going down Rocky Point Road and I still had the bruisers from last month. Q.Section is decorated with cave coral which is very rounded and mostly orange-brown with some pure white. There is a small alcove where there is three small straws 6cm's in length which are very unusual as they are pure black.



Considering the little rain the area has had over the last twelve months and the dry dustyness of the rest of the cave the Q.Section is very wet with water dripping from the formations.

After we finished the Q.Section we headed on out and checked a few leads off the Ante Room. Then we detailed Ricky's Hole a small passage off H.8. Firstly I had trouble finding where it went off, so I said to Rick, "I know Ricky's Hole goes off at H.8 but where is it", and he said, "up there", pointing way up above my head. "I know this is going to sound silly but how do you expect me to get up there". Rick then climbed up on a large rock about 1.4m from Ricky's Hole and said "with some difficulty", and I could well believe it as he climbed across and there wasn't any hand holes or foot holes that I could see. So I climbed up and believe you me it is all pressure holes, I used everything from behind to my knees and shoulders. Finally I was up and was able to do the detailing. By the way the climb down is not nearly as bad and it was a great deal faster.

I am beginning to wonder at the way Terry delegates my days and areas to survey. They are always tighter, muddier and grottier.

Reported by Louise Coleborn.

XXXXXXXXXXXXXXXXXXXXX

#### CLIEFDEN

Date: 4th - 5th September, 1982

Aim: Continue with the Taplow Survey:

Members Present: Terry Coleborn, T.L., Louise Coleborn, Brian Skinn, Carol Skinn, Ricky Brett, Janelle Comerie, Jack Charley.

This being one of the rare occasions when we had more people than we knew what to do with we headed into the M.Section and set to work as two teams to complete the detailing.

While detailing we came across the remains of Green Tree Frog L.C.1-2 which was found under Taplow Station. He was partly decomposed with several small white creatures near the body.

Sunday we again divided into two parties to detail the L.Section. The L. Section is a very tight rift area with interconnecting passages. It is pretty in places and tight and awkward in others.

After cleaning the hut we then headed for home.

XXXXXXXXXXXXXXXXXXXXX

BUNGONIA

Date: 11th - 12th September, 1982.

Aim: Exploration of B-4-5 Extension.

Members Present: Ricky Brett, T.L., Louise Coleborn, Terry Coleborn, Brian Skinn, Carol Skinn, Janelle Comerie, Mark Warburton, Gary McGuigan, Jack Charley.

Visitors: Allan and Robyn.

Jack, Janelle and myself arrived late Friday night, closely followed by Mark, Gary, Robyn and Allan. Next morning we met Terry, Louise, Brian, Carol and the kids at the Grill car park. We then set off to Fossil car park and gathered all our gear together and headed for the cave full of enthusiasm.

Once in the cave Jack set up the first ladder pitch with myself leading on and making sure everybody made it down safely. After everybody had negotiated the ladder we headed off to the first small, but difficult squeeze, which had some choice words said about it. Once on the other side of the squeeze we came into a small chamber, which is where the B-4-5 Extension heads off.....

I looked down the entrance to the extension and got the shock of my life as it was as small as the Bungonia book had suggested.

At this point, we decided to split the party into two groups, so Jack, Brian, Robyn, Allan and Mark headed off to see the less squeezey part of the cave, leaving Louise, Gary, Janelle and myself to explore the extension.

With myself in the lead, armed with a small garden trowel, we headed off, and the digging began within 3 metres of the entrance to allow us access through the body sized furrows. The four of us kept up all enthusiasm and crawled and wriggled our way along the small tight passages. Finally we came to a small chamber and "wow", what a relief - we could actually sit up comfortably. Relentlessly, we headed on, by now feeling tired and beginning to feel quite sore in the neck from looking ahead whilst crawling on our stomachs. Once again after enlarging the passages by digging we came to a very tight, awkward sand filled passageway, which took some time to be negotiated. After this we found ourselves in a small chamber which we could eventually stand in. We followed the passage for a short way hence finding ourselves in the largest chamber.

After exploring the chamber we had a bite to eat and then headed out, this time running into Jack and Allan, who then continued on to the big chamber after which they headed out behind us. This time the reverse of the entry was to be encountered and finally, after climbing the ladder pitch, we found ourselves in the fresh darkness.

Said goodbye to Terry, Louise, Brian, Carol and the kids as they headed for home. This saw us heading back to camp for a great hot tea and a listen to the Hitch-Hikers Guide to the Galaxy, and finally to bed for a good nights sleep.

The next day we found Mass Cave, and after having a quick look through we headed for home.

CANOMODINE

Date: 24th - 25th September, 1982.

Members Present: Jack Charley, T.L., Terry Coleborn, Louise Coleborn  
Ricky Brett, Mark Warburton, Gary McGuigan, John  
Leonard, Kris Warburton, Peter Kuypers, Graham  
Cummings.

Visitors: Alma Cummings.

Saturday morning we all set up camp on the side of the hill and then began to explore the Canomodine limestone outcrop.

Several small holes were investigated but although they seemed to continue on none of our members could get through. After lunch the groups split into two with one group going to explore the Main caves, while the other group carried out a dig in a small entrance on the otherside of the hill.

The dig went several metres into the hill but began to become quite unstable so it was left.

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

WYANBENE

Date: 1st - 3rd October, 1982.

Members Present: Ricky Brett, T.L., Louise Coleborn, Terry Coleborn,  
Janelle Comerie, Teresa Brett.

We all arrived at the Wyanbene camp early on the Saturday morning. Saturday was spent on an exploration trip through to the Gunbarrel. Kevin and Brian left for home and the rest of us set up camp for the night.

Sunday we went for a walk to the big hole, and were lucky enough to see the resident lyrebird coming out of the hole. The lyrebird would have to win the fastest ascent of the big hole it only took a couple of minutes.

After saying goodbye to Terry, Louose and the kids we left for home.

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

CLIEFDEN

Date: 9th - 10th October, 1982.

Aim: To continue the Taplow Survey.

Members Present: Terry Coleborn, T.L., Louise Coleborn, Ricky Brett,  
Janelle Comerie.

We arrived Friday night with Rick and Janelle arriving Saturday morning.

After Rick and Janelle had their breakfast and unpacked we headed down the well worn track to Taplow Maze.

The first section we detailed was the small section of the number line from 17 - 10. There is still some passage off the number line to survey. A look around the B.Section convinced us that it will require a re-survey as some of the passage has been missed on the original survey and the paper survey markers they used have become part of the cave ecology. Rick surveyed the tight section from end of B. which connects to a high level in the C.Section. Then we completed the detailing of the A.Section before heading back to the hut for tea.

Sunday was spent detailing the D.Section. Here we picked up several passages which are not on the original survey and we will have to survey some of these next month as we ran out of time.

1. Passage from D3 connects back to the C.Section near C5.
2. Passage from D13 leads to a sump 7.6m x 4.6m after a very tight squeeze is negotiated 0.3m x 0.5m.
3. From the end of the F.Section we climbed up a tight rift and discovered a huge new section we have not previously seen. This section is very wet and active and has the most formation of any section so far seen in Taplow. The formations range in color from pure white through gold to chocolate and black. In one section there are long tree roots down the flowstone. This new section is on three levels and runs in the direction of the high and low levels of the C.Section but it will certainly boost the passage length when we survey it next month.
4. A small passage was also found from D17-D18 which leads to a small sump which has 25cm of water in it. This is the only sump in Taplow which still has water in it.

+ On the first survey in 1977 the sump at D11 had around 30cm. and the sump at J3 and J19 also had water but these sumps have been dry for over 12 months. ( Bilger 1977).

It seems that every time we enter this cave we find more passage to survey. I hope OSS are willing to extend our time a little to add in these new discoveries. We hope to be finished by June next year but only time and 'Taplow' will tell.

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

#### CLIEFDEN

Date: 6th - 7th November, 1982.

Aim: To continue with Taplow survey.

Members Present: Terry Coleborn, T.L., Louise Coleborn, Ricky Brett.

Visitors: Kevin Cheney, Kevin & Cheryl Coleborn.

