

# Tourism and Environmental Conservation: Conflict, Coexistence, or Symbiosis?

by

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## INTRODUCTION

This paper deals with the idea that three different relationships can exist between those promoting tourism and those advocating conservation of Nature. These relationships are particularly important when tourism is partly or totally based on values derived from Nature and its resources.

1) Tourism and Nature conservation can be in *conflict*, particularly when the presence of tourism and what it implies is detrimental to Nature and its resources. The result is that conservationists see such a relationship with at least some degree of unhappiness—not to put it more strongly—and, naturally, they often fight back with all kinds of interdictions or other restrictions.

2) There can be *coexistence* when the two camps—the tourist industry and those promoting the cause of conservation of Nature—establish relatively little contact. This can be because neither tourism nor conservation is well developed in an area, or because of administrative barriers, or, very widely, because of the ignorance of each concerning the other's field. However, this situation of coexistence rarely remains static, particularly as an increase of tourism is apt to induce substantial changes, so that this stage is followed either by a mutually satisfactory relationship (symbiosis) or by conflict (if things go the wrong way).

3) Finally, there is the state of '*symbiosis*' in which tourism and conservationists are organized in such a way that both their disciplines derive benefits from the relationship. From the conservationist's point of view, this means that, while natural assets are conserved as far as possible in their original condition or evolve towards an even more satisfactory condition, an increasing number of people derive wider benefits from Nature and natural resources—whether in a physical, aesthetic, cultural, scientific, or educational, sense. Of course there are economic advantages too. Such mutual support between tourism and conserva-

tion can and should contribute to the realization that conservation of Nature can, indeed, be a useful tool for achieving a better quality of life.

All three types of interaction and their variations exist, as numerous examples throughout the world clearly show. Unfortunately for the majority of cases at present, the relationship between tourism and conservation is usually one of coexistence moving towards conflict—mainly because of an increase in tourism and the shrinking of natural areas. Could it be that, provided the objectives and ways of operating are well understood on both sides, such relations would eventually lead to a symbiotic relationship? Obviously the attainment of such a goal should be attempted.

In recent years there has been, virtually, an explosion of tourism concerned with wildlife, wildlife areas, scenic beauty based on natural resources, and so on. It is not the purpose here to analyse the various reasons behind such a growth. They include more leisure time, increased interest of a larger and larger proportion of the widely-increasing human population who are now 'conditioned' to enjoy these values, and various economic factors such as better salaries, improvement of communications, cheaper group-travel, and expanded and improved accommodation facilities. The fact is that such increased tourism is taking place throughout the world and is unavoidably affecting the resources upon which it is based. To a considerable extent it has taken by surprise the organizations dealing with the administration and management of natural areas, so that they are ill-prepared to withstand its impact.

The net result has been a widespread degradation or reduction in the assets of Nature and, with it, of tourism. Many of the places visited by tourists support fragile ecosystems that cannot endure heavy disturbance (e.g. Jubenville, 1974; Usher *et al.*, 1974). After 'saturation point' is reached, or when a critical threshold is passed, rapid degradation seems inevitable. Examples can be found where different types of wildlife disappear because of increasing human presence, noise, or other influence; where roads are built to reach specific areas and in doing so destroy their intrinsic scenic

value or cause ecological disturbance; or, all too often, where debris and rubbish is dropped by people who are not conditioned to behave as befits the circumstances. More subtle and, therefore, often ignored, are the effects of increased tourism on various human populations living near the natural areas that are being visited. The sudden arrival of different cultures can be extremely detrimental to the local human resource, often changing cultural and economic patterns in unfortunate ways. This has been largely documented for many places, *inter alia* by Parker (1972), Baines (1975), and Crittendon (1975). Moreover, tourism often changes basic land-use patterns and conflicts with traditional attitudes towards natural resources (e.g. Swift, 1972).

Clearly, steps need to be taken to avoid a catastrophic situation. Adequate administrative arrangements will have to be established, but all interested parties must be made aware of the inherent dangers that a policy of 'laissez-faire' can lead to. Those who handle tourism must be adequately educated to recognize the dangers and, equally, conservationists throughout the world should be made to understand that tourism, rather than being stopped, must be better planned and controlled.

#### THE CHALLENGE OF CONSERVATION

Conservation was defined during the IUCN General Assembly at New Delhi in 1969 as management of the resources of the environment—air, water, soil, minerals, and living species including Man—so as to achieve the highest sustainable quality of human life. (In this context, management includes surveys, research, legislation, administration, preservation, utilization, and implies suitable education and training.)

