

**Submission  
No 123**

**INQUIRY INTO MANAGEMENT OF PUBLIC LAND IN  
NEW SOUTH WALES**

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**Submission Regarding the NSW Government Inquiry into the Management of Public Lands.**

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No confidentiality restrictions are imposed on this submission.

**Summary**

**General Comments** on the need for more expert biologists and the problems of bureaucracy and underfunding, including suggestions for possible solutions. Suggestions for improvements in the conservation of endangered species. Some suggestions for solutions to **Revegetation** problems.

Also brief comments on **Fire Strategies, Noxious Species, Toxic Chemicals and Public Access & Land Usage** in National Parks etc. Some suggestions regarding **Effective Management Methods** and the **Training of Expert Advisors**.

**General Comments**

I trust that highly qualified advisors in the areas of botany, zoology, ecology and conservation are available to assist this committee. Their advice should be paramount in all decisions relating to management of National Parks. The considered input of such experts is critical to the long term success of the management of public lands and the appropriate development of National Parks.

From my long experience as a biologist it is clear to me that the past management of National Parks and other public lands has been far from optimum.

A major consideration for the efficient long-term management of National Parks is the costs involved. It can be expected that costs will increase significantly in the future as more staff of higher calibre are employed. This expectation calls for astute financial management without inhibiting public access and participation in the use of our natural resources.

Another major consideration in the current era of financial stringency is the question of how to reduce the significantly over-bureaucratic nature of our current system. Methods need to be found that optimise the use of resources that are expected to remain very limited for some long time to come?

Just one way of saving millions of dollars that could be used to improve National Park Management would be to eliminate unnecessary bureaucracy. For example, it is ludicrous for the Government to check on every lizard, snake, turtle or tadpole (and a host of other species) held by adults or children around the country. Charging fees, issuing licences, receiving and issuing correspondence, maintaining data bases etc. etc. is bureaucracy gone mad. The only native species that need managing are the critically endangered species and perhaps potentially lethal species such as taipans and large crocodile species. Australians should be encouraged to own native pets rather than exotic species such as cats and dogs. In my opinion it is an infringement of civil liberties to restrict people's access to native pets, especially as there seems to be no restriction on indigenous collection of such species.

Less than 1% of native species have been well studied and the above action alone would not only save money but encourage more research, publication and education regarding native species.

Probably a majority of research on Australian species (at least in the past) has been done overseas thanks to the porous nature of our customs services which (on paper at least) are highly restrictive. Appropriately managed wildlife exports could also generate millions of dollars for Australia rather than for smugglers (e.g. as has been done with crocodile skins and Wollemi pine production).

Another over-bureaucratic area where millions of dollars could be saved that could be used to help save endangered species is in the area of animal care & ethics (ACE). Almost every university and pharmaceutical entity in Australia has set up an 'empire' to comply with Government legislation. However it is doubtful if one extra animal (in the University system at least) has been saved from cruelty compared to the time prior to the enactment of the ACE legislation. Approximately 99.9% of

research animals live a much more pleasant life than their wild counterpart. They do not get drowned in floods, burned alive in bush fires, struck by lightning or torn apart by predators. One of the fundamental axioms of the ACE legislation is seriously flawed in that it calls for reduction in the use of animals in research. The use of animals is vital to most areas of biomedical and pharmaceutical research and the continued reduction in numbers of animals used will increase the danger of adverse side-effects of new medical procedures or new medications. The whole ACE issue could be administered with minimum bureaucracy and cost by the institutions involved.

Another area of National Park management needing major improvement involves the conservation of endangered species. Unless the local authorities involved with conservation are qualified or highly experienced in conservation very little can be achieved. As a biologist concerned about biodiversity I make it my business to monitor endangered species in my area (at my own expense because no funding is available for such monitoring). For example, I sometimes find it very difficult to get information about threatened species, I have been told that unless I have a license for a given protected species then I can't be given access to the location data. Secondly even when I have found out exact locations of highly endangered species of plants or animals very little is done to actually protect them.

There are many examples in Australia and overseas of the problems relating to extinctions and the protection of endangered species. One example is that of an endangered local plant found in a local reserve area. Its presence and location was reported to Council. It was just coming into flower when it was mowed to the ground by Council workers. I immediately complained to the Council (I now have to wait another year to observe life history data and collect pollen for analysis). A couple of months later, just as the plant was beginning to grow again it got mowed off for a second time and on top of that someone had sprayed herbicide around. After this (and further complaints from me) the Council planted a protective screen of new plants in the area to prevent mowing. Fortunately the plant has survived but the point is that a keen and/or knowledgeable individual (in this case

myself) was needed to identify, monitor and achieve effective protection. What would have been even better (from the species survival point of view) would be for me to propagate the species and locate new populations in appropriate and less vulnerable areas, (but of course the legal position is that I could not interfere with it. Again, there is too much bureaucracy and little official understanding of the technicalities involved).

