

"The Wonders and Exhilaration of Caving"

Written by Garry K. Smith.

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You may ask what is so special about caving? To fully answer this question we must look at both the physical and philosophical aspects. However as a starter, if you are physically fit, not afraid of heights, dark places, tight squeezes, deep water or the unknown and have a sense of adventure, then the "Caving Experience" is for you.

Caving embraces the thrill and exhilaration of exploring large caverns, tight passages, deep shafts, swimming underground rivers and requires a combination of many skills such as:- abseiling, rock-climbing, prusiking, ladder-climbing, observation, map reading and agility.

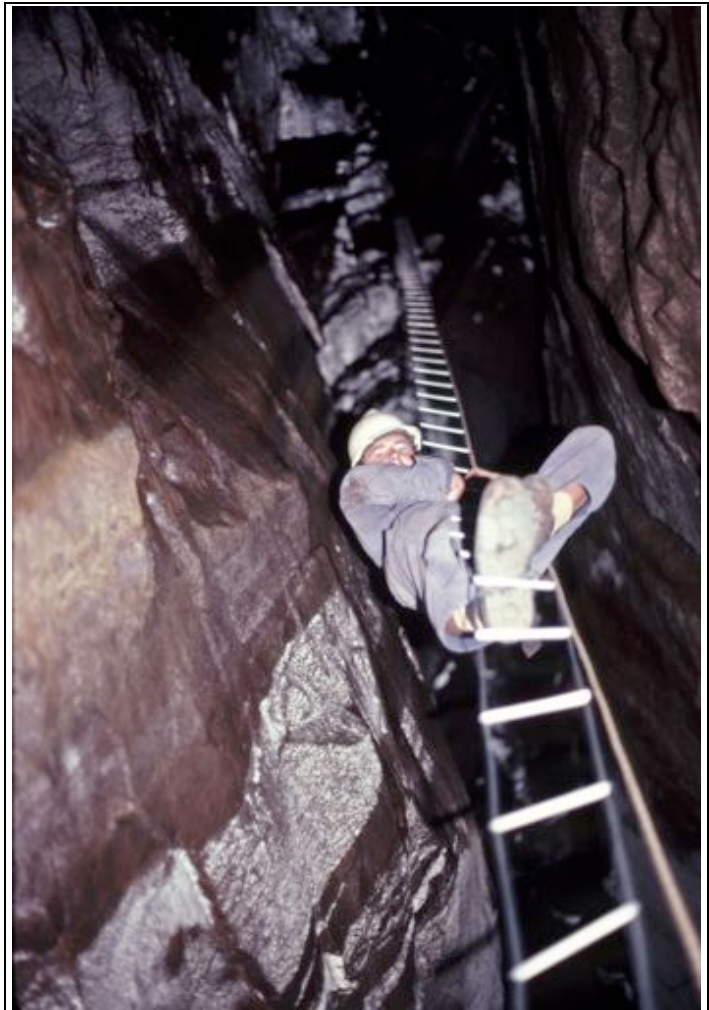
The sport presents the challenge of achieving seemingly impossible feats with contortory manoeuvres through a limitless range of physical obstacles and constrictions. Bearing in mind that the object is to achieve this in such a way as to remain physically intact and using the least energy possible. Any fool can climb a flexible ladder with plenty of brawn - however this is not the fundamental objective. It is to master the technique of climbing a ladder with finesse, using the minimum of energy as well as achieving the maximum degree of safety.

Important social aspects of caving include the mateship, comradeship, trust and team spirit which rapidly develops among fellow cavers set on a common goal. A days caving often ends with sitting around a camp fire, sipping a cup of tea and sharing personal experiences of trips gone by.

Caves are one of the few frontiers which humans have not fully explored. There is still the possibility of finding new chambers and passages where no other human has been before. New discoveries in this subterranean world, excite even experienced cavers. Some caves have developed with complicated three dimensional mazes which test even seasoned cavers and there is a likelihood of becoming **"lost"** or a better expression is "geographically misplaced", since you must be somewhere in the cave. Others have developed with deep shafts and vertical rifts, which test the cavers ladder and rope skills.

One will marvel at chambers full of sparkling calcite crystals and exquisite calcite formations. When new caves are found, every effort should be made to minimise human impact by undertaking track marking to avoid delicate areas. (For advice on this subject contact the Australian Speleological Federation). Calcite decorations, form over hundreds, thousands or even hundreds of thousands of years into an infinite varieties of shapes, sizes and colours. So every cave is different and no two chambers or passages are the same.

Caves are a precious non-renewable resource, which must be protected for future generations. Unfortunately caves are partly destroyed every time humans enter them, whether intentional or not.



Caver descends 27m pitch in Rebel Cave. Photo by Garry K. Smith

Therefore all cavers must consider themselves as honoured guests and never intentionally damage a cave.

Only experienced leaders should undertake the training of beginners, so that all of the fundamentals of safety and cave preservation are fully taught and explained. In this way beginners may have a full appreciation of their impact on this fragile underground world. For conservation of this limited resource, the training of beginners should be restricted to areas or caves ("sacrificial caves" for want of a better term) which have been well trodden over the years and present little chance of further damage. In this way caving skills can be honed without risking damage to sensitive caves and leaders may assess individuals attitude and ability before moving on to more delicate caves.

