CAVE CONSERVATION IN AUSTRALIA: FIGHTING FOR THE IMPOSSIBLE?

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Abstract

An examination will be made of problems facing cave conservation in particular and conservation generally in Australia. Attention will be focused on avenues open to conservationists for tackling issues and their effectiveness. Some discussion will centre on the lack of access to courts and exclusion from governmental decision-making processes which face many Australian conservation issues today. Examples will be cited where possible. A comparison with conservation in the United States of America will be made.

There appear to be some promising trends appearing on the Australian scene although the overall situation is still rather poor.

INTRODUCTION

The term cave conservation implies that the cave is under some sort of threat to its integrity or to the integrity of its associated ecosystem. Such threats range from wholesale destruction by mining activity through to unwitting abuse by excessive visitation to the fragile cave system by speleologists. The latter threat is a subtle one and one with which we are only just learning to come to grips. My discussion will centre on ways of tackling the more obvious sorts of threats, such as those posed by mining activity.

In particular, I will examine the legal avenues available which can be used to tackle conservation issues. The laws in Australia, and the liaison with governments that resulted in their formulation, are a far cry from those in the United States of America.

THE LAWS IN AUSTRALIA

Of necessity, I must discuss laws relating to conservation of the environment generally, simply because I am not aware of the existence of any law in Australia designed specifically for the protection of caves.

The first thing that one strikes when looking at environmental law is the great variation in legislation between different states. However, there are a few similarities in the laws. For example, all states have laws which are generally inadequate or useless! In this regard I mean that the laws are open to abuse by the administering government, for example, the process of protecting a site by declaring it a national park. Such decisions are made behind the veils of secrecy in the cabinet room and as such, the cabinet ministers can abuse their responsibility with little fear of public reprisal. I could cite examples here of states with such a cabinet, but I will leave it to your imagination.

In Queensland, there are four laws involved to a significant degree with

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protection of the environment. First, there is the *Fauna Conservation Act*. This statute provides "protection" to all native fauna on a temporary or permanent basis. It provides protection from the killing or taking of an animal, but says nothing about the protection of the habitat of that species. In relation to caves, protection of habitat is protection of the particular cave. An obvious example is the protection of bat maternity caves.

Next is the *Native Plants Act* which has not been amended since the 1930s. This Act provides for the protection of a select list of native plants, which includes things like orchids, from destruction on Crown Land only. A person can do what he likes provided the particular plant is on private land.

Third, there is the *Forestry Act* which provides for national park-type protection, except that forestry activity of any kind, including clear-felling, is allowed.

The fourth of these laws looks a little more promising. This Act deals with environmental safeguards for public and private developments, and includes provision for preparation of environmental impact statements (E.I.S.). It works like this. The Co-ordinator General's Department is notified of private projects requiring State approval or public projects which are in planning. The Co-ordinator General selects an advisory council made up from representatives of various government departments likely to be affected by the project. The council first decides whether or not the project is likely to have major environmental consequences and if it does, an E.I.S. must be prepared by the proponent. After the E.I.S. is completed, public comments are sought and the advisory council then examines these and recommends any necessary restrictions which it thinks should be placed on the project. It is then up to the head of the department with which the project is most closely associated to make a final decision, taking into account all factors of relevance including environmental factors. The important part of the legislation is contained in an amendment made in October 1978. The amendment places a legal responsibility on the particular departmental head making the decision, to ensure that environmental factors are taken into account. The departmental head can be held legally liable if he does not do so. While I can see major problems in the policing of this provision, I think the amendment is a major step in the right direction.

Many of the provisions of the E.I.S. legislation are repeated in the *Local Government Act*, that is, local authorities are required to pay due attention to environmental factors when assessing the merits of a project.

With regard to local governments and protection of the environment, local authorities have land-zoning powers which enable them to afford some protection to environmentally significant areas. However, there are problems. For example, land which is zoned for public recreation does not pay rates. I personally know of one council which could not care about protection of the environment for this reason alone. Another problem with local authorities is their lack of power such that the state government can override many of their decisions. Pardon me for not using a cave example but in the case of Moreton Island near Brisbane, the Queensland Local Government Minister, Rus Hinze, modified Brisbane's town plan to suit the State Government's own wish that sand-mining should go ahead on the island.