This is a long step from the former restrictive approach centred on preservation, which has too often been confused with privilege for the rich and educated. Understandably, this has been resented by the poor and hungry. Conservationists have often had to wage a lonely fight against changes affecting wild areas, and in doing so have been identified as 'conservative' or 'opposing progress'. Thankfully this old concept of conservation is fading out rather rapidly—and none too soon. Preservation remains, of course, an essential tool for conservation programmes, and its application, in combination with other conservation measures, can successfully lead to progress and development in particular as wildlife and wild areas can be made to 'produce'.

#### MUST TOURISM BE DÉTRIMENTAL TO CONSERVATION?

The answer to this question is, more often than not, negative—provided appropriate steps are taken. The

classic case is, of course, that of degradation of a limited resource by a large number of tourists, leading to many kinds of deterioration—such as physical damage, poor waste-disposal, vandalism, and so on (Jubenville, 1974; Usher *et al.*, 1974). Instances are too well known to require further comment. Other factors, however, which usually pass unrecognized, seem to be much more important—including the construction of buildings and roads and other facilities for tourist visitation in natural areas.

The policy of building hotels, restaurants, road systems, and/or even viewing-points, in a natural area, which may be immediately favourable to the development of tourism, has recently been heavily criticized at various meetings. The decision to interfere with the physical setting of a natural area is extremely complicated and should not be undertaken lightly. As a general rule, it is felt that most natural areas maintain their greatest values if they are left untouched. If this is not possible, in and around most natural areas that are managed as such, particularly in national parks, careful zoning should be instituted and rigidly maintained (Fig. 1).

This usually means that a few areas are accessible to the general public, while the majority remain as undisturbed as possible, although, if circumstances permit, access may be allowed on foot. But some areas must remain completely protected and become 'strict reserves'. The location and construction of hotels and roads needs very careful planning, and should involve consultations with ecologists and the people who manage the parks. The latter people should obviously have a clear understanding of the present and future requirements of tourists.

Past experience, particularly in those countries where tourism based on Nature has increased dramatically, clearly shows that most former projections of tourist impacts were inaccurate; all too often there had been no assessment, because the value of keeping natural areas as much as possible in their natural state was not recognized. Now the situation has changed, and in some parks of the USA, for example, buildings that had been erected for tourist accommodation are being torn down, motor traffic is being restricted, and the impact of tourism is being reduced or otherwise controlled. The intention is not so much to limit the flow of visitors as to redistribute them in space and time.

As a general rule, it is found most advisable to have hotels and recreation centres situated outside the natural area, and to provide some kind of an information and interpretation centre at the entrance. However, there are exceptions in some places; for instance, in some of the large game-parks in East Africa, it has been found necessary to have the hotel just within the park, so that the park authorities can better control the





FIG. 1. *Visitors to Isla Plaza in the Galápagos archipelago looking at seals and birds. The photograph was taken when visitors were still permitted to move around critical areas without any restrictions. For the past few years visitors have had to be accompanied by a guide and stay on certain trails as a result of the negative impact on the animals. Photo: Dr Myron D. Sutton.*

management of the hotel and its guests. The other undesirable extreme is where the hotel is built close to the main attraction of the park.

More important, perhaps, is the decision as to who should manage the park. Because of the upsurge of tourism and the glamour it holds, there has been a tendency, particularly in some developing countries, to entrust the management of natural areas with a potential for tourism to the authorities who deal with tourism. This can be fatal, because the people who are thus left in charge are rarely qualified to understand delicate ecological relationships, or to administer parks and nature reserves in such a manner that they can fulfil the purposes for which they were created. National parks, for instance, have been created principally to preserve unique and exceptional features, whereas other areas, not connected with national parks, have often been established for the primary purpose of promoting tourism. IUCN has recently had the opportunity to intervene in a number of cases to get this simple message across—namely, that national parks and equivalent reserves should not be entrusted solely to those promoting tourism.

#### THE SYMBIOTIC RELATIONSHIP

Obviously, tourism and conservation can benefit mutually from each other. Tourism helps by lending support to those conservation programmes which will 'develop' educational, scientific, and recreational, resources, with the objective that they in turn will attract more, and different kinds of, tourists. There are as yet only a few cases where this has actually been achieved, but the potential is very great.

