

## CAVE RIGHTS FOR TROGLOBITES

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Abstract; Prior to, and during our Bicentennial year it became increasingly popular, even trendy, for the media, politicians and individuals, to recount the continuing struggles of the Australian Aborigine - the original owners of Australia - for land rights. Now, a couple of years after that monumental non-event, it is becoming fashionable to talk land rights again. This time, amongst others, there are those who are calling for land rights for Koalas!

Even though membership of speleological societies has declined in recent years, the pressure on caves and their faunal inhabitants has increased to the point where, in some caves, there is urgent need to raise more than a word or two about land - or more precisely - cave rights for troglobites, the original 'owners' of caves.

Have we mere terrestrials, who are infrequent cave visitors but who often perceive ourselves as the best or logical custodians of caves and all they contain, lost sight of the fact (either through arrogance or ignorance) that troglobites and their troglophile cousins have rights too?

Through aeons of time people have entered caves for a variety of reasons ranging from habitation, art, religious rites, curiosity, impulse, recreation, mining, study or vandalistic intent. All these activities can and do have a detrimental effect on a cave, its environment or fauna either through ignorance or (sometimes callous) indifference.

In recent times some people - especially cavers - have become aware of the physical damage that can and does happen to caves and have moved to protect them, often citing fauna or habitat protection to add plausibility to their argument.

All too often we talk about caves as if they are 'ours' and that we can do just about anything we like in them.

We lock them up to keep everyone but ourselves out.

We talk about being custodians of caves for future generations to enjoy.

Future generations of 'us' - but cave fauna? I think not.

However, talk about preventing or restricting some or all of 'us' from going somewhere in a cave, or perhaps a whole cave, and all hell breaks loose. "You can't prevent 'us' from going caving - we're cavers! We have a 'right' to go caving!" Do we?

We try to regulate our activities in certain areas and sections of caves. We certainly try to regulate the activities of others in caves, but do we really regulate ourselves very well in relation to a particular cave and any fauna it may contain? Do we really care?

How many amongst the general cave and cave diving community have taken the time to question the immediate and cumulative effects of their activities on a cave's fauna or food supply?

How many have given more than a passing thought to bat guano, so often contemptuously trodden underfoot in the haste to explore a cave's confines, excrement that may provide sustenance to a multitude of cave fauna, especially when so few cavers take the time and effort to look for such creatures much less understand their life cycle or needs.

Indeed, who would have thought that even degraded bat guano serves as a food source for cave fauna as has been found recently in some caves of the Nullarbor Plain, and no doubt elsewhere. Have cavers, where there is no option but proceed through guano, established a single file trail, even to the extent of walking in others footsteps?

The point to be emphasized is that even the simple activity of tramping indiscriminately through vulnerable habitats like guano, litter and soil/mud deposits degrades them by breaking down their open structure to form hard compact substrates in which nothing can live. Hence the need for creation of trails which cause minimal disturbance within the cave.

A somewhat different but graphic example of the effects of indiscriminate tramping is to be seen in Roaches Rest Cave, a cave few cavers put much value upon. It once harboured a large community of troglobites (including cockroaches and spiders) which died out, probably with the close of a past moister climatic regime. The evidence for this lay in the accumulation of preserved troglobite carcasses that once littered the cave floor and formed a quite unique historical record of a community now extinct. A couple of decades of visitation and trampling has turned the cave floor into a dust-bowl lacking any evidence of the former inhabitants (Gray. pers.

comm.) Part of the reason for this sort of destructive happening is that invertebrates are relatively invisible to the visitor - better awareness becomes very important here.

Equally importantly, any other source of organic material in a cave should be left undisturbed. Such materials form vital energy 'hot spots' on which the cave biota depends. Even plant root systems, whether alive or decaying and so often found in caves provide food and shelter for cave fauna.

Casual perusal of club literature reveals that there is a higher percentage of recreational rather than 'scientific' caving (SRG is no exception). However, recreational caving is not being criticized as such by this paper. What is being criticized is the indifference towards caves and of the need to take special care of these subterranean environments.

A case in point is the area known as the Dome in Mullamullang Cave, Nullarbor Plain. It has become the 'macho rite' amongst visitors (ASF members or not) to 'do the Dome' (complete the arduous 10km return trip in a day). Indeed, many seem to go to Mullamullang Cave for no other purpose than to prove that they can 'do' the Dome. As Ken Boland of the Victorian Speleological Association so aptly puts it, they come under the influence of the 'Dome Syndrome'. At the moment little has been done to cure people of this detrimental condition. It is now thought that the Dome's fauna, *Tartarus mullamullangensis* (spider) and *Trogloblattella nullarborensis* (cockroach), are either extinct or have suffered a massive population decline due to habitat disturbance as a result of this increased human activity. A high price to pay just to satisfy people's ego. Thirty years ago the Nullarbor Plain was a very remote area and may have been visited by speleologists only once or twice a year. Such trips often took months to prepare. Today numerous expeditions to the Nullarbor are staged each year often with repeated intense activity at certain caves - in keeping with popular practise to areas closer to home. When, at the suggestion of Dr. Mike Gray of the Australian Museum, SRG proposed a 10 year ban on entry to the Dome in an effort to allow any remnant population to re-establish itself, the howls of 'What about us' were very loud indeed.