There are two Federal laws of relevance to this discussion. The first is the *Environment Protection (Impact of Proposals) Act* passed by the last Labor Government. This Act is similar to, but less effective than, the

Queensland E.I.S. law which I referred to earlier. A project requiring Federal approval is assessed for a possible effect on the environment. If the Minister thinks there will be a significant effect, he informs the proponent that an E.I.S. must be prepared. Once the E.I.S. has been prepared, comments from the public are sought. The E.I.S. is amended in line with these comments and the final statement is placed before the Minister, who makes the decision. It is clear that this legislation, while having the capacity to be a powerful law, is open to abuse by the excessive provision for discretion on the Minister's part. A recent example of abuse of this discretion, again non-cave, was the Iwasaki project. In this case the E.I.S. was prepared and some serious deficiencies were brought to light via public comment on the Statement. However, the Federal Government apparently ignored even the right of the public to comment by making a Cabinet decision to give the all clear to the project, before the deadline for public comment closed.

The other piece of Federal legislation is the *Australian Heritage Commission Act* 1975. The Act called for the establishment of an Australian Heritage Commission whose task was to prepare a register of the National Estate, that is, a list of places of environmental and historical significance in Australia. Places on the register are afforded protection, under this Act, from Federal Government action likely to damage these places. However, the Act does provide for development to occur on places on the register when the Minister is satisfied that 'there is no feasible or prudent alternative'. The Act states that under these circumstances 'measures that can reasonably be taken to minimize the adverse effect will be taken'. While the powers to protect places on the register are limited, again by the excessive provision for ministerial discretion in the Act, the independent recognition of the significance of a place, by its inclusion on the register, is of considerable political value. Another value of the legislation is the direct contact it provides between the Government and the public, via the process of nomination of a place for inclusion on the register. A necessary function of the Commission is obviously the assessment of nominations, so that selection of places to be included on the register can be made. This has required a considerable amount of expert opinion. The Australian Speleological Federation was asked to supply such expert opinion by the Australian Heritage Commission and funds were supplied for this purpose. This has been a major breakthrough in having caves, and the environment generally, recognized by our administrators and is the first step in the effective management of caves in Australia. Such liaison between governments and private groups or individuals is a new thing in Australia, with regard to environmental matters, and there are still many administrators to be convinced of the value of such liaison. To illustrate, I spoke to a Queensland Liberal parliamentarian recently about the need for independent opinion on environmental matters. He clearly had not given the subject much thought and came out with the instant reply: 'but you don't have any say.'

After the Australian Heritage Commission legislation was introduced, some states followed suit by introducing similar laws. One of the most effective laws introduced was that in New South Wales. This law is regarded as potentially more effective than its Federal counterpart simply because many more projects come under State jurisdiction than under Federal jurisdiction.

USING THE LAW IN ENVIRONMENTAL MATTERS

Here comes the crunch! At the moment, all of the laws involved with protecting the environment can be policed only by governments. Clearly, if for its own convenience a government wishes to see a project go ahead, then despite a significant environmental effect, the project can not be stopped in the courts because the government obviously will not take the necessary legal action. There is provision for individuals to take action under two circumstances. The first is when an individual can show that he will be affected by a project, to a greater extent than a member of the general public. The circumstances under which this can be proved are almost non-existent in environmental cases and where recourse is possible, court costs are generally prohibitive. I do not know any case where action was successfully taken under these circumstances. The other situation is when an ordinary citizen wishes to pursue an environmental case, or any other public interest case. Under these circumstances, the person must first obtain the Attorney-General's "fiat", as it is called, and legal precedent has been set to establish this requirement. "Fiat" is a legal term meaning that the action proceeds in the Attorney-General's name, that is, in the government's name, although court costs etc. are the responsibility of the person proceeding with the action. The Attorney-General's fiat is required because the person proceeding with the action does not have the legal standing, or *locus standi*, to take the case to the courts. This system was designed around the English system. However, in England, the Attorney-General is an independent public servant whereas in Australia, the State and Federal Attorney-Generals are party-political Cabinet Ministers. The Attorney-General is useless in this situation because when a government decides not to take legal action on a particular environmental matter, it certainly is not going to allow a member of the public, via its Attorney-General, to take such legal action. This is what happened in the case of the Mt Etna caves near Yeppoon in Queensland (Pure, 1978). Grounds were established for a legal challenge questioning the granting of mining leases over Mt Etna. Of necessity, the State Attorney-General's fiat was sought so that the challenge could proceed. The Attorney-General refused to grant his fiat and would not detail the reasons for his refusal. We will be left to ponder whether the Queensland Government's entrenched opinion that mining will be allowed to continue on Mt Etna had any influence on the Attorney-General's decision.