A good case is the various tours organized in the Galápagos Islands. Here the tourists are accompanied by highly qualified guides, so that they may enjoy and profit from their trip, yet are prevented from causing more than a minimum of disturbance to the very interesting yet highly vulnerable local fauna and flora (Fig. 1). Both the tourists and the tourist companies are contributing financially towards the Ecuadorian Government–Charles Darwin Foundation conservation programme. The Foundation has established its laboratories on one of the islands, and has undertaken scientific research on the fauna, flora, and geology, of the archipelago. This is more than a



simple question of providing money: the tours people give financial and moral support that is directed towards the right type of action and, in part, towards making tourism as compatible as possible with conservation aims.

Many more places could mutually benefit from such a relationship. Perhaps the project which IUCN is at present involved in, called 'The Green Book' (of Outstanding and Endangered Landscapes), will help in this respect. The Green Book will take the form of a loose-leaf book identifying and describing outstanding and endangered landscapes which are not, or are only partially, protected.

In many countries, tourism can be aimed at attracting university teachers and specialists in, for instance, birds, plant ecology, or systematic botany. In Costa Rica it has been estimated that such a trend is bringing the country about one million dollars annually, which is considerable considering that the human population is less than two millions and the annual budget is small (Fig. 2).

#### PROMISING LINES OF ACTION

There can be no doubt that the next few years will witness an acceleration of the dwindling of resources that are susceptible to be managed for tourism: consequently at the present stage it is most important to try to foresee future needs. Planning the management of natural resources for national and international tourism must receive high priority, particularly in developing countries where there are heavy population pressures on resources as well as critical trade deficits. Of course, what is needed is the lifting of nature conservation to a much higher level of significance in the planning and development process of many countries.

This would be a radical change from the past, when economic and social factors gave food production and industrialization a top rating and there was little concern for natural resources. But times are changing, and the amazing growth of tourism as a money earner has brought about considerable adjustments already, and seems destined to bring about far more in the future.

#### TOURISM CAN SUCCESSFULLY INVEST IN CONSERVATION

The most promising ways in which tourism can invest in conservation appear to be the following—not necessarily listed in order of importance, as they are applicable in varying degrees in different countries or regions:

(a) As a general guideline the tourist industry should support conservation organizations financially as an investment to further its own interests, though sometimes it may be necessary to attach conditions to such financial aid. It is quite clear that financial contributions will be particularly productive if

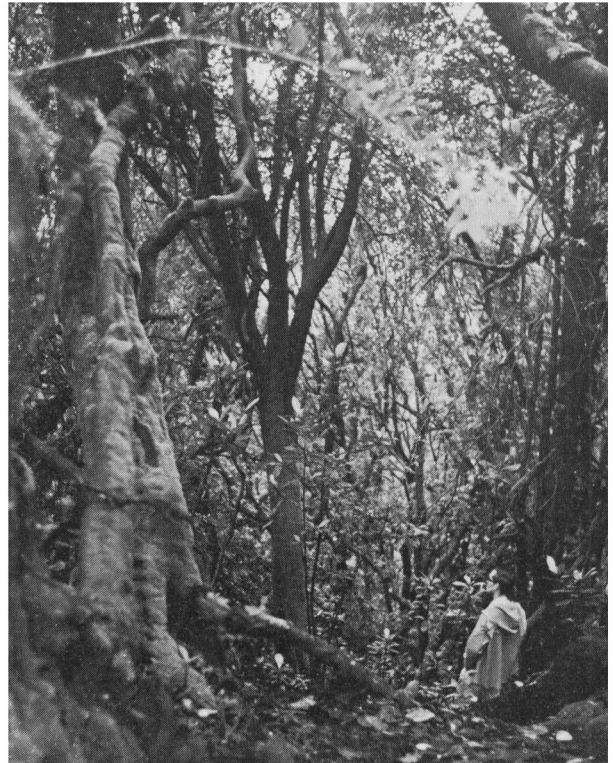


FIG. 2. *Cloud-forest in Volcan Poas National Park close to San José, Costa Rica. The cloud-forest is a very fragile ecosystem, and visits by the ever-increasing number of tourists (close to 100,000 in 1974) are being restricted by carefully managed and supervised schemes along trails. Photo: Dr Gerardo Budowski.*

they are made to those organizations, whether they be governmental or private, that fully comprehend the mutually beneficial relationship between conservation and tourism.