Another example is that of a very rare local orchid species that I discovered in the Watagan Forest with a colleague. This was probably the rarest species of plant in the world as there were only about 6 other specimens known at the time. As nobody else was monitoring it I took it upon myself to record data, photograph and continue monitoring it and publish the data obtained. I notified the appropriate authorities and even took the Managing Director of forestry to see the plant (all at my own expense). However after about 6 years of monitoring I visited the site only to find that the whole area had been clear-felled and bulldozed. Despite repeated and extensive searching no other specimen could be found either before or after this catastrophe. I'm not sure about what more should have been done to prevent this annihilation of a critically endangered species but a highly trained orchidologist could no doubt have propagated it and perhaps replanted it in a more suitable area.

I believe that both these examples (and I have many others) show that the best (and cheapest) way of saving endangered species is to eliminate bureaucracy (almost) and get responsible local people actively involved under the guidance of an expert for that particular species.

### **Revegetation**

Just allowing cleared land (such as agricultural land) to regrow naturally is inadequate. Even replanting and repopulating with local provenance species is also inadequate, not only because it can take over a hundred years to achieve original ecological status, but also because such methods are likely to increase the risk of introduction of exotic weed species. Also, rare and endangered

species tend towards extinction during successional events (unless introduced very carefully with long term expert protection and monitoring). Every such revegetation opportunity should be viewed as a chance to save local endangered species and to enable the downgrading of their conservation status towards least-threatened. Adequate refuges (hollow logs etc. even artificial if necessary) for all animal species present (or likely to be present) have to be catered for right from the start. If biologists thoroughly understood the life-history of each species we could then propagate them (in captivity if necessary) and encourage local people to take pride in their heritage and support the propagation programs (this cannot be done legally under present legislation). Reduction in bureaucracy and adequate funding for training supervisors would greatly facilitate the preservation of endangered species. Every endangered species and rare species needs a designated expert who studies and understands the entire life-history including threats and propagation methodologies etc. Such experts can then produce certified publications on the care and propagation of each species.

### **Fire Strategies**

Fire is a natural part of Australian ecosystems and extreme efforts to eliminate fire are certainly misplaced. Fire research has made great advances in recent years, however because of climate changes the fire regimes for some localities and ecosystems are changing dramatically. Serious consideration needs to be given to the application of the optimal regime for a given area at a given time. This means that a lot more expert advice is needed as well as more research into bush fires and the biological consequences of different types of fires.

### **Noxious Species**

It is outrageous that some noxious or invasive exotic species are not placed on lists of species for control or elimination because "it would be too expensive to control" (as occurs in our local area). Conversely there are so called 'noxious' species listed that have no chance of survival in our local climatic conditions. Clearly more research and expert specialist advice are needed throughout the management process. If management protocols involved in the control of noxious species and weed

elimination are implemented right from the start of park management it would be much easier to stop massive invasions from building up. More research on the biology of noxious species and improved expert advice is required to make sure that optimum management decisions are made.

### **Toxic Chemicals**

Many agricultural and other commercial sites are heavily contaminated with toxic chemicals and it is certain that (in the past at least) inadequate soil and water testing was done (if done at all) and if this situation is to be improved it will need more expert testing and strong oversight.

### **Public Access & Land Usage**

These lands are owned by the public and the public need to be encouraged to recognise this ownership. A large number of activities should be permitted and encouraged in order to strengthen this sense of ownership. Any activity that is likely to be detrimental to the ecology of National Parks (such as trail-biking) must be very closely scrutinised and either banned completely or very closely controlled, perhaps within restricted areas and only according to the advice of expert ecologists, zoologists, botanists and conservationists.

### **Effective Management Methods**

Even where modern management techniques are used, the effectiveness of management needs to be assessed regularly to ensure that the latest and most appropriate policies are implemented.

Because of variable factors such as climate change and ecological succession, discovery of endangered or threatened species etc. the policies will need to be constantly reviewed and adjusted to match these changes.

### **Training of Expert Advisors**

For many years our Universities, State Museums and to a lesser extent agencies such as the CSIRO have been seriously, even catastrophically underfunded. Many highly qualified scientists are unable

to function in their major areas of expertise, many others have had to retrain, retire early, be made redundant or seek employment abroad. "Unless it can be seen to make a quick profit, don't bother" seems to be the overriding political doctrine. Professor Hilmer (Vice Chancellor of the University of Sydney) said recently that their government funding was less now than it was in pre-war days. The result is that in many (perhaps most) specialist areas of biological science the number of top world-class experts is zero. I have had specimens awaiting Museum identification for many years and the reasons are that there are no (or too few) appropriately qualified taxonomists and minimal field work is being done even on species which are threatened or of great biological or regional significance. Some of the research facilities are old and totally inadequate for modern high technology research. Many are in dire need of multi-million dollar refurbishments and re-equipping with modern facilities. The research areas at most Australian museums for example are totally inadequate and could best be described as abysmal. Maybe one of the major reasons for this parlous state of affairs is that the number of politicians with higher degrees in biological science is still zero I believe and even the number with a BSc in science is about the same. The future of our civilisation depends on science (including technology) but what can we expect in terms of management when there are still politicians who refuse to accept that climate change is man-made or that the problem needs urgent action? Presumably this is just because they have listened to those with vested interests or those with very little scientific understanding rather than to the sum of scientific evidence.