While Terry went to Cowra to have a tyre replaced we trogged up and headed down to Taplow to the new section which we had found while detailing the original D. and F. sections on the last trip.

The weekend was spent surveying, detailing and exploring this section. Up to date we have surveyed 231.5m. of passage in this section and there is still a lot to do.

The new section has several sumps. A sump was found off D.13 and this is the W.Section. The passage down to the sump is extremely tight and has a right angle bend in the passage just before the bottom chamber which contains a sump, which has 0.36m. of water in it. The other sumps go off from F.28 and have 25cms. and 50cms. of water with calcite rafts. The water level as shown by the calcite rafts is about 1.5m. in the second sump and there is a 0.6m. high calcite mound in the corner being the remains of previous rafts and subsiding water levels.

This section has quite a lot of decoration in the higher levels. One area near the Oliphant Chamber has a deposit on the walls which resembles moonmilk, but in the same area there is a similar deposit which is a bright orange, red. I have never seen red moonmilk before so maybe the white is also something entirely different.

Taplow Maze now has a total passage length of 2355.85m.

Reported by Louise Coleborn.

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

#### WEE JASPER

Date: 27th - 28th November, 1982.

Aim: 1. To compare the SRT characteristics of two types of ropes on the same pitch.  
2. To explore Dip Cave.

Members Present: Brian Skinn, T.L., Terry Coleborn, Louise Coleborn, Carol Skinn.

After showing the team the various pitches from the outside we planned our days work. The idea being that we would rig the Main Daylight Chamber in Series 2 with a Blue Water and a Superstat. to be able to directly compare their characteristics.

We rigged the pitch, trogged up and then entered the cave through the Rubbish pitch entrance and made our way through to the base of the pitch in Series 2. There we left our SRT gear and headed off for Series 5. On the way we met up with another group of cavers, whom two we had met in the same cave, same place, eighteen months previous. Tgis being the first trip back to Wee Jasper for both parties since that first meeting.

Back at the daylight hole we donned our SRT gear and tried out both ropes. We ended up abseiling and jummaring.

Blue water is definately the better rope of the two for true SRT work. Although I believe that as a general purpose rope, that is, abseiling, SRT, handlining and belaying, Superstat ( 9.5 - 11mm) has advantages, mainly for its slightly stretcher characteristics.

CLIEFDEN

Date: 26th December, 1982 - 3rd January, 1983.

Aim: Familiarization, General Exploration, Survey  
Trapdoor and B.M.S.C. Extension.

Members Present: Terry Coleborn, T.L., Louise Coleborn, Brian Skinn  
Gary McGuigan, Lionel Baker, Ricky Brett, Wally Gab,  
Carol Skinn, Mark Warburton, Kris Warburton, Peter  
Kuyppers, Richard Hyslop, Jack Charley, Greg Powell.

Visitors: Ethel Miller, Glenn Miller, John Miller & Natalie,  
Glenn Wilson, Janelle Comerie, Brenda Powell.  
Gary, Kevin, Cheryl, Ann-Marie, Kylie and Michelle  
Coleborn, Larissa Skinn, Benjamin Powell.

The Coleborns arrived around 4pm. and the Skinns around 6pm. on Christmas Eve. Lucky for us Santa found Cliefden okay and after unwrapping presents we all headed for Orange for Christmas Day.

Our caving officially started on 26th and as some of our members had not been to Cliefden before we commenced with a short exploration trip through Trapdoor. They were very impressed with the aqua color of the sump.

After lunch we decided to take a small group for an exploration trip through Malongulli. We removed a large log from near the entrance before setting up the ladder. Then we continued on down to the sump which was found to be empty except for a small pool at the bottom of the passage, disappointment no miles of passage on the otherside. The first timers to Cliefden were suitable impressed with the Nazgul formation.

That evening before tea we all went down to the swimming hole for a well deserved swim.

27th December.

This started out as a trip to check the bearings in the F. Section. We wished to check if F.10 was above F.33 as the map seemed to imply. It proved that F10 is connected to F33 by a small tight rift.

Then before we left the cave we took a few members to Wits End showing them the Blue Room on the way. They were very impressed with the prospects of continuing the cave from this point.

Richard and Mark carried out their Ladder and Rope Care for their membership on the way out.

28th - 29th December.

Mark led his trips to Canomodine - Mark will submit separate report.

30th December.

Brian led a party into Cliefden Main for general exploration. Some time was spent in the Main Chamber searching for the Crystal Room, which some have seen but can't remember where it is. Then the party continued onto the Boot Room where they showed the new members the Crystal Boot and then onto Helectite Wall, down the Laundry Shute past the Jewel Room the Antler Slide as far as Cl. 64 gate.

Then they returned to the Boot Room and detoured on the way out for a quick look at the Laurel Room before heading out. On getting out of the cave they then headed full pace to the river, where they spent the rest of the morning before heading back to the hut.

That afternoon Mark, John, Richard, Louise and myself went down to check out Cl. 75, but we were disappointed that it did not head in the right direction although there was evidence of some previous digging attempts. Seeing we had the ladder set up Richard and Mark practiced their belaying, and belaying a falling weight ect. before we headed on over to Cl. 67 Carrapin Cave.

We were hoping to be able to extend this cave as last Winter on a very cold day, Louise saw air coming from the entrance from down near the river. And as this is a good indication that the cave is breathing we decided to investigate the prospects of finding more cave.

after a thorough search of the entrance, as last time it was full of red back spiders, we continued down. Carrapin has a steep slope to the bottom and then the cave continues on through a horizontal squeeze through a slot. Ricky was able to get part of the way through and had discovered that the squeeze comes out on top of a 6 - 7 metre pitch, he could see that it entered a small chamber and continues on. But as the squeeze is through solid rock no amount of effort on our part did any good. From the location of the cave and the direction it continues it is probably good that no one can pass the slot as it probable could connect to Cl 64, and it has a natural barrier.

### 31st December

Friday was spent continuing the Trapdoor survey and the BMSC extension, which was commenced in August. We only have the area near the sump to do and we have completed the whole cave.

When we headed out we had every intention of finishing the survey on Saturday but on arriving back at the silo, where Louise was to meet us we were informed that Janelle had rolled Ricky's truck. On arriving back at the hut where his Datsun Truck was, we could see what a mess it was, windscreen was out, but not broken, both front guards were severely dented as was the front of the roof, the radiator had several holes in it from the fan and the sides of the tray were completly ripped off. Thank heavens no one was hurt.

As it was New Years Eve, the kids decorated the kitchen in streamers and balloons and we had a terrific party even if a little quite as most of our members of the previous week had left for home and this weekends lot had not yet arrived.



1st January

While Rick and I continued on with the work on his Truck. Louise led a trip to Yarrowigah. She informed us on her return that the cave was dustier than ever and that the only fauna they found was dead, which was quite unusual as quite a lot was seen on our previous trip. The fauna found then was 5 blowflies, 2 Taplow tupe cockroaches ( reddish brown type) and 2 carabid beetles ( Coleborn 1982).

While they were away we banged out the gards, jacked up the roof, pulled out the front and tried to fix the electricals ect.