Caving adventures subject people to a variety of circumstances from adrenalin pumping situations through to peaceful times resting in an awe inspiring chamber. Caving is both a sport and a science. The sporting aspect must be developed before the science can be truly pursued. To fully appreciate



Garry K. Smith in the well decorated Clown Room of Main Cave. Photo by self timer

"The Caving Experience" individuals should be exposed to all of the physical and mental aspects as well as have some interest in a cave science. Experienced cavers within ASF clubs do a great job teaching beginners the practical means of traversing a cave system, safety practices and conservation aspects of caving. However experienced cavers who are training novice cavers are presented with the perfect opportunity to plant the seed (so to speak) which may spark individuals interest in one of the many sciences. These include the study of cave ecology, paleontology (study of bones and fossils), geology and chemistry. Speleology is the general term which covers all of the above as well as encompassing the exploration of caves as a sport or profession.

For instance, if we look briefly at ecology and ask what inhabits this underground world, the usual answer is bats. Did you know that despite the popular saying "as blind as a bat" they have good eyes which can see in low light conditions, however they have the added ability to be able to navigate using sonar in total darkness. With this echolocation system they can fly at great speed through tight twisted passages with astonishing accuracy. Most species roost in large colonies deep in the cave during the

day. At dusk a mass exodus occurs as they leave the safety of the cave to feed on airborne insects during the night. Bats are harmless creatures which are an important part of the ecology of our land as they eat up to half their body weight in insects each night. This helps to keep insect populations in check and reduces the need for farmers to use insecticides. These small cave dwelling bats should not be confused with their larger cousins, the fruit eating bats, otherwise known as flying foxes.

Beside bats there are many other varieties of unique fauna which live their total life in the cave environment. In total darkness, such creatures as, cave crickets (Wetas), spiders, beetles, fish and crustaceans can be found. Even the undisturbed cave floor is teeming with microscopic life, so cavers should stick to a single path to avoid compacting all of the floor area and destroying the ecology of the cave. A study of this fascinating microscopic world will shed a whole new light on your understanding, of preserving the total cave ecology. Next time your underground have a close look at a small heap of bat guano with a large magnifying glass. A thimble full sample observed under a microscope will reveal more varieties of creatures then you ever imagined.



Garry Smith photographs a formation called 'The Claw' in a cave at Codrington Victoria. Photo by Michael Smith

The caving fraternity is judged by the critical eye of the public, so each individuals actions could mean the difference between speleologists in general having a good or bad name. Strict adherence to the Australian Speleological Federation's (ASF) "Minimal Impact Caving Code" will help preserve caves and maintain speleologists good name. This philosophy is widely accepted throughout the caving fraternity and includes such things as:- avoid touching decorations (speleothems), leave nothing and take nothing but photos and memories. Without this philosophy we run the very real danger of ruining our caves forever. We are but specks on this earth but our actions have far reaching consequences.

Some people may rightly argue that every time a person enters a cave, some damage is done whether intentionally or not. However, while ever responsible people are interested in caving, then attention is drawn to the need to protect this fragile wilderness against unscrupulous profiteers, intent on mining easily accessible limestone outcrops containing caves. Mining will remain a threat while ever our community continues to use large quantities of cement products, lime for agriculture and as a coal mine fire suppressant. The efforts of speleologists and interested groups to save caves in the future

will no doubt depend on tomorrow's adults who have often gain their first caving experience as youth members in the Scout Association or other youth groups. Having said that one must consider that the need to mine is driven by demand of the consumer (ourselves). By far most caves occur in limestone but we should bear in mind that some caves also occur in other types of rock. The creation of National Parks to protect caves is a step in the right direction, however there is no absolute guarantee that this will protect them forever.

Caving Safety

Some important safety rules and caving practices include:-

- Make sure that other people know of your plans before going underground. In this way if the worst scenario were to eventuate, there will be someone to raise the alarm.
- Make sure that your group has the appropriate permit or permission of the landowner.
- Make sure that each person in the group has the appropriate equipment and skills required for the cave to be entered.
- Caving parties should consist of a minimum of 4 and maximum of 7 persons.
- Always cave as a group, never split up.
- Each person should carry at least three sources of light, a personal first aid kit and wear a good fitting helmet with four attachment point chin strap.
- Strictly adhere to the "Minimal Impact Caving Code". As an example one part of this code includes not touching decorations (speleothems). This is because the perspiration from your skin will discolour the formations and prevent them from growing. Dirt or mud inadvertently left behind from contact with the decoration will also inhibit the future growth of the speleothems. There is also the chance that fragile speleothems will be broken, destroying hundreds of years of growth in less than a second.
- Be aware of the dangers of Carbon Dioxide.
- Be aware of the signs of hypothermia and claustrophobia.
- Any squeeze you can get through you can get out of, if you don't panic.
- Suggest that everyone should go to the toilet before going underground.
- Don't leave rubbish in a cave and remove any you find.
- Do not disturb any bats you come across.
- Strict adherence to safety standards will minimise the possibility of accidents. There can be no compromise on safety.