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On p. 1, Tamul waterfall, San Luis Potosí
On p. 2, Lacandon rainforest
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U.S. Fish & Wildlife Service, Division of International Conservation
Wildlife Without Borders Programs
Species Programs

Species Programs

Global Programs

Regional Programs

WILDLIFE WITHOUT BORDERS

M E X I C O

WILDLIFE WITHOUT BORDERS
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The most wonderful mystery of life may well be the means by which it created so much diversity from so little physical matter. The biosphere, all organisms combined, makes up only about one part in ten billion of the earth's mass. It is sparsely distributed through a kilometre-thick layer of soil, water, and air stretched over a half billion square kilometres of surface.

EDWARD O. WILSON 1992

U.S. FISH AND WILDLIFE SERVICE
DIVISION OF INTERNATIONAL CONSERVATION





*At their roots, all things hold hands.
When a tree falls down in the forest,
a star falls down from the sky.*

CHAN K'IN
LACANDON ELDER
LACANDON RAINFOREST
CHIAPAS, MEXICO

WILDLIFE WITHOUT BORDERS

MEXICO

ACTIVITIES REPORT
1995-2006

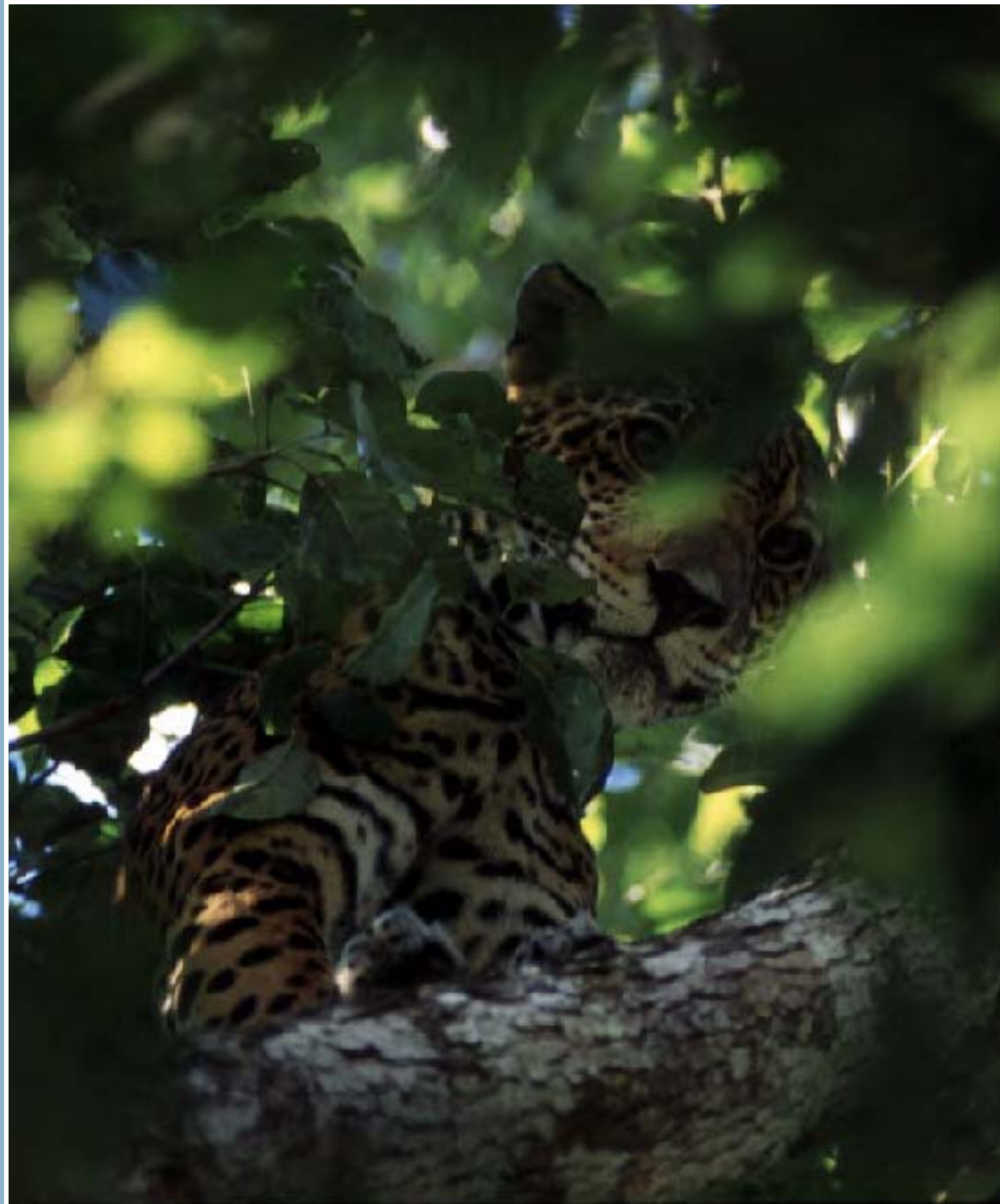
U.S. FISH AND WILDLIFE SERVICE

&

SECRETARÍA DE MEDIO AMBIENTE
Y RECURSOS NATURALES MEXICO



SIERRA
MADRE



Jaguar. Calakmul, Campeche.

FOREWORD

Conservation of biological diversity has truly arrived as a global priority. Over the past ten years, the U.S. Fish and Wildlife Service has expanded its landscapes approach to fish and wildlife conservation. As major ecosystems go beyond national boundaries and the survival of wildlife species largely depends on the health of these ecosystems, the need for international collaboration has never been greater.

Seventy years ago the United States and Mexico recognized the importance and interdependence of shared wildlife and entered into their first formal treaty to work together for wildlife conservation. This first treaty, signed in 1936 and still in effect today, is known as the *Convention for the Protection of Migratory Birds and Game Mammals*. This important Convention, supplemented in more recent years by various other treaties, agreements, and accords, provides the basis for cooperation between Mexico and the United States.

The U.S. Fish and Wildlife Service (USFWS) and Mexico's Ministry of Environment and Natural Resources (SEMARNAT) are constantly seeking to strengthen their collaboration. As part of this effort, in 1995 both agencies agreed to create a joint program to address local capacity building for biodiversity conservation in Mexico called *Wildlife Without Borders-Mexico*. This program is now widely recognized as highly efficient and effective, and an example of successful U.S.-Mexico collaboration.

As we look back at the first 10 years of *Wildlife Without Borders-Mexico*, one thing is clear; its achievements would not have been possible without the

significant contributions in time, dedication, and expertise from our many partners. USFWS and SEMARNAT colleagues worked side-by-side, lending every effort to ensure the successful implementation of this program. Partner institutions in the academic and scientific sectors are committed to preparing new generations of resource managers in Mexico. They are also establishing vital links with management authorities, non-governmental organizations, and local communities. The U.S. state natural resource agencies have enthusiastically participated in many of these projects and Service field personnel have worked with Mexican colleagues on several activities.

This report is in sincere appreciation to the thousands of dedicated people who have worked together over the past 10 years to make this program a success, many of them true "conservation heroes" for whom this is not merely a job, but a lifetime commitment. We are equally thankful to our many partners in both Mexico and the U.S., without whom this success would not have been possible.

The Service is committed to building upon the success of *Wildlife Without Borders-Mexico*, and ensuring that our commitment remains focused and relevant by strengthening and expanding our partnerships. We welcome an exciting new era of joint U.S.-Mexico collaboration to conserve the extraordinary and unique biological diversity shared by our two nations.

DALE H. HALL

DIRECTOR

U.S. Fish and Wildlife Service

WILDLIFE WITHOUT BORDERS - MEXICO (1995 - 2006)

Mexico and the United States are bound not only by geographic proximity, trade treaties and cultural and historical links: a unique biological web, with all its complexity and extension, is shared along a 1,959-mile border, from the Pacific Coast in Tijuana to the Rio Grande Delta, in the Gulf of Mexico.

Mexican-protected areas along the Mexico-U.S. border cover 6,855 square miles. They are representative of unique ecosystems: fragile dunes of the Pinacate-Altar Desert Biosphere Reserve in Sonora, amazing scenery at Santa Elena Canyon in Chihuahua, sky islands with conifer forest amongst the vast Coahuila Desert in Maderas del Carmen, and lush wetlands in Laguna Madre and Rio Grande Delta.

These ecosystems are naturally continued in the U.S. side of the border, for example, in the Lower Rio Grande Valley National Wildlife Refuge, which follows the last 275 river miles of the Rio Grande. Considered one of the most biologically diverse wildlife refuges in the continental United States, it represents several distinct biotic communities, from coastal barrier islands to desert-like bushlands.

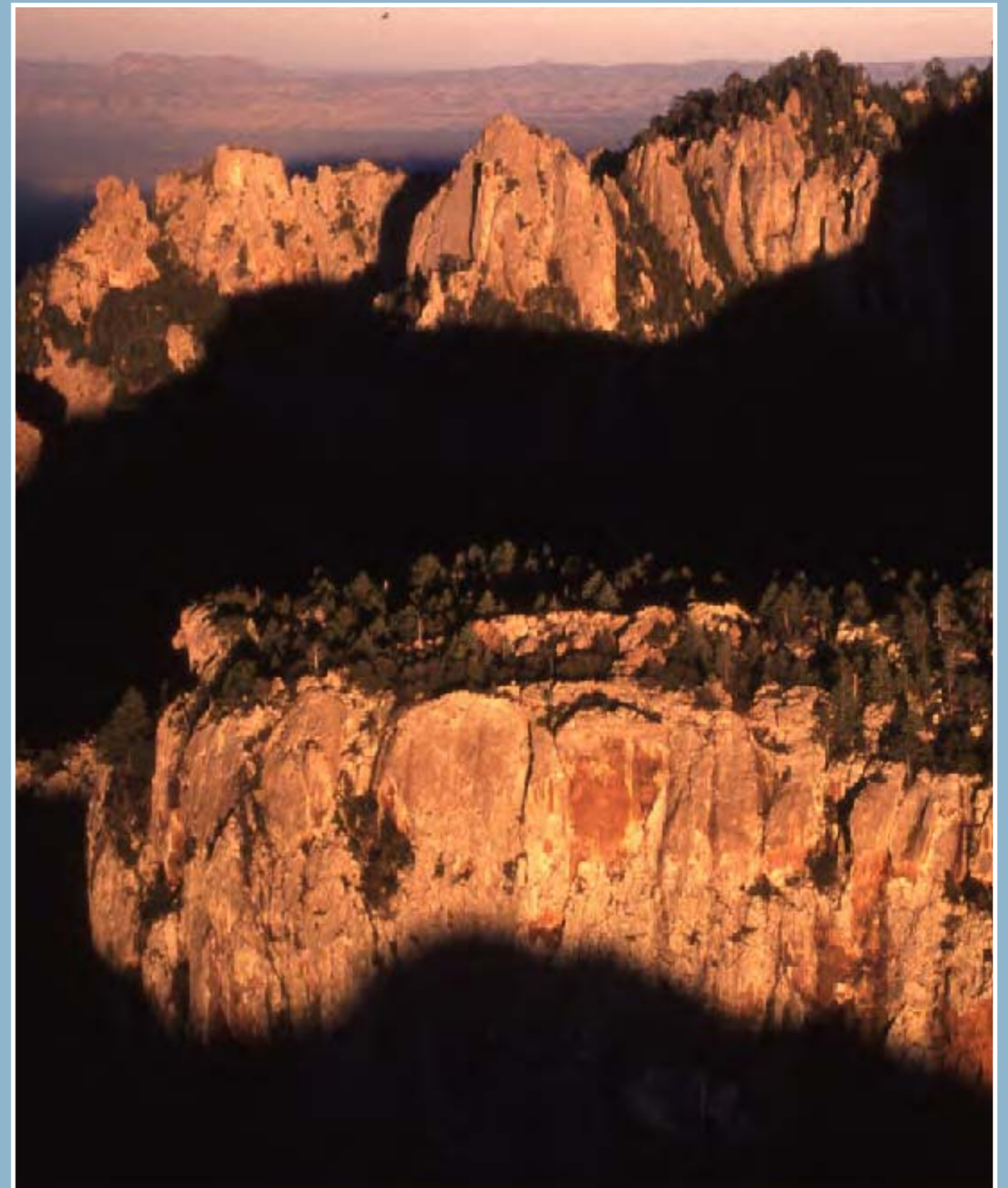
Considering that this immense natural wealth overlaps with a highly populated area—approximately 9.5 million people live in an area of 157,600 square miles, about the size of California—, its conservation must be addressed as a high priority for both countries.

The Ministry of Environment and Natural Resources of Mexico and the U.S. Fish and Wildlife Service are engaged in extensive collaborative efforts to protect these interdependent ecosystems.

Through the Wildlife Without Borders-Mexico joint initiative, and with local organizations and private sector as partners, both agencies have promoted awareness and capacity building for biodiversity conservation and sustainable management of natural resources. Benefits have reached more than twelve thousand people and their communities and regions, as well as natural reserves and species considered a high priority by the international community.

Wildlife Without Borders-Mexico presents to us a formidable report of ten years of commitment and dedicated work, which inspires us to continue in the pursuit of a common understanding of the conservation challenges ahead of us.

JUAN RAFAEL ELVIRA QUESADA
MINISTER
Ministry of Environment and Natural Resources
Mexico



Granite cliffs and conifer forests in the Maderas del Carmen, Coahuila.



Pronghorn. Valle Colombia. Coahuila.



INTRODUCTION

In 1975, Mexico and the United States signed an *Agreement for Cooperation in the Conservation of Wildlife* aimed at more effectively implementing the 1936 *Convention for the Protection of Migratory Birds and Game Mammals*. The agreement established the *U.S.-Mexico Joint Committee on Wildlife Conservation*. Since then, the Service has worked closely with the Mexican government to conserve threatened and endangered species of wild flora or fauna, manage migratory birds, provide conservation training, and enhance wildlife law enforcement. These are only a few areas of joint collaboration. Bi-national cooperation increased when Mexico became a signatory to the *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (CITES) in 1991.

Additional opportunities for official collaboration were developed in 1988 and 1994 with the signing of the *U.S.-Mexico-Canada Tripartite Agreement on the Conservation of Wetlands and their Migratory Birds* and the signing of the *North American Waterfowl Management Plan*, respectively. These agreements further intensified continental conservation efforts. Most recently in 1995, Mexico, the United States, and Canada established the *Trilateral Committee for Wildlife and Ecosystem Conservation and Management*. The Trilateral Committee strengthens and facilitates coordination, cooperation, and development of partnerships among wildlife agencies in the three countries, and other interested parties, for the conservation and management of biological diversity of mutual interest.

Mexico and the United States are two nations bound

by geographic proximity, cultural and historical links, two-way trade, and a complex and extensive biological web. These facts serve as a compelling reminder about the fundamental nature of our common interests. Cross-border cooperation is essential to conserving the biological diversity of the border region, and just as significantly, in providing stopover and wintering habitats to the myriad migratory species shared between our two nations. Wildlife that breed as far north as Alaska and Canada migrate south to Mexico's most remote ecosystems. A large number of migratory birds from the U.S. and Canada reside in Mexico for the better part of each year.

Every autumn, thousands of ducks, geese, thrushes, warblers, raptors, and hummingbirds congregate along the Gulf Coast from Texas to Florida in preparation for the nonstop flight across the gulf to the Yucatán Peninsula. Likewise, millions of monarch butterflies from throughout Canada and the U.S. converge on forests in Mexico's central mountains to winter. Sea turtles, gray whales, marine fishes, and insectivorous bats are also part of this biannual migration. The conservation of these highly migratory species can only be accomplished through effective international cooperation. Such collaboration results not only in improved sustainable natural resource practices in partner countries, but also serves to broaden the perspectives and develop the skills of Service personnel thus enhancing knowledge and innovative technologies for application in the United States. Indeed, international cooperation is a two-way street which brings benefits to all.

HERBERT A. RAFFAELE

CHIEF, DIVISION OF INTERNATIONAL CONSERVATION

U.S. Fish and Wildlife Service

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Agave and Cactus. Chihuahuan Desert.

BACKGROUND

WHY MEXICO?

Mexico is one of the three most important countries in the world in terms of biological diversity. Mexico is also a major center for plant origins and domestication and a key plant and faunal dispersal corridor. Covering only 1 percent of the earth's land area, it contains about 12 percent of all species known to science. Half of these species can only be found in Mexico. The zoogeographic position of the country as the transition zone between New World temperate and tropical regions establishes it as a crucial element in the conservation and management of North American wildlife and the world's biodiversity. With 32 major types of vegetation, Mexico has examples of most of the earth's recognized ecosystems. The convergence of the Nearctic and Neotropical biotic regions, topography, location, high diversity of ecosystems and climate influence this extraordinary biological diversity. Fourteen Mexican ecoregions are considered a world conservation priority. The biological diversity which Mexico harbors is of global importance.

Biomes contribute differently to this diversity. Arid areas tend to have high endemism, whereas humid areas high species richness. Of the 26,000 vascular plant species and 1,352 vertebrate species that can be grouped by habitat, 81 percent and 75 percent respectively are found in lowland rain, dry (seasonal), and pine/oak forests. Mexico's tropical rainforests, although representing only 0.16 percent of the land area, harbor nearly 50 percent of the species found in the country and are among

the richest reservoirs of biological material in the planet. These ecosystems provide critical wintering habitat to a large number of migratory species from the U.S. and Canada. For example, 51 percent of the bird species of the U.S. and Canada spend 6-9 months a year in Mexico. Mexico's rich avifauna includes 1,007 species of birds, which represent 30 percent more species than the U.S. and Canada combined.

Mexico has the world's highest number of reptile species (717), and when combined with amphibians (285 species), it contains almost 10 percent of the world's herpetofauna, and the most diverse. It has the second-largest number of terrestrial mammal species (456), and the fourth-highest number of angiosperm plant species (26,000). There are 21,600 known plant species in Mexico, but it is estimated that there may be as many as 34,000 total species. Mexico has more species of *Asteraceae*, *Agavaceae*, and *Pinaceae* than any other country, and it is also the richest country in the world in species of cacti. Mexico's coastal and marine biodiversity are equally impressive. A third of the world's marine mammals are found in the Gulf of California seascape, and the northern part of the longest barrier reef in the Western Hemisphere is found off the Yucatan Peninsula. Areas with the highest biodiversity are found in the states of Oaxaca, Chiapas, Veracruz, Guerrero, and Michoacan. Those with the highest degree of endemic species are Baja California, Baja California Sur, and Oaxaca.

THE THREATS

Mexico has the highest rate of deforestation of any country in the world (more than 600,000 hectares of forest per year). Forests that once covered 75 percent of Mexico's territory now cover only about 25 percent. Land use practices have reduced soil fertility in about 80 percent of the territory. The Organization for Economic Cooperation and Development (OECD) estimates that 460 million tons of soil are lost yearly because of wind and water erosion. Since 1960, pesticide use has increased about 5 percent per year. In 1991 alone, Mexico used 3 million tons of fertilizers and 2 million tons of insecticides. Unsustainable farming practices and use of fertilizers have affected much of the countryside. Nearly a third of the country's 20 million hectares of farmland have been severely eroded: 86 percent is suffering erosion of some degree. In the state of Oaxaca, 70 percent of once-arable land can no longer be farmed. Environmentalists forecast that without substantial recovery efforts, the state of Tlaxcala could become a desert by 2010. Illegal wildlife trade affects about 105 animal species, including birds, reptiles, and mammals, as well as cacti, orchids, and palms. However, the most serious threat to biodiversity is habitat loss and degradation due to unsustainable agriculture and development.

