

Protected areas

Evolution of the concept

For several centuries, mankind has designated areas restricting access to and use of flora, fauna and other resources to maintain the original qualities of these sites. The reasons have been many, including economic (forest reserves), spiritual (religious sites), and recreational (hunting and parks, etc.).

In the late nineteenth century the creation of areas for nature conservation, known as **national parks**, was begun. The main criteria used for selection of these areas were aesthetic and recreational. Coniferous forests and high mountains dominated the selection.

However, ideas about nature conservation were very particular. In several countries, residents were relocated from these sites to promote the recovery of the environments. Predators were also removed and exotic fish were introduced to promote recreational fishing. In Yosemite National Park, now one of the jewels of the National Park System of the United States, the famous spectacle of launching bonfires of burning coal over the waterfall was presented to entertain the public who could admire the "cascade of fire."

Under the leadership of some countries, the creation of protected areas spread throughout the world. However, in countries with little culture of nature and small budgets, the effectiveness of this conservation tool has not been the same.

In the 1970s a different concept was proposed: the **biosphere reserve**. The main objective of this system was to involve communities in conservation rather than exclude them. The model includes a core area with access



and uses restricted surrounded by a buffer zone where activities are sustainable.

In Mexico, the driving force behind Biosphere Reserves was the programme "Man and the Biosphere" by the United Nations Educational Scientific and Cultural Organization UNESCO in the 70's. The first reserves to be set up were Michilía Mapimí in Durango and Montes Azules in Chiapas.

At the end of the 1970's, the scientific community realized that many protected areas had problems. First, they were being isolated, surrounded by a sea of cultivated land. Protected areas, isolated without the possibility of recolonization, began to lose species. Secondly, the criteria by which they had been created were not fully compatible with biodiversity conservation. Many protected areas did not have the sufficient size to maintain viable populations of species with large space requirements such as some of the predators (e.g., eagle and jaguar).

In some cases larger areas were created, while in others, arrangements were made with neighbours to increase the effective area of conservation (Greater Yellowstone Ecosystem). In others, attempts to maintain connectivity of the landscape were made through brokers.