2nd January

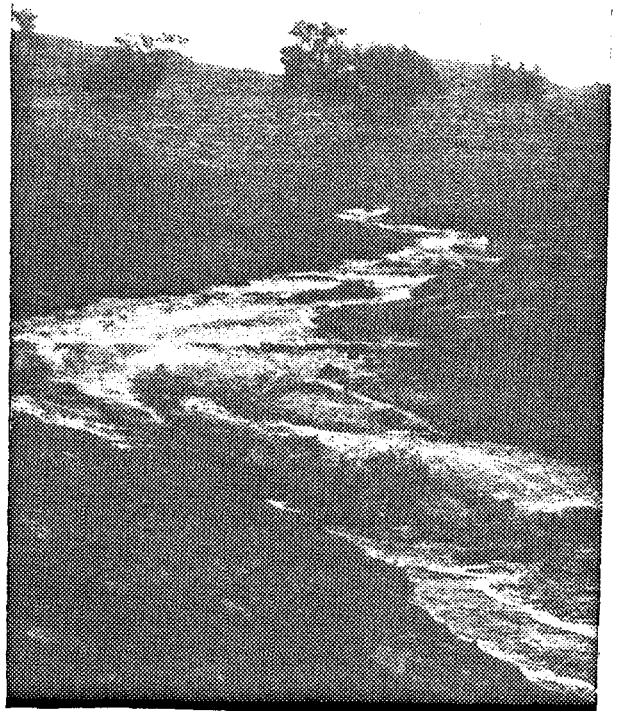
Sunday we had hoped to get back to Trapdoor but this time weather was against us. We woke up to very heavy rain. Bruce said it was the heaviest in over four years. The creeks behind the hut had a metre of water flowing in them and the hillsides were awash with water and looked like huge waterfalls. the area around the hut was 15cm. deep and the creek crossing near the silo was about 25cm. deep The Limestone Creek crossing went over during the storm but soon subsided once the rain stopped. Once the rain eased off Gary took Rick into Cowra to try and buy a new radiator or at least one from the wreckers. When they returned we fitted the radiator, then commenced to tie the windscreen in with Duck Tape as well as any thing else which needed securing.

We soon had it driveable so we took it for a run and went down to show Gary, Richard, and Kip the thermal spring and also to see how much the Belubula had risen due to the storm that morning. It was flowing very fast and had risen about 2 metres but had already started to recede.

At midnight, Rick and Janelle were ready to set off on their slow trip home. Gary, Richard and Kip intended to follow in case they needed any help along the way.

3rd January

Louise and I cleaned up the hut and then handed in the hut fees to Bruce. Before heading home we stopped into see the Rothery Ladies who were overjoyed with the rain the previous day even though they had to rescue their pump from the flooded river.



The drought breaking at Cliefden



CLIEFDEN CAVES

Date of Trip: 6th - 7th July, 1985.  
 Aim of Trip: Further documentation of area.  
 Members Present: Terry Coleborn (T.L.), Louise Coleborn, Brad Barnes,  
 Richard Hyslop, Tony Zimmerman, Lionel Baker.  
 Visitors Present: Micheal Stone, Gary Coleborn, Kevin Coleborn.

Report:

Saturday morning after a late start due to the normal running repairs to hot water service and septic, we headed off to Lock outcrop to do a few hours caving as we had a few newer members to Cliefden.

The next hour and a half was spent crawling around and exploring Lock. I can't help wondering if digging in this cave would not yield further passage. Several of our members decided to try a more sporting exit from this cave so ascended via the daylight hole.

Then we all headed over to Wareemba entrance and proceeded with a quick exploration of this cave. I made it down to the mud chamber but bulked at the squeeze which preceeded the rest of the cave. However, this cave is reported to be well decorated. Brad reported the sighting of a spider with pincer-like fangs, which from the description could possibly be a spider from the Family - Cradungulidae. Specimens of this spider have been collected from Cliefden ( Gray 1973 ).

Also sighted in Wareemba was a Horseshoe Bat ( Rhinolophus megaphyllus ) near the entrance. On the way back to the car we had a look at the entrance to Nothing cave and Curtis Interuptus cave.

After a late tea Brad and Gary went for a walk down Davy's creek to check the water temperatures.

Time: 10pm.

Air Temperature: 8° C.

Water Temperature at the influx- Davy's creek sink: 9° C.

Water Temperature at possible efflux-Davy's creek sink: 18° C.

This temperature difference possible indicates that the water flows into a substantial size pool in order to heat up by 9° C. 18.9° C is the temperature of the water in the Main Cave Cl 1 sump. On our next trip I intend to establish a temperature profile along Davy's creek.

The rest of Saturday night was spent doing First Aid Exam and practicing knots for Full Mmembership requirements. It is to be noted that Richard Hyslop has carried out his First Aid requirements as requested by the Committee at the last meeting and Brad Barnes has completed his knots for Full Membership.

Brad convinced Louise ( who by the way has a real problem, she actually loves going to Taplow) to lead a trip into Taplow on the Sunday. While they were at Taplow I tried putting some fluroscen into the influx of Davy's creek sink, and waited around for results. After six hours we still couldn't detect any evidence of fluroscen in Davy's creek. This would tend to reinforce the theory that the water flows into a large pool.

Louise reported that she took the party for a trip to Wits End showing them the Blue Room, Upside down Funnel, Taplow Alps and Marks Reward. The area down through Frog Hollow to Wits End was as usual rather muddy as was noted by the really muddy appearance of all on their return. From Wits End they then went on to the Railway tunnel where they retrieved some more of the survey markers.

They had a look at Kevins' Hide-a-way ( which is where we think further passage is possible after further digging). Their report was that at the end of the small chamber known as Kevins' Hide-a-way the layering of the rock and mud is similar to a section of C1 31, so maybe there is a chance of connection from this area.

On there way out near the Blessed Realm, they sighted a rather strange shaped bug, which has since been identified as a black Tree Hopper, Family - Membracidae. Tree hoppers are insects which are conspicuous for their swollen and often grotesquely shaped heads ( really prothorax or pronotum lying between head and wings) which may possess swollen or expnadated cheeks. This specimen was most probably carried in by them accidentally or by some previous cavers to Taplow. Also noted in same area was the reddish brown Taplow cockroach which was also found in the mud near the Anti-Room.

Taplow party did not arrive back to the hut till 4.20 pm. We then cleaned the hut while Gary and Tony went up and got a couple of bags of rubbish out of Tet-Anus.



TRIP REPORT - JENOLAN 13th/14th July, 1985

AIM - General Exploration and to find a new club project at Jenolan.

PRESENT - Brian SKINN (T), Graham CUMMINGS, Tony ZIMMERMAN, Richard HYSLOP.

VISITOR - Terry HOOKER.

REPORT: - With surprisingly good timing we all turned up on time, so without delay we gathered the keys then drove all the way back to set up the car site.

On into the Northern Valley we made our way up to Little Canyon Cave where we spent a long time getting almost everybody through the squeeze connecting J61 to J72. I wish I had made it but I would not have been able to distort my body to the other entrance shape anyway. Looking at it from the other side I can't understand how anybody can get through it. Another trip into the cave should see us with a little more gear to safely negotiate the descent to the very bottom.

We had a satisfying lunch by the entrance to Bushrangers Cave, J68, after which we did poke around inside Bushrangers and spent some time searching for digs. The easiest cave isn't necessarily going nowhere, one day maybe a way on can be found - one never knows.

Late in the afternoon we entered Mammoth to have a look at Naked Lady Chamber. Graham took the easy way with Tony, I took on Hell Hole. Needless to say they well and truly beat us there, they came and getting cold, we arrived very hot ready for a rest. Maybe I'm getting old.

Sunday found us again in J274, Split Rock, digging our way on and on and on, is it going anywhere? how long will it take? will enthusiasm remain to keep up the effort? At the moment it seems not, but still the breeze blows out through the rocks, enough to blow a candle flame at rightangles.

TRIP REPORT: Jenolan 13th/14th July, 1985 Con't

A lot of dirt has been hauled out, a lot of time spent, what we need is a few of the clubs expert diggers to evaluate the prospects to either excite others or to kill the project altogether.