Mexico's endangered species legislation (NOM-059-SEMARNAT-2001) distinguishes the following categories according to population status: (1) probably extinct in the wild; (2) at risk of extinction; (3) threatened; and (4) under special protection. About 33 percent of the mammal species are either threatened or under risk of extinction. Similarly, 17 percent of the birds, 18 percent of the reptiles, 17 percent of the amphibians, 4 percent of the fishes, and 2 percent of the vascular plants are considered under these categories. Extinct large mammalian species include the grizzly bear, bison, wolves, black-footed ferret, monk seal and sea otter. Among the more than 300 species classified as "at risk of extinction" there are 3 subspecies of pronghorn antelope, the Mexican grey wolf, and the Pacific harbor porpoise. Among the plant species, many orchids and cacti are particularly at risk.

There are 2,583 threatened species in Mexico, including many species of birds that are dependent on specific habitat types or have direct trade value, like parrots and birds of prey. Other species in this category include land and sea turtles and several species of crocodile and salamander. The International Union for Conservation of Nature and Natural Resources (IUCN) list of threatened species includes 74 mammals, 62 birds (14 endemic), 21 reptile species, 204 amphibians, and 109 fishes found in Mexico. There are 42 globally-threatened invertebrates, and about 4,000 of 32,000 plants are also considered threatened or endangered according to IUCN criteria. The Mexican states with the highest number of species at risk are Veracruz, Oaxaca, Chiapas, Michoacan, and Coahuila.

FACING THE CHALLENGE

Mexico recognizes these threats, and has committed significant resources to protect this biological diversity. Progress in dealing with the deterioration of natural resources is categorized by the following measures: 1) gathering and monitoring data; 2) passing legislative reforms to address the issues; 3) planning natural resource management and remediation programs to address the problems; 4) implementing programs that deal with the problems effectively; and 5) strengthening institutions relevant to natural resource management.

The *General Law of Ecological Balance and Environmental Protection of 1988* (LGEEPA), modified by decree in 1996, 1999, 2001, 2003, 2005, and 2006, is Mexico's principal environmental statute. This law establishes and provides for management of wildlife and natural protected areas and the rational use of natural resources. It introduced a system of "ecological physical planning," providing national, state and local plans that outlined the existing ecological status and suggested appropriate uses for the land. In 1996, significant amendments to the LGEEPA encouraged major environmental regulatory reform and provided SEMARNAT with a mandate to facilitate efforts toward sustainable use of natural resources, public participation, and substantially expand environmental impact assessments.



Harris Hawk. Illegal trade.

Mexico has the unique distinction of comprising part of three biodiversity "Hotspots" - defined as the Earth's biologically richest places, home to especially high numbers of species found nowhere else. Each hotspot faces extreme threats and has already lost at least 70 percent of its original natural vegetation. Mexico should be commended for its conservation accomplishments in recent years. Conservation legislation and policies have been strengthened, institutional capacity has been bolstered, and federal funding for environmental programs has increased. Mexico's non-profit environmental organizations, academic and research institutions and the business sector have also strengthened their own environmental programs. Both rural communities and individual landowners are also increasingly managing their lands with conservation goals. However, while Mexico has the highest per capita income of any Latin American nation, many of the nation's people still live in poverty, particularly rural peasants and indigenous communities whose territories coincide with the regions with the most protected areas and highest biodiversity. In many cases, these communities inhabit sites that include the last remaining habitat for critically endangered species. The Alliance for Zero Extinction (AZE), of which CI forms part, has indicated that there are more such sites in Mexico than in any other nation. Finding ways to save these AZE sites while improving the standards of living of impoverished communities and eliminating destructive land use practices poses a particular conservation challenge for the Mexican government and people. CI looks forward to continued collaboration with the Mexican Government and people, and international partners like the U.S. Fish and Wildlife Service, to conserve the rich natural heritage of Mexico. We commend the USFWS and the Mexican Ministry of the Environment and Natural Resources (SEMARNAT) on the publication of this report highlighting the rich natural heritage of Mexico and its conservation challenges.

RUSSELL A. MITTERMEIER

President, Conservation International

In the past 15 years alone, Mexico has taken unprecedented actions to strengthen its natural resource institutions. The creation of the *Federal Attorney for Environmental Protection* (PROFEPA) in 1992 signaled intensification of enforcement efforts. Also in 1992, a Presidential decree established the *National Commission for the Knowledge and Use of Biological Diversity* (CONABIO) to administer activities and research programs. In 1994, the *Ministry of Environment and Natural Resources* (SEMARNAT) was created, elevating for the first time biodiversity conservation and natural resource management at the cabinet level. This also brought together in one national ministry the policies, programs, and administrative capabilities related to natural resources, soil conservation, restoration, and environmental management of federal laws and environmental policy planning. Also in 1994, the law for endangered species protection (NOM-059-ECOL-94) was enacted, with a revised version issued in 2001 (NOM-059-SEMARNAT-2001).

In 1995, SEMARNAT established the *Direction General for Wildlife*, specifically mandated to ensure the conservation and management of wildlife. Two years later, Mexico issued the *1997-2000 National Program for Conservation of Wildlife and Diversification of Rural Production*. In addition, the *1995-2000 National Environmental Program* provides mechanisms for "slowing the deterioration of the environment, of ecosystems, and natural resources and establishes the foundation for a process of restoration and ecological recovery that will promote the sustainable economic development of Mexico." In 2000, Mexico enacted its General Wildlife Law, the most comprehensive wildlife legislation ever enacted in Mexico. Also in 2000, the National Institute of Ecology (INE) was mandated with providing technical and scientific support to all the agencies of SEMARNAT, on both brown and green issues. In 2001, INE was appointed by SEMARNAT as the USFWS counterpart to implement the *Wildlife Without Borders-Mexico* Grants Program.

The *Program of Natural Protected Areas* strives to protect areas that are representative of Mexico's biological diversity.

SEMARNAT now integrates local participation and the socio-economic dimensions into this process. The *Forest Law* addresses conservation, restoration, and sustainable management of forest resources, complementing SEMARNAT's *Forestry and Soils Program*, which promotes reforestation and sustainable forestry practices involving all social areas. In 2001, Mexico created the *National Council for Protected Areas* (CONANP), in charge of managing Mexico's *National System of Natural Protected Areas* (SINAP) (created in 1983), which now encompasses 155 protected areas (a considerable number of which are located along the U.S.-Mexico border), totaling 50 million acres, or almost 10 percent of the land area of Mexico.

Mexico has significantly increased its participation in international environmental programs. It became a signatory of the *Migratory Bird Act* in 1936, *Man and the Biosphere Program* in 1977, the *Ramsar Convention on Wetlands* in 1986, the *North American Agreement on Environmental Cooperation* in 1993, and the *North American Waterfowl Management Plan* in 1994. In 1991, Mexico became a member nation of the *Convention on International Trade in Endangered Species* (CITES), and in 1993, a member of the *Convention on Biological Diversity*. As part of the implementation of this Convention, in 2000, Mexico established a *National Information System on Biodiversity*, and produced its *National Biological Diversity Strategy* to ensure the protection of natural resources.

In 1996, the wildlife conservation agencies of the U.S., Canada, and Mexico signed a memorandum of Understanding establishing the *Canada/Mexico/U.S. Trilateral Committee for Wildlife and Ecosystem Conservation and Management*, to facilitate and enhance cooperation and coordination among the wildlife agencies of the three countries, and other interested parties, for conservation and management of wildlife, plants, and ecosystems of mutual interest. These achievements are just a few of the many examples of Mexico's strong commitment to environmental protection and natural resource conservation and management.



Snow geese. Chihuahuan Desert.



Desert Bighorn sheep. Baja California.

WILDLIFE WITHOUT BORDERS-MEXICO

A BI-NATIONAL PARTNERSHIP

Mexico and the United States share a 2,000-mile-long border which presents many conservation challenges as well as unique opportunities. Ecosystems shared in the border area include the Sonoran and Chihuahuan Deserts and the Sierra Madres, as well as several cross-boundary watersheds, with a considerable number of local species that wander back and forth across the border, as well as more than 100 threatened and endangered species listed in both countries.

The splendorous biological diversity in the border region, its unique shared ecosystems, and the stopover and winter habitats Mexico provides for migratory species solidifies its place of importance to the United States. In this region, wildlife truly knows no borders. As Mexico continues to develop its northern border, the conservation and management of biological resources along the U.S./Mexico border has become increasingly critical.

In 1995, SEMARNAT and the Service created *Wildlife Without Border-Mexico* to achieve: (1) Capacity building for natural resource managers in Mexico; (2) Ecosystem management via sustainable resource use; and (3) Information transfer to promote informed management and improve understanding of conservation problems.

Wildlife Without Borders-Mexico developed a small grants initiative to promote cross-border partnerships for realizing these goals. Between 1995-2006, the Service has funded 225 projects (86 in the U.S.-Mexico border area-Annex B), for a to-

tal amount close to \$6.5 million dollars, which leveraged almost \$18 million dollars from Mexican collaborators, tripling the Service's original investment (Annex C). Projects supported one or more of the following focus areas: (a) Academic and technical training; (b) Applied research, monitoring and management; (c) Conservation education and community outreach, (d) Information exchange and technology transfer, and (e) Networks, partnerships and coalitions (Annex D). These were promoted through projects with universities, research centers, federal, state, and municipal governments, non-governmental organizations, private industries, rural peasant communities and indigenous people (Annex E).

From California to Texas, partnerships have been developed and maintained with the four border U.S. state natural resource agencies as well as regional Service personnel. Building upon mutual interests, cooperation has taken many forms, but mainly, personnel from these state agencies graciously provide technical assistance and guidance to numerous projects in Mexico funded under *Wildlife Without Borders-Mexico*.

CAPACITY BUILDING THROUGH INSTITUTIONAL AND HUMAN RESOURCE DEVELOPMENT

A major obstacle identified by SEMARNAT in the development and implementation of conservation strategies is the lack of trained personnel in local organizations. During 1995-2006, capacity building was conducted via: (1) Graduate programs in wildlife ecology and management; (2) Short-

term, on-the-job courses (certificate programs) for managers, including SEMARNAT personnel, non-governmental organizations, and educators; (3) Workshops for communities in buffer zones of natural protected areas, as well as other ecosystems; and (4) Environmental education/outreach activities for key target stakeholders, including policy-makers, natural resource managers, teachers, schoolchildren, journalists, peasant farmer associations, rural communities in buffer zones, indigenous people, and the public in general. Personnel from the Service and Mexican organizations collaborated to design courses and training activities.

During 1995-2006, approximately 12,000 individuals were trained, 46 advisory committees were established, 76 inter-institutional agreements were signed, and 19 NGOs were created (Annex G). Collaborative programs were developed for 5 graduate programs. Twenty-six information/outreach centers were created and 910 training workshops were implemented. One hundred and sixteen scholarships were granted and graduate students completed 41 theses. In addition, funding supported development of 51 radio spots, publication of 12 textbooks and 18 newsletters (Annex G).

CONSERVING SPECIES

Wildlife Without Borders-Mexico activities benefited 104 species of international concern, 58 of which are shared with the U.S. (Annex I). These species are listed under the *U.S. Endangered Species Act* (ESA), Mexico's *NOM-059-SEMARNAT-2001*, and/or under CITES. In addition, all are protected by the *Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere*, and, in the case of migratory birds, by the *Migratory Bird Treaty Act*.

An important goal of bi-national collaboration is sharing responsibility for species recovery and avoidance of the need for species listing. Mexico and the U.S. share many species considered threatened or endangered by both nations (more than 100 species presently fall within this category). Both countries are concerned about the status, distribution, and actions necessary to conserve and recover these plants and ani-

mal species and their habitats. Mexican and U.S. biologists collect population data to assist in recovery efforts for these species. In fact, with the extirpation of some species from the U.S., Mexican stocks are the last refuge for re-establishment of several species to their historical ranges in the U.S. and *vice versa*. Indeed, bilateral collaboration is critical for the effective implementation of *The Endangered Species Act* (ESA).

ECOSYSTEM CONSERVATION AND MANAGEMENT

Currently there are about 7,000 nationally-protected areas worldwide, covering about 5 percent (650 million hectares) of the earth's surface; however, biological diversity cannot be conserved in natural protected areas alone. Most of the world's biological diversity, in fact, is found outside these areas. In Mexico, about 10 percent (20 million hectares) of the land is legally protected; 17 percent is under agriculture (12 percent seasonal and 5 percent under irrigation); and 65 percent is used for cattle ranching. Trends to clear more land for pasture and cash crops push the limits of resource sustainability. *Wildlife Without Borders-Mexico* has supported a number of projects implemented by peasant farmer organizations in ecosystems where ecological principles are used to manage both for self-sufficiency and commodity production as well as for conservation of species diversity.

The conservation of biodiversity calls for knowledge of ecological processes operating at multiple scales: organizational (individuals, populations, communities); spatial (habitats, landscapes, seascapes, regions); and temporal (days, seasons, years). In 1983, the Government of Mexico introduced the *National System of Protected Areas* (SINAP) to ensure habitat representation, management, and funding for natural protected areas. An array of protected areas are managed under SINAP, representing almost 10 percent of Mexico's land area.

Although the allotment of protected land has more than doubled since the 1980s, the range of habitats and biological diversity represented should be expanded. For example, while 13 percent of moist tropical forest is protected, only 1



Black bear cub. Coahuila.



Mangrooves. Gulf of California, Sonora.

A PARTNERSHIP AT WORK...

Wildlife conservation is one of the leading areas for bi-national cooperation among the border states. Wildlife Without Borders, a program that the U.S. Fish and Wildlife Service and Secretaria de Medio Ambiente y Recursos Naturales had the foresight to establish, has been a major catalyst to implement numerous bi-national projects. Texas and Mexican entities have partnered to exchange information and technology, to standardize wildlife surveys, to improve habitat and exchange wildlife stock, and to conduct joint research. We are now working on bi-national regional management plans for shared species and strengthening our partnerships with the new wildlife state agencies of the six Mexican border states, which recently received authority to manage resident wildlife species. As we continue to strive to conserve and restore habitat, we look forward to the opportunities for bi-national collaboration that the next 10 years will bring.

MICHAEL E. BERGER, Ph.D.

Wildlife Director, Texas Parks and Wildlife Department

Not only do the U.S. and Mexico share the same mountains, grasslands, deserts, oceans, and air, but we frequently share the same wildlife which migrates and moves across our borders. As neighbors of this biologically wealthy nation, we should be working together to conserve species and ensure a future for wildlife in both our countries. Over the past ten years, our partnerships with the U.S. Fish and Wildlife Service and groups south of the border have achieved important goals for the management and conservation of wildlife and their habitats along the U.S.-Mexico border. Our successful collaboration with Mexican entities has allowed us to exchange wildlife genetic materials and expand our knowledge of the natural history of species common to border states. The information collected has assisted state and federal agencies in the resource decision-making process, and has helped develop an effective management program for those species in both countries.

DUANE L. SHROUFE

Director, Arizona Game and Fish Department

percent of dry (seasonal) tropical forest (accounting for one-third of the forest cover and plant diversity) is protected.

Wildlife Without Borders-Mexico has promoted the conservation and management of natural protected areas and ecosystems in Mexico, prioritizing areas according to their importance for listed species and biodiversity value. The program assisted 44 natural protected areas, covering 8,197,658 hectares (20,248,215 acres) (Annex H). It also produced a wide variety of materials, including 172 management or species recovery plans, 212 training manuals, 82 informative brochures, 102 educational signs, 103 posters, 14 educational comic books, and 1 educational board game (Annex G).

Projects supported by *Wildlife Without Borders-Mexico*

have promoted the conservation of critical habitats for hundreds of animal and plant species, and stimulated applied techniques in gap analysis, land use planning, habitat restoration, watershed protection, sustainable agriculture and forestry, soil and water conservation, energy-efficient technologies, commercialization of resource-based and non-timber forest products, management and enforcement of regulations, resource management training, environmental education, public outreach, and ecotourism.

BIOLOGICAL DIVERSITY AND PEOPLE

Much of the world's biological diversity occurs on lands of rural peasant farmers and indigenous people. Therefore, it is

essential to establish partnerships with local people and develop their capacity to manage natural resources. In Mexico, subsistence peasant farmers and indigenous groups are key members of society for resource management efforts, because over 15 million hectares of tropical and temperate forests (approximately 70 percent of the forest area) are collectively owned by these two groups.

In the Chimalapas area of Oaxaca, a new approach to conservation is providing important lessons on local participation in the conservation of natural areas in Mexico. This area, widely recognized as a conservation priority, is not legally protected and is severely threatened by deforestation. Local indigenous peoples have resisted both outsiders and a

variety of plans to protect this biologically important and endangered area. Instead, the area is proposed for management as a "*Reserva Campesina*" (Peasant Reserve), granting responsibility for conservation in the reserve to its inhabitants. Management of the reserve would be according to a plan that includes the cultural and economic needs of the local people, and would be accepted and followed by all interested parties. A similar effort is underway in the Pino Gordo area in the Sierra Tarahumara. This could be a model for other areas of the country.

ONE HUNDRED AND SEVEN GUIDES LATER...

When we started a nature guide training program in Southern Baja California with seed funding from the Wildlife Without Borders-Mexico Program, our biggest concern was whether students would even show up for the course. I remember my first trip to the region in 1994—early visits with Baja's SEDUE and tourism officials, talks with local tour operators, even a boat ride with the head of a Magdalena Bay fishing cooperative. To each party, I explained how the RARE Center hoped to replicate a guide training program we developed with rural adults in Costa Rica. We would select 15 local fishermen from coastal communities like San Carlos in Magdalena Bay; live with them at isolated campsites for three months; and study conversational English, natural history, and useful skills like bird watching. Participants would also learn the basics of

environmental interpretation, in the hopes that they might motivate visitors and other community members to take an interest in the environment. Everywhere I went, I heard the same warning, even from the President of a Magdalena Bay fishing cooperative: "This is not Costa Rica...this is not even Mexico... this is Baja... if the fishermen even show up for classes that will be a victory in itself." One official in La Paz was particularly skeptical of the program. He courteously told me that I was wasting my time.

Our first training group included three college graduates, two women, and a handful of community activists. Not exactly the "fishermen" we had been told to expect. Of the graduating class of 13 (two dropped out in the first week), half of them have become local "stars" in the conservation/ecotourism community. One graduate, Raul Lopez, from San Ignacio, was flown by the Mexican Minister of Environment to meet Mexico's President on Earth Day, 1996. Another, Pancho Mayoral, is pictured on the most

recent cover of the popular nature magazine Mexico Desconocido and just received a one-year fellowship to study with the National Outdoor Leadership School. A third member of this group, Victor Vargas, founded the EcoScouts environmental education program in Magdalena Bay. And the list goes on. By the end of the year, RARE Center and its counterparts had trained 107 nature guides from coastal communities in Baja and the Yucatan. Of these, only four dropped out of the program. Today, more than 60 percent of the graduates speak conversational English; 80 percent consider themselves "guides"; and 70 percent of those who work as guides say they have changed their traditional tours to incorporate natural history concepts, mangrove visits, dune walks, and bird watching. Obviously, the "fishermen" did more than show up for the course.