Fortunately, the problem of members of the public being unable to take such public interest court action is receiving attention. Recently, the Australian Law Reform Commission has examined this problem (Australian Law Reform Commission, 1978) and has recommended a change in the present regulations to allow greater public access to the courts in such cases.

There is one instance I know of which may indicate a trend towards greater access to the courts in public interest matters. There is provision in the Federal *Trade Practices Act* for any member of the public to take legal action on the matters, essentially of public interest, which the law covers. Furthermore, this provision of the Act has recently been successfully tested in a public interest suit (R. Phelps, pers. comm.). However, it seems that a trend in greater court access will be slow in coming, first, because governments will be loathe to give up their powers in this regard and second, because the courts in this country are already working to capacity and any increase in traffic which would result from a change in the present provisions could not be coped with.

THE SITUATION IN THE U.S.A.

Not only is there an impressive array of conservation laws in general and cave conservation laws in particular in the U.S.A., but the U.S. public have virtually full access to the courts in public interest suits. For a detailed comparison of Australian and U.S. conservation generally, with particular reference to use of the law, see Miller, 1978.

To look at the effectiveness of the laws, take for example the *Endangered Species Act* 1973 which seeks to:

> provide a means whereby the ecosystem upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions . . . .

Then compare this with the Queensland Fauna Conservation Act's flimsy provisions that I described earlier. Furthermore, many Federal departments affected by the U.S. Act have initiated their own programs to ensure its effective implementation (Mohr, 1976). This law has been effective in the protection of animals and their environments. For example, this legislation was used to stop local authorities from removing water from the surrounds of Devil's Hole cave because this would have resulted in the destruction of the extremely rare pupfish in this cave (Anon., 1976).

In relation to specific cave conservation laws in the U.S., the first law was gazetted in 1883. By 1974 there were twelve separate statutes, covering eleven states and five statutes in the process of being gazetted. The more recent laws are fairly comprehensive and cover cave vandalism, littering, and protection of cave fauna. I have appended the text of one of these laws, which was introduced in Maryland in 1978. While these laws are fairly powerful, considerable difficulty has been encountered in trying to police them. Perhaps less than five convictions have been recorded in the whole of the U.S., although no accurate records have been kept on this. The laws obviously must have some deterent effect though (Stitt, 1976).

Many government departments have provisions for protection of caves and their ecosystems. For example, Godfrey (1977) reports that the Bureau of Land Management goes to considerable lengths to preserve caves under its jurisdiction. Also, Manges (1976) indicates that the National Parks Service has several specific rules dealing with caves in national parks. Another example is the Scout Mountain Nature Preserve in Indiana which is run by the Division of Forestry. This Preserve was gazetted to protect a bat wintering site (Keith, 1976).

Generally speaking, liaison between the U.S. Government and cavers seems to be excellent. A further example here is the signing of an agreement for preservation of the Marble Mountains wilderness area caves by the Klamath Mountains Conservation Task Force and the Forest Service (Sims, 1977). On the state level, activity by cavers prompted the establishment of a committee in Virginia to look at ways to protect the State's caves (Strong, 1978). A major breakthrough has been the recognition of the concept of "underground wilderness", thus allowing caves to be covered by the *Wilderness Act* (Stitt, 1975).

To conclude this section, I will quote from a letter I received from Tom

Strong who is Conservation Committee chairman of the National Speleological Society:

> Attempts by cavers to influence Government policies have generally been most successful on the local level with personal contact. For example, cavers active in a particular national forest or a unit of the National Park Service have frequently been able to work with the unit supervisors or resource management personnel to influence cave management. This is especially true in the western United States because of the extensive Federal ownership of land.
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> The National Speleological Society is also on the mailing list for Environmental Impact Statements prepared by various agencies, particularly the Forest Service, Park Service and Bureau of Land Management. The main function of the Environmental Impact Sub-committee of the Conservation Committee is to respond to or provide input on these Statements where caves might be affected.