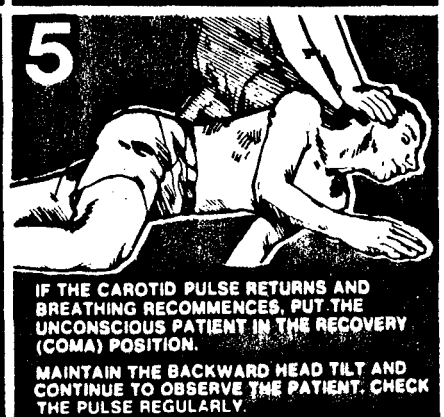
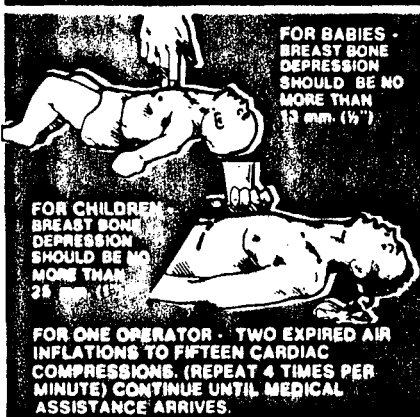
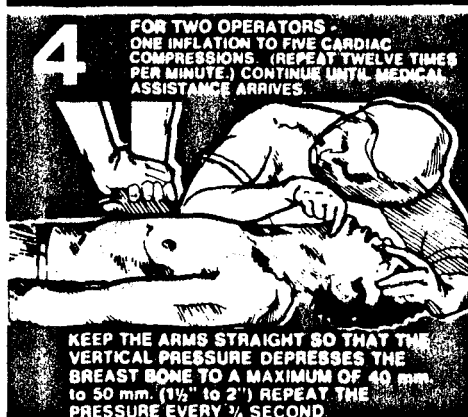
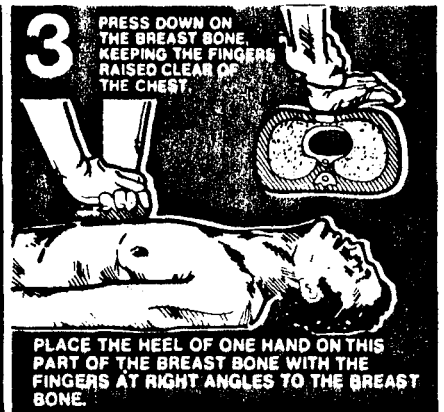
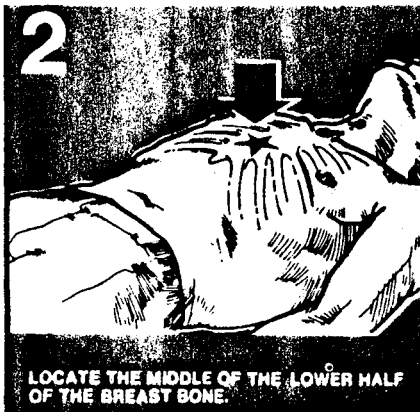
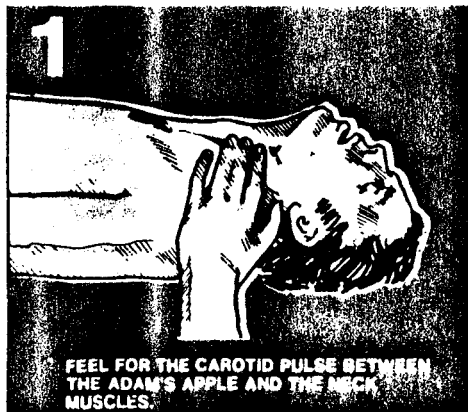
Hours underground - 7 hrs each

Ground Trog Tours - 2 hrs each.

*Brian Skinn*  
Brian Skinn  
Trip Leader.

# EXTERNAL CARDIAC COMPRESSION

AFTER THE FIRST 5 BREATHS CHECK THE CAROTID PULSE. UNCONSCIOUSNESS, LACK OF BREATHING AND AN ABSENCE OF PULSE INDICATE THE HEART IS NOT BEATING. APPLY EXTERNAL CARDIAC COMPRESSION WITH EXPIRED AIR RESUSCITATION. IT IS HIGHLY DESIRABLE THAT E.C.C. IS LEARNT ON A MANIKIN UNDER SUPERVISION.



CLIFFDEN

Date of trip: 3rd - 5th August, 1985.  
Aim of Trip: General Caving Weekend.  
Members Present: Lionel Baker (T.L.), Terry and Louise  
Coleborn, Richard Hyslop, Tony  
Zimmerman, Gerry Doherty.  
Visitors: Gary, Kevin & Cheryl Coleborn.

Report:

Saturday was spent really exploring Main Cave. No rush down to Helictite Hall and out but a systematic exploration of all areas. No major finds but we saw more of the cave than ever we had seen before.

We were disappointed with the amount of mud which has been thrown around the formations in the Laurel Room. How can Cavers justify such behaviour! I will never know.

In the evening Kevin and Lionel sent up their rockets. The night launch was really spectacular.

Sunday the group went into Murder and had a look at the 'Blue Stal' and the Sewers. That afternoon we collected two bags of rubbish from Tet-anus. Louise and I then had to go home so we cleaned our room and left the others to enjoy a QUITE night.

They informed us that no caving was done on the Monday due to bad weather so after cleaning the hut they also headed on home.

Terry Coleborn.

BLUE MOUNTAINS SPELEOLOGICAL CLUB  
TRIP REPORT - JENOLAN

Date of Trip: 10-11th August, 1985.  
Aim of Trip: To find a club project in Mammoth.  
Members Present: Brian Skinn, (T.L.), Steve Ross, Tony Zimmerman, Brad Barnes,  
Rob and Cindy Mann.  
Visitors: Ian Lacey, Tim Pearson and Leanne Paul ~~New~~

Report:

A late-ish start found us all in Mammoth negotiating the 40 footer. To speed our progress some members found their way through the rockpile and showed the others into the small rest cavern. Soon we were admiring the splendour of Oolite Cavern. It seems something new is always found here and this trip was no exception. Brad and Tony had a go at the climb into Upper Oolite but retreated after reaching the 'difficult bit'.

Some time later the size of the Railway Tunnel was being admired by the NEWCAVI Members, saying something like, 'next time more camera gear'. After showing some the mud slides, from the wrong end we proceeded into the Naked Lady Chamber, where they both (the females) refused to oblige - Oh well there is always next time.

Deciding not to negotiate Hell Hole we slid down the slope and back out into the sloshy tunnel into the Railway Tunnel. A quick glimpse at the Skull and Cross Bones and the way out was attempted by some members - Eventually we were out and back at the Pig Flat for a solid meal and a good yarn around the slow burning fire.

A Frosty morning ~~caused~~ caused by a late start so a three hour trip into Dwyers found everybody enjoying the sites, down even the smallest blind side passage. The helictites here are really quite special. Tim the ever adventurer pushed the P Percolater to the top of the 30 footer and back. Amid some blue flavoured words he found his way back out, somewhat relieved I think.

Hours Underground

B.Skinn .... 9 hours  
S.Ross..... 9 hours  
Brad Barnes.. 9 hours  
Rob Mann..... 6 hours  
Cindy Mann... 6 hours  
Ian Lacey.... 9 hours  
Tim Pearson.. 9 hours  
Leanne Paul.. 9 hours

Brian Skinn

TRIP LEADER

O.S.S. ANNUAL DINNER - BORENORE

Date of Trip: 16th - 18th August, 1985  
Aim of Trip: To attend OSS Annual Dinner and see some of Borenore Caves area with OSS members.  
Members Present: Louise Coleborn, Terry Coleborn and Family, Lionel Baker and Orange members.

Report:

Friday night found us meeting OSS at the Orange Civic Centre as guests at their annual dinner. The dinner was really great and everyone had a wonderful time. We were all impressed with Orange members photographic exhibits. BMSC have been challenged by OSS to a photo competition for sometime in 1986. After the dinner, BMSC members were invited to bed down at Ian Curtis for the night.

Saturday morning after a leisurely start we met the rest of OSS members in Orange and then headed out to Borenore. The property owner had given permission to find MacDonalds Cave so we entered Borenore from the backway. After trogging up in a slight drizzle of rain we headed down across the green slopes towards Boree Creek. On the way down we noted several dolines with small holes about 6m. deep but we didn't have time enough to explore them on the way out.

The first cave we saw was Verandah Cave, which is really quite unique and very picturesque. It is an overhang type cave as the name implies. Verandah Cave has formed on the bend of Boree Creek and there is a peninsula of ground in the middle cut off by Boree Creek, which can be reached either by crossing the creek or from a ledge which has formed on top of the cave. This peninsula has dry type of formation and it looks like the inside of a cave on the surface.