As fishing stocks are depleted in coastal regions like Magdalena Bay, the experience of these graduates makes a compelling argument for investing in adult education and

microenterprise development to promote ecotourism in Mexican biosphere reserves. In Baja alone, during the past three guide training courses, RARE Center and its funders, have invested more than US\$180,000 in training 57 guides. Yet already the program has paid for itself. Before the training program, the participants' average high-season income was about US\$330/month; after the training program, they average \$1050/month during the same three month period. This 215-percent increase generated an estimated \$120,000 in additional income in the first three months of 1999. Given that most of this money was spent in their local communities, the benefits are quite clear—107 guides later."

BRETT JENKS

President

RARE Center for Tropical Conservation



Popoluca women. Los Tuxtlas, Veracruz.

IT'S FOR THE BIRDS

Four years ago, the Wildlife Without Borders-Mexico Program gave us one of our first grants for protection of islands in the Gulf of California and the Baja California Pacific. This support has been instrumental in protecting the region's islands.

For the past five years, we removed introduced mammals from seven northwest Mexican islands, allowing for the reestablishment of seabird nesting colonies and protecting numerous endemic plants and animals from extinction. For example, Asunción and San Roque Islands in the El Vizcaíno Biosphere Reserve once had perhaps five species of hole- and crevice-nesting seabirds including the threatened Xantus' Murrelet. Asunción Island had one of the five largest colonies of Cassin's Auklets in the world. All hole-nesting seabirds and an endemic subspecies of deermouse were extirpated by cats, on both islands, and rats, on San Roque.

In collaboration with the El Vizcaíno Biosphere Reserve, the local fishing cooperative and others, we eradicated introduced mammals from both islands. In conjunction with the introduced mammal removal we conducted a community involvement and education campaign, which significantly increased awareness of the ecological value of the islands. Later we installed automatic bird call playback systems to encourage recolonization by extirpated seabirds.

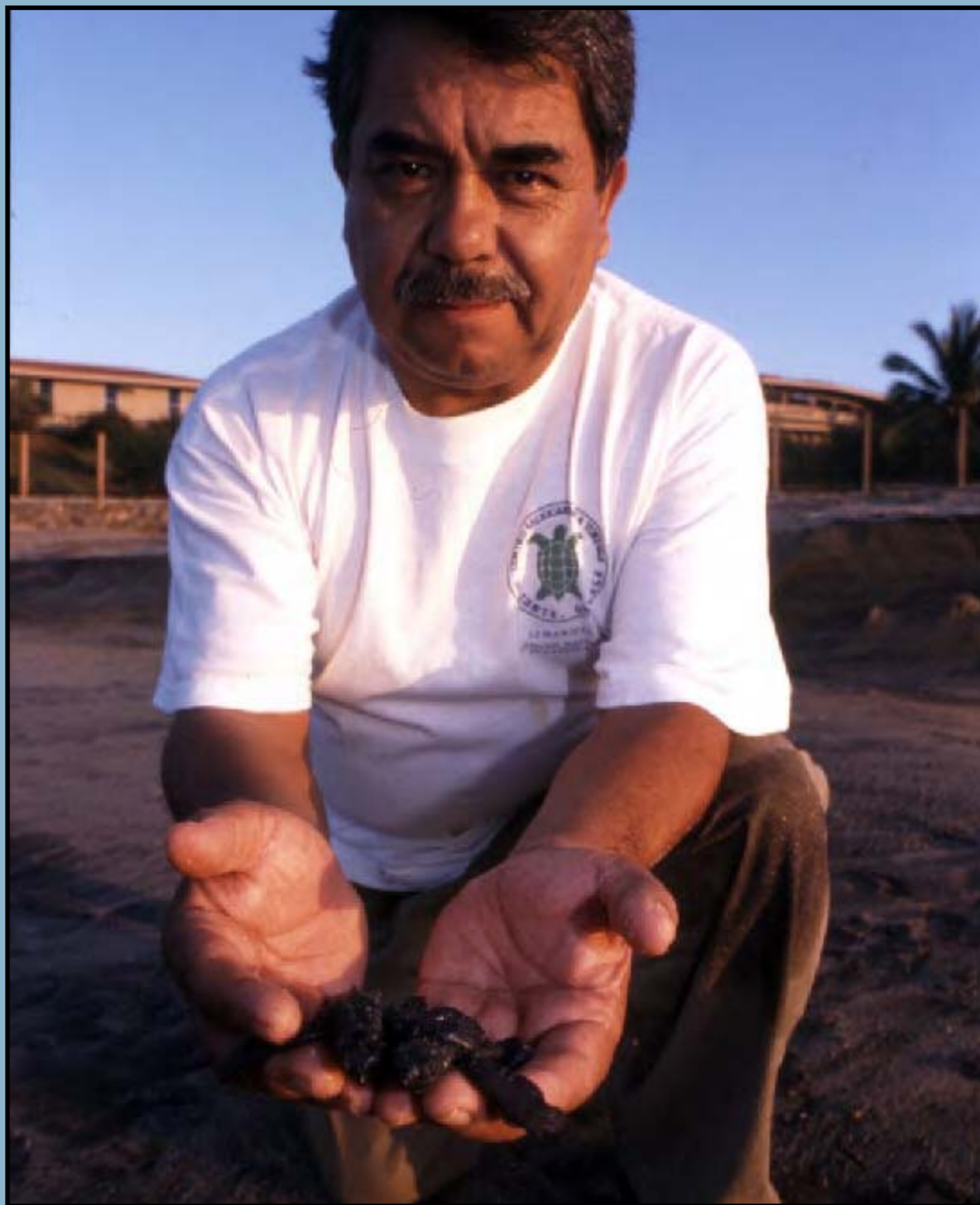
We learned the importance of gaining community support and involvement in conservation projects. We were frequently heartened and inspired by the response of local people to our work. Natividad Island has the world's largest breeding colony of the Baja endemic Black-vented Shearwater. ICEG studied the little-known natural history of the Shearwater, building community support for its conservation through slide shows and children's field trips to the breeding colony. When mortalities of the Shearwater increased due to cat predation, local residents initiated their own cat control program and schoolchildren made the Shearwater their school mascot. On San Benitos, fishermen voluntarily cleaned up a garbage dump that interfered with seabird breeding activities. We believe that local capacity-building and communication with colleagues are the key to long-term protection of these islands.

BERNIE TERSHY, PhD, JOSÉ ÁNGEL PACHECO, ANNA WEINSTEIN, DON CROLL, PhD

Island Conservation & Ecology Group, Santa Cruz, California



Blue-footed Booby. San Pedro Mártir Island, Baja California.



Newborn Olive Ridley sea turtles. Escobilla, Oaxaca.

HIGHLIGHTS OF THE WILDLIFE WITHOUT BORDERS MEXICO-PROGRAM

CONSERVATION IS A PROFESSION

A major component of *Wildlife Without Borders-Mexico* is training at multiple levels to strengthen Mexico's capacity to address environmental issues and conserve ecosystems and biological diversity inside and outside natural protected areas. The program promotes training at the graduate level on wildlife ecology and management, environmental sciences, and environmental education, as well as specialized, on-the-job certificate courses for wildlife professionals seeking career development and new skills, and on-the-ground training practices for local peasant farmers and indigenous people. Support has included curriculum development, scholarships, communications infrastructure, workshops, production of training materials, and a wide array of on-the-job certificate courses.

Graduate Program in Wildlife Conservation & Management in San Luis Potosi - Colegio de Postgraduados
This program emerged from a traditional school of animal husbandry. Initial support was provided for development of a curriculum in wildlife conservation/management. The curriculum gained a foothold and stature within the Mexican system of higher education. Between 1995-1999, 25 students completed a Master's degree in Science in wildlife ecology and management.

Graduate Program in Ecosystem Management in Baja California - Universidad Autónoma de Baja California
During 1995-1999, *Wildlife Without Borders-Mexico* provided scholarships or stipends to 50 students entering the program, assisted in establishing an information extension unit, and supported several publications and theses on wildlife management. This program successfully integrated varied disciplines into the development of applied projects focusing on ecosystem management and wildlife population recovery or maintenance. The curriculum was designed to develop the student's ability to comprehend patterns connecting ecosystem and landscape levels.

Graduate Program in Environmental Education in Mexicali - Universidad Pedagógica Nacional
This program targeted teachers with different academic backgrounds. Participants were exposed to a wide variety of environmental problems and explored alternative solutions to promote public participation and the sustainable use of natural resources. During 1993-1999, 120 teachers from 8 cities in Baja California completed a Master in Science degree. As a result of this program, "green divisions" have been created in local industries in Baja California, and a regional network of environmental educators was established for the first time in Baja California.

Certification of Wildlife Professionals

Program for Mexican Government State Officials

Before 1999, on-the-job training opportunities for government employees were rare, particularly at the state level. In response to this need, a training program was developed by CONABIO, SEMARNAT's National Institute of Ecology (INE), and the Center of Ecology of the National Autonomous University of Mexico (UNAM), an effort subsequently undertaken by *Unidos para la Conservación, A.C.*, INE, and several host universities in Mexico, leveraging considerable cash and in-kind contributions from local industries and business. Activities emphasize teamwork, conflict management, public outreach, decision-making, resource monitoring, landscape ecology, and adaptive management. As part of certification requirements, course graduates serve as instructors in several Mexican states resulting in a multiplying effect. To date, close to 200 wildlife managers have been certified, and 5 high-quality technical training man-

uals have been produced for the first time in Spanish, and are now being widely used throughout Latin America.

In 2005, a series of workshops were funded under *Wildlife Without Borders-Mexico* to train wildlife managers in the Mexican states along the U.S.-Mexico border, in support of Mexico's recent decentralization of wildlife functions to Mexican states. As a result, in an unprecedented fashion, several of these Mexican states have created wildlife state agencies which are already working closely with their counterparts in the U.S. towards the conservation and management of species and habitat shared along the U.S.-Mexico border.

Reserve Wardens Certificate Training Course, Natural History and Ecology Institute (IHNE), Tuxtla Gutiérrez, Chiapas

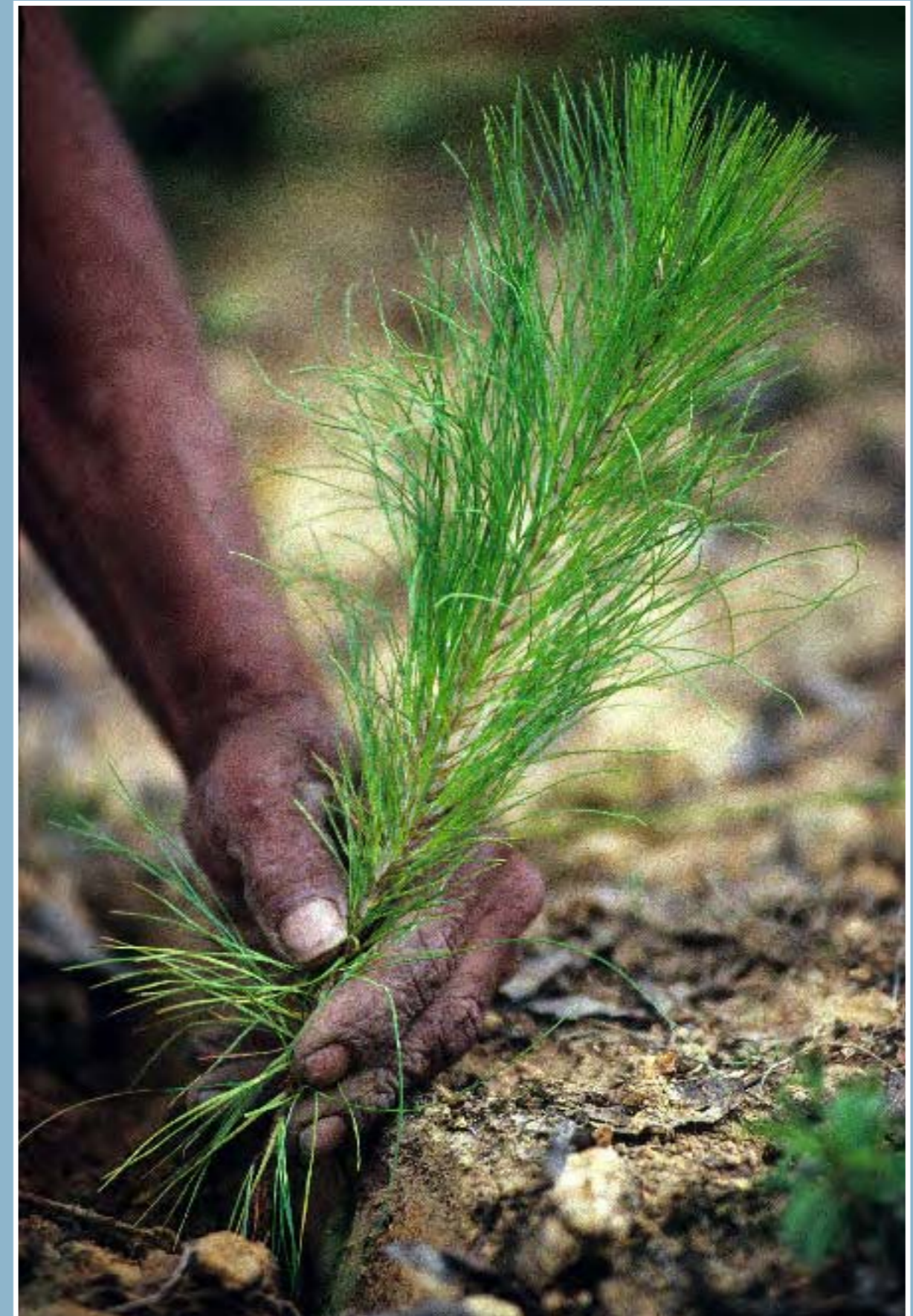
Declaring a reserve does not guarantee its conservation. Reserves present varying levels of conservation and their per-

After graduating from this course, we are now able to make better decisions, based on a more solid technical basis. This will improve our activities in the management of the natural resources of our state, Tamaulipas. Every day we apply the concepts and the practices which we learned at the course, and I can tell you that this is making a big difference in all aspects of our work, research, management, and outreach. We hope this program continues so other people like us can benefit.

ING. JUAN MARTIN BERNAL RIVERA
ING. JORGE ARIEL TREVIÑO BLANCO
Wildlife Officers, State of Tamaulipas

I would like to express my sincere gratitude for all the support the Wildlife Without Borders-Mexico Program provides to Mexico and to other developing countries, which permits intense applied research, such as the one conducted by me. Without your support, this type of research would not be possible because of financial barriers in spite of the existence of many people like me, eager to dedicate our lives to conservation.

JORGE PALACIOS
Master's Degree Program in Wildlife Conservation & Management, Colegio de Postgraduados, San Luis Potosí, Mexico



Reforestation.

sonnel encounter problems such as logging, illegal wildlife trade, forest fires, and human settlements, which require training to confront them successfully. However, training opportunities are limited, especially for park rangers, often the only permanent institutional presence in a reserve. In 1995, with \$10,000 dollars, *Wildlife Without Borders-Mexico* funded the “First Course for Park Rangers of Nature Reserves of Chiapas,” to provide basic tools in a simple, straightforward manner to enable park rangers to face these challenges, changing their image from “ecological police” to “outreach agent.” By 2005, more than 250 individuals from 40 reserves from Mexico and Central America had received training, including park rangers from throughout Mexico as well as other Latin American countries, resulting in the “First Latin American Course for Park Rangers.” Links have been established with the International Federation of Park Rangers. Today, with support from *Wildlife Without Borders-Mexico*, a Training Center for Park Rangers has been established at IHNE.

STEWARDS OF THE LAND

Effective community participation is essential for the conservation and management of natural resources. The integration of scientific and socioeconomic criteria into the decision-making process is of critical importance for the success of community-oriented conservation efforts. Recognizing a communities traditional knowledge and values enhances our capacity to manage natural resources.

Wildlife Without Borders-Mexico supports natural resource management training for rural peasant communities, identifying leaders who receive specialized training as “promoters” to expand training efforts. Participants learn to identify conservation problems and needs, prioritize actions, and develop community-based management plans. These training programs are based on the premise that rural communities can meet their needs while renewing the natural resource

base upon which their subsistence depends by collective action in the management of natural resources.

A Royal Guest: Preserving the Wintering Habitat of the Monarch Butterfly - Alternare, A.C.

The goal of this project is to conserve the Monarch butterfly habitat in a Monarch Reserve in central Mexico. The project is based on a strategy addressing the main threats to this habitat: 1) limited organization among local communities; 2) shortage of trained personnel to conduct management actions; 3) lack of organizational infrastructure to promote self-sufficiency and guidance; 4) deforestation and soil erosion caused by unsustainable agriculture; and 5) environmental impact by visitors. To date, more than 2,000 community members have received training in sustainable agricultural practices, the use of energy-efficient technologies, and the development of service-related capabilities, including ecotourism, soil and water conservation, reforestation, and alternative income crops. Training manuals and many other materials have been produced to support activities at grass-root levels and promote widespread participation.

Keepers of the Lacandon Rainforest: – Lacandonia, A.C.

In 1995, *Wildlife Without Borders-Mexico* awarded \$8,000 to Lacandonia, A.C., an NGO created by the Lacandon Indigenous People in the Montes Azules Biosphere Reserve, in Chiapas, Mexico (where 50% of Mexico’s biodiversity is found, including over 500 species of migratory birds). The funds were to provide training to the Lacandon Community on how to sustainably harvest *Chameadorea* palm growing naturally in the Lacandon rainforest. By 1996, the Lacandon Community was not only successfully harvesting the palm sustainably, but also marketing the palm directly to buyers, eliminating the middle-men. By 1997, the Community associated with other palm producers in other reserves in Mexico, including peasant farmers in El Cielo Biosphere Reserve

The certificate course in ecological restoration supported by Wildlife Without Borders-Mexico, was eye-opening. I realized the importance of this topic to manage ecosystems and degraded sites, and conserve remaining biotic resources. I had the opportunity to meet natural resource managers from other parts of Mexico, establishing a nationwide network of managers. The interdisciplinary approach followed, and the emphasis on practical aspects resulted in a rich experience. To fulfill the requirements of the course, we in the state of Jalisco, implemented the 1st certificate course on ecological restoration, in partnership with the University of Guadalajara. As a result, new jobs in this field have been opened and productive partnerships have been established with the state government as well, resulting in a multiplying effect.

SANDRA AKIKO

Environmental Technician Ministry of Environment and Sustainable Development, State of Jalisco

The knowledge that we acquired through this course has improved the way I conduct my daily tasks as Chief of the Department of Natural Resources of Zacatecas. Personally, I am very happy to have learned concepts and practices which make me feel better prepared to do my job by knowing that the decisions I make every day are really based on sound science. I also feel better about myself overall in all the things I do. Since I took the course, I have been able to organize my thoughts better, and make my decisions from the perspective of a wildlife manager. All this has changed my attitude towards my daily work as a resource manager in my state. Thank you very much for this opportunity. I would also like you to know that after taking this course, I have decided to continue my studies in wildlife management.

