

The Relationship Between Protected Areas and Indigenous Peoples

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ABSTRACT. *“Wilderness”—natural areas untouched by man—has always been rare, but only recently have people started drawing lines on maps and preventing people from using resources they have traditionally exploited. But without the support local people, the future of any protected area is insecure, since in their search for the means of their own survival, the temptation to exploit reserved resources may be irresistible. Such support should not be difficult to obtain, provided the proper approach is used; but nature conservation is not to be accomplished only by the establishing of specially protected natural areas—it must be practiced in all places at all times. Guidelines on how to provide for long-term positive interactions between local people and the natural environment are provided.*

1. INTRODUCTION

Perhaps the most difficult problem faced today in our efforts to accomplish conservation of nature is the inability of people to recognize and comprehend the rates at which the world is changing. For as long as people have been on earth there have always been wild areas—the land across the river, the other of the mountain, the frontier. Throughout the human story there has been a backdrop of wilderness before which the acts of civilization were played. There seemed to be always more lands, more timber, more pastures, more wild animals to give substance to the myth of inexhaustible resources.

In the United States, even after most of the country had been settled by Europeans, there were still areas that seemed untamed—wild mountains, southern swamps, deserts. But beyond these were the more magic places, names to excite the adventurous spirits of young people—Africa, the Arctic, the Himalayas, the Amazon,

the really wildest lands. Americans still want to believe that those places are still remote and wild, just as they want to believe that there are “Pacific paradises” that they have not yet spoiled. They are encouraged in this myth by television, with its never-ending wild animal series which hover near “prime viewing time” and occasionally even invade it.

Unfortunately, in those “magic places” for Americans, the people who have always lived there believe the myth also, even though in their latest excursion into the rainforest or the desert they have encountered the villages or the herds of those who had moved in from the other side. People cannot accept the rate of change or the disappearance of natural abundance. It is too fast and it takes place within the lifetimes of adults who spent their growing years in a seemingly changeless land. Nobody before had to worry about taking care of the forest or the wild animals—they took care of themselves, or God watched over them. They had not been human concerns. It is asking much for people to accept that in just five, ten or twenty years all the rules have changed, and that what “always has been” is no longer.

Now we are drawing lines on the map, attempting to separate the wild from the tamed. We designate lands as nature reserves, national parks, or wilderness areas, and we say that these are no longer places where people can live, or take from, or use in any way except the way of the visitor who comes to look, but not to interfere. This is difficult for people who have always lived in wild country and consider themselves part of it.

There may have been areas on earth that were rich and teeming with life but not permanently occupied by people, what we now call wilderness. But it seems more likely that such areas were visited at least seasonally or occasionally by hunting or gathering parties, or were

used by the shamans or by young people on a "vision quest." The really barren and lifeless areas of the poles, the most arid deserts, the highest mountains, were not occupied by people, and probably not visited. But they are still pretty much that way today. Most of the land we designate as formal wilderness or set aside in national parks is land passed on to us by people who considered it to be, in part at least, their homeland. We consider it to be of national park quality because they did not treat it the way we have treated land. Too often they have gone, and our legal designations, our wardens and patrols, take their place. Something seems to have gone wrong, somewhere along the way.

We are now attempting to find ways to put things back together, to integrate the conservation of human cultures with the conservation of the natural world. We do this in part to encourage those who have cared for the land in the past to continue to do so, and in part to encourage those who have not cared to begin to take an interest in conservation of nature, to realize that their future is tied in with the future of the natural environment and with the proper use of the lands and resources on which they depend for their livelihood.

We realize that the national parks, nature reserves and other protected areas of the world have most commonly been established without either the advice or consent of the people most likely to be directly affected by their establishment. Without the support, or at worst acceptance, by these people, the future of any protected area cannot be considered secure, since in their search for the means for their own survival the temptation to take wildland resources from the area, or to encroach upon its boundaries, will tend to be irresistible. Furthermore, the prospect for extending any system of protected areas to take in new lands or waters becomes increasingly dim where popular support for protection of nature is lacking.