After looking around the verandah cave we all then headed across to where Tunnel Cave exited into the blackberries. Most of us decided the top entrance was the best way to see Tunnel Cave so we then headed high up on the hill to the top entrance. Tunnel Cave is also referred to as River Cave. The cave has an active stream flowing through it and our group were all suitable impressed with the cave.

On the top of Tunnel Cave were several small caves and one of these caves had a Brush Tail Possum in it. As it was getting late Ian decided we would all spread out in an attempt to locate MacDonalds Cave on the way back to the cars. Michelle couldn't see the problem in locating MacDonalds as she said 'it has a BIG M on it'. After half an hours searching with no luck we then headed back up the hill. By this time it was getting late and the weather had turned decidedly cold. With cold wind and drizzle on the way up the hill we all glad to be back to the cars and heading back to Ians.

Within an hour we were back at Ians and after a lovely hot bath we were soon all curled up in front of a roaring fire, with drink in hand, watching Bruce Howletts slides of last Tassie trip.

Sunday we spent a leisurely day around the house and then headed for home around 4pm. Thank you OSS for a great weekend and thank you Ian for your hospitality.

Louise Coleborn

Cliefden Caves

Date of Trip; 7th- 8th September, 1985.  
Aim Of Trip; Further Documentation.  
Members Present: Terry Coleborn, (T.L.), Louise Coleborn, Ricky Brett, Lionel Baker, Gerry Doherty, Tony Zimmerman.  
Visitors: David Noble, Richard Perry, Peter Brett, Kevin & Gary Coleborn.  
NEWCAVE Members: Ian Lacey (T.L.), Tim Pearson, Leanne Paul, Ian Morrow, Michelle Nickerson, Darren Armitage, Neil Lindus and Chris Metcalf.

Report:

Because of the influx of eager speleologists who were all eager to go caving we elected to run a trip to Taplow. So Saturday morning found a rather large party on its way to Taplow. Delegating Louise, Lionel and Ian, Petes Pit to survey !!!

Being too large a party for one trip leader we split into two groups and as Tony was one of the survey team he was given the second group to lead.

I took the remainder to the Mines of Moria, where they discovered that Taplow is full of little surprises - like things you can easily get down but can't get back up and being able to loose ones way with ridiculous ease.

After experiencing Brian's leadership in Mammoth they very soon decided that sticking as close to possible to me was the only way to ensure that they weren't led astray. However, there is more than one way to skin a cat, ask anyone from Newcastle.

After savouring the delights of the Mines we headed down to the pretties and proceeded with a general tour down to Wits End and back and then to the Railway Tunnel, where we conducted another exercise in getting lost (Kevin's fault not mine).

Here again the party split into two. I took one group into the Metro with the rest heading out. I think everybody is suitably impressed by this cave or at least that is the impression I got reading between the complaints.

Back at the hut I asked Louise how Petes Pit went. She said great, it seems to continue on. Finally I found out little Michelle went down and it continued on for 2m to a squeeze and Shell said it goes on further.

That night Rick led a trip to Gable as Louise wanted to try and find some spiders she had read in a report by (Gray). The next day Bruce informed us that there was a rule that cavers were not allowed to travel around at night during the lambing season. A rule I was not aware of.

Sunday we went to investigate Malongulli area, where we again split into several parties. Michelle led a trip into Cl 82, while others explored Cl 81 and Cl 71. Although still unentered past the bottom constriction Cl 71 is still a good prospect and one which will receive alot more attention in future. Rick led a party to explore Nibicon. It is enough to say that Michelle said ' gee thats a tight cave'.

It seems that someone over the last month has removed a mantlepice and the bricks from the barbeque. We were able to find enough broken bricks to rebuild it for a barbeque on the Saturday night.

Hut cleaned and hut fees handed into Bruce.



JENOLAN

Date of Trip: 14th September, 1985.  
Aim of Trip: General Exploration.  
Members Present: Terry Coleborn (T.L.), Ricky Brett,  
Brad Barnes.  
Visitors: David Noble, Stuart ? , Kevin  
Coleborn.

Report:

Arrived at Jenolan, checked in at Guides Office and headed up valley to Wyburds. The walk was pleasant but the rain was not and it didn't take us long to locate the entrance and get underground.

We spent the next few hours exploring the totally dry cave. This cave is like Taplow in that it was once filled with dirt, which has since been washed out. However, there are a lot of places where digging may prove fruitful.

The walk back to Mammoth was also punctuated by rain and the entrance to Mammoth is made somewhat less pleasant by the stench of two rotten goats. The smell from which can be detected at the top of the 'forty footer'.

We took David and Stuart into the Railway Tunnel to give them a taste of what this cave has in store for them on another trip. We also took them down the 'sloshy tunnel' which leads to Hell Hole.

However, time ran out and after a couple of hours we headed out, back to the guides office and signed out. Then we headed for home.

Hours Underground:

6 hours for all.

## YARRANGOBILLY

Date of Trip: 5th - 7th October, 1985.  
Members Present: Rick Brett (T.L.), Graham Cummings,  
Richard Hyslop, Tony Zimmerman.  
Visitors: Carolyn Tunks, Tim Pearson (NEWCAVES)  
Richard and Michelle (NEWCAVES).

Saturday 5th

We arrived at Yagby River on Saturday morning to find the rest of our party already waiting for us. Quickly we headed down to the guides office to organise the keys for the caves and for Cotterils Cottage. Back at the cottage we arranged our rooms, made lunch, then trogged up ready to go caving.

We had forgotten to bring the temperature taking kit so general exploration was the order of the weekend. Old Inn was our destination, so we headed off to find the cave. After following the Guides instructions we found the entrance within ten minutes.

Once into the cave we found our way along the stream passage, then took the turnoff which led us down to the sump. This part of the cave saw the large amount of water just disappearing into the loose gravel floor and the leftover water flowing down a rabbit burrow sized hole.

Tim being keen tried to push the 'rabbit burrow' but was eventually forced to give in because of the freezing cold water. Tim's final statement being "I'll bring my wet suit next time."

After referring to our map supplied by Terry and Louise we headed back to the Junction Chamber, hence finding our way down to 'Strawhaven'. After exploring this section of cave we discovered there was quite a bit of passage not shown on the map.

Photography of this section was next on the venue so off Graham and I went taking photos. Graham had trouble with his flash so we decided to return to this section on Monday to take some more photos after he had fixed his flash unit.

Before departing 'Strawhaven' we all had a well earnt lunch break. After lunch we backtracked to the Junction Chamber, then divided into two groups to try and find the entrance to the upper level passage. This saw Richard and Tony finding what they thought was the way on. After everybody negotiated a very tight and undesirable squeeze they found the way on, which was up a 3m. dirt sided hole and was too dangerous to climb. It was all back out through another squeeze and try to find the correct way on. Eventually the way up was found, this saw the party entering into some large chambers and eventually coming to some small climbs down to another stream passage, then we saw some beautiful flowstone the party detrogged for this section. Upon returning from the stream passage we trogged up and made our way out of the cave signing the visitors book on the way out.

5½ hours for everybody.

Day 2 - Sunday 6th

After an early rise we soon had breakfast, trogged up and headed off to find North Deep Creek. Graham at the wheel of his new 4WD drove us through a bush track until we came to the top of a big hill, which is where we were told to park. From here it was on foot to try and find the cave. After about 20 minutes we found the entrance. Another quick read of the map was carried out before we entered. After we were all in the entrance chamber we looked for the gate, which didn't take long to find. I soon discovered that the key for the gate had no chance of fitting. Graham grovelled down to the gate but failed in opening it as well. Not to worry another way on through the rockpile was quickly found.

After negotiating the rockpile we came to the 10m. ladder pitch which was a little tricky to set up. Eventually the pitch was rigged so we headed on down. Graham, Richard and Tim abseiled behind us. From here on we basically followed the stream passage. A few side passages were looked at and found to have some nice formation and some very good oolites, then back to the stream passage and on to the 'duckunders'.

After a lot of digging we decided to give the 'duckunders' a go. The two Richards, Tony and myself decided to push through, Richard led the way through the first duckunder and myself through the second. The freezing cold water taking your breath away as soon as we hit it. After passing the duckunders we changed into dry clothes and continued on to the end of the cave. In the last chamber we climbed up to some small upper section to view some magnificent 2m. straws.