ROBERTO FLORES RODRÍGUEZ

Chief, Natural Resources Department, Direction of Ecology, Government of Zacatecas

in Tamaulipas, also engaged in sustainable palm harvesting, and started selling the palms directly to funerary homes in the U.S. This has resulted in income that has not only allowed the Lacandon Community to implement other conservation projects and improve their life conditions, but also develop entrepreneurial skills promoting self-sufficiency.

In Good Hands: Peasant Farmers Managing the Sierra Gorda Biosphere Reserve – Grupo Ecológico Sierra Gorda, A.C.

In 1995, *Wildlife Without Borders-Mexico* funded training in natural resource management for a group of peasant farmers in the forests of central Mexico. They knew the area was important for wildlife, but did not imagine that in 1997 the Government

of Mexico would recognize this as one of Mexico's biodiversity "hotspots" (130+ migratory bird species) and declare this area a reserve. Likewise, nobody could have predicted that in 1999 this would become an internationally recognized UNDP pilot program in regional development and a model on how to reconcile environmental and socio-economic priorities. With the participation of these local peasant farmers, in 1997, the reserve's management plan was developed. To date, four additional FWS grants have provided training for 10,000 farmers, 500 teachers and 16,000 school children, benefiting almost 1.5 million acres. In 2005, the Sierra Gorda Earth Training Center was created, offering two certificate courses for teachers, workshops on ecosystem services for protected areas personnel, and a program for local officials. Its goal is to train 24,000 students and 22,500 adults annually by 2007. The key to this success story is the comprehensive, participatory approach involving all stakeholders. Local

communities manage their natural resources while improving life conditions; teachers and school children are promoting a "sustainability culture"; management authorities work with communities to implement monitoring and enforcement activities; scientists work with locals in research projects, providing data for the management plan and environmental education programs.

Buffer Zone Communities Managing the El Cielo Biosphere Reserve - Terra Nostra, A.C.

El Cielo is the largest (144,250 ha) and most important reserve in northeastern Mexico. It contains 5 ecosystems sustaining more than 750 plant species (40 threatened), 340 bird species (175 migratory), 92 mammal species, 28 fungi species, and 25 amphibian species. It is the only reserve in Mexico containing a resident population of black bears. The reserve represents a major stopover site for migrating Monarch

A SMALL WINGED VISITOR

Since 1996, our team, Alternare, A.C., has been working with local peasant farmer communities of the Monarch Butterfly Biosphere Reserve to promote the sustainable management of these natural resources through training in participatory agro-ecological practices. At the beginning, it was hard because we had to visit each community at a time, and often, our fellow campesinos did not want to talk to us. However, through persistence, we have been able to show with actions and example that our methodology works, that the conservation of natural resources can go hand-in-hand with improved living conditions for campesinos in Mexico. Now, members of communities from far away come to us asking for training. Anyone can learn, and learning brings change. Today, more than 2,000 fellow campesinos from the Reserve participate in our training program and eagerly await for the arrival of our small winged visitors each year.

GABRIEL AND ELIA SÁNCHEZ LEDESMA

ALTERNARE, A.C. Letters from the field, July 2006



Boy with his pet parrot. Yucatan.
Pages 44-45, winter refuge Monarch butterfly.



CONSERVATION AND MANAGEMENT OF RAW MATERIALS FOR ARTISAN USE

If there is an area in which the relationship between cultural and biological diversity is clear, it is in artisanry. The artisan discovers the raw materials in nature, then manages, processes and combines them. He contributes to technology and science through the discovery and perfection of tool and techniques, undergoing thousand-year-old processes of observation, trial and error, through which the rules of managing natural resources and the transformation of the raw materials are established. The relationship of artisans with the environment is as old as the history of humankind.

But from the point of view of the ecologist, commercial success of a craft that utilizes flora and fauna is synonymous with "Caution! Natural Resources at Risk!" There is an increase in the number of people who convert the artisan activity into their principal source of income. As production increases, so does pressure on the resources, without management plans, regulations, or incentives for reforestation and propagation. During the last quarter of this century, the increasing demand for handicrafts in the national and international market has exacerbated the overexploitation of natural resources—many endemic to Mexico. This situation is very serious because in the majority of cases artisans as well as specialized collectors have alienated themselves from preserving traditional practices of reproduction and propagation of animal and plant species which they utilize as raw materials. These resources are also depleted by the deterioration of ecosystems, placing a large number of species at risk of extinction.

Equally serious is the lack of dialogue and coordination among the sectors involved: biologists, ethnobiologists, ecologists, agronomists, anthropologists, restorers, etc., and between them and authorities, and the artisans and providers of raw materials. This results in dispersion of information, efforts and resources, affecting the artisans as well as the environment.

To address this problem, AMACUP and the USFWS/SEMARNAT Wildlife Without Borders-Mexico Program organized the seminar in 1996 "Conservation and Management of Raw Materials for Artisan Use," the first of its kind in Mexico, with the participation of all relevant players. During 1997-98, regional seminars were also conducted throughout Mexico. A total of 44 representatives from research centers, government offices, NGOs and artisan organizations participated. Themes included: regional inventories with taxonomic identification of species; communication and exchange of information between artisans and academics; challenges and alternatives to improve sustainable use and management of the species in highest demand; and, legal and regulatory aspects related to raw material for artisan use. Also with support from this program, a serialized publication (AMATE) was produced and widely distributed in Mexico as a vehicle to create the space needed for these activities, open dialogue, and link all the relevant players.

The overall project's goal was met: to identify promoters at the regional level that pursue the development of multi-disciplinary projects and actions to achieve the sustainable use and management of raw materials for artisan use. This was the first step in establishing a network of specialists in the conservation and management of raw materials for artisan use. An inventory of raw materials within different ecosystems will require the integration of social and biological sciences. This unique artisan tradition is passed from fathers to sons, complementary to working in the agricultural fields. It is the principal economic activity for thousands of families, combining art and culture. This tradition requires the availability of raw materials and the sustainable use of natural resources.

MARTA TUROK WALLACE
PRESIDENT, AMACUP, A.C.

[Excerpts from *Artesanos, Medio Ambiente y Tecnología* (AMATE, No.1, 1997)]

butterflies, and it is the main water catchment for the region. Timber companies want to log buffer zones in the reserve which would affect the population of *Chamaedorea* palms, which provides income to local people. A local NGO, created by peasant farmers in the reserve, combined efforts with *Wildlife Without Borders-Mexico* to train local communities and improve their livestock management practices to protect forest resources; established carpentry shops to manufacture and sell dead-wood items; created a nature center for environmental education; posted educational signs in the reserve; and built a small lodge to promote ecotourism in the reserve. Local communities harvesting palms established links with other buffer zone communities in other reserves in Mexico engaged in this same activity. Approximately 1,500 individuals (70 percent of people in the reserve) benefited from this project and 6 community natural resource management plans were produced.

Developing Innovative "Campesino" Training Methodologies – Campesino Center for Sustainable Development, A.C. Centro Campesino's approach to natural resources training is unique. Its training methodology has evolved as a result of comprehensive discussions with other *campesino* organizations regarding challenges, goals and techniques that work, and has been used in similar projects supported by *Wildlife Without Borders-Mexico* in Mexico. It has had a significant impact on land use practices in the country. As a result of this project, a network of *campesino* organizations around the country has been created. Fifty outreach specialists from 10 states have been trained in these techniques, 20 high-quality, reader-friendly training manuals have been produced addressing participatory techniques in natural resource management, and 5 new environmental NGOs have been created. Training topics include strategic planning, identification of personal capacity, communication methods, and problem-solving.

LESSONS FROM NATURE

The importance of conserving biological diversity is not widely understood by the general public. Because conservation efforts require broad public support, conservationists must be able to clearly explain this concept. Until the general public develops a conservation ethic, efforts to promote wise resource use will have only limited success.

Public involvement is necessary to promote the development of a conservation ethic. However, simply holding a public meeting does not constitute public involvement. To have true public involvement, it is necessary to make issues relevant to the local context, communicate with locally acceptable means, involve the public in the decision-making process, and be sensitive to locally derived solutions. Environmental education provides the key link in this process.

Public education is a priority for Mexico. The country has committed considerable resources to create an "ecological culture." To this end, the Ministry of Public Education has endorsed the study of environmental subjects; likewise, SEMARNAT is committed to improving public awareness and increasing public participation. Under recent amendments to Mexico's environmental law (the LGEEPA), mechanisms were established for public consultation, including environmental impact assessments. Public participation has increased dramatically with close to 1,000 local non-governmental conservation organizations. Environmental education curricula and materials produced with support from *Wildlife Without Borders-Mexico* have been adopted by state authorities in Baja California, Chiapas, Coahuila, and Quintana Roo.

Wildlife Without Borders-Mexico has supported a number of projects aimed at strengthening environmental education activities in Mexico to promote environmental values. Partners include a wide variety of organizations in the United States and Mexico (Annex J). During 1995-2006, educational materials, including manuals, text books, brochures, pamphlets,

newsletters, school plays, radio programs and spots, comic books, TV programs, videos, coloring books, posters, signs, board games, baseball caps and T-shirts have reached more than 25,000 individuals. Finally, a major outreach campaign was conducted in 10 of Mexico's largest airports to increase public awareness about illegal wildlife trade (Annex H).

Island Sanctuaries of the Gulf of California - Conservation International

This project implemented an environmental education program at the *Gulf of California Islands Special Biosphere Reserve*, in Baja California. When the project started, there was no evidence of protected status for these islands. Increasing numbers of public visitors resulted in disturbances to breeding grounds of endangered and threatened bird species. Twenty-five bilingual signs were strategically placed on the islands. Five hundred copies of the brochure entitled "Recommendations for Conducting Tours in the Islands of the Gulf of California," were distributed to local businesses, schools, tourists, researchers, and fishermen. An educational comic book specially designed for the local fishermen was produced. It was so well received that it was published by a major Mexican editorial company, with proceeds going towards the conservation of these islands.

Bird Fanciers of Puebla - Union of Bird Fanciers of the State of Puebla

A private conservation group of local bird catchers and vendors, with a membership of 1,500 individuals, is committed to preventing the extinction of bird species in the region by promoting conservation practices among their members and educating the public. Funding from *Wildlife Without Borders-Mexico* reinforced successful efforts of the group and prompted the state government to grant them administration of the city's aviary, one of the largest in Latin America. The educational materials at the aviary provide 1,000 visitors per month information on the importance of wildlife and its conservation.

Ecosystems of the Yucatan Peninsula - A Public Introduction - Amigos de Sian Ka'an

To raise local awareness of the importance of the ecosystems of the Yucatan Peninsula (and its natural protected areas), Amigos de Sian Ka'an implemented a comprehensive educational campaign, producing a series of environmental education instructional kits, with different modules focusing on the various ecosystems of the area. Kits contained posters, text books for teachers and students, workbooks, and other material. More than 4,000 kits were distributed to 35 local schools. Local newspapers carried articles profiling the efforts under this program.

Educational Campaign to Curb Illegal Wildlife Trade in Mexico-NATURALIA, A.C.

Everyday thousands of passengers pass through Mexico's airports on their way to various destinations. This program provided critical information, in a bilingual brochure, to potential buyers regarding illegal wildlife trade. More than 1,000 bilingual brochures were strategically distributed to travelers at airports in those cities having the highest incidence of confiscations. A permanent display of confiscated articles is located at the Mexico City Airport.

Bi-national Environmental Education Program in the US-Mexico Border-PROBEA/San Diego Natural History Museum Wildlife Without Borders-Mexico supports the implementation of a highly-successful environmental education curriculum and materials for teachers, focusing on the Tijuana River Watershed, and species and ecosystems of the Baja Peninsula. More than 2,000 teachers have graduated from this program. The program is so successful that state governments of Tijuana, Ensenada, Mexicali, Loreto, and La Paz have requested this training, and, in some cases, adopted the curriculum as part of their state educational programs.



Law enforcement. Mexico City Airport.



Oaxacan boys.

LOOKING TOWARD THE FUTURE

Consistent with its primary goal of strengthening Mexico's capacity for biodiversity conservation, and building upon the success of the first ten years of program implementation, Wildlife Without Borders-Mexico has further refined its strategic vision for the future. This focuses on training in biodiversity conservation and natural resource management associated with federal, state, or local nature reserves, and areas in the process of acquiring protection status. Of particular interest will be capacity building which results in specific and measurable products and management actions, has demonstrative value, can be replicated elsewhere, and creates coalitions with other stakeholders. This training includes short-term on-the-job courses, courses certified by educational institutions (Diplomados), workshops, and personnel exchanges, among other delivery mechanisms, including on-the-ground practices.

Wildlife Without Borders-Mexico will support projects that fall under the following categories:

Managing for Excellence: Training in natural resource conservation and management for government personnel (policy-makers, federal, state, and municipal-level resource managers, and reserve managers and guards);

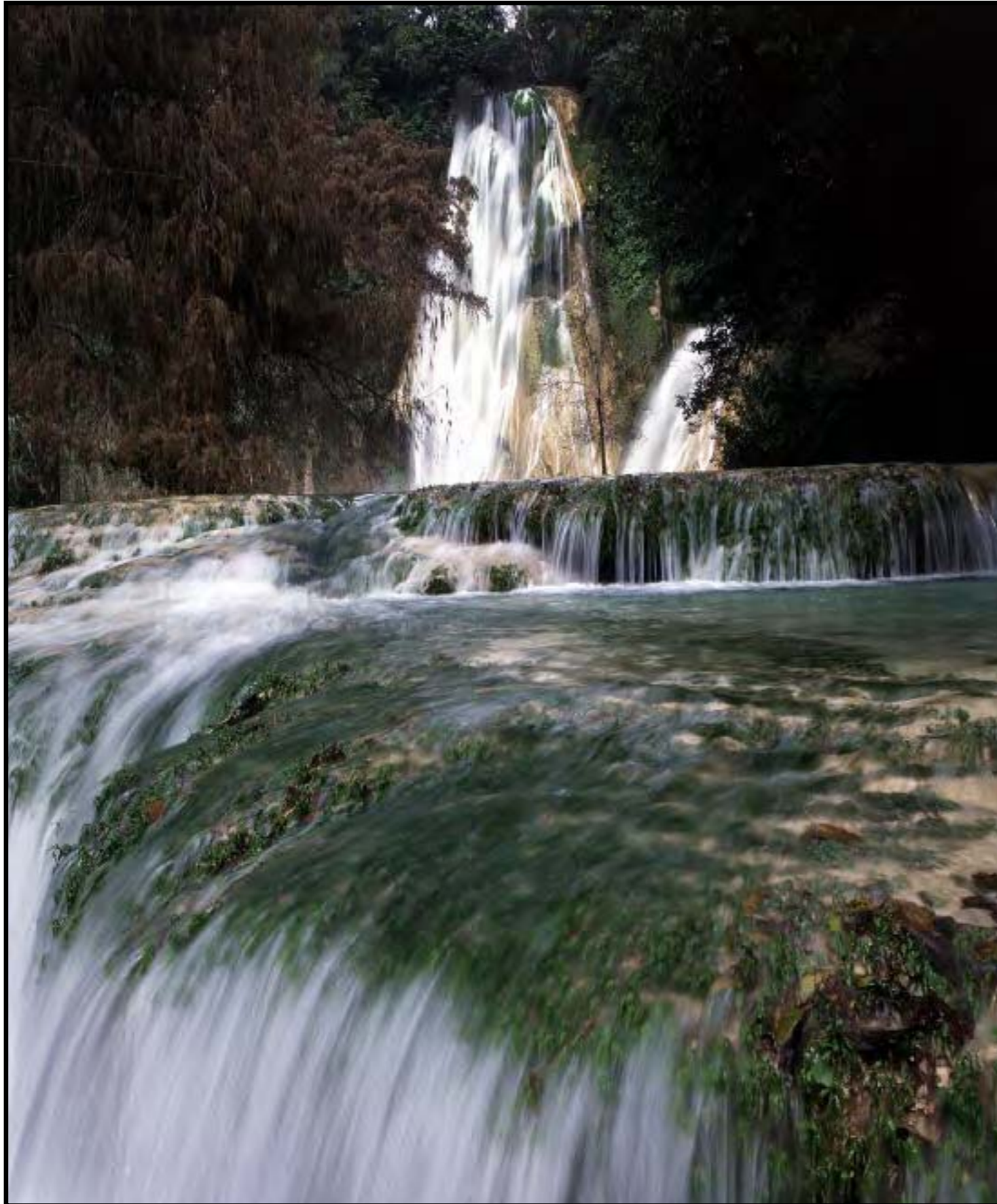
Stewards of the Land: Training in natural resource conservation and management for resource owners and/or direct users (local communities, rural peasant farmer organizations, and indigenous people); and

Society for Nature: Training in environmental education and/or public outreach for targeted society stakeholder groups (teachers, school-children, journalists, and private sector organizations or businesses).

To better focus collaborative efforts on reserve management, the Service, SEMARNAT and CONABIO have developed a simple geographic information system to strategically locate additional conservation initiatives for the future. This system, which includes maps of watersheds, designated protected areas, biodiversity "hot-spots," and ecosystem boundaries, is a valuable planning tool. A primary output is the identification of key watersheds in Mexico, where concentrated actions bring the greatest conservation benefits.

Wildlife Without Borders-Mexico will strive to remain focused, relevant, strategic, and catalytic. Support will serve priority conservation needs not addressed otherwise. Seed funding will be made available to get innovative, demonstration projects off-the-ground. The program will continue to be based on the concept that sustainable, long-term changes are best initiated and nurtured by local people, or as is said, "for locals by locals." Through close monitoring and evaluation of activities, the program will continue to follow an adaptive approach to incorporate lessons learned, to keep the program flexible, and to take advantage of conservation opportunities. Ultimately, it is not the money, but people that make a difference, as conservation is done by committed individuals with solid projects in place that count on local support and commitment.

Agreeing to cooperate is one thing, but effectively implementing cooperative projects is quite another. Language barriers, cultural differences, communication problems, and differing perspectives and priorities are a few of many obstacles that can hinder effective international collaboration. Therefore, under Wildlife Without Borders-Mexico, great emphasis will continue to be placed on strengthening the working relationship and key partnerships between natural resource management agencies of Mexico and the U.S., as well as with other interested entities in both countries, guided by a common goal: to preserve the unique natural resources shared by our two countries for the benefit of generations to come.



Minas Viejas waterfalls. San Luis.Potosí.

WILDLIFE WITHOUT BORDERS-MEXICO

ANNEX

A. CONTRIBUTIONS FROM PROMINENT MEXICAN CONSERVATIONISTS

DR. JOSÉ SARUKHÁN KERMEZ
Mexico's Biological and Ecological Diversity

DR. GONZALO HALFFTER SALAS
Conserving Habitat Inside and Outside of Protected Areas

DR. VÍCTOR M. TOLEDO
Biodiversity and Indigenous Peoples

DR. RODRIGO A. MEDELLÍN
The Importance of International Collaboration

DR. EXEQUIEL EZCURRA
Wildlife Without Borders: Strengthening
the U.S.-Mexico Partnership for Biodiversity Conservation

B. PROJECT LOCATION BREAKDOWN

C. GRANT & MATCHING FUNDS

D. FOCUS AREAS BREAKDOWN

E. ORGANIZATIONAL FUNDING

F. FUNDING SUPPORT BY ECOREGIONS

G. PRODUCTS 1995-2006

H. NATURE RESERVES BENEFITTING FROM WILDLIFE WITHOUT BORDERS-MEXICO

I. SPECIES OF INTERNATIONAL CONCERN BENEFITTING FROM WILDLIFE WITHOUT BORDERS-MEXICO

J. GRANTS AWARDED (1995-2006)

ANNEX A
CONTRIBUTIONS FROM PROMINENT MEXICAN CONSERVATIONISTS

MEXICO'S BIOLOGICAL AND ECOLOGICAL DIVERSITY

The concept of “megadiversity” is applicable only to few countries—those that harbor an extraordinary percentage of the planet’s biodiversity. Mexico is in this very special category.