CONCLUSIONS

The advanced state of cave conservation law in the U.S. has grown out of liaison between cavers and governments at the various levels. Small activities such as lobbying politicians on particular cave conservation projects has created interest about caves generally amongst the politicians, and the government agencies that serve them, to the point now where cavers not only comment or collaborate with government agencies on particular projects but supply expert opinion on cave management matters (Curl, 1976).

Promising trends are appearing on the Australian scene in this regard and I mentioned the example of the A.S.F. Australian Heritage Commission study earlier. These trends have been slow in appearing probably because of the relatively short time which the Australian caving fraternity has been in existence.

To look at a few achievements, a caver was appointed to the Queensland National Parks and Wildlife Service to prepare a management plan for the Chillagoe caves, and recently, another Queensland caver was appointed to the Service so that he could continue his research on the Ghost Bat. In other states, liaison with national parks services and other government authorities is occuring. An example here is the Nullarbor caves management strategy prepared by the A.S.F. for the Western Australian Government. The long term result hopefully will be sufficient awareness of caves by our administrators that specific legislation can be introduced to protect caves, as has happened in the U.S.

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REFERENCES

Anon. (1976). Conservation happenings. *N.S.S. Newsletter* 34(10):184.

Australian Law Reform Commission (1978). *Access to the courts I; Standing: Public interest suits.* (Discussion Paper Number 4).

Curl, R.L. (1976). National Speleological Society liaison with Federal Agencies. *National Cave Management Symposium Proceedings.* Speleobooks, Albuquerque.

Godfrey, C. (1977). Federal land use planning and cave management. *National Cave Management Symposium Proceedings.* Speleobooks, Albuquerque.

Keith, J.H. (1976). *Myotis sodalis* protected in Scout Mountain Nature Preserve. *N.S.S. Newsletter* 34(11):193.

Manges, G.E. (1976). Legislation and liability of the Bureau of Land Management and the National Park Service. *National Cave Management Symposium Proceedings.* Speleobooks, Albuquerque.

Miller, A.S. (1978). Conservation, politics and the law. *Habitat* 6(1):19-23.

Mohr, C.E. (1976). The protection of threatened cave bats. *National Cave Management Symposium Proceedings.* Speleobooks, Albuquerque.

Pure, G.A. (1978). Mt. Etna caves and politics. *A.S.F. Newsletter* 80:11-12.

Sims, M. (1977). K.M.C.T.F. researches Marble Mountain Caves. *N.S.S. Newsletter* 35(6):120.

Stitt, R. (1975). Conservation notes. *N.S.S. Newsletter* 33(11):179.

Stitt, R.R. (1976). State cave protection laws and their enforcement. *National Cave Management Symposium Proceedings.* Speleobooks, Albuquerque.

Strong, T. (1978). Conservation happenings. *N.S.S. Newsletter* 36(9):196.

APPENDIX

MARYLAND CAVE LAW

Subtitle 14. Caves

5-1401

(A) In this subtitle, the following terms have the meanings indicated.

(B) "Cave" means any naturally occurring void, cavity, recess, or system of interconnecting passages beneath the surface of the earth or within a cliff or ledge, including natural subsurface water and drainage systems. The word "cave" includes or is synonymous with cavern, pit, pothole, sinkhole, grotto, and rock shelter.

(C) "Commercial cave" means any cave with improved trails and lighting utilized by the owner for the purpose of exhibition to the general public as a profit or nonprofit enterprise, wherein a fee is collected for entry.

(D) "Gate" means any structure or device located to limit or prohibit access or entry to any cave.

(E) "Person or persons" means any individual, partnership, firm, association, trust, or corporation.

(F) "Speleothem" means a natural secondary mineral formation or deposit occurring in a cave. This includes or is synonymous with stalagmites, stalactites, helectites, anthodites, gypsum flowers, needles, angel's hair, soda straws, draperies, bacon, cave pearls, popcorn (coral), rimstone dams, columns, palettes, flowstone, et cetera. Speleothems are commonly composed of calcite, epsomite, gypsum, aragonite, celestite and other similar minerals.

(G) "Owner" means a person who owns title to land where a cave is located, including a person who owns title to a leasehold estate is [sic] such land.