2. INDIGENOUS PEOPLE

In attempting to work with people who live in or near to areas that have been designated as having protected status by the government of the country concerned, or areas that are considered worthy of some form of legal protection, there is danger that we will confuse ourselves by our own terminology. If we designate some people as "indigenous" and consequently worthy of special consideration, we leave other people in the category of "non-indigenous" and consequently not worthy of special consideration. I do not believe we can risk such a dichotomy, which from the outset establishes two classes of citizens, one with special privileges, and the other presumably to be kicked around as usual.

In one sense there are no indigenous people: all have ancestors who have come from somewhere else. At some time every native group was an invader, an exotic coming from some other place. There are, however, marked differences in how long each of us have

been in a particular place, and the degree to which we have adapted our ways of life to that area. Some can trace their ancestry in a particular area back over centuries, others have just arrived and don't intend to stay. Some are entirely dependent on the resources of a particular area, others come to visit, to trade, or to raid, and have their source of livelihood elsewhere. Attitudes toward land and resources can differ depending on background, tradition and degree of allegiance to a particular living area. There are therefore real differences between people in relation to their response to the need to manage, or protect the resources of an area. These, however, cannot be resolved by a simple native/non-native dichotomy. Some natives only wish to go somewhere else; some non-natives deeply desire to become natives and to cherish and care for the land they occupy.

In an earlier paper (Dasmann, 1974) I attempted to distinguish *ecosystem people*, a: those who live within an ecosystem or several adjacent and related ecosystems and are dependent on those resources for their existence. Such people must over time learn to live within the ecological limitations of their home area if they are to survive. Although individually they may not have a strongly developed ecological consciousness, culturally they are committed to sustainable ways of life that are essentially sound in ecological terms. By contrast, *biosphere people* are those tied in to the *global economy*, whose livelihood is not necessarily dependent on the resources of any one particular ecosystem. I did not intend to set up a dichotomy with this terminology, but rather to indicate the extremes of a cultural continuum. Much of the difficulty encountered in attempting to achieve ecologically sustainable ways of life comes from people who are in transition from one extreme to the other—their cultures have been disrupted or destroyed, and with that their means of working with the natural environment to which their ancestors were adapted, but they have not yet achieved any firm foothold in the global economy.

From the viewpoint of cultural conservation, it is obvious that the ecosystem people are the most likely to be adversely affected by contact with representatives of the more dominant culture, including those who come with the intention of establishing nature reserves. They are also the people who have in the past maintained the ecological conditions that today are favourable to the establishment of nature reserves. However, does this mean that they should be given favoured status? Does their past record of occupancy of the area, including care for the wild species within it, entitle them to remain in place even when the interests of the national government and the international community dictate that nature conservation should be given first priority in that area? If the answer is yes, should this entitlement remain even after they adopt the ways of the dominant society—when automatic weapons replace bows and arrows?

I would suggest that all people who live in an area and consider it to be their home must have similar rights

and be given equal consideration when planning for nature reserves or other protected areas. The question to be asked is not whether they are indigenous, but whether their ways of life are compatible with the objectives and goals of conservation. Hunter-gatherers who have traditionally been conservative in their use of wildlife and plant resources and constitute no threat to the future of wild species in that area should be encouraged to remain within a nature reserve and to participate actively in its protection. However, this arrangement can only work so long as their numbers and their resource utilization remain in balance with the productive capacity of the area. As Brownrigg (1982) has pointed out, "protected areas planning must also anticipate population increases and culture change. It is unrealistic to expect a group to atrophy, or worse, to 'return' to some traditional technology long ago discarded in favour of a more modern alternative." Agreement must be reached, however, for population surpluses to be accommodated elsewhere, and for resource utilization, whether traditional or modern in its technology, to remain within prescribed limits. Otherwise the goal of nature conservation is sacrificed.

Hunter-gatherers, fisherfolk, hunter-gardeners, shifting cultivators, and pastoral nomads could in theory all be accommodated within protected areas, providing they agree to the limitations already described. But the same rules must apply to non-traditional people who occupy areas of high priority for nature conservation, including those primarily involved in raising cash crops for export. If their ways of using the land do not conflict with nature conservation priorities, and if they agree to limitations on their numbers and their use of resources, they can equally be welcomed within a protected area and be asked to join in the activities of protecting and managing the reserve.