From here we headed back to the duckunders, changed back to wetsuits and passed through the freezing water again to meet the rest of the party. After changing back to dry clothes we pushed ourselves for a quick exit from the cave, passing up through the rockpile proved a little tricky but we soon emerged into the entrance chamber. From here it was up an awkward climb and back out into the fresh air.

Tim, Michelle, Richard, Tony, Richard.H., Graham, Rick. 6½ hours.

Day 3 - Monday 7th

Monday morning saw us saying goodbye to Tim, Richard and Michelle as they headed back to Newcastle. The remainder of the party set out for another trip into Old Inn so we could do some more photography.

When entering the cave we found things a little more difficult because the creek flowing into the cave had risen due to heavy rain on the previous night. After negotiating the waterfalls the party went through to 'Strawhaven' to do some more photography. Soon enough Graham and I had run out of film so there was nothing to do but head out, up through the waterfalls and over the wet slippery logs and onto dry land, back up to the cars and headed back to the cottage.

Rick, Graham, Carolyn, Tony, Richard. 2½ hours.

We cleaned up the cottage handed in the keys and headed for home after an excellent weekends caving.

Date - 12th/13th October, 1985.

Aim - Pisa Room in Mammoth.

Members Present - Brian SKINN (TH.), Steve ROSS, Brad Barnes, Tony Zimmerman, Jerry Doherty,

Visitors - David Noble, David ~~Barry~~

REPORT:

Upon arriving at Jenolan, Ernie Holland (the Chief Guide) and I discussed the possibility of our club undertaking a meaningful project at Jenolan. If agreed to by the club we could start immediately. It's my recommendation that we accept the project as much could be learnt at a club level, about Jenolan, with the results ultimately helping all cavers at the Jenolan Management Plan outcome.

Anyway we entered Mammoth with gear bags and high spirits, only to be dampened immediately by the very wet condition of the cave. The Forty Footer was bypassed for the sake of slaving out way through the rockpile. This exercise soon warmed away the Jenolan Chill, so on we pushed to the Lower River, which wasn't really swollen like I thought it would. It had risen only a few inches since the previous month - considering the rain since then at Jenolan and that the entire passage network from the entrance to the Lower River was very wet, I was surprised.

Negotiating the vertical push into Oolite Cavern was just like taking a shower with the water full on. It was really flowing down the hole enforcing a very short stay, those who hadn't been through it before, not knowing how to do it quickly, got pretty wet.

Oolite Cavern was really alive, water everywhere making the flowstone remind me of Tassie, Oh well, I can daydream. On we pushed, upto Upper Oolite, where the way across from the chimney tunnel to the safety of the soft muddy floor of the cavern proper was very carefully negotiated by all, one wrong step and your history. Most of the passages here were checked the and on our return.

The Scene looking down into the Crater Caven was most captivating, sparkly stuff everywhere, punctuated by the brilliant white of the detrog gear bucket, a scene not likely to be seen anywhere else.

A decent was made as far as the Lower Pisa Room, where the contents the buckets were examined. I was very disappointed to find the Visitors Book Bucket full of water, rendering the Book absolutely useless. What a shame, as this Book is of great historical significance if nothing else, to find it in this condition was a shock. I strongly recommend that this book be replaced and stored inside a waterproof container, separate from everything else. The old book was left in the cave, but I suggest that it be removed, restored as best as possible, the information copied and the book given either to the ASF Library or the Jenolan Historical Society.

JENIAN - 12th/13th October, 1985

The pisa Room was itself very wet, all the Donkey Tails were underwater with the top flowstone canopy providing a minor waterfall into the pool, this disturbed the water which made the donkey tails move alarmingly. I hope they are still there next time. All the pisa room was flowing water which was cleaning off any dirt/sed that had dropped in from the tailing. This was the best I had seen the pisa room, a truly memorable sight.

The exit from the cave was made minus one 50m rope and bag, left somewhere between the bottom of the Forty Footer and the entrance. This should be retrieved at a later date, either by MSSC next trip or by the Jenolan staff within the next week or so.

Steve, Brad and Tony have on this and past Jenolan trips satisfied a ladder climbing and care requirement of the club to become full members.

MEMBERSHIP:

2 hrs each.

Trip Leader

JENIAN STAFF.

# CLIEFDEN

Date - 26th January, 1986

Aim - Exploration through Murder and Mollongulli

Members - Ricky Brett (TL), Kevin Coleborn, Warren Lacey.

Visitors - Tim Pearson, Darren Armitage (New Caves), Carolyn Tunks, Rick Ockenden, Geoff Dean, Ron Thomas and family.

## REPORT:

After a slow start to Sunday morning, a few keen people decided they wanted to go caving. With a bit of encouragement everybody managed to get trogged up. The caves to be visited were Murder and Mollongulli and I was the lucky one chosen to lead the trip to Mollongulli with Lionel leading a party through Murder. Once everybody was organised we piled into two vehicles and headed off to the caves.

After leaving the cars and heading along the fence line to Mollongulli, we found that some of the group had just been rudely introduced to the full grown, dreaded Cliefden thistles. Finally at the cave entrance, the gate was removed and the ladder rigged for the 10m entrance pitch. Kevin headed down first to find the ladder didn't quite reach the bottom and an easy 1m free climb was necessary. Next to head down was Warren followed by Tim, Darren, Ron and his two children.

After Ron reached the bottom, Kevin headed off to show his group the Barrier Shawl.

With Carolyn, Rick, Geoff and myself safely down, we headed on to the Lake Chamber. Whilst Kevins group were looking at the Barrier Shawl, I set up the tape for the climb up to the Nazgul. Rick, Geoff and Carolyn then climbed up over the slippery flowstone to have a look at the Nazgul. Rick and Geoff were both stunned at the size of the thing, they expected it to stand about 1m in height as they had seen the photo of it back at the hut. Rick and Geoff headed back down while I showed the Nazgul to Carolyn.

Once back at the bottom of the flowstone we headed for the Barrier Shawl. After negotiating the awkward uphill crawl we came to the small passage which brings us out at the shawl. Once we arrived Kevins group headed back down to have a look at the Nazgul.

After a quick look at the Barrier Shawl we decided to check out some of the higher passages in this part of the cave. After going around in circles for  $\frac{1}{2}$  hour I decided to take my group up to an awkward uphill squeeze which was shown to me by Bruce from OSS on a previous trip.

Rick was first to attempt the squeeze and gave in after about 5 minutes of frustration. I was next and being smaller was a good advantage as it only took about 3 or 4 minutes to get through. Next was Carolyn who made the squeeze look easy. The next attempt was made by Geoff and after at least 10 minutes of struggling gave into the squeeze physically but not verbally. Rick not to be outdone made another attempt and after a lot of sweat and grunting made it through.

From here we went back down the squeeze, which was much easier than, going up then down the mud slope and back to the lake to meet up with the rest of the group. After a quick munchie break we all headed out of the cave and back out with the hot sun and the flies.

Cliefden - 26th January, 1986 Con't

An enjoyable trip was had by all.

4 hours underground for everybody.

Trip Leader.

Ricky Brett.

Hours underground for trip to Murder.

4 hrs - Lionel Baker(TL), David Noble, Garry Coleborn, Tony  
Zimmerman, Brad Barnes.

Visitors Ian Curtis.

## CLIEFDEN

Date of Trip: 24th - 27th January, 1986  
Aim of Trip: 20th Anniversary ' Caveman' Dinner  
Present: BMSC, OSS & NEWCAVES.

Report:

Carol, Brian, Terry and myself arrived about lunch time Friday to begin preparations for the 20th Anniversary Dinner to be held on Saturday night. After rather an unexpected set back we began the cooking and decorating for the next days festivities.

Friday evening until late Saturday afternoon members, past members, quests, bushrangers, troopers and the band arrived. Saturday afternoon we held our Annual General Meeting and Saturday evening we celebrated twenty years of safe caving. Sunday morning was spent at "Cliefden" homestead where members and quests were given a tour of the homestead and garden by the Rothery sisters, followed by a bushranger re-enactment. Where we were all bailed up by several bushrangers but were saved by Trooper Powell and Constable Timbo. ( See C.Skinns report).

