

# The Tiburon Island Bighorn Sheep Program: An Example of Binational, Interinstitutional Collaboration for Conservation and Sustainable Development in a Mexican Indian and Protected Area

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During the February, 1999 Reno convention, The Foundation for North American Wild Sheep entered into an agreement with the Seri Indian Nation of Tiburon Island to auction two permits for the taking of desert bighorn sheep on Tiburon Island, with complete outfitting services, annually. This agreement shall be continued for the next five (5) years, through the year 2004. This agreement may be canceled by either party by June 1<sup>st</sup>, preceding the annual convention auction.

## INTRODUCTION

Mexico is among the richest countries in terms of biological diversity in the world. It also has some important socio-economic troubles that makes the need for alternative sources of development urgent. The protection of wildlife has traditionally been focused on reserves and protected areas—those regions set aside by the government for the preservation of natural resources. However, these have had a limited impact in conservation because they fail to take into account the interests and requirements of the peasant and indigenous communities that are frequently the owners of the land. Since any species, being legally protected or not, is of no interest for the land owner if it does not have a value to them, a recently established conservation and development program makes it possible for land owners to receive benefits from wildlife management programs after solid, technically sound management plans. Wildlife harvesting for hunting, pet trade, meat and hide products, etc., is increasingly having a positive impact for the conservation of natural resources and development of indigenous and peasant communities. The amount of land devoted to conservation through wildlife management in Mexico has grown to over 10 million hectares after the establishment of this program in 1995, only three years ago. One significant burden of this program is the great scarcity of wildlife managers in Mexico. Wildlife management has only been active here for the past few years, and then only at a very localized scale. For comparison, Spain, with only less than 1/5th the land surface as Mexico, and with a much smaller and less charismatic fauna, raises magnitudes more money under the concept of sports hunting than Mexico. Also, wildlife management in the

United States has at least 100 years of tradition, that has proven critical for the recovery and conservation of many wildlife species. It is clear that wildlife management programs must be expanded and involve as many sectors and regions as possible.

## BACKGROUND

In 1996, Tiburon Island joined this program of wildlife management for conservation and development. This is the largest island in Mexico, covering over 120,000 hectares. Tiburon Island is owned by the Seri Indian Community, who inhabited it for many generations until the decade of the 1970's, when they were relocated to the Sonoran mainland. As part of a joint experimental wildlife management operation between Mexico's federal government and the New Mexico Game and Fish Department, the island received a group of introduced desert bighorn sheep from the nearby continental regions in 1975. Little or no follow-up on that population happened until nearly 20 years later. In 1994, the Mexican federal government's ministry in charge of the administration of natural resources and wildlife organized a meeting of several institutions working on conservation and research to request their support for the purpose of conservation and study of the natural resources of the islands of the Gulf of California. In this meeting, Agrupación Sierra Madre (ASM) and Unidos para la Conservación (UPC), two institutions well known for their achievements in conservation such as the reintroduction of the pronghorn antelope into the State of Coahuila, from where it had been extirpated 20 years earlier, expressed their interest in participating in a research and management program of the bighorn sheep in Tiburon Island, with the objective to reintroduce this species into its historic range in Northcentral Mexico. ASM and UPC have maintained a close relationship

with the National Autonomous University of Mexico (UNAM), specifically with its Institute of Ecology, whose personnel had been working in this area for several years, and had established a close relationship with the Seri Indian community thanks to Jesus Ramirez. With his vast experience in research and removal of harmful exotic wildlife from the islands of the Gulf of California, Jesus was able to establish a network between UNAM, UPC, and the Seri community in order to begin exploring the possibilities to study, manage, and harvest sheep for the benefit of the Seri community and to establish an example for conservation that wildlife management could indeed become an alternative and efficient conservation tool. This group of institutions today operate the management and conservation program in Tiburon Island, all supervised closely by the Federal Government of Mexico.

## WHAT HAS BEEN GOING ON?

In early 1995, Agrupación Sierra Madre and Unidos para la Conservación received an important donation from CEMEX (Cementos Mexicanos) with the objective to establish a three-year formal research and conservation program for the desert bighorn sheep on Tiburon Island, led by Dr. Gerardo Ceballos in the scientific aspects, and by Carlos Manterola (Director of UPC) in charge of the operation and administration. The project began, but Dr. Ceballos had to maintain some previous engagements at Stanford University. Dr. Rodrigo Medellín, professor and researcher at UNAM, and at the time the official in charge of the Federal Government's wildlife program, was invited to take over the scientific aspects of the project.

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Because of the recent dismantling of the monopoly on bighorn sheep management in Mexico, and because of the relatively high economic impact of this species, a series of very significant obstacles and difficulties in establishing this program have been encountered, and the group has been subjected to false accusations and threats. Only through continued efforts that showed tangible, real results in terms of the knowledge of sheep biology and management needs, they have demonstrated beyond any doubt their intentions. Some team members are internationally recognized experts on mammal ecology and conservation, and have over 60 scholarly publications in the field. However, the wildlife management background required to make this a success and detonator for other, similar initiatives was lacking. An incidental contact between Rodrigo Medellín and Raymond Leo in 1994 led to the establishment of a cooperative program, that Ray serves as the management advisor for the Federal Government's Tiburon Island Bighorn Sheep Management and Conservation Program. Although the decisions are made autonomously, Ray's advice is always considered. Up until now, several students have been involved with their theses projects and the ecology of sheep on the island, measuring their impact on the vegetation and their movements around the island. The group has worked with the Seri authorities since the beginning, and each step has been taken with their consensus. For this purpose Francisco Navarro has played the active role as advisor, working closely with the Seri community over the past seven years. The Seri Indian community has placed their trust in Francisco's hands, and this trust is precisely the key element that the entire program bases its potential for success.

Since this is an example of what can be done for conservation through management, the entire program is continuously coordinated and closely monitored by the Federal Government of Mexico through the Director General of Wildlife, Felipe Ramirez.

## THE ACTIONS

As a result of the continued effort and the growing trust between ASM-UPC, UNAM, the Federal Government and the Seri Indian community, we have signed an agreement with the Seri Community in that appoints UNAM responsible for the conservation and management of the

sheep on the island. Today, Tiburon Island is registered as a Unit of Management of Use of Wildlife before the Federal Government and that means it must fulfill a series of requirements, social, scientific, and conservation-wise. Our studies are focused on the impact of sheep on the vegetation and on the potential competition with the native subspecies of mule deer. We are also analyzing the population dynamics and genetic health. All of these aspects have allowed us to submit a management plan that justifies a first-ever harvests quote in the 1998-1999 season. More importantly, after studies, actions and intensive negotiations by United for Conservation, a transplant of the first group of desert bighorn sheep into the states of Coahuila and Chihuahua, where sheep have been extinct for the past 40 years, is imminent. Again, this effort is solidly based on the idea to avoid the establishment of monopolistic management practices that do nothing for either conservation or development. Thanks to the support of the Foundation for North American Wild Sheep (FNAWS), the program continues into the next steps: producing part of the

funds that justify the conservation and give momentum to the entire initiative. Now ASM and UPC are working with DEMEX and several other interested institutions to obtain the necessary economic support to reestablish bighorn sheep populations throughout its entire historic range. The participation by FNAWS has come to crystallize and give reality to some important goals of the present and future stages of the program. This program is having an impact at the national level by-

- 1) Showing that conservation, management, and social development can be a part of the same strategy under the same landscape.
- 2) Providing the opportunity for desert bighorn sheep populations to recover and expand to a section of its historic range.
- 3) Demonstrating that true international collaboration can be a key element to successful conservation and management programs.

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