Between 1982 and 1987 the troglobitic species of Nurina Cave had been lifted from one to seven making it one of the most important biospeleological caves on the Nullarbor Plain. It also has one of the regions highest visitation rates due to its proximity to human habitation and ease of access. Shortly after the discovery of aquatic amphipods in the cave (a Nullarbor 'first') and news disseminated around the caving fraternity, a member of one caving party went to the cave with the express purpose of 'photographing the amphipods' (*information extracted from visitor's book Sept. 1985*) This sort of activity should be discouraged due to the risk of habitat disturbance and possible death of the subject/s. An alternative would be availability of studio photographs of (scientifically) collected specimens.

It is important to ensure that an example of our unique Nullarbor cave ecosystems survives as intact as possible. Nurina Cave provides an excellent opportunity for this. It contains a uniquely rich and representative sample of the 'typical' Nullarbor troglobitic fauna and should be a prime candidate for special conservation status and restricted entry.

As a more immediate measure, it has become a practise for societies and individual members of societies to keep some cave locations or section of caves 'secret' from the general caving community (*and their own members*) in an effort to protect the contents. SRG has joined this trend somewhat in relation to Nurina Cave except that we are letting people know about it and why. While recommending to the possible future cave manager Dept. of Conservation and Land Management (CALM) that the cave be gated, SRG is restricting access to the map that shows the location of the Fauna Chamber and Arachnid Alley to scientific perusal only and asks readers to respect this action. The Fauna Chamber and Arachnid Alley are not conducive to exploration caving, aesthetic photography or even the ASF recommended minimum sized party due to the arduous nature of the passageways and the diverse troglobitic fauna that resides there. A sign (*Fig 1*) has been placed at the entrance to these passages asking accidental discoverers of the extensions to respect the rights of the fauna beyond and not to proceed further. The sign also mentions that the spiders webs that would be encountered are virtually invisible to direct lighting. These webs quite often occupy several cubic metres and be destroyed before a person realizes one is there or by small air currents generated by nearby body movement.

## CONCLUSION

We are cavers and no doubt wish to continue enjoying being underground for whatever reason. Due to the increasing pressures of population we find ourselves competing with other interest groups for a scarce non-renewable resource. Quite often we have to negotiate with land managers be they government, semi-government or private in order to gain access to caves and adhere to ever restricting rules and regulations. Gone are the days of frontiersville - well almost.

People join a caving club for a variety of reasons in addition to achieving a common goal which is access to caves. The duty of the more experienced members of these clubs is to train the less experienced members how to enter and traverse the confines of any given cave without injury to themselves, their companions or the cave. Perhaps it is time that all club members were made aware that apart from being trained not to injure the cave, they should be trained to take greater care not to injure the cave's natural inhabitants.

HI!

YOU HAVE ENTERED THE AREA KNOWN AS THE "CALCITE CRAWL AND ARE ASKED NOT TO PROCEED ANY FURTHER.

A RICH AND DIVERSE TROGLOBITIC FAUNA COLONY EXISTS NEARBY AND YOUR PRESENCE CAN EASILY DISTURB OR DESTROY THEM OR THEIR HABITAT.

THE FOOD BASE IS THE DEGRADED BAT GUANO FOUND ON THE FLOOR AND SHOULD NOT BE TRODDEN ON UN-NECESSARILY.

VERY RARE AND DELICATE SPIDERS OCCUR. THEY AND THEIR WEBS ARE INVISIBLE TO DIRECT LIGHTING.

THE PASSAGE BEYOND THIS POINT BECOMES QUITE NARROW AND DOES NOT OPEN OUT TO ANYTHING THAT MAY BE PLEASING PHOTOGRAPHICALLY.

IF YOU WANT FURTHER INFORMATION REGARDING THE FAUNA OF THIS CAVE INCLUDING COPIES OF SCIENTIFIC PHOTOGRAPHS YOU ARE URGED TO CONTACT

DR. MIKE GRAY  
AUSTRALIAN MUSEUM  
COLLEGE ST.  
SYDNEY 2000  
02 339 8111

OR  
NORMAN POULTER SRGWA  
PO BOX 120  
NEDLANDS 6009  
09 276 2495

PLEASE DO NOT PROCEED BEYOND THIS POINT

IF YOU ARE INTERESTED IN CAVING CONTACT THE SECRETARY,  
AUSTRALIAN SPELEOLOGICAL FEDERATION,  
P.O. BOX 388 BROADWAY NSW 2007

IN WESTERN AUSTRALIA, CONTACT:-

SPELEOLOGICAL RESEARCH GROUP WESTERN AUSTRALIA  
P.O. BOX 120 NEDLANDS 6009 09 276 2495

WESTERN AUSTRALIAN SPELEOLOGICAL GROUP  
P.O. BOX 67 NEDLANDS 6009 09 386 7782

WITCHCLIFFE AREA SPELEOLOGICAL SUB-GROUP  
097 555 324

Figure 1

The NSS once adopted a quote reading in part "*leave nothing but footprints*". That could leave a trail of death and destruction depending on where the foot was placed. It is understood that this quote has now been changed to "*leave nothing but memories*." Does that mean Americans 'float' through caves?

The ASF carries a message on its letterhead saying that "*What we have now is all there ever will be.*"

The present author is suggesting that "*what we have now is less than we had yesterday*" would be a more appropriate remark and one that all cavers should bear in mind on entering a cave.

Wherever there is a food source in a cave - it is possible there is also a faunal ecosystem. In times past we have argued the right of a cave to exist. It is about time we acknowledged that the fauna within a cave (no matter how much fear or contempt we may harbour for that fauna), also has a right to exist - and that existence must be protected and respected.

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