- (b) There is a dire need to create parks, reserves, and other protected areas, to meet the growing requirements of the tourist industry. This demands a large amount of research and planning, for example to locate and create a system of national parks and equivalent reserves for each country. However, at this stage, little coordination seems to have been achieved with the tourist industry, even if it is possibly the principal 'consumer'.
- (c) Much greater cooperation is needed between the tourist authorities and the national parks and wildlife authorities regarding the planning of sites and the construction of hotels and related facilities—particularly access roads.
- (d) Tourist authorities should actively contribute to the efforts made by conservation groups in the preparation of guidelines for tourist groups in natural areas, the adoption of a code of ethics, and other forms of bringing the right message across to the 'consumers'.
- (e) Support should be provided to make tours and other tourist facilities connected with natural

areas available to schools, university students, and similar groups, at specially reduced rates.

- (f) The tourist industry should assist in the establishment and maintenance of interpretation and information centres connected with national parks and other natural areas. Again, it is the initial effort and the training of the necessary personnel which are needed most urgently at present.
- (g) Tourist authorities might assist in preparing and editing publications that explain the natural resources and their attributes to the general public. These should help tourists to understand the ecological functioning of natural parks, the reasons why zoning and long-term planning are essential, and why some areas must be closed to the public.
- (h) Tourism can play a role in supporting education and training activities that deal with the tourism-conservation relationship. For example, courses might be offered for the guides who take tourists to particular areas, and also for wardens and park personnel connected with tourist activities. Many schools for park administrators are desperately in need of such support.

#### CONCLUSION AND SUMMARY

A new and promising field has appeared as a result of the increased tourist industry based on natural resources, though too often such expansion has been achieved without due planning and has taken many people by surprise. Conservationists and their organizations have often reacted adversely to this 'invasion',

but this need not be so. There are many reasons and examples which prove that a change of attitude, leading to a symbiotic relationship between tourism and conservation in the wide sense, can offer a very large variety of advantages and benefits—physical, cultural, ethical, and economic—to a country.

A tourist industry can expect a brilliant future, based on natural assets of the environment, provided due consideration is given to the ecological principles which must guide resource-use. The alliance of those responsible for tourism with ecologists and conservationists is a natural one, that should contribute greatly to development—the right kind of development involving the right kind of change—leading to a better quality of life for all concerned.

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#### The Natural Landmarks Program of the United States

The United States National Park Service is currently engaged in the identification, evaluation, and registration, of outstanding portions of America's land and waters as Natural Landmarks. These are areas having geological or ecological values of national significance and often represent ecosystems reflecting an image of how the country appeared prior to the advent of European settlers. The objectives of this programme are to foster the preservation of these outstanding sites, to enhance their scientific and educational value, and to strengthen the public's cultural appreciation and conservation awareness of America's heritage of natural history.

The identification and evaluation of sites are based on various 'themes' or categories which describe almost all the natural environments or phenomena found in the United States. Examples are: deserts, volcanoes, streams, marine environments, and tundra. Some areas contain overlapping themes, whereas others may represent only one theme. Unique or magnificent scenery is often a quality of a Natural Landmark, but is not essential. Rare species of flora or fauna, or concentrations of wildlife, may be present. In every case, the area must reflect integrity by being undefiled and a true, essentially unspoiled example of Nature. Two cases of existing Registered Natural Landmarks are Corkscrew Swamp Sanctuary in Florida and Shishaldin Volcano in Alaska.

Natural landmark studies are based on 'natural regions' and are largely physiographic in origin. More than thirty such 'natural regions' have been listed by the National Park Service (Fig. 1). Studies have been completed in five of these—the Atlantic Coastal Plain, the Arctic Lowland (Alaska), the Great Plains, the Wyoming Basin, and the South Pacific Border—and are under way in eleven others. The remaining natural regions will be scheduled for study within the next two years.

Only areas having exceptional value are recommended by each region's study team as being potentially eligible for inclusion in the National Registry of Natural Landmarks. Outstanding sites are then visited by competent field personnel and a written evaluation is made of each. These reports are reviewed by the National Park Service's regional offices and its Science Center (*see below*). Sites that appear to qualify as natural landmarks are then presented to the Secretary of the Interior's Advisory Board for recommendation and ultimately the Secretary's approval. To date, 330 sites have been officially listed. The projected number, after all the natural-region studies have been completed and field-evaluated, is between 2,000 and 3,000.

When a site is finally approved, the owner of the area, whether private or public, is invited to apply for a certificate, and a bronze plaque is installed which designates the site as a Registered Natural Landmark. The owner must agree