

CTCG

NEWSLETTER

capital territory caring group

po box 638 woden, a.c.t.



Number 78/8 E

November 1978

Next Meeting:

12 Munro St

Curtin.

Friday 17 November.

PRESIDENTS REPORT.

Future Trips: + Wyanbene. Leader - Greg Martin. Date 25/11/78 for the weekend.  
+ Cooleman. Leader - Chris Nicholls. 16/17 Dec. for the weekend.  
+ Buchan. Leader - Robert Douglas. Jan long weekend.

Past Trips: + Yarrangobilly. Attended by Ian Brown, Marie Brown, Reg Bament, Judy Bament, Mike Webb, Jim Reid, Mike Doyle.  
No one else turned up!! Why!!  
The organisation put into the trip was enormous. Rangers were organised to accompany us, bush walks planned, Eagles Nest cave trip arranged, guides from another club invited to lead the Eagles Nest trip, work was planned for the club project, trip to Y58 to collect bones, trip to Y46 exit to pick up some equipment and a trip to Jersy cave for temperature measurements. For those few people who did go - they had an excellent time but they were the people who organised it. For those people who said they were going and did not.... this is your club, not an exclusive club for a few. We want you to participate. This is what makes our work worth while. Maybe we are doing something wrong, at least tell us! If not at a meeting then give me a ring at home 815268 or work 470677 and we can discuss the problems.  
+ Wee Jasper. Attended by Mike Johnson (leader), Tim Faulkland, Mike Webb, Lindsay Atkinson, Ian Brown and Phill Bowers. Also attended was about twenty Sydney University Teacher Education students. Caving trips took place on both days in both Punchbowl and Dip cave - with an excursion into Signature. Abseiling techniques were practiced at Devils Punchbowl. A very good weekend.

Annual General Meeting.

To be held in February; venue to be determined.

This is an advance notice. If you would like to be active in the organisation of the club, here is your chance to do it your way for the next twelve months.

All committee positions will be vacant. If you want them filled volunteer, otherwise.....

Perth Trip.

The club is being represented by John Masala at the Perth A.S.F. Committee Meeting. John will be armed with all the relevant data.

Phill.

BATS This is an article compiled by Reg Bament.

Bats form a very distinctive and uniform group of mammals. There are about 800 species, making the Chiroptera the largest order of mammals after the Rodents, and twice as large as any other order. Despite this, most of us are familiar with only the bats found in our local cave areas, and have little or no knowledge of the many and varied distant cousins. While our local bats will be the subject of a series of articles by Bob Douglas, the following information, gleaned from the pages of a Wildlife Encyclopedia, is designed to increase our basic knowledge of the family as a whole.

The word Chiroptera means Hand-wing and refers to the bat's most distinctive feature; the wing is literally an extended hand, with a thin web of skin stretched between enormously elongated fingers, stretching back to the body and hind legs. These wings make the bat capable of sustained flight, the only mammal with this ability. All bats are small in size, the largest being only 15 inches long, weighing  $2\frac{1}{2}$  lb.. They have poorly developed hind legs and pelvis, making most of them very poor walkers. In fact, some cannot move on land at all.

The order of Chiroptera includes 17 families of bats, usually grouped into two sub-orders, the Megachiroptera and the Microchiroptera. This is a very unequal subdivision, because the Megachiroptera comprise only a single family, the Pteropidae, the true Fruit Bats. All the remaining families are lumped together in the sub-order Microchiroptera, which, despite its name, does not only comprise small bats---some have wing-spans of up to 15 inches --- any more than Megachiroptera contains only large ones.

Another major division found in the bats is their distribution. Only three of the seventeen families are found in both the New and Old Worlds. All the others are found in Europe, Africa, Asia, Australia or the Americas. In some cases, interesting parallel developments in different families not closely related, have resulted in the species having a similar ecological role, simply through evolution. A prime example of this is the major South American family Phyllostomidae, which provides one of the best examples of adaptive radiation in the animal world. By a kind of private evolution, the members of this one family have evolved to fill all the feeding functions performed by separate families elsewhere. In this group alone insectivorous and carnivorous bats, nectar, pollen and fruit feeders are found, all with similar, but quite independently evolved adaptations.