Sunday afternoon several parties went underground. Main, Murder and Malongulli were all visited. ( See R.Brett's report). After lunch we went for a wonderful, cooling swim.

That afternoon BMSC, OSS and NEWCAVE members spent 2½ hours in ' The Coathanger'. Ian Curtis (OSS) and Terry Coleborn (BMSC) were unable to get through the initial entrance squeeze. Next the ' six twister squeeze' proved very difficult to negotiate with only the thinner members of the party being able to get through, but not totally unscared. Brad Barnes (BMSC) gave it his best effort but was unable to get through. The ' six twister' squeeze was difficult but nothing compared to the ' Vice Grip Squeeze' near the end. Bruce Howlett (OSS) being unable to push the Vice Grip had to retreat. Tim Pearson (NEWCAVES) at this point was very anxious to remove some bones just inside the Vice Grip but was advised that this could be considered unethical.

Only Richard Hyslop (BMSC) was able to negotiate the Final Squeeze even though Tim and Rick detrogged to try and get through.

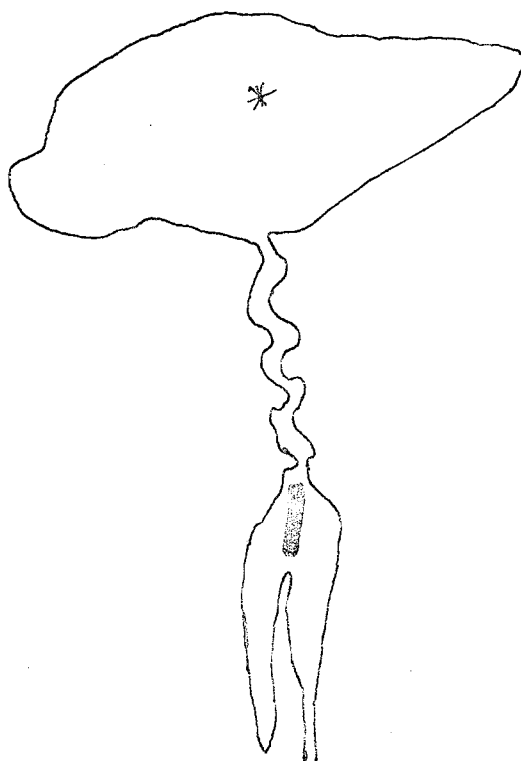
"The Coathanger" ( O.S.S. Provisional Map No. Cl. I00) is located along Davies Creek in the general direction of Limestone Creek. ( See next Oolite for more details).

Monday one group went to explore Transmission, another went for a swim, while Terry, Bruce and Brad cleaned the tank near the Shearers Quarters ready for sealing. After cleaning the Quarters we all went our separate ways.

( See over for sketch of Cl. I00) .



"THE CORTHANGER" (O.S.S. Provisional No. CL.100  
CRG I. (NOT TO SCALE)



## JENOLAN

DATE OF TRIP: 8th/9th February, 1986

AII: Documentation Project at Jenolan (Southern Limestone)

MEMBERS PRESENT: Brian Skinn (TL), Terry Coleborn, Gary Coleborn, Mick Pollack, Tony Zimmerman, Brad Barnes, David Noble and G Doherty (Una O'Doherty, Pat O'Doherty.)

VISTORS: Anita. *MARRISON* ,

REPORT: After a discussion with the chief guide, Ernie Holland about our club project program, we headed for Split Rock, J274, to update and to improve the original survey. Actually, initially all members made their way to J279 for a little SRT and ladder climbing. This cave being a vertical cave developed in a singular rift, the entrance pitch would be close to 100 feet, (your own metric conversion, please) is therefore an excellent cave for training new members. However.....

This was not the first time BMSC has used this cave for training purposes, but it was the first near accident for a long time. Everything was progressing smoothly, all the right gear was being used, all safety precautions that could be taken were in use, but inexperience reared its ugly head when about 15 feet down on a nervous abseil long hair found its way into the input side of the Whaletail. Not being able to move for fear of actually being scalped, a quick, effective rescue was enacted. With this type of emergency the only rescue method is to ease the weight of the abseil device, immediately if possible, this not being immediately possible, it was decided to simply pull the victim up using the actual abseil rope. This luckily was quite effective, however if, instead of being only 15 feet down, this had happened 75 feet down, I'm sure a different method would have had to have been employed.

Now one wonders how hair can be caught in this manner, but believe me, it could happen to anyone at anytime especially when ones tired, wet and cold. So here an important lesson can be learnt, everybody should make a mental note and be aware of the many dangers that are present when abseiling, and add this one to them.

Once this episode was over, Terry and myself moved over to Split Rock and surveyed the damn thing. It was full of huntsman spiders again, they scare me.....

SUNDAY: With five of us left on Sunday, and peoples spirits high, it was decided to find Paradox and to check the other caves on the way up. As it was bloody H.O.T. out, the cool environs of Paradox was most welcome. This cave is really quite incredible, it even has its own Wombat. Coming face to face with a bloody great wombat deep into the cave, (any cave) is really quite a shock. I jumped, he jumped, I jumped again towards the small hole I had just squeezed through, hoping he wouldn't try for the same hole at the same time, as their **just** wasn't enough room for both of us. And anyway immediately behind me, in the river passage, were the others. The wombat would have made quite a mess of everybody if he had tried to exit, luckily he didn't. On the way out, in the main cavern area of the cave an inscription on the ceiling caught our eye. It read... W NO?HOW 1886-27-8... is this genuine? I ask.

JEWELAN - 8th/9th February, 1986

After lunch we set out to find J47, but instead found a very small cave entrance breathing out great volumes of cold air, this was most interesting, considering there was not one breath of air outside. What lay beyond we thought, A dig was started and large amounts of soil and rocks - big and small were removed along with four funnel web spiders. Bloody hell, they scared us - we were so jumpy we jumped whenever anybody said Boo. Therefore we named the cave Funnel Web Cave. But its a long way to go for a dig. Anyway, not wishing to compete with the funnel webs, I think we had pushed our luck too far anyway, and not having proper digging implements we called it a day.

Gary Coleborn, Mick Pollock, Tony Zimmerman, G Doherty, David Nobel and Anita all completed their full membership ladder climbing requirement. Mick Pollock his belay, Rope and ladder care requirements.

Trip Leader

Brian Skinn

Hours Underground:

Brian Skinn	-	7 hrs
Tony Zimmerman	-	7 hrs
Brad Barnes	-	7 hrs
Mick Pollock	-	7 hrs
Anita	-	7 hrs
Terry Coleborn	-	3½ hrs
Garry Coleborn	-	3½ hrs
David Noble	-	3½ hrs
Gerry Doherty	-	3½ hrs

WYANBENE CAVES

Date - 22nd / 23rd February, 1986.

Aim - Exploration of Wyanbene and Big Hole.

Members Present - Tony Zimmerman, David Noble, Gerry Doherty, Mick Williams, Ian Ware, Brad Barnes.

Report:

After an early start at 6.30am, Tony, Gerry and David, Katoomba for Wyanbene Caves, we arrived at the caves at 11.30am after a five and a half hour drive having some trouble finding the turn off. On arrival we met with the Hills speleo club, and one of our members Brad Barnes who told us of their plans for the weekend.

We then inspected the camping area and found a warm lake nearby which we thought would be an ideal place to have a wash when we left the caves. Lunch was then partaken and Gerry's friends Mick Ian and Horse (the dog) soon arrived. After getting acquainted we prepared ourselves for the trip underground. Two batteries each were taken as well as a length of rope and three ladders. Horse was left at the car as he was not experienced at caving yet. A group of scouts were informed of our plans and after a short walk the entrance was soon reached. At the entrance an old gateway was seen which was in an open position.