Mexico occupies the first place in the world for its number of species of reptiles, 707, of which 56 percent can only be found in Mexico (endemic). It is second in number of mammals, with 493 species (32 percent endemic), and fourth in amphibians, with 282 species (62 percent endemic). It occupies fourth place for the number of phanerogam plants, with 220 families, 2,410 genera, and almost 2,600 species.

The Mexican states with the highest biological diversity are located in the south, where two main biogeographical regions (the Neartic and the Neotropical) meet, with Oaxaca as number one, followed by Chiapas, Veracruz, Guerrero, and Michoacan. The states with the highest degree of endemism are Baja California Sur, Baja California Norte, and Oaxaca.

Mexico also harbors an enormous richness of ecosystems and ecological diversity. With 32 major types of vegetation in the country, Mexico presents most of the ecosystems recognized on the planet. This includes deserts, alpine habitats, and tropical rain forests. However, habitat destruction, erosion, pollution, and natural disasters, such as fires and floods, are threatening this biological and ecological diversity.

Mexico has been classified as one of 15 critically threatened areas in the world. Although covering only 1 percent of the planet’s surface, these areas harbor between 30-40 percent of the total richness in land species. The conservation of these areas is a priority for Mexico. Mexico’s National System of Protected Areas is an important achievement for Mexico. Conservation areas include national parks, natural resource-protected areas, state- and municipally-protected areas, and privately-owned protected areas.

However, many legally-protected areas are being transformed or degraded. Human and economic resources directed at protecting this national network of protected areas are still very scarce and insufficient. In addition, there is an urgent need to create and protect new areas.

The protection of Mexico’s biological and ecological diversity cannot be accomplished exclusively within protected areas. It is imperative that all land use planning incorporate conservation strategies. Finally, considerably more financial resources for biodiversity protection need to be committed if Mexico’s biotic richness is to be preserved.

DR. JOSÉ SARUKHÁN KERMEZ

National Coordinator for the CONABIO and Emeritus Researcher for the Institute of Ecology of the UNAM



Great curassow. El Cielo cloud forest, Tamaulipas.



El Carmen Protected Area. First wilderness designation in Latin America.

CONSERVING HABITAT INSIDE AND OUTSIDE OF PROTECTED AREAS

Mexico has a relatively large number of protected areas, with more than a fifth of its national territory under legal protection. In the past, attempts at protected area management have encountered problems which included regulatory and administrative difficulties. Administrative structures have offered inadequate protection for parks and reserves. Personnel and funding have been insufficient. Management has tended to be over-centralized, and characterized by an institutional void and/or territorial conflicts among agencies. The legal framework for conservation has historically been inadequate, confusing and even contradictory (Alcerreca *et al.* 1988), even though the situation has improved in recent years through new legislation (incorporating protected areas within the context of development policies) and with the control of biosphere reserves and other areas by SEMARNAP.

In the past, most parks were established to protect “natural” landscapes and watersheds or to provide recreational areas close to cities. As a result, certain ecosystems of critical importance –such as arid zones, dry tropical forests, coastal wetlands and sub-tropical mountain forests– have tended to be poorly represented in the protected area system. Land tenure has been another critical factor. In the early 1980s, land ownership was not established in 60 percent of the national parks (Vargas 1984). The establishment of most protected areas on communal or settled lands resulted in sharp conflicts between the objectives of nature conservation and the needs of local people.

It was within such a context that the biosphere reserve concept has been tested and applied in Mexico. The creation of biosphere reserves in Mexico has been founded on a theoretical and conceptual base which has been carefully analyzed, and which has become to be known as the “Mexican model of biosphere reserves” (Halffter, 1984a, 1984b). Its underpinning and practice are based on two premises: first, the outright acceptance of the role of humans in nature and, second, the adoption and development of the concept of the biosphere reserve as created by UNESCO-MAB, but broadened in such a way as to respond to the social, economic and political conditions particular to the prevailing situation in Mexico.

To a country like Mexico, attractive features of the biosphere reserve concept are the explicit recognition of the need to perceive conservation as an integral part of socio-economic development, the notion of reserves having multiple functions and zoned areas, and a flexible approach which can be adapted to particular ecological conditions and human settings. Biosphere reserves in Mexico are important in the conservation, study and use of biological diversity, in providing logistic bases for long-term ecological research, and in contributing to new opportunities for rural development.

Key ingredients in attempts to integrate conservation, research and development, as experienced through the setting up and management of biosphere reserves in Mexico, include: the establishment of long-term research programs that are sensitive to local problems and issues; the challenges facing reserve managers in involving local people as the real driving forces of conservation; the role of biosphere reserves within the broader regional context; and the corollary need to address the issue of biodiversity conservation outside protected areas.

DR. GONZALO HALFFTER SALAS

Head of the Department of Animal Biodiversity and Ecology
for the Institute of Ecology of Xalapa, Veracruz, Mexico

BIODIVERSITY AND INDIGENOUS PEOPLE

Mexico is a symphony of textures and traditions; a privileged country, biologically and culturally. Its territory is home to a large number of species as well as to many indigenous groups, direct descendants from the ancient Mesoamerican civilizations. Today, Mexico is home to the largest number of indigenous peoples in the Americas: 50 cultural groups which speak 230 languages. To the indigenous population (~10.5 to 12 million) must be added a large group of “mestizo” population, hardly distinguishable physically and culturally from the indigenous population. This other sector, which G. Bonfil called the “disindianized Indians,” together with those who speak a language in addition to Spanish, totals at least 20 million, that is, one fifth of Mexico’s population, mostly living in rural areas.

As is common in most countries rich in biodiversity, indigenous people in Mexico live in strategically important places for biodiversity. However, Mexican Law has granted these groups protection to manage their resources in a communal fashion. After Mexico’s Agrarian Revolution of the beginning of the century, communal property was acknowledged in Article 27 of the Mexican Constitution. As a result, today, this sector of the population not only owns large extensions of property, but also has jurisdiction over most of Mexico’s forests, hydrologic, biologic, and genetic resources! In fact, this sector owns and manages more than half of the national territory. There are 3 million families, belonging to 30,000 *ejidos* and communities, which represent 70 percent of the rural productive units of the country, managing 103 million hectares of land! This sector is the key producer of corn, and other basic staples, as well as the major producer of other important agricultural products such as honey and coffee, Mexico’s main agricultural export.

From the point of view of natural resources, these indigenous cultures are also owners of approximately 80 percent of Mexico’s forests (under the management of 7,000 to 9,000 *ejidos* and communities), making Mexico the most important experiment in communal forest management in the world.

In addition, most of the “water factories” of center and southern Mexico are under Mesoamerican [indigenous] control, since a large part of the so called “refuge areas” of indigenous population overlap with high-altitude areas of numerous watersheds, critical to feed hydroelectric plants, urban and industrial centers, as well as agricultural, coastal, fishing, and touristic areas.

The Mesoamericans have jurisdiction over the main biological and genetic reservoirs in the country, that is, the biodiversity-richest areas. An illustration of this is that 60 percent of Mexico’s priority conservation areas, identified by The National Commission for the Knowledge and Use of Biodiversity (CONABIO), overlap with indigenous communities, and most biosphere reserves in the country overlap, or are surrounded by communal and *ejido* lands.

Finally, half of the communal groups (15,000 *ejidos* and communities) are located in the 10 biodiversity-richest states in the country. Oaxaca, the state with the highest biodiversity in Mexico, also has the largest indigenous population.

DR. VÍCTOR M. TOLEDO
Researcher, UNAM

THE IMPORTANCE OF INTERNATIONAL COLLABORATION

Conservation Biology is now established and recognized throughout the world as a key discipline for biodiversity protection and sustainable development. Nevertheless, many developing countries—which house the greatest proportion of biological diversity—face severe deficiencies in addressing biodiversity loss from a lack of trained conservation biologists, the limitations of their specific fields of expertise, and their lack of influence in the policy decision-making process relevant to conservation. Because some countries are well ahead of others in terms of knowledge, infrastructure, and on-the-ground program implementation, and because conservation biology is a global field and its processes and interests go far beyond national borders, it is of utmost urgency to establish international interactions to increase local conservation knowledge and practice. International collaboration in all branches of conservation biology is clearly the best means by which our discipline will have a significant impact on the challenges we face.

Mexico continues to make progress, and for the first time the Government now has a Ministry of the Environment, a victory won by conservationists in the hard-fought war to raise civil awareness of the need for and benefit of conservation. Although under-funded and short of human and other resources, this is a good start, but conservation efforts require collaboration with natural resource professionals from Mexico and abroad. The protected areas and wildlife programs are promising and are beginning to show results, but the urgency now lies in providing answers and successful, result-producing projects before it’s too late. One element is key to solving these problems: increasing the number of professionals in natural resource ecology, management, and conservation. Mexico has a relatively short history in professional ecology and relatively few practitioners. Most of its ecologists started their professional careers no more than several decades ago, and the number of active, trained ecologists is limited. Wildlife management, an important part of the overall goal, did not start in Mexico until very recently, and currently the demand for managers is urgent and huge. Today, Mexico, a country ranked among the top three in the world in number of mammal species, has less than 30 Ph.D.s actively working in mammalian biology. Emphasis on training natural resource professionals is paramount, but local training programs are still scarce and limited by a lack of faculty, curricula, and funding.

It is here that international cooperation comes into play as a catalyst to a solution for the scarcity of natural resource professionals in developing countries. Synergistic collaboration between national wildlife specialists and foreign experts is key to successful conservation and development efforts. Learning from successful programs and adapting their strategies to local conditions is the responsibility of the natural resource manager of each country. Because conservation is a global, integrative field, it is also the ethical responsibility of practitioners to establish solid, cooperative interactions across national borders.

These interactions must be established on a basis of mutual respect, fair conditions, and joint learning. In the past there have been cooperative programs, not always with optimal outcomes for the host country. Many conservation professionals from developed countries are already working in developing countries; these visiting scientists are one step ahead because they have crossed the boundaries and are in biotically rich countries that need their expertise. Their impact needs to be multiplied through their interaction with the local scientific community. Cooperative programs must diversify to include serious collaboration between institutions and professionals on the landscape across national boundaries. This takes effort and a solid commitment.

DR. RODRIGO A. MEDELLÍN
Researcher, UNAM



Jumping Choya and wild poppies. Sonoran Desert.

WILDLIFE WITHOUT BORDERS: STRENGTHENING THE U.S.-MEXICO PARTNERSHIP FOR BIODIVERSITY CONSERVATION

What a country chooses to save is what a country chooses to say about itself.

Mollie Beatty

Borders are built by human societies to delimit and identify nations. They are dialectical entities: They separate and distinguish cultures, but at the same time they are the meeting place where different cultures encounter and blend. And few countries have a border as long, as contrasting, and as ecologically significant as Mexico and the U.S. Some of the most significant ecosystems of North America expand across our joint border: The unique communities of the Tamaulipan and Californian Biotic Provinces, the rich montane forests of the Eastern and Western Sierra Madre, the magnificent expanses of the Chihuahuan and Sonoran Deserts.

But these ecosystems are not the only nature we share, as ecological processes expand at great distances and in complex ways: Migratory waterfowl travel every year in immense numbers along the Pacific and the Gulf of Mexico flyways, using the precious wetlands that still survive in North America spared from human development. Pollinator bats travel from the deep valleys of Oaxaca into the U.S. borderlands following the flowering of giant cacti and agaves. Monarch butterflies sail in the breeze of our great plains, all the way from the Canadian border into their winter refuge in the fir forests of Michoacán. Myriad birds travel north and south along the mountain corridors of the Sierra Madre, or fly from north to south above the great open wildernesses of Mexico and the US; pronghorn antelopes browse desert scrubs both sides of the border from the Yuma desert into Mexico's Gran Desierto; black bears move across the Rio Grande between Texas and Coahuila. Gray whales, sea turtles, raptors... the list is endless.

Fortunately, Mexico and the United States have had for years visionary and committed conservationists and scientists that have realized that the only way to preserve these unique species and these irreplaceable environments is by working together across the border. The joint efforts are not new: At a governmental level, they started in the 1930s and grew slowly but surely, first into the *U.S.-Mexico Joint Committee on Wildlife Conservation*, to finally consolidate into the *Wildlife Without Borders-Mexico* program, an outstanding and highly successful binational conservation effort. The program was launched in 1995 with the enthusiastic and committed support of the late Mollie Beatty, at that time head of the U.S. Fish and Wildlife Service, and with the dedicated work of Marshall Jones, Herbert Raffaele, Mélida Tajbakhsh, in the USFWS headquarters in Arlington, and Angélica Narváez in the U.S. Embassy in Mexico. The initiative was also embraced and enthusiastically supported in Mexico by Julia Carabias, then Minister of Environment, and Javier de la Maza and Felipe Ramírez Ruiz de Velasco, the officers in charge of protected areas and wildlife, respectively.

Wildlife Without Borders-Mexico has supported myriad projects throughout Mexico and the Mexico-U.S. borderlands. Ten years after its launching, its success has been immense: It is difficult to find a region in Mexico that has not received some support from the program, or that has not been in some way influenced by its achievements. Its influence has moved beyond the sphere of the projects it supports, to become a regional catalyst of binational collaboration. The program has had great influence in the sphere of private non-profit organizations, such as the Arizona Sonoran Desert Museum, the San Diego Zoological Society, or the San Diego Natural History Museum, which—influenced by the philosophy of the program—have also started in this last decade a series of ambitious projects of cross-border cooperation in conservation, reintroduction of endangered species, ecological restoration, or environmental education. It also sparked renewed interest in trans-boundary conservation efforts in state-level agencies, such as Arizona Game and Fish Department, or Texas Parks and Wildlife Department, who are doing outstanding collaborative work with Mexican agencies.

But, most importantly, the program has been a model in dialogue and cooperation between two nations and two cultures that are bound by a common geography, a shared history, and fragile ecosystems that know no borders. The first ten years of *Wildlife Without Borders-Mexico* clearly delineate a roadmap for the future and define an agenda for successful collaboration. Apart from its success in numbers and projects supported, the program has provided a forum where wildlife authorities and conservationists of both countries meet and share experiences and dreams. It has become, above anything else, a promoter of dialogue and camaraderie in wildlife conservation, a meeting place where both nations develop visions and dreams for a sustainable future. There is no other way to move forward.

DR. EXEQUIEL EZCURRA

Director, Biodiversity Research Center of the Californias, San Diego Natural History Museum

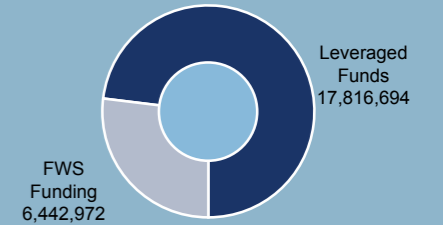
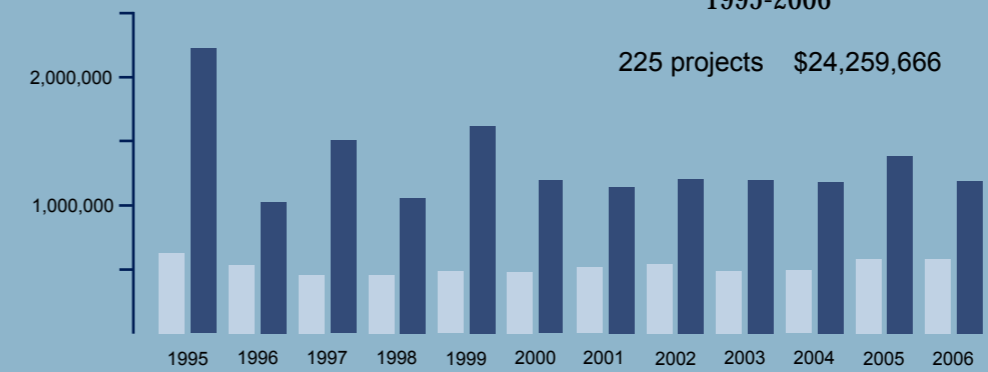
ANNEX B
PROJECT LOCATION BREAKDOWN
Number of projects by state



ANNEX C
GRANTS & MATCHING FUNDS
1995-2006

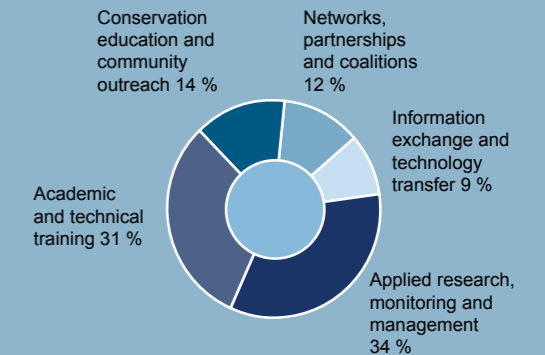
FISCAL YEAR	FWS FUNDING	LEVERAGED FUNDS	PROJECTS
1995	750,861	2,439,245	34
1996	565,593	1,046,000	19
1997	414,991	1,543,331	18
1998	420,934	1,101,207	17
1999	486,923	1,720,364	18
2000	449,871	1,383,619	16
2001	528,966	1,280,006	15
2002	573,083	1,413,444	20
2003	464,323	1,385,786	16
2004	472,326	1,357,691	14
2005	657,924	1,779,652	20
2006	657,177	1,366,349	18
Total	6,442,972	17,816,694	225

ANNEX C
GRANTS & MATCHING FUNDS
1995-2006

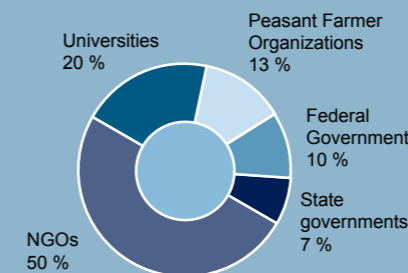


ANNEX D
FOCUS AREAS BREAKDOWN
1995-2006

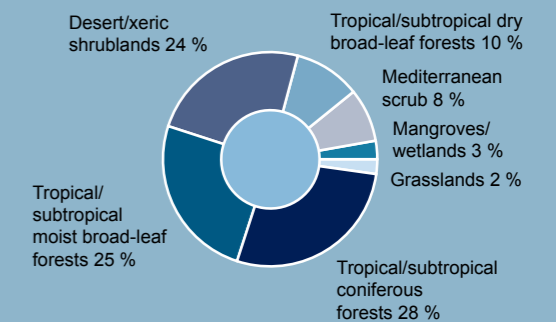
FOCUS AREA	FWS FUNDING	LEVERAGED FUNDING	PROJECTS
Applied research, monitoring and management	2,176,336	6,067,089	74
Academic and technical training	1,971,952	5,239,224	57
Conservation education and community outreach	897,788	2,558,937	38
Networks, partnerships and coalitions	799,457	1,944,363	27
Information exchange and technology transfer	597,439	2,007,081	29
TOTAL	6,442,972	17,816,694	225