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BATS cont'd

to their individual ways of life. It is also interesting to note that only two or three families of bats have colonised the temperate zones of the earth, where cold winters cause a seasonal shortage of food. To escape starvation these bats usually hibernate becoming torpid for long periods, with their metabolism slowed right down, and sustained by their reserves of fat. Hibernation is a very complex physiological event, the sights being chosen for the right temperature and humidity. High humidity is important for small bats; their membranes dry out if the humidity falls much below 85%. The sights chosen frequently include caves, and protection of those caves is vital if the bats are to survive.

The bats method of navigation, called Echolocation, also varies from family to family. For example, the sound impulses emitted by the Horseshoe bat come through its nose, at about 20 pulses per second, whereas the Vesper bats "shout" through the mouth. Only the Microchiroptas use Echolocation; the other family group use their eyes. The one exception is the Fruit Bat, Rousettus, which can Echolocate, but makes only low pitched sounds by clicking its tongue.

THE FRUIT BATS (Pteropidae)

The true Fruit Bats are confined to the old world, although some new world bats have independantly evolved to feed on fruit. The family includes the Flying Fox (Pteropus Giganteus) with a wingspan of nearly 6 feet, the largest of all known bats. The Flying Fox lives in large colonies, each with a distinct and complex social structure. It is a strong flyer, and may fly up to 90km, to a favourite feeding place.

Not all the Pteropids are large. The Epaulatted Fruit Bat (Epomophorus) of Africa, with prominent white tufts of hair on the shoulders of the male, concealing special scent glands, is only 20 inches in wingspan. Another African species, the Eidolon helvum, is also only small, and is well known because it has formed a large colony in the trees of the main street of Kampala, the capital of Uganda. (Ed comment---Any vampires?)

Anything that would live so willingly close to Big Dada must have to be batty!

Most fruit bats feed directly on fruit, favouring soft things such as mangos and guavas. These they squash on special sharp ridges on the pal te, spitting out the pulp and swallowing the juice. However, the Long Tongued Fruit Bats of South East Asia feed on Nectar and pollen. They and their relatives who feed on fruit juice lapped from squashy and over-ripe fruit, have developed a long snout and tongue, but have tiny teeth and weak jaws.

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BATS cont'dVESPER BATS (Vespertilionidae)

Vesper bats are a varied family and have few features common to all, except that all lack the special distinctions of other families. A fairly typical species is the Mouse Eared Bat (Myotis Myotis), the largest European bat with a wing-span of about 18". It has a white underside, and the usual grey/brown fur on its back. The Pipistrelle is often identified as one of the small bats seen through-out the old world and the continent of North America. It is the smallest of 15 types of small bats. Even so, six of the 15 are only a few centimetres larger than Pipistrellas. Most bats give birth to only one young at a time, yet among these bats, several give birth to twins, and the American Red Bat, (Lasiurus borealis), may occasionally exceed three. The Long-eared Bats of Europe and North America, (Plectous) are perhaps the most distinctive of this group, having enormous ears which are over half the length of the head and body. The Pallid Bat (Antrozous pallidus) of the Western U.S. also has big ears, and in addition to the normal diet of insects has been known to pounce on beetles, grasshoppers and even scorpions in its quest for food.

FISHERMEN BATS (Noctilionidae)

There are only two species in this family, and of those only one is a true fish eater. Equipped with short, sparse and greasy fur, Noctilio leporinus captures its prey by detecting ripples of fish near the surface, then swooping down, attempts to spear the fish with its specially elongated claws. The short greasy fur protects the bat should it misjudge and fall in the water. A good swimmer it can take off from the water with ease. It is a resident of Central and South America.