(H) "Speleogen" means a solutional feature of the bedrock, and includes or is synonymous with anastomoses, scallops, rills, flutes, spongework, and pendants.

(I) "Sinkhole" means a natural depression in a land surface communicating with a subterranean passage or drainage system.

(J) "Cave life" means any life form which normally occurs in, uses, visits, or inhabits any cave or subterranean water system.

5-1402.

(A) A person may not, without express, prior, written permission of the owner, wilfully or knowingly:

(1) break, break-off, crack, carve upon, write, burn, or otherwise mark upon, remove, or in any manner destroy, disturb, deface, mar, or harm the surfaces of any cave or any natural material therein, including speleothems and speleogens;

(2) disturb or alter in any manner the natural condition of any cave;

(3) break, force, tamper with, or otherwise disturb a lock, gate, door, or other obstruction designed to control or prevent access to any cave, even though entrance thereto may not be gained; and

(4) dispose of, dump, store, or otherwise introduce into any cave, sinkhole, or subterranean drainage system any litter, refuse, dead animals, sewage, trash, garbage, or any chemical or biological contaminant which is potentially dangerous to man or any form of cave life.

(B) Any person violating any provision of this section is guilty of a misdemeanor, and upon conviction thereof, shall be fined not less than $150 nor more than $500, and in addition thereto, may be imprisoned for not less than ten days nor more than six months.

5-1403.

A person may not sell or offer for sale any speleothems in this State, or to export them for sale outside the State. A person who violates any of the provisions of this section is guilty of a misdemeanor, and, upon conviction, shall be fined not less than $150 nor more than $500 and in addition may be imprisoned for not less than ten days nor more than six months.

5-1404.

(A) A person may not remove, disfigure, kill, harm, disturb, keep, restrain, or in any manner alter the natural condition or environment of any plant or animal life which normally lives or occurs within any cave or subterranean water system.

(B) Notwithstanding the provisions of subsection (A) of this section, scientific collecting permits may be obtained from the Secretary. Gates

employed at the entrance or at any point within any cave shall be of open construction to allow free and unimpeded passage of air, insects, bats and aquatic fauna. A person who violates any provision of this section is guilty of a misdemeanor, and, upon conviction thereof, shall be fined not less than $200 nor more than $500 and in addition thereto, may be imprisoned for not less than 15 days nor more than six months.

5-1405.

(A) A person may not excavate, remove, destroy, injure, deface, or in any manner disturb any burial grounds, historic or prehistoric ruins, archeological or paleontological site, including relics, inscriptions, saltpeter workings, fossils, bones, or any other such features which may be found in any cave.

(B) Notwithstanding the provisions of subsection (A) of this section, a permit to excavate or remove archeological, paleontological, prehistoric, and historic features may be obtained from the Secretary. The permit shall be issued for a period of two years and may be renewed at expiration. It is not transferable but this does not preclude persons from working under the direct supervision of the person holding the permit.

(C) A person applying for a permit shall:

(1) provide a detailed statement to the Secretary giving the reasons and objectives for excavation or removal and the benefits expected to be obtained from the contemplated work.

(2) provide data and results of any completed excavation, study, or collection at the first of each calendar year.

(3) obtain the prior written permission of the Secretary if the site of the proposed excavation is on State owned lands and prior written permission of the owner if the site of the proposed excavation is on privately owned land.

(4) carry the permit while exercising the privileges granted.

(D) A person who violates any provision of subsection (A) of this section is guilty of a misdemeanor, and upon conviction shall be fined not less than $100 nor more than $500, and may be imprisoned for not less than ten days nor more than six months. A person who violates any of the provisions of subsection (B) of this section is guilty of a misdemeanor, and, upon conviction, shall be fined not less than $100 nor more than $500, and the permit shall be revoked.

5-1406.

(A) Neither the owner of a cave nor his authorized agents acting within the scope of their authority are liable for injuries sustained by any person using the cave for recreational or scientific purpose if the prior consent of the owner has been obtained and if no charge has been made for the use of the cave.

(B) An owner of a commercial cave is not liable for an injury sustained by a spectator who has paid to view the cave unless the injury is sustained as a result of the owner's negligence in connection with the providing and maintaining of trails, stairs, electrical wires, or other modifications, and the negligence is the proximate cause of the injury.

SECTION 2. And be it further enacted, that this Act shall take effect July 1, 1978.