To say these things is easier than to do them. If the doors of the national parks and reserves are to be opened to some people, perhaps under carefully defined conditions, then what about others who also claim rights to the land or resources of the area? Are those with ownership rights which have been formally recognized by the government to be treated differently from those with traditional rights dating back into the distant past that are not formally recognized? What about those, such as many American Indian nations that once had formal rights, established by treaty, but have lost their land to others or to the government despite these agreements? Furthermore, are we to agree to one set of conditions governing the establishment of protected areas in the non-industrialized world that do not also apply to the industrialized world? Are the Sioux in the Black Hills to be treated differently from the Yanamani in the northern Amazon basin?

What I am recommending is a uniform code for the treatment of people whose cultures or means of livelihood are likely to be affected by the establishment of protected areas. The code can take into account the special problems of endangered peoples, just as wildlife

laws become more restrictive when a species is endangered. It must be flexible enough to recognize that some people can be compensated in cash for the lands or resources they may be asked to sacrifice, but that others cannot. Those who cannot are not only those with traditional rights or communal ownership, but all those who closely identify with the land and the natural environment where they live—the new natives on whom the future may depend.

3. NATURE RESERVES AS ISLANDS

Since the work of McArthur and Wilson (1967) there has been increasing interest in the concepts of island biogeography as these apply to the size, shape, and distribution of national parks, nature reserves and other protected areas. The prospect that areas designated for nature conservation may in the future exist as islands surrounded by lands used intensively for the production of food and other necessities for human survival has caused serious concern that these areas may be inadequate to provide for the survival of the species originally contained within them. The basis for this concern has been explored in books by Soul and Wilcox (1980) and Frankel and Soul (1981). To counteract any tendency toward insularization of nature reserves, the Unesco Biosphere Reserve project (Unesco-MAB, 1974) has proposed that such reserves consist of a fully protected core area (strict nature reserve) surrounded by buffer zones which may be used for recreation (national parks) or compatible forms of resource exploitation (managed forests, rangelands, hunting areas, etc.) grading outward to more intensively used areas. Although many designated biosphere reserves do not fit these criteria, those national parks systems that have been reasonably successful for nature conservation, such as those of the United States and Canada, do have *de facto* buffer zones surrounding and often connecting the national parks. These are for the most part federal, state or provincial areas in which use is controlled and managed with a view toward sustainability. Furthermore, even beyond these protected areas the general level of land management is reasonably good, and the common attitude of the human population is at least indifferent and benign, and at best highly favourable to nature conservation. As a result, many towns and cities are *de facto* bird sanctuaries, supporting an unusual abundance and diversity of wild bird species as well as a surprising variety of small mammals.

In those parts of the United States where nature conservation is most successful, it is not the nature areas that are islands, but the human communities. The pattern of human use is such that cities, towns and intensively used rural areas form a pattern of large and small islands connected by transportation corridors, but surrounded by much larger areas within which native vegetation and animal life survive very well.

The future of no country is likely to be secure, and

certainly no system of parks and reserves will survive, if we attempt to set up systems of protected areas—no matter how well distributed—within a system of land use that otherwise is contributing to the degradation of soils, exhausting the productivity of renewable resources, and relying on heavy inputs of agricultural chemicals to compensate for a deteriorating resource base.

In considering the relationships of people to protected areas, therefore, we must look well beyond the boundaries of those areas and work with the local people to create ecologically sustainable systems of land and resource use. Nature reserves must be seen as parts of those systems, not separate from them. Obviously, people must see the opportunity for economic stability in a context of ecological sustainability before they will take a serious interest in protecting the wild environments of protected areas.

Without in any way denying the importance of strict nature reserves, national parks or other closely protected areas, equal attention must be paid to universal rules of land use and nature protection that apply throughout the country. In various calculations of minimum population size needed to maintain the genetic diversity within a wild animal species and minimum area of protected reserve needed to maintain that population, it becomes apparent that we will never have a system of nature reserves or national parks adequate to protect all wild species (Soul and Wilcox, 1980). We must be able to rely on the rational use and management of lands outside the reserves.