VAMPIRES (Desmodontidae)

Vampires are the only mammals that feed exclusively on blood. They make a swift incision with their needle sharp teeth, then lap up the blood as it flows out. A special anti-coagulant in the saliva delays clotting, enabling the Vampire to drink so much it can hardly fly. The Vampire lives in the warmer regions of Central and South America. The Common Vampire (Desmodus rotundus) has benefited from the introduction of domestic animals such as horses and cattle. Vampires are relatively small, about 4" long with a wing-span of about 12". Unfortunately, many carry Rabies and are subject to a vigorous eradication campaign.

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BATS cont'dFREE TAILED BATS(Mollossidae)

Members of this family are also known as Mastiff Bats due to their broad, square ended muzzle. They have a short thick tail not enclosed in the usual tail membrane stretched between the hind legs. The family occurs in all the warm parts of the world except Australia, sometimes in great numbers. All have long, very slender wings adapted to rapid flight. For instance, the Guano Bat travels a thousand kilometers or more each Autumn, from the U.S. to Mexico. Two species choose to live in roofs, where temperatures may reach the unbearable heat of 50 C. The Flat Headed Bat of East Africa (Platymops), prefers to live under rocks and in narrow crevices. As a special adaptation to squeezing into tight places, the skull is only a third deep, as it is wide, so flat it looks as if it has been accidentally squashed. (Reminds me of a couple of squeeze freaks I know.)

MOUSE TAILED and SHEATH TAILED BATS(Rhinopomatidae and Emballonuridae)

The four species of mouse tailed bats live in the dry areas of N.E. Africa, Arabia, and India. They are the most primitive of the living bats, and are about 3" long. The tail is of a similar length, thin, and is not enclosed in the tail membrane.

Sheath Tailed bats have prominent scent glands forming pockets in the front edge of the wing membrane. They are commonly known as Sac-winged bats. All are characterized by a tail which pokes through the tail membrane, about halfway along its length. The membrane slides freely along the tail as though forming a thin fleshy sheath.

Five families of bats have special fleshy structures built up around the nostrils. Sometimes this "noseleaf" forms a spike, but in some species it is very elaborate. In the Horseshoe bats, the nose leaf forms a perfect cone with a triangular spike sticking up from it between the eyes. The noseleaf of this bat plays a vital part in its echo-locating abilities. The Ghost Bat, the largest of all Microchiroptera, with a wingspan of up to 3 feet, is an imposing Australian representative of this large family. Carnivorous, it preys on rats, mice, reptiles and other bats.

As stated earlier, there are over 800 species of Bats. Yet despite their abundance, they are poorly known, with many aspects of their Biology only recently discovered. The preceding descriptions, brief as they are, serve to indicate the great variety to be found within the order. It seems a great pity that Man, by persecution, pollution or by wanton destruction of the Bats habitat, is slowly destroying this distinctive group of very interesting Mammals.

FINI.

CAVING EQUIPMENT Specialized Mechanical Aids and Devices1. JUMARS

These are undoubtedly the best and safest devices for prussiking. They are the easiest to handle, can simply be put on or off the rope, and their cams grip and resist wear well. The stirrups are tested by means of a test load of 300kg. Weights exceeding 300 kg and/ or shock loads are not permitted. They 420 grams and their size is 17x7.5x4cm. They can work on a rope both dry and wet, with a diameter of 6 to 12mm.

When using Jumars, the lower one will tend to raise the rope when you slide it up. To avoid this release the cam with your thumb. The tape or rope used for slings, should be inspected often for wear. Always be sure that both Jumars are attached to your body. Be careful on using them on muddy or icy ropes as they will slip. The Jumar must be kept parallel to the rope at all times. Always check that the safety latch is working and that the cam face is against the rope. Jumars, and all ascending devices, are less likely to slip on kernmantle rope compared to hawser laid ropes.

2. CLOGS English and French

Clogs or the French equivalent "Petzels", can be used for ascending a rope, but are not considered as good as Jumars. On wet muddy ropes the teeth on their cams clog up with mud, so that often the cam will not bite the rope itself unless carefully worked on. This can be most frustrating on a long pitch, not to mention the unnerving slips. To remove or attach the clogs to a rope, they must be detached from their harness, footsling etc.. This can lead to a potentially dangerous situation. The French design is slightly improved; they have a "lock open" device which makes cleaning easier. They also have a nipple in the middle of the cam which grips the rope firmly and quickly

3. FIGURE OF 8 DESCENDER

This is a specialized abseiling device. They are simple to use and hence less prone to cause accidents. It is also useful for belaying, as it allows you to feel the climber. The 'Clog' aluminium alloy figure-of-8 descender is preferred as the alloy absorbs heat quickly, and the rope does not pass over any sharp corners or bends. The descender is also very strong.