We then descended the first steel ladder, where we met our first bats. We soon got our feet wet with the first water walk and were surprised at how warm the water was. We passed through the tourist section quite quickly and were soon at the base of the Blow Hole where a rope was in place which made climbing up to the Blow Hole easy. We then climbed down the scouts ladder where we dropped back to creek level and continued walking through the water. The Goal House was then passed through and then it was back into the water for a while until the first overpass was reached, then on through the Triangular squeeze up over the second overpass and then back down to the creek for the water crawl. Here we were introduced to the cool water all over. We then went up through the third overpass and along to the chamber by the Gun Barrel. Tony, Mick and David then traversed the narrow mud ledge to the Gun Barrel. We then climbed down to the bottom through a tight squeeze in which Ian had been trapped in the past to gaze at the great height of the Barrel.

On returning to Ian and Gerry we found Ian busy sculpturing in the mud (what an artist), It was then onward to Ceasars Palace which is a gigantic chamber where caving lights become obsolete. The rope was set up for the next section as a tricky climb was to be encountered before Diahoera Pot, a ladder was set up soon after this and another soon after again, after Gerry chimneyed up to set it up. Then Frustration Lake was reached at which Ian commented on it being much higher than normal. Some beautiful speleotherms were seen at which Mick and Ian said they were not there in their previous trips.

The trip out was started at about 8.30pm and we proceeded out at a much faster rate than we came in with David and Tony leading the way. The water crawls seemed much warmer and the cold was not felt as we kept moving most of the time.

Hills Speleological club were met near the Goal House and we were amazed to see them in only shorts and T-shirts. We then gave our condolences to their knees and elbows through the crawls.

Wyanbene Con't

However they were sure that it was much better this way and we were not going to argue. They made a comment about it being warmer in the cave than out and we soon found out why!!! It was raining and cold. We left the cave at 11.00pm and quickly made our way to the dam for a wash then down to the hut to light a fire for tea, and then it was off to bed.

After rising at about 10.30am we set off for the Big Hole. By about 1.00pm we reached the hole after carrying 103m of 9mm rope and over 110m of ladder. The rope was dropped down and the ladders set up and by about 2.00pm the first person "Tony" was abseiling down the hole on the 9mm rope. He was soon followed by myself and Gerry while Mick and Ian stayed up at the top. The Big Hole was explored and the visitors book signed, at which we found we were the first for 1986.

David led the way up after a quick 2 minute lesson from Gerry, in the art of Jumaring and soon got into the rhythm. After David reached the ledge he untangled the ladder which had got tangled up on the way down and then it was on to the top. Next up was Gerry who managed to Jumar the first bit and then laddered up from the ledge, Tony then came up on the ladder all the way with a belay, which was a mu for such a large drop.

The gear was then packed up and we arrived at the cars at about 7.30pm Mick and Ian said they would return at a latter date with some 11mm rope, and then we said our goodbyes and headed for home after a ver long weekend of caving and a great time and were the first BMSC to conquer the BIG HOLE.....

8.30 Hours in Wyanbene.

5.00 Hours in the Big Hole.

A total of 13.30 hours caving was carried out.

David Noble.

TRIP REPORT - BUNGONIA (CAVE RESCUE)

Date - 8th/9th March, 1986

Aim - Search and Rescue Weekend

Members Present - David Noble, Brad Barnes, Richard Hyslop and Tony Zimmerman.

REPORT:

All of our party left late on Friday night with some arriving at Bungonia that night, and the rest arriving at about 9.00am on Saturday after taking a not so short, short cut. The members who attended the weekend included David Noble, Brad Barnes, Richard Hyslop and Tony Zimmerman. We soon met each other on Saturday morning after signing in and finding out we were all in the same group (RED 1).

The timetable was examined and we soon found that it was going to be a full weekend. The first thing on the agenda was a series of lectures on such aspects as first aid, equipment used in cave rescue, and a discussion on cave rescue in general. After the lectures had finished which took most of the morning we then had a break for lunch at which everyone had an opportunity to have a talk to each other.

After lunch it was on to some cave rescue work, so we headed off for a small cave. Our leader led us into the cave and after only a short time he sprained his ankle. It was then our task to get him out of the cave with this ailment. We had some tape so we rigged up a harness and with a length of rope we managed to pull him to the surface. When we reached the surface he made a miraculous recovery and told us of our bad and good points in the rescue.

We then headed off for another cave which involved an abseil in and a ladder out, here we found that a member of our party had broken his arm, so he was unable to climb the ladder. We rigged up a pully system with some Jumars and some pullies and found it easy for one or two men to pull him up the pitch. After this rescue was over we packed up and headed back to camp where we had tea at which everyone was glad to see after a very energetic day.

After tea a movie Nineteen Forty One was shown. However we were approached by a member of Macquarie University Caving Club who wanted some extra people to come caving with him that night. We quickly jumped at the opportunity and Brad, Tony and David said we would be glad to go. We quickly got ready for caving and drove down to the cave after signing out and letting our intentions known.

On entry to the cave we met a group of Venturers who were doing an easier cave so Tony who could not use Jumars decided he would join in with their group. We had planned to do Henry's Pot but after finding what an awkward squeeze it was to get into especially with the gear and rope. So we then decided we would follow the Venturers through the other cave which is called Fossil Cave and Henry's Hole. Traverse which involved crawling along a narrow ledge which sloped down to a large 15 metre drop. It was taking along time to get everyone across so we asked the Venturers to drop down a rope so we could Jumar up the 15 Metres. They agreed and Brad, Mick and David soon were at the top with Brad and Mick using the frog method and David using the Mitchells method.

Bungonia Cave Search and Rescue 8/9-3-86 (Con't)

At the top we said goodbye to the Venturers and headed for the exit. As the exit from this cave is not the same as the entry point we were unsure of our way back to the cars so after some wandering around we returned back to the cave to find out which way it was from the Venturers, and after a while we eventually got back. We then signed back in and went to bed at about 2.00am.

The next morning the wakeup siren blew and after some reluctance we managed to get up. Today we had a broken wrist and a fracture of the lower leg to deal with at which the patient was to be Richard, who was a very co-operative patient. We dragged him from the two caves and then had a break for lunch where we talked on our good and bad points. We all learnt that the communicating with the people on the surface was one of the harder points, however it was also the most important point in cave rescue as was organization of resources.

After lunch it was pack up time followed by a de-briefing where people thanked and people aired their views on the weekend and suggested ideas for another weekend.

x Overall all members learnt that cave rescue is a much harder effort than was first realized and that it is far better to take that extra care in a cave than to take a risk.

Total Rescue Caving - 6 Hours  
Total Recreational Caving - 4 Hours  
Weekend Total Caving - 10 Hours.

David Noble.

## TRIP REPORT

COLONG CAVES

15 - 16 March 1986

Members       Graham Cummings (TL) David Noble Tony Zimmerman  
              Gerry Doherty  
Visitor       David Bearup.

After leaving the vehicles at the top of acetylene spur we quickly descended into Iannigans creek and made our way upto the Grand arch, where a few photos were taken then on through the arch upto the top entrance.

On the way in we detoured via Lizard cave to see the formation 'Mother & Child' then on past Kings Solomon's Temple to Kings Cross

The Way to wolfs cavern was on through the maze past the Terraces, and we arrived about 3 hours after entering the cave.

Some time was spent in and around Wolfs photographing and exploring the cavern and the side caverns, Slab cave Beach Cave and the river Passage.

On the way back out we decided to take the lower passage through the maze, but part way I decided to go around the maze and it was a while before people realised they were going in a circle. When we eventually arrived in Kings Cross it was decided to exit via the lower entrance but after a few moments it was apparent we were back in the maze as the terraces were in front of us again, funny that. At this point it was decided to exit via the way we had come in as David was concerned about getting his Subaru back up the steeper sections of track back to Bats camp.

This was done and we exited at 3.30 into the heat and sun and slowly made our way up the dreaded spur, nothing changes, back to the vehicles.

As was expected some fun was had getting the Subaru out up the steeper sections but it sure beats walking back.

Due to the fact that it would take too long to visit Billys creek on Sunday we decided to climb Mt Moogan and take some Photos and head for Home

Time Underground   6 Hours

Graham Cummings (TL)