The magnificent system of national parks and nature reserves in the state of Alaska is likely to be inadequate to protect wolves and caribou; for those species alone we need virtually the entire state of Alaska. Fortunately we *have* the entire state of Alaska, for the wildlife laws of that state, which apply to all areas, offer—if enforced—the necessary degree of protection. I am proposing therefore that we give attention to rules of land use and nature conservation that apply everywhere and not just to areas within or near protected natural areas. We need to recognize that planet Earth was originally established as a nature reserve, the only one we know of in the entire universe. We need to keep it that way.

4. GENERAL PRINCIPLES OR GUIDELINES

4.1. General principle

The conservation of nature is fundamental to human existence and is the concern of all people everywhere. It is not to be accomplished only by the establishing of specially protected natural areas, but must be practised in all places at all times. All areas must be protected areas to some degree, since even the most heavily ur-

banized areas provide suitable living spaces for many wild species.

4.2. Ownership, tenure and resource use

The rights of land ownership, tenure or resource use do not include the right to land degradation or resource abuse. Recognition of such rights by governments should be dependent upon agreements for reasonable care and stewardship over the land and its resources.

4.3. Protected natural areas

The establishment of protected natural areas intended to provide for the conservation of biotic communities or wild species in surrounding or adjacent areas, but without adequate attention to the interactions between people and the natural environment, can have adverse effects on local economies or cultures. To provide for long-term positive interactions, the following guidelines are potentially useful:

4.3.1. **Use of local knowledge.** People who have a long history of use or occupancy of areas to be considered for protection also have a familiarity with its species, communities and ecological processes which cannot readily be gained through surveys, inventories or baseline studies by experts from elsewhere. In particular, long-term trends or fluctuations in abundance and distribution of wild species, past influences and changes, values and usefulness for human purposes can be determined most easily from local people. Consultation with these people is essential to gain the knowledge important for both conservation and for the avoidance of conflict.

4.3.2. **Local involvement with planning of protected areas.** Planning of protected areas should involve those people who are most likely to be directly affected, positively or negatively, by implementation of protected area status. Every effort should be made to achieve the desired conservation objective with minimum disruption of traditional ways of life and maximum benefit to local people. Boundaries of protected areas and regulations governing their protection and use should reflect the actual conservation objectives to be accomplished and the ways in which these can be achieved through local cooperation, rather than attempting to adhere to internationally approved categories. A simple conservation rule that has local adherence and support may accomplish more than a national park that has none.

4.3.3. **Local involvement with management and conservation.** Insofar as possible, local people should be involved with management and conservation practices within a protected area. All of them, at best, should take an active interest in the protection of that area. At

the least, they should provide the guards, wardens, rangers, and labourers.

4.3.4. Use of protected areas to safeguard native cultures. People who have traditionally lived in isolation from the dominant cultures within a country may be protected from unwanted outside interference by establishment of a protected area which includes all of the lands they have traditionally used—giving them the authority to exclude outsiders and to manage the lands as they see fit. Protected natural areas are also useful as buffer zones surrounding the traditional lands of isolated cultures. Outsiders are in this way controlled by the protected area authorities. Neither of these options is intended to exclude interaction or travel on the part of the native group. The reserve boundary or buffer zone has a “one-way screen” keeping out unwanted visitors but not holding people inside who wish to leave.

4.3.5. Economic benefits. Economic benefits derived from a protected area from tourism or other forms of use must be shared with local people according to agreements and contracts reached before the protected area is established. For existing protected areas, renegotiation with local people will be important to give them a greater role in maintaining the protected status of the area.

4.3.6. Definition of “local people”. The people directly affected by the establishment of a protected area often

include many who are not permanent inhabitants of the area or its vicinity. Other groups may use the area seasonally—migratory hunter-gatherers, nomadic pastoralists, etc. Still others may only use the area occasionally, but those occasions may have great importance in relation to religion, ceremony, or long-term subsistence needs—the area may already be a “reserve” for people who do not live there permanently. All of these people must be considered in reserve planning, conservation, use, and economy.

4.3.7. Planning and development of surrounding areas. Planning or development of protected areas must not be undertaken in isolation from planning and development of the lands surrounding the protected areas to provide a viable and sustainable economic future for the people involved. The principles of agroecology and agroforestry as well as wildlife management should be considered in the planning and development of these areas. The basic principles of ecodevelopment should be applied. The *conservation unit* approach developed by W. J. Lusigi (1978) for Kenya may provide a useful model.

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