4. BRAKE BAR.

This replaces the crossed karabiner method for abseiling. Care should be taken in using the correct materials for the bar, and ensuring it is not damaged in the making. Stainless steel rod is a suitable material.

NOTE: Remember these precautions when abseiling with mechanical devices.

- a. Use screwgate karabiners wherever possible
- b. Keep tension on all systems at all times to prevent rotating and strains coming onto the gats.
- c. Clothing, hair and headlamp wires MUST be clear of the system



WINE AND CHEESE

On Friday 17 November, the club will be holding its next meeting at Vickie Wilson's place. A very brief general meeting for announcements and enquiries will be held, and then into a good night of wine and cheese. The club is providing the cheese, bring your own wine. Be imaginative with your choice so as not to have too many of a similar type. A projector will be set up to show slides (limit of twenty per person).

Commences at 7.30 p.m.-8.00 p.m. Meeting starts at 8.00 p.m. sharp.

Address - 12 Munro Street, Curtin.

T-SHIRTS T-SHIRTS T-SHIRTS T-SHIRTS T-SHIRTS

Jim Wilson has prepared the art work for the C.T.C.G. T-Shirts. They have arrived and by the time you have received this newsletter they will be ready for those who have ordered and paid for them. Any enquiries - ring Jim on 811189.

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CLUB PHOTOGRAPH ALBUM.

Here's an Idea!! What about people contributing photographs of past trips in various caves. This will give documentary information on what we, C.T.C.G., have been doing over the past years. Think about it.

COMMITTEE MEETING.

The next committee meeting will be held on 23 November, at Phill Bowers place at 8.00 p.m.

Last committee meeting decided that a good First Aid Kit be purchased, probably an M.S.A. brand. Other items to be purchased are: three lengths of ladder and two lights. Magazine covers will be available with the club logo silk screened onto the front. See Jim Wilson.

The next set of Canberra Directories delivery date is still unknown. Please keep them in mind.

BRITISH COLUMBIA SPELEOLOGICAL FEDERATION.

It has been suggested by Greg Martin who recently visited Canada, that we form a brother/sister affiliation with the above club. Advantages to us would be contacts in Canada with the view for reciprocal caving; keeping up with the latest overseas trends in techniques and equipment; and contact with American/French Speleo people through the Canadian Club.

# capital territory caving group

## PERSONAL DETAILS FORM.



NAME: (Surname).....  
(Christian Names) .....  
(Preferred Name) .....

ADDRESS: .....

POST CODE .....

DATE OF BIRTH: .....

TELEPHONE: (Home).....(Work) .....

NEXT OF KIN: .....

ADDRESS: .....

## MEDICAL STATUS.

CONFIDENTIAL - In case of accident only -

Do you suffer from any chronic disease or disability?  
e.g. (Epilepsy, Diabetes, High Blood Pressure etc.)

DETAILS: .....

Do you suffer from Claustrophobia or fear of heights etc? .....

Do you need to take any medication regularly?

DETAILS: .....

Do you have any allergies (e.g. to Penicillin)? .....

.....

Who is your Medical Practitioner? .....

Address: .....

What is your blood group? .....

CAPITAL TERRITORY CAVING GROUP

EXPERIENCE DETAILS

Caving Experience;.....

Previous/Present Club Memberships: .....-.....

.....

Special Abilities/Skills: .....

.....

other comments; .....

.....

CERTIFICATION

*I hereby agree to obey the rules of the Capital Territory Caving Group as outlined in the official Constitution. I also certify that the details given in this application are true and correct.*

SIGNED

(applicant)

WITNESSED

(introducer)