ANNEX E
ORGANIZATIONAL
FUNDING
1995-2006



ANNEX F
FUNDING SUPPORT
BY ECOREGIONS
1995-2006



ANNEX G
PRODUCTS 1995-2006

ACADEMIC AND TECHNICAL TRAINING	
Individuals Trained	12,000
Graduate Degree Programs Created	5
On-the-job Certificate Programs Created	35
Scholarships Granted	116
Thesis Completed	41
APPLIED RESEARCH, MONITORING AND MANAGEMENT	
Management/Recovery Plans Developed	172
Nature Reserves Benefited (Annex H)	44
Educational Signs Produced and Posted	102
Species Benefited (Annex I)	104
Training Manuals Produced	212
Nature Reserves Created	5
CONSERVATION EDUCATION AND COMMUNITY	
Videos Produced	70
Brochures Produced	82
Environmental Education Kits Produced	95
Educational Comic Books	14
Posters Produced	103
Educational Board Games	1
Individuals Reached	25,000
INFORMATION EXCHANGE AND TECHNOLOGY TRANSFER	
Information/Outreach Units Inaugurated	26
Conferences Supported	16
Textbooks Produced	12
Newsletters Created	18
Radio Spots Produced	51
Data Bases Created	34
Workshops Conducted	910
NETWORKS, PARTNERSHIPS AND COALITIONS	
Advisory Committees Established	46
Inter-institutional Cooperative Agreements Signed	76
Non-governmental Organizations Created	19

ANNEX H
LIST OF RESERVES WHICH BENEFIT FROM
THE WILDLIFE WITHOUT BORDERS-MEXICO PROGRAM

NATURE RESERVE	AREA IN HECTARES
1. El Vizcaino Biosphere Reserve, Baja California	2,546,790
2. Upper Gulf of California / Colorado River Delta Biosphere Reserve, Sonora / Baja California	942,270
3. Calakmul Biosphere Reserve, Campeche	723,185
4. El Pinacate Biosphere Reserve, Sonora	714,556
5. Sian Ka'an Biosphere Reserve, Quintana Roo	528,147
6. Sierra Gorda, Queretaro	380,000
7. Montes Azules Biosphere Reserve, Chiapas	331,200
8. Cañón de Santa Elena Wildlife Refuge, Chihuahua	277,210
9. Maderas del Carmen Wildlife Refuge, Coahuila	208,381
10. Ajos-Bavispe, Sonora	198,160
11. Islands of the Gulf of California Natural Sanctuaries, Sonora / Baja California	150,000
12. La Sepultura, Chiapas	167,309
13. El Cielo Biosphere Reserve, Tamaulipas	144,250
14. Sierra de San Pedro Martir, Baja California	140,000
15. Sierra de Manantlán Biosphere Reserve, Jalisco	139,577
16. El Triunfo Biosphere Reserve, Chiapas	119,177
17. Lacantun, Chiapas	61,873
18. Ria Celestun, Yucatan	59,130
19. El Ocote Biosphere Reserve, Chiapas	48,140
20. Ria Lagartos, Yucatan	47,840
21. La Michilia, Durango	35,000
22. Sierra de Huautla, Morelos	31,314
23. Bosque de la Primavera Ecological State Reserve, Jalisco	30,500
24. Sierra de San Juan, Nayarit	30,000
25. Pico de Tacintaro National Park, Michoacán	29,140
26. Isla Guadalupe, Baja California	26,000

Continue on page 66

ANNEX H
LIST OF RESERVES WHICH BENEFIT FROM
THE WILDLIFE WITHOUT BORDERS-MEXICO PROGRAM

NATURE RESERVE	AREA IN HECTARES
27. Cañon del Sumidero, Chiapas	21,789
28. Mapimi, Durango	20,000
29. Special Biosphere Reserve of the Monarch Butterfly, Michoacán	16,110
30. Cuixmala-Chamela Biosphere Reserve, Jalisco	13,142
31. Isla Rasa, Baja California	6,900
32. Parras de la Fuente, Tamaulipas	3,118
33. Cascadas de Agua Azul, Chiapas	2,580
34. La Encrucijada Ecological State Reserve, Chiapas	2,000
35. Cumbres del Ajusco, D.F.	920
36. Los Tuxtlas, Veracruz	700
37. El Zapotal Ecological State Reserve, Chiapas	614
38. El Taray, Coahuila	355
39. Flor del Bosque Ecological State Reserve, Puebla	100
40. Cuatro Ciénagas Ecological Reserve, Chihuahua	84
41. La Mancha, Veracruz	49
42. Laguna Bélgica Ecological State Reserve, Chiapas	48
TOTAL AREA BENEFITTING	8,197,658 (*) (*) 20,248,215 acres
43. Maruata-Colola Marine Turtle Protection Reserve, Michoacán 10 miles of coastline	
44. Akumal Coral Reef, Quintana Roo	



Jaguarundi.

ANNEX I
LIST OF SPECIES OF INTERNATIONAL CONCERN WHICH BENEFIT
FROM THE WILDLIFE WITHOUT BORDERS-MEXICO PROGRAM

(Species in bold indicate ranges extending into the U.S.)

M A M M A L S

- Lesser (=Sanborn's) long-nosed bat (*Leptonycteris curasoae* (=sanborni) (yerbabuena) (ESA) (NOM-059-SEMARNAT-2001)
- Mexican long-nosed bat (*Leptonycteris nivalis*) (ESA) (NOM-059-SEMARNAT-2001)
- Mexican grizzly bear (*Ursus arctos* = *U. a. nelsoni*) (ESA) (CITES) (NOM-059-SEMARNAT-2001)
- Nocturnal beaver (*Castor canadensis mexicanus*) (NOM-059-SEMARNAT-2001)
- Mexican bobcat (*Lynx* (=Felis) *rufus escuinapae*) (ESA) (CITES)
- Tehuantepec jackrabbit (*Lepus flavigularis*) (NOM-059-SEMARNAT-2001)
- Jaguar (*Panthera onca*) (ESA) (CITES) (NOM-059-SEMARNAT-2001)
- Gulf Coast jaguarundi (*Herpailurus* (=Felis) *yagouaroundi cacomithi*) (ESA) (CITES) (NOM-059-SEMARNAT-2001)
- West Indian manatee (*Trichechus manatus*) (ESA) (CITES) (NOM-059-SEMARNAT-2001)
- Black howler monkey (*Alouatta pigra*) (ESA) (CITES) (NOM-059-SEMARNAT-2001)
- Howler monkey (*Alouatta palliata* (=villosa) (ESA) (CITES) (NOM-059-SEMARNAT-2001)
- Ocelot (*Leopardus* (=Felis) *pardalis*) (ESA) (CITES) (NOM-059-SEMARNAT-2001)
- Mexican prairie dog (*Cynomys mexicanus*) (ESA) (CITES) (NOM-059-SEMARNAT-2001)
- Peninsular pronghorn (*Antilocapra americana peninsularis*) (ESA) (CITES) (NOM-059-SEMARNAT-2001)
- Sonoran pronghorn (*Antilocapra americana sonoriensis*) (ESA) (CITES) (NOM-059-SEMARNAT-2001)
- Desert Bighorn sheep (peninsular ranges) (*Ovis canadensis*) (ESA-California population) (CITES) (NOM-059-SEMARNAT-2001)
- Vaquita or Gulf Porpoise (*Phocoena sinus*) (CITES) (NOM-059-SEMARNAT-2001)
- Grey whale (*Eschrichtius robustus*) (ESA) (CITES) (NOM-059-SEMARNAT-2001)
- Mexican Wolf (*Canis lupus baileyi*) (ESA) (CITES) (NOM-059-SEMARNAT-2001)
- Guadalupe fur Seal (*Arctocephalus townsendii*) (ESA) (CITES)
- Baird's tapir (*Tapirus bairdii*) (ESA) (CITES) (NOM-059-SEMARNAT-2001)
- White-lipped peccary (Tayassu pecari) (CITES) (NOM-059-SEMARNAT-2001)
- Collard peccary (Tayassu tajacu) (CITES) (NOM-059-SEMARNAT-2001)
- Neotropical nutria (*Lontra longicaudis annectens*) (CITES)
- Spider monkey (*Ateles geoffroyi vellerosus*) (ESA) (CITES) (NOM-059-SEMARNAT-2001)
- Puma (*Puma concolor*) (ESA) (CITES) (NOM-059-SEMARNAT-2001)
- Jaguarundi (*Herpailurus yagouaroundi*) (ESA) (CITES) (NOM-059-SEMARNAT-2001)
- Margay (*Felis leopardos wiedii*) CITES
- Anteater (*Tamandua tetradactyla*) (ESA) (CITES)
- Southern sea otter (*Hendira lutris nereis*) (ESA) (CITES)

B I R D S

- Masked bobwhite (quail) (*Colinus virginianus ridgwayi*) (ESA) (CITES) (NOM-059-SEMARNAT-2001)
- Harpy eagle (*Harpia harpyja*) (ESA) (CITES) (NOM-059-SEMARNAT-2001)
- Golden eagle (*Aquila chrysaetos*) (CITES) (NOM-059-SEMARNAT-2001)
- Aplomado falcon (*Falco femoralis septentrionalis*) (ESA) (NOM-059-SEMARNAT-2001)
- Horned guan (*Oreophaps derbianus*) (ESA) (CITES) (NOM-059-SEMARNAT-2001)

- Military macaw (*Ara militaris*) (CITES) (NOM-059-SEMARNAT-2001)
- Scarlet macaw (*Ara macao*) (CITES) (NOM-059-SEMARNAT-2001)
- Mexican spotted owl (*Strix occidentalis lucida*) (ESA) (NOM-059-SEMARNAT-2001)
- Maroon-fronted parrot (*Rhynchopsitta terrisi*) (CITES) (NOM-059-SEMARNAT-2001)
- Thick-billed parrot (*Rhynchopsitta pachyrhyncha*) (ESA) (CITES) (NOM-059-SEMARNAT-2001)
- Brown pelican (*Pelecanus occidentalis*) (ESA)
- Resplendent quetzal (*Pharomachrus mocinno*) (ESA) (CITES) (NOM-059-SEMARNAT-2001)
- Light-footed clapper rail (*Rallus longirostris levipes*) (ESA) (NOM-059-SEMARNAT-2001)
- Yuma clapper rail (*Rallus longirostris yumanensis*) (ESA) (NOM-059-SEMARNAT-2001)
- California least tern (*Sterna antillarum* (=albifrons) *browni*) (ESA) (NOM-059-SEMARNAT-2001)
- Least tern (*Sterna antillarum*) (ESA) (NOM-059-SEMARNAT-2001)
- Pygmy owl (*Glaucidium brasilianum cactorum*) (ESA)
- California clapper rail (*Rallus longirostris obsoletus*) (ESA)
- Heermann's Gull (*Larus heermanni*)
- Elegant tern (*Sterna elegans*)
- Blue-footed booby (*Sula nebouxi*)
- Brown booby (*Sula leucogaster*)
- Double-crested cormorant (*Phalacrocorax auritus*)
- Brandt cormorant (*Phalacrocorax penicillatus*)
- California condor (*Gymnogyps californianus*) (ESA) (CITES) (NOM-059-SEMARNAT-2001)
- Keel-billed Toucan (*Ramphastus sulfuratus*) (CITES)
- American stork (*Mycteria americana*) (ESA)
- Mexican spotted owl (*Strix occidentalis lucida*) (ESA)
- Pipin plover (*Chradrius melodus*) (ESA)
- Western snowy plover (*Chardrius alexandrinus nivosus*) (ESA)
- Black-capped vireo (*Vireo atricapillus*) (ESA)
- Least Bells' vireo (*Vireo bellii pusillus*) (ESA)
- Golden-cheeked warbler (*Dendroica chrysoparia*) (ESA)
- Ocellated turkey (*Agriocharis ocellata*) (CITES)
- Great curassow (*Crax rubra*) CITES

R E P T I L E S

- Morelet's crocodile (*Crocodylus moreletii*) (ESA) (CITES) (NOM-059-SEMARNAT-2001)
- Black sea turtle (*Chelonia mydas agassizi*) (ESA) (CITES) (NOM-059-SEMARNAT-2001)
- East Pacific green turtle (*Chelonia agassizi*) (ESA) (NOM-059-SEMARNAT-2001)
- Leatherback turtle (*Dermochelys coriacea*) (ESA) (CITES) (NOM-059-SEMARNAT-2001)
- Olive ridley sea turtle (*Lepidochelys olivacea*) (ESA) (NOM-059-SEMARNAT-2001)
- Kemp's Ridley (*Lepidochelys Kempii*) (ESA) (NOM-059-SEMARNAT-2001)
- Loggerhead sea turtle (*Caretta caretta*) (ESA) (CITES) (NOM-059-SEMARNAT-2001)
- Hawksbill sea turtle (*Eretmochelys imbricata*) (ESA) (CITES) (NOM-059-SEMARNAT-2001)
- Desert tortoise (Gopherus (=Xerobates, =Scaptochelys) agassizii) (ESA) (NOM-059-SEMARNAT-2001)
- Cuatro Ciénegas softshell turtle (*Trionyx ater*) (ESA) (CITES)
- American crocodile (*Crocodylus acutus*) (ESA) (CITES)

- Aquatic box turtle (*Terrapene coahuila*) (ESA) (NOM-059-SEMARNAT-2001)
- California red-legged frog (*Rana aurora draytonii*) (ESA)

FISH

- Yaqui catfish (*Ictalurus pricei*) (ESA) (NOM-059-SEMARNAT-2001)
- Desert pupfish (*Cyprinodon macularius*) (ESA) (NOM-059-SEMARNAT-2001)
- Gila topminnow (inc. Yaqui) (*Poeciliopsis occidentalis*) (ESA) (NOM-059-SEMARNAT-2001)
- Totoaba (sea trout) (*Cynoscion macdonaldi*) (ESA) (NOM-059-SEMARNAT-2001)
- Chihuahua chub (*Gila nigrescens*) (ESA)
- Yaqui chub (*Gila purpurea*) (ESA)
- Devils river minnow (*Dionda diabolh*) (ESA)
- Loach minnow (*Rhinichthys (=Tiarota) cobitis*) (ESA)
- Rio Grande silvery minnow (*Hybognathis amarus*) (ESA)
- Colorado pikeminnnow (*Ptychocheilus lucius*) (ESA)
- Desert pupfish (*Cyprinodon macularius*) (ESA)

INSECTS

- Monarch butterfly (*Danaus plexippus*) (endangered migratory phenomenon-IUCN)

PLANTS

- Three species of *Chamaedorea* palms:

Ch. ernesti-augusti (NOM-059-SEMARNAT-2001)

Ch. pochutlensis (NOM-059-SEMARNAT-2001)

Ch. quezalteca (NOM-059-SEMARNAT-2001)

- Seven species of *Orchidaceae*:

Cuitlauzina pendula (CITES) (NOM-059-SEMARNAT-2001)

Cypripedium (CITES) (NOM-059-SEMARNAT-2001)

Encyclia adenocaula (CITES) (NOM-059-SEMARNAT-2001)

Encyclia citrina (CITES) (NOM-059-SEMARNAT-2001)

Lemboglossum cervantesii (CITES) (NOM-059-SEMARNAT-2001)

Rodriguezia dressleriana (CITES) (NOM-059-SEMARNAT-2001)

Rossioglossum splendens (CITES) (NOM-059-SEMARNAT-2001)

- Four species of Cycads:

Dioon merolae (CITES) (NOM-059-SEMARNAT-2001)

Ceratozamia norstogii (CITES) (NOM-059-SEMARNAT-2001)

Zamia soconuscensis (CITES) (NOM-059-SEMARNAT-2001)

Ceratozamia matudae (CITES) (NOM-059-SEMARNAT-2001)

TOTAL: 104*

* In addition, several species of *Cactaceae* have benefitted from various projects supported through this program.



Environmental education (Vaquita porpoise).



Nahua woman with corn. Puebla.

ANNEX J GRANTS AWARDED IN 2006

ACADEMIC AND TECHNICAL TRAINING

Advanced Certificate Course: GIS Development & Application for Conservation of Nature Reserves in Chiapas
 Grantee: Instituto para el Desarrollo Sustentable en Mesoamerica, A.C.
 Location: Chiapas, Mexico
 Grant Funds: \$39,930.00
 Matching Funds: \$28,400.00
 Purpose: Train 30 Mexican reserve management personnel in utilizing GIS to advance conservation efforts (06-G048)

APPLIED RESEARCH, MONITORING, AND MANAGEMENT

Local Participatory Training in Natural Resource Management at the Monarch Butterfly Biosphere Reserve
 Grantee: ALTERNARE, A.C.
 Location: Michoacan, Mexico
 Grant Funds: \$50,000.00
 Matching Funds: \$221,870.00
 Purpose: Protect wintering habitat of the monarch butterfly in the Monarch Butterfly Biosphere Reserve (06-G053)

Research and Strategy Implementation for the Conservation of Mexican Migratory and Endangered Bats
 Grantee: Bioconservation, Educacion y Ciencia, A.C.
 Location: Monterrey, Tamaulipas, Chiapas,

Baja California
 Grant Funds: \$20,000.00
 Matching Funds: \$67,000.00
 Purpose: Promote recovery of endangered bat species and maintain the ecological services they provide (06-G045)

Restoration of Degraded Areas with Native Forest Species of Economic Interest in the Lacandon Rainforest
 Grantee: Etnobiologia para la Conservacion, A.C.
 Location: Chiapas, Mexico
 Grant Funds: \$30,000.00
 Matching Funds: \$10,940.00
 Purpose: Promote conservation of the Lacandon Rainforest through reforestation by local communities (06-G054)

Capacity Building for Ecological Restoration of Soils in the Chilapa Region, Guerrero
 Grantee: Grupo de Estudios Ambientales, A.C.
 Location: Guerrero, Mexico
 Grant Funds: \$46,000.00
 Matching Funds: \$111,000.00
 Purpose: Train local rural peasant farmers in Guerrero in sustainable natural resource management (06-G059)

Community Development in Three Micro-regions of the Lacandon Rainforest, Chiapas
 Grantee: Instituto para el Desarrollo Sustentable en Mesoamerica, A.C.

Location: Chiapas, Mexico
 Grant Funds: \$35,000.00
 Matching Funds: \$17,260.00
 Purpose: Train rural peasant farmers in sustainable natural resource management in Chiapas (06-G049)

Control of Invasive Arundo Donax in Cuatro Ciénegas
 Grantee: Pronatura Noreste, A.C.
 Location: Chihuahua, Mexico
 Grant Funds: \$40,000.00
 Matching Funds: \$87,900.00
 Purpose: Conserve the unique biological resources of global importance of the Cuatro Ciénegas Reserve (06-G058)

Conservation of Black Bear Through Community Participation in El Cielo Biosphere Reserve, Tamaulipas
 Grantee: Pronatura Noreste, A.C.
 Location: Tamaulipas, Mexico
 Grant Funds: \$30,000.00
 Matching Funds: \$57,950.00
 Purpose: Conserve black bear through environmental education and training for local communities (06-G056)

Community Participation for Sustainable Management of the Monarch Butterfly Biosphere Reserve
 Grantee: Red Mexicana de Organizaciones Campesinas Forestales, A.C.
 Location: Michoacan, Mexico
 Grant Funds: \$44,809.00

Matching Funds: \$44,309.00
Purpose: Protect wintering habitat of the Monarch butterfly through local capacity building (06-G046)

Community Work Focused on the Conservation and Management of the Dry Forests of the Oaxaca Coast
Grantee: SERBO, A.C.
Location: Oaxaca, Mexico
Grant Funds: \$35,000.00
Matching Funds: \$51,400.00
Purpose: Conserve endangered dry forests through training in reforestation/restoration for local communities (06-G047)

Bio-cultural Conservation in the Proposed Sierra Tarahumara Biosphere Reserve
Grantee: Sierra Madre Alliance, Inc.
Location: Chihuahua, Mexico
Grant Funds: \$44,000.00
Matching Funds: \$224,000.00
Purpose: Develop network of community-proposed protected areas/local biodiversity conservation plans in the Sinforosa-Urique corridor as a model for regional conservation planning in the Sierra Tarahumara (06-G062)

Restoration of the California Condor to Baja California
Grantee: Zoological Society of San Diego
Location: Baja California, Mexico
Grant Funds: \$32,000.00
Matching Funds: \$234,768.00
Purpose: Reintroduce 4-8 condors in 06 into former ranges in the Sierra San Pedro Martir in Baja California (06-G060)

CONSERVATION EDUCATION AND COMMUNITY OUTREACH

Strengthen Conservation Education through Radio Programs at the Montes Azules Biosphere Reserve
Grantee: Montes Azules Biosphere Reserve
Location: Chiapas, Mexico
Grant Funds: \$35,000.00
Matching Funds: \$38,398.00
Purpose: Produce 10 radio programs on biodiversity conservation and training manuals for local teachers (06-G055)

Native Habitat Garden in Tijuana as Model Site for Teachers and Promoters
Grantee: San Diego Natural History Museum
Location: Baja California, Mexico
Grant Funds: \$25,000.00
Matching Funds: \$8,000.00
Purpose: Conservation through training for schools, grassroots NGOs, field extension workers in Baja (06-G063)

INFORMATION EXCHANGE AND TECHNOLOGY TRANSFER

Mexican Wolf Introduction in Mexico; a Risk Assessment Process for Release Site Prioritization
Grantee: NATURALIA, A.C.
Location: Puebla, Mexico
Grant Funds: \$5,080.00
Matching Funds: \$9,520.00
Purpose: Reintroduction of Mexican wolf into selected sites in Mexico (06-G050)

NETWORKS, PARTNERSHIPS AND COALITIONS

Jaguar Camera Survey Contest
Grantee: Defenders of Wildlife
Location: Sonora, Mexico
Grant Funds: \$37,371.00

Matching Funds: \$11,634.00
Purpose: Conserve endangered jaguar along the U.S.-Mexico border engaging landowners and ranchers (06-G061)

Strengthening US/Mexico Cooperation for Conservation of Biological Diversity Shared by the Two Nations
Grantee: Unidos para la Conservacion, A.C.
Location: Nationwide
Grant Funds: \$77,987.00
Matching Funds: \$82,000.00
Purpose: Produce/distribute a report on 10 years of joint activities for conservation of shared resources (06-J008)

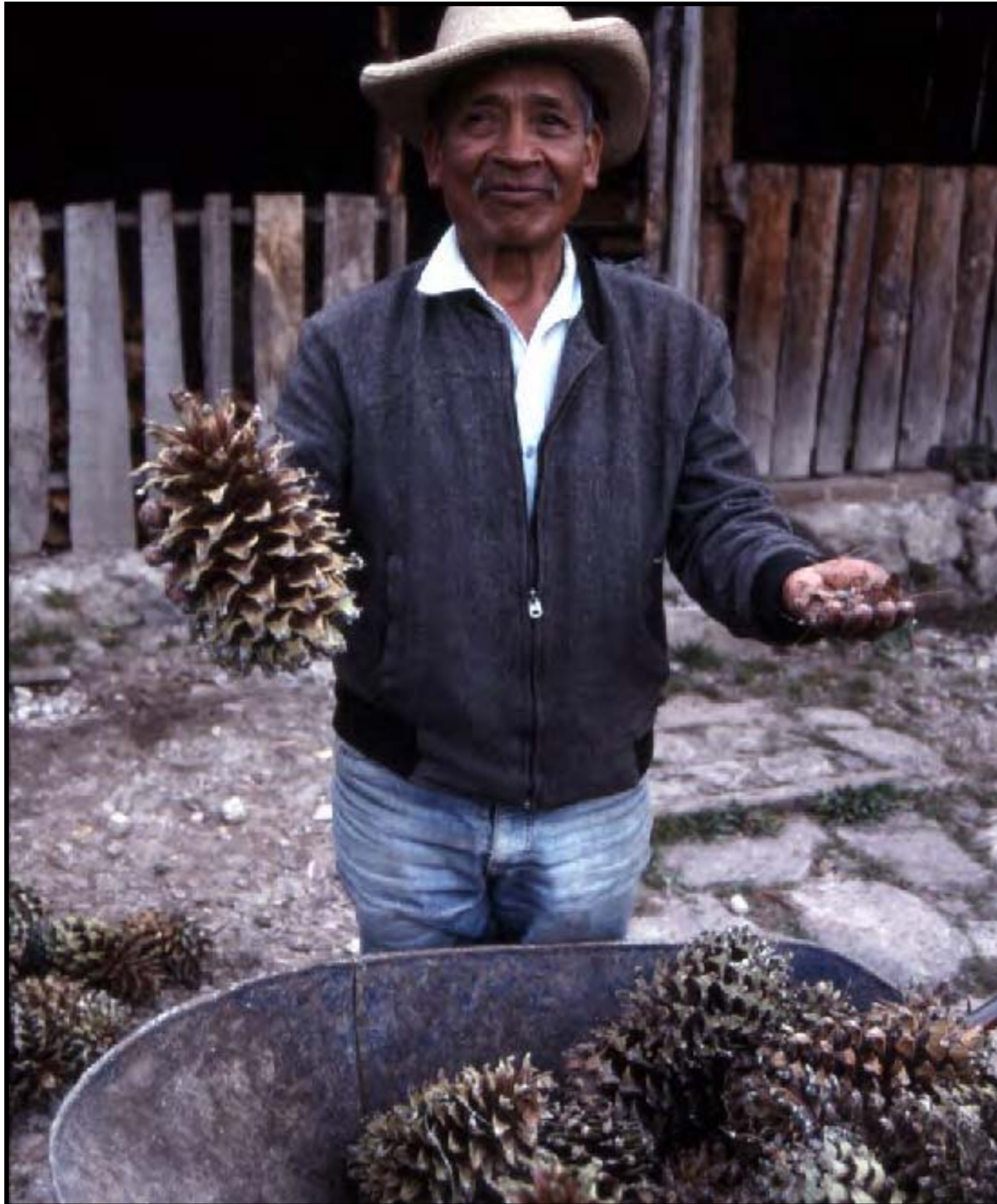
Training on Management and Contingency Response to Health/Disease of Wild Waterfowl and their Habitats
Grantee: Wildlife Trust
Location: Nationwide
Grant Funds: \$30,000
Matching Funds: \$60,000
Purpose: (06-G190)



Mexican wolf.



Laguna Madre, Tamaulipas.



Seeds of pine for reforestation. Estado de Mexico.

ANNEX J GRANTS AWARDED IN 2005

ACADEMIC AND TECHNICAL TRAINING

Capacity Building Training for Mexican Wildlife Managers from Mexico-U.S. Border Mexican States
 Grantee: Espacios Naturales y Desarrollo Sustentable
 Location: Mexico-US Mexican border states
 Grant Funds: \$30,000.00
 Matching Funds: \$172,000.00
 Results: Support Mexico's decentralization of wildlife functions to states by training 35 state officers (05-G251)

Training in Ecological Restoration for Local Peasant Communities in the Chilapa region, Guerrero, Mexico
 Grantee: Grupo de Estudios Ambientales, A.C.
 Location: Guerrero, Mexico
 Grant Funds: \$35,000.00
 Matching Funds: \$113,077.00
 Results: Trained 60 peasant farmers in natural resource use and produced 8 management plans (05-G063)

Training for a Sustainable Future in the Sierra Gorda Biosphere Reserve
 Grantee: Grupo Ecologico Sierra Gorda, A.C.
 Location: Queretaro, Mexico
 Grant Funds: \$34,439.00
 Matching Funds: \$241,779.00
 Results: A fully functional local campesino training center; training/environmental education materials (05-G082)

Third Certificate Course on Geographic Information Systems in Chiapas
 Grantee: IDESMAC
 Location: Chiapas, Mexico
 Grant Funds: \$39,485.00
 Matching Funds: \$21,100.00
 Results: Training course/manual in GIS for resource managers for 30 trainees; 30 GIS strategies (05-G060)

First International Course for Park Wardens in Mexico and Central America
 Grantee: Instituto de Historia Natural
 Location: Nationwide, Mexico
 Grant Funds: \$20,000.00
 Matching Funds: \$42,612.00
 Results: 30 participants from 17 nature reserves graduated from this course. (05-G065)

Certificate Course in Outreach for Natural Protected Areas of Mexico
 Grantee: Pronatura Chiapas, A.C.
 Location: Nationwide, Mexico
 Grant Funds: \$40,000.00
 Matching Funds: \$54,110.00
 Results: Third course for 25 reserve managers from Mexico's Protected Area Commission CONANP (05-G078)

Certificate Course on Conservation and Management of Wetlands in Mexico
 Grantee: Unidos para la Conservacion, A.C.
 Location: Mexico, D.F., Mexico
 Grant Funds: \$70,000.00
 Matching Funds: \$94,088.00

Results: 5th certificate course for 40 Mexican wildlife personnel on ecological restoration/training manual (05-G081)

Certificate Course on Marine Protected Area Designation
 Grantee: Universidad Autonoma de Baja California
 Location: Baja California, Mexico
 Grant Funds: \$40,000.00
 Matching Funds: \$51,400.00
 Results: 30 graduated, an academic plan, and an Advisory Committee to oversee follow-up activities (05-G064)

APPLIED RESEARCH, MONITORING, AND MANAGEMENT

Participatory Training for Local Communities to Restore Habitat in the Monarch Butterfly Biosphere Reserve
 Grantee: ALTERNARE, A.C.
 Location: Michoacan, Mexico
 Grant Funds: \$48,000.00
 Matching Funds: \$240,980.00
 Results: 250 trainees; Community Training Center refurbished; training/education materials (05-G058)

Protecting Coral Reef Ecosystems: Implementing a Coral Reef Conservation Program for Akumal
 Grantee: Centro Ecologico Akumal, A.C.
 Location: Yucatan, Mexico
 Grant Funds: \$35,000.00

Matching Funds: \$50,715.00
Results: Coral reef/associated wildlife protection in partnership with authorities, NGOs, universities, schools (05-G066)

The Parrot Trade in Mexico: A New Assessment of the Scale, Pathways and Impacts of Legal and Illegal Trade
Grantee: Defenders of Wildlife
Location: Nationwide, Mexico
Grant Funds: \$17,000.00
Matching Funds: \$23,725.00
Results: Conservation of endangered parrots; recommendations to management authorities (05-G096)

Sustainable Development by Peasant Women in the Lacandon Rainforest, Rainforest, Chiapas
Grantee: IDESMAC
Location: Chiapas, Mexico
Grant Funds: \$35,000.00
Matching Funds: \$24,400.00
Results: 150 trainees; 5 work plans; environmental education program for children and elderly (05-G061)

Women and Natural Resource Management in Dry Forests
Grantee: SERBO, A.C.
Location: Oaxaca, Mexico
Grant Funds: \$35,000.00
Matching Funds: \$51,400.00
Results: 40 trainees; 6 community management plans for coastal endangered dry forests implement (05-G062)

Planning, Education, Social Organization for Conservation in Proposed Sierra Tarahumara Biosphere Reserve
Grantee: Sierra Madre Alliance, Inc.
Location: Chihuahua, Mexico
Grant Funds: \$40,000.00
Matching Funds: \$201,300.00
Results: Comprehensive training/ educational program for local

communities; training manuals; management plan for a proposal being considered by the Mexican Government (05-G094)

Restoration of the California Condor to Baja California, Mexico
Grantee: Zoological Society of San Diego
Location: Baja California, Mexico
Grant Funds: \$37,000.00
Matching Funds: \$176,979.00
Results: Five condors reintroduced to former ranges in Mexico; environmental education program; training of Mexican biologist in reintroduction techniques (05-G097)

CONSERVATION EDUCATION AND COMMUNITY OUTREACH

Interactive CD: Marine Turtles; Get to Know Them and Protect Them
Grantee: PROESTEROS, A.C.
Location: Baja California, Mexico
Grant Funds: \$15,000.00
Matching Funds: \$28,300.00
Results: Public awareness campaign for protection of nesting sites in the Baja Peninsula (05-G079)

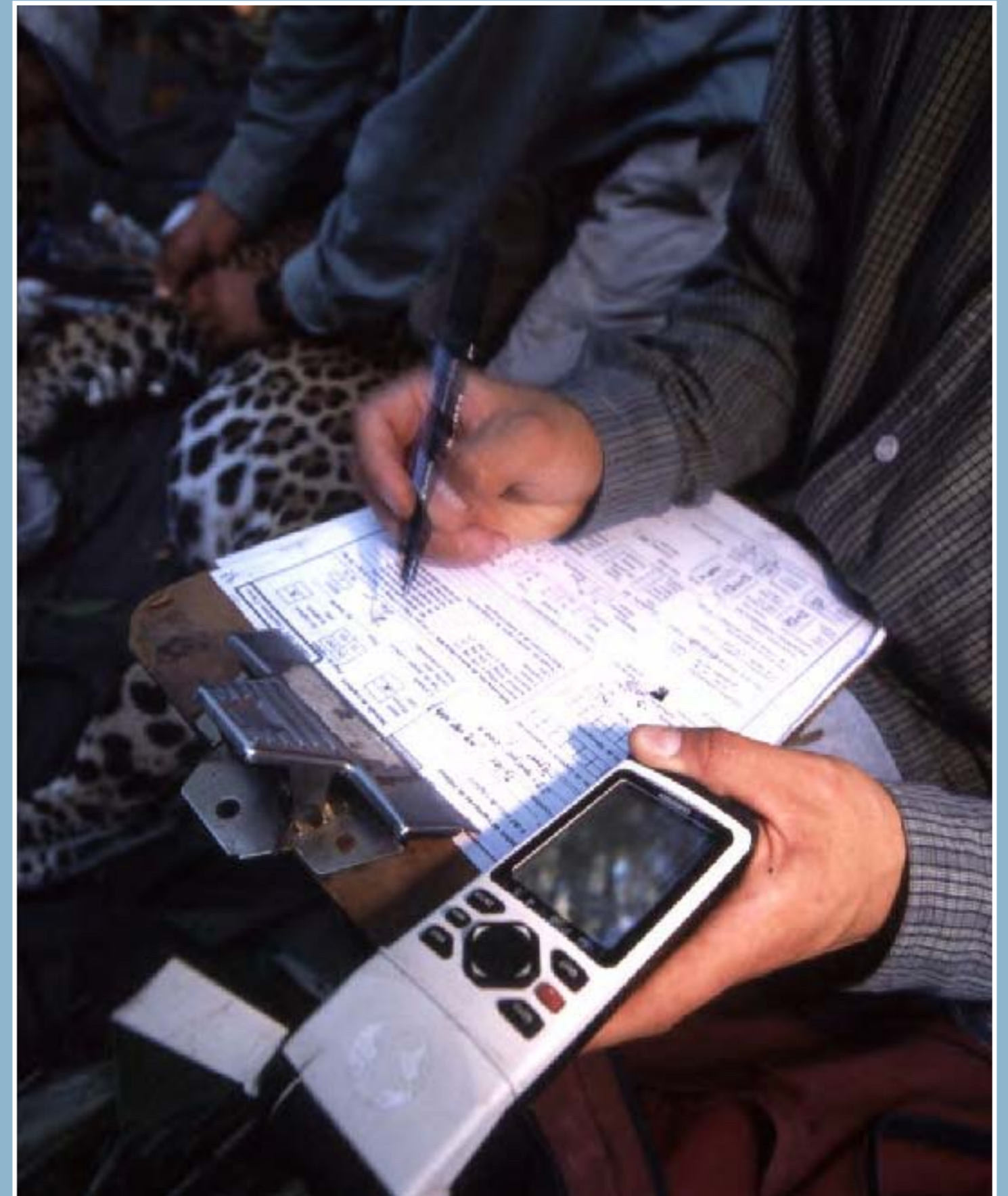
Environmental Education and Training for Jaguar Conservation in Yucatan
Grantee: Pronatura Peninsula de Yucatan, A.C.
Location: Yucatan, Mexico
Grant Funds: \$35,000.00
Matching Funds: \$68,075.00
Results: Educational program along "the route of the Jaguar" in Yucatan, Mexico; trained 8 Mexican personnel and 12 local people; established a field station for jaguar monitoring; produced a jaguar recovery/ management plan; created educational material and distributed via educational workshops for local communities; CD and magazine (05-G077)

Baja California Peninsula Watershed Project
Grantee: San Diego Natural History Museum
Location: Baja California, Mexico
Grant Funds: \$17,000.00
Matching Funds: \$52,752.00
Results: Conservation of watershed shared by US and Mexico in the San Diego/ Tijuana border; 90 teachers trained; public campaign; watershed activity guide, maps, school children's workbook, teacher's manual, and video (05-G095)

INFORMATION EXCHANGE AND TECHNOLOGY TRANSFER

Strengthening Leadership of Local Resource Managers in Rural Areas of Tlaxacala
Grantee: Centro Campesino, A.C.
Location: Tlaxcala, Mexico
Grant Funds: \$20,000.00
Matching Funds: \$21,200.00
Results: Trained 15 peasant farmers in natural resource management, with emphasis on developing leadership skills to teach other peasant farmers; high-quality "Campesino-to-Campesino" training material produced and distributed in Mexico and Central America (05-G059)

Birds of Con Caac, Annotated Field Guide in Three Languages
Grantee: Conservacion del Territorio Insular Mexicano, A.C.
Location: Baja California, Mexico
Grant Funds: \$15,000.00
Matching Funds: \$49,660.00
Results: List of local birds; data base; environmental education materials (05-G080)



Jaguar research. Calakumul. Campeche.



Bird trapper. Los Tuxtlas, Veracruz.

ANNEX J GRANTS AWARDED IN 2004

ACADEMIC AND TECHNICAL TRAINING

Training for Peasant Farmers in Ecological Restoration of Endangered Dry Forests
 Grantee: Grupo de Estudios Ambientales, A.C.
 Location: Guerrero, Mexico
 Grant Funds: \$30,000.00
 Matching Funds: \$77,182.00
 Results: Trained 70 members of 10 local communities in restoration; management plans, evaluation indicators; demonstration plots in each of the participating communities for a total restoration area of 15 hectares; trained promoters to continue efforts in other local communities (04-G779)

GIS Diplomado at the University of Chiapas
 Grantee: Instituto para el Desarrollo Sustentable en Mesoamerica, A.C.
 Location: Chiapas, Mexico
 Grant Funds: \$35,000.00
 Matching Funds: \$23,100.00
 Results: II Certificate Training Course for 25 managers; GIS strategies for their areas; training manual (04-G776)

Certificate Course in Conservation Outreach for Protected Area Managers
 Grantee: Pronatura Chiapas, A.C.
 Location: Chiapas, Mexico
 Grant Funds: \$35,000.00
 Matching Funds: \$55,905.00
 Results: 25 trainees; personnel exchanges; networks; outreach strategies; training materials (04-G769)

Capacity-Building Workshops for Women from San Isidro Chacalapa Discussing the Use of Firewood Resources
 Grantee: SERBO, A.C.
 Location: Oaxaca, Mexico
 Grant Funds: \$20,000.00
 Matching Funds: \$34,200.00
 Results: 4 training workshops for local communities; reforestation working groups; 5,000 local species seedlings planted; 5 hectares reforested; implemented an environmental education course for local schools (04-G773)

APPLIED RESEARCH, MONITORING, AND MANAGEMENT

Certificate Course in Ecological Restoration for Mexican Resource Managers
 Grantee: Unidos para la Conservacion, A.C.

Location: Nationwide, Mexico
 Grant Funds: \$65,000.00
 Matching Funds: \$85,000.00
 Results: 4th certificate course in ecological restoration techniques and principles for 30 managers; manual (04-G775)

Local Participatory Training in Natural Resource Management at the Monarch Butterfly Biosphere Reserve
 Grantee: ALTERNARE, A.C.
 Location: Michoacan, Mexico
 Grant Funds: \$50,000.00
 Matching Funds: \$270,200.00
 Results: 250 trainees; 5 training manuals; 1 calendar for sustainable agriculture (500 copies); refurbished training center for peasant farmers in the Monarch butterfly reserve (04-G780)

Reducing Sea Turtle Bycatch Mortality in Mexico's Pacific Shark Fisheries
 Grantee: Defenders of Wildlife
 Location: Baja CA; Sinaloa; Colima, Mexico
 Grant Funds: \$20,000.00
 Matching Funds: \$22,170.00
 Results: 300 trainees; training manual addressing proper record-keeping and equipment use; posters (04-G771)

Conservation of the Endangered Leatherback Sea Turtle in the Pacific Coast of Mexico
Grantee: Kutzari, A.C.
Location: Michoacan, Mexico
Grant Funds: \$25,000.00
Matching Funds: \$290,508.00
Results: Protection activities in key nesting beaches; baseline data on status of nesting populations for leatherback documented; training and environmental education activities for local communities (04-G777)

Recovery of the Endangered Pronghorn Antelope in Mexico
Grantee: Unidos para la Conservacion, A.C.
Location: Coahuila, Mexico
Grant Funds: \$35,000.00
Matching Funds: \$90,000.00
Results: Reintroduction of pronghorn antelope to historic ranges; population studies; awareness campaign for local people; outreach manual "El Retorno Del Berrendo" (04-G774)

CONSERVATION EDUCATION AND COMMUNITY OUTREACH

U.S. and Mexico Migratory Bats Conservation and Education Initiative
Grantee: Bat Conservation International
Location: Morelos and Zacatecas, Mexico
Grant Funds: \$50,000.00
Matching Funds: \$72,260.00
Results: Bat roost identified in Coahuila, and Texas/Mexico border; 13 educational/training products; workshops on bat conservation and management; raised support of communities (04-G770)

PROBEA: Coming Full Circle: Impact and Measurement
Grantee: San Diego Natural History Museum
Location: Baja California, Mexico
Grant Funds: \$20,000.00
Matching Funds: \$44,950.00
Results: Trained 4 schools in environmental improvement projects in Tijuana and La Paz, Baja California; school/community project "Best Practices" handbook to train other teachers to implement similar projects (04-G768)

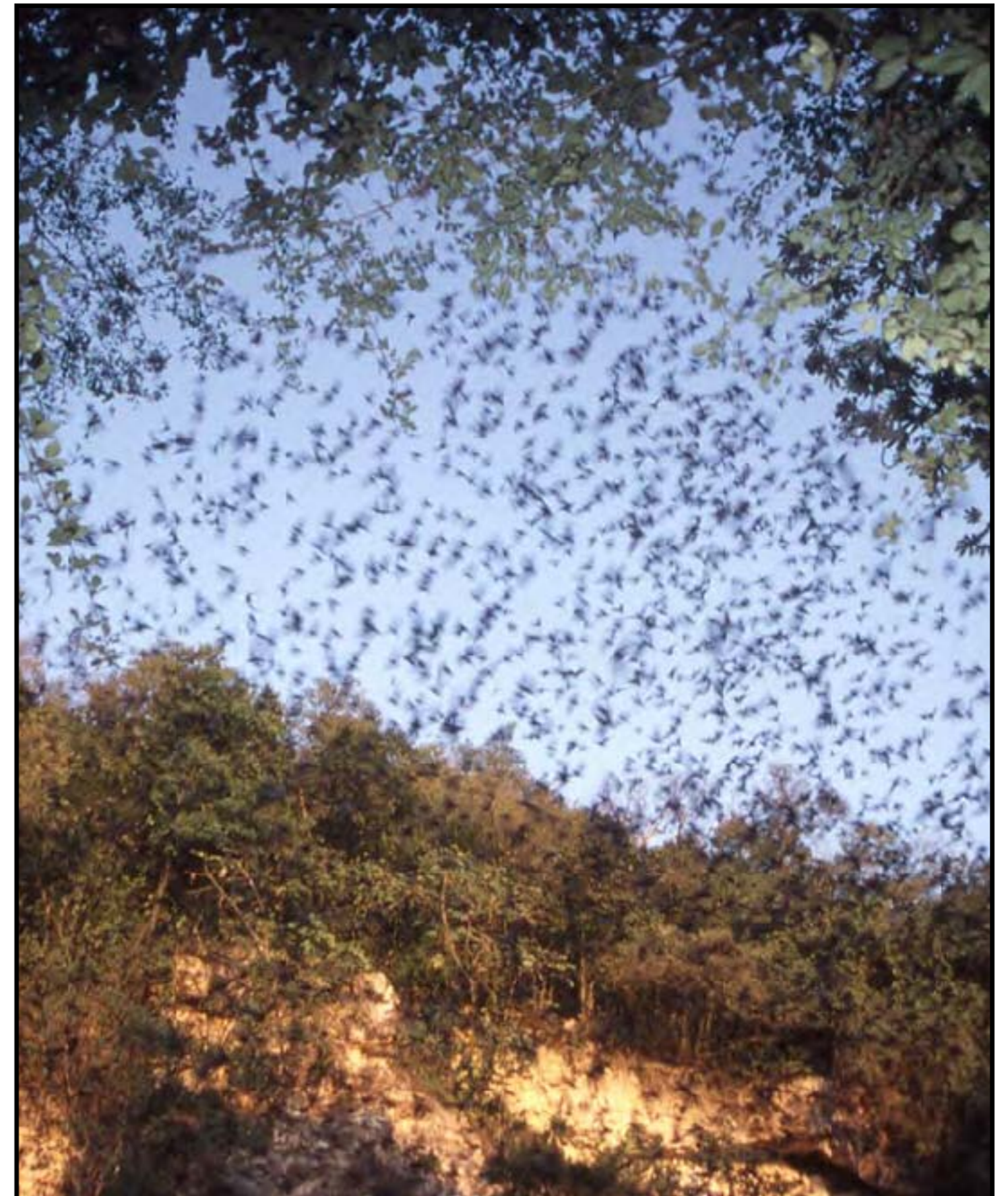
INFORMATION EXCHANGE AND TECHNOLOGY TRANSFER

A Hands-on Seminar for Mexican Reporters and Editors
Grantee: National Wildlife Federation
Location: Nationwide, Mexico
Grant Funds: \$34,326.00
Matching Funds: \$61,216.00
Results: Workshops for 35 media representatives raise public awareness in Mexico (04-G772)

Ecotourism Plan for the Communities of the Sierra San Pedro Martir
Grantee: Terra Peninsular, A.C.
Location: Baja California, Mexico
Grant Funds: \$20,000.00
Matching Funds: \$207,000.00
Results: Research on life cycle/habitat needs of reintroduced California condor; training Mexican personnel (04-G778)

NETWORKS, PARTNERSHIPS AND COALITIONS

State Wildlife Agencies Participation in USFWS Activities Related to Their Work in Mexico
Grantee: International Association of State Fish and Wildlife Agencies
Location: Nationwide, Mexico
Grant Funds: \$33,000.00
Matching Funds: \$24,000.00
Results: Participation in the Trilateral Committee; project evaluations in Mexico (04-G851)



The volcano cave bats. Campeche.



Shorebird research. Gulf of California, Sinaloa.

ANNEX J GRANTS AWARDED IN 2003

ACADEMIC AND TECHNICAL TRAINING

Third National Course
for Ecological Reserve Rangers
of Mexico
Grantee: Instituto de Historia Natural
Location: Chiapas, Mexico
Grant Funds: \$29,866.00
Matching Funds: \$23,805.00
Results: Certificate course in natural
resource management for 30 trainees;
manual; course evaluation (03-G708)

Diplomado on Conservation and
Management of Temperate Mountain
Ecosystems in Mexico
Grantee: Unidos para la Conservacion, A.C.
Location: Mexico, D.F., Mexico
Grant Funds: \$75,000.00
Matching Funds: \$86,000.00
Results: 40 Mexican resource managers
trained; training manual; network of
resource managers (03-G513)

APPLIED RESEARCH, MONITORING, AND MANAGEMENT

Monitoring of the Steineger Lizard
(*Phrynosoma ditmarsii*) at the
Ajos-Bavispe Reserve
Grantee: Consejo Nacional de Areas
Naturales Protegidas
Location: Sonora, Mexico
Grant Funds: \$8,630.00
Matching Funds: \$17,200.00
Results: Recovery plan for species; data

base on population and habitat
characteristics (03-G511)

Population/Feeding Ecology
of Seabirds in the Gulf of California
and Relationship with Commercial
Fisheries
Grantee: Conservación del Territorio
Insular Mexicano, A.C.
Location: Baja California Sur, Mexico
Grant Funds: \$20,000.00
Matching Funds: \$95,600.00
Results: Management plan; engagement of
fishing industry; 18 trainees; monitoring
program for the species (03-G515)

Conservation and Restoration
of Guadalupe Island
Grantee: Island Conservation and Ecology
Group
Location: Baja California, Mexico
Grant Funds: \$15,000.00
Matching Funds: \$37,770.00
Results: Removed goats from island;
restored native plants; working group of
plant restoration specialists; quarantine
program to stop introductions to island;
environmental education and outreach
program (03-G522)

Reforestation Project at the Monarch
Butterfly Biosphere Reserve
Grantee: Michoacan Reforestation Fund
Location: Michoacan, Mexico
Grant Funds: \$20,000.00

Matching Funds: \$107,000.00
Results: Produced seedlings/distributed to
participating communities; monitored
sites; developed long-term business plan,
trained and assisted local participants in
reforestation (03-G517)

Culture-based Protection and
Restoration of Wildlife Habitat in the
Sierra Tarahumara
Grantee: Sierra Madre Alliance, Inc.
Location: Chihuahua, Mexico
Grant Funds: \$37,000.00
Matching Funds: \$92,000.00
Results: 26 indigenous promoters trained;
two pilot riparian restoration initiatives
created; expanded bilingual
education program; ethno-ecological
information on fire history and local
practices gathered; Birds of the Sierra
Tarahumara
Region manual produced (03-G518)

Establishment of Strategy for
Reintroduction/Recovery of the Desert
Bighorn Sheep in Mexico
Grantee: Unidos para la Conservacion, A.C.
Location: Mexico, D.F., Mexico
Grant Funds: \$25,000.00
Matching Funds: \$54,480.00
Results: Bi-national Advisory Committee
established; conducted two workshops and
field trips; produced a training
manual and a National Strategy for the
Reintroduction and Recovery of Desert
Bighorn Sheep in Mexico. (03-G514)

CONSERVATION EDUCATION
AND COMMUNITY OUTREACH

U.S. and Mexico Migratory Bats
Conservation and Education Initiative
Grantee: Bat Conservation International
Location: Nationwide, Mexico
Grant Funds: \$20,000.00
Matching Funds: \$171,800.00
Results: 7th bilingual children's book "Bats,
a Treasure for All to Protect"; educational
workshops; graduate tracking database;
management plans for 3 key bat caves for
wildlife sanctuary designation; agave
planting program to create long-nosed bat
habitat. (03-G524)

PROBEA: Sea of Cortés Collaboration
for Environmental Education and
Training
Grantee: San Diego Natural History Museum
Location: Baja California, Mexico
Grant Funds: \$35,000.00
Matching Funds: \$209,604.00
Results: Regional environmental education
community center in Tijuana; teacher
training in Baja California South;
regionally-focused curricula; video on
watershed; 400 teachers trained; 75 action
projects implemented (03-G523)

INFORMATION EXCHANGE
AND TECHNOLOGY TRANSFER

Establishment of the National School for
the Capacitation of Peasant Wildlife
Promoters
Grantee: Centro Campesino para el
Desarrollo Sustentable, A.C.
Location: Tlaxcala, Mexico
Grant Funds: \$35,000.00
Matching Funds: \$84,278.00
Results: 80 trainees in conservation
principles/practices; 6 training workshops
on participatory and outreach techniques;
5 work plans; training manuals/educational
materials (03-G519)

Survey/Monitoring Methods for
Detection of Hunting and Poaching of
Wildlife in Montes Azules Biosphere
Reserve
Grantee: Consejo Nacional de Areas
Naturales Protegidas
Location: Chiapas, Mexico
Grant Funds: \$16,500.00
Matching Funds: \$33,742.00
Results: Training manual; 8 outreach
workshops for local communities;
identified species under threat by illegal
activities; and identified and mapped illegal
hunting and poaching sites in the reserve
(03-G510)

Capacity-building and Awareness-raising
Program in Agriculture Production
Alternatives
Grantee: Consejo Nacional de Areas
Naturales Protegidas
Location: Chiapas, Mexico
Grant Funds: \$22,326.93
Matching Funds: \$14,706.82
Results: 2 needs assessment workshops
for 90 participants; 3 training workshops
on sustainable natural resource
management for 25 community leaders
to serve as core group of extension workers;
500 training manuals, 3 videos; built 9
demonstration agricultural plots
(03-G512)

NETWORKS, PARTNERSHIPS
AND COALITIONS

Local Participatory Training in Natural
Resource Management at the Monarch
Butterfly Biosphere Reserve
Grantee: ALTERNARE, A.C.
Location: Michoacan, Mexico
Grant Funds: \$50,000.00
Matching Funds: \$273,000.00
Results: Needs assessment; training/
educational materials; fostered local project
support; equipped and maintained a
fully-functioning training center at the

Reserve; developed a curriculum, schedule,
and long-term activities plan for
volunteers; conducted 17 working sessions
and 8 training exercises (03-G516)

Developing Capacity and Transferring
Information for the Conservation of the
Colorado River Delta
Grantee: Sonoran Institute
Location: Sonora, Baja California, Mexico
Grant Funds: \$20,000.00
Matching Funds: \$55,000.00
Results: Local capacity to implement
restoration projects; managed/shared
collection of scientific data; integrated into
GIS system; identified management
action/restoration projects based on data
resulting from the workshop (03-G521)

Training Program for the Ecological
Planning and Management of
Watersheds in Four Priority Regions
Grantee: UNORCA, A.C.
Location: Mexico
Grant Funds: \$35,000.00
Matching Funds: \$29,800.00
Results: Trained 50 extension workers;
provided specialized training to
UNORCA's Biodiversity Commission
members; produced and implemented
management plans for 4
regions (03-G520)



Bean and corn harvest. Puebla.



Environmental Education Program.

ANNEX J GRANTS AWARDED IN 2002

ACADEMIC AND TECHNICAL TRAINING

Diplomado in Conservation Outreach in Southeastern Mexico
Grantee: Pronatura Chiapas, A.C.
Location: Chiapas, Mexico
Grant Funds: \$50,027.62
Matching Funds: \$54,875.00
Results: Training manual; scholarships procured for 30 individuals in protected areas management; course on participatory methodologies for social organizations (02-G445)

Training Workshop for Natural Resource Managers of Oaxaca
Grantee: SERBO, A.C.
Location: Oaxaca, Mexico
Grant Funds: \$10,000.00
Matching Funds: \$57,000.00
Results: 60 trainees in project development, fund-raising, organizational skills, monitoring and evaluation (02-G203)

APPLIED RESEARCH, MONITORING, AND MANAGEMENT

Local Participatory Training in Natural Resource Management at the Monarch Butterfly Biosphere Reserve
Grantee: ALTERNARE, A.C.
Location: Michoacan, Mexico
Grant Funds: \$74,500.00
Matching Funds: \$218,694.00
Results: Project evaluation; specialized training for 4 groups of local farmers and core group of 30 extension workers; basic training for 5 new groups; work plans;

cooperative agreements; 16 workshops; 45 working sessions (02-G196)

Conservation of the Tropical Rainforest of Northeast Chimalapas
Grantee: CADEPI, A.C.
Location: Oaxaca, Mexico
Grant Funds: \$35,000.00
Matching Funds: \$44,563.00
Results: Training for 50 members from local communities; 7 workshops; educational materials (02-G195)

Bioregional Strategic Plan for Sustainable Ecosystems through Neotropical Cat Protection and Recovery
Grantee: Cat Action Treasury
Location: USA
Grant Funds: \$15,000.00
Matching Funds: \$46,000.00
Results: Action plan; educational booklet; contact with USFWS Refuges and Mexico to link shared habitats (02-G213)

Population/feeding ecology of seabirds in the Gulf of California and its relationship with commercial fisheries
Grantee: Conservacion del Territorio Insular Mexicano, A.C.
Location: Baja California South, Mexico
Grant Funds: \$25,000.00
Matching Funds: \$63,200.00
Results: Population size monitoring program; management plan to protect endangered birds in Baja (02-G194)

Pacific Island Reserves
Grantee: Island Conservation and Ecology Group

Location: Pacific Islands, Mexico
Grant Funds: \$22,055.00
Matching Funds: \$85,550.00
Results: Technical proposal declaring a Pacific Islands Protected Area; Mexican Government declares Guadalupe Islands a Protected Area; consideration is being given to other islands as well (02-G212)

Herpofauna of Tlaxcala: Sustainable Use in 6 Municipalities
Grantee: Universidad Autónoma de Tlaxcala
Location: Tlaxcala, Mexico
Grant Funds: \$9,000.00
Matching Funds: \$12,070.00
Results: Survey of amphibians/reptiles; management plan delivered to Mexican authorities (02-G197)

CONSERVATION EDUCATION AND COMMUNITY OUTREACH

U.S. and Mexico Migratory Bats Conservation and Education Initiative
Grantee: Bat Conservation International
Location: Morelos and Zacatecas, Mexico
Grant Funds: \$20,000.00
Matching Funds: \$168,800.00
Results: Research on long-nosed bats in Morelos and Zacatecas; 100,000 agaves planted; educational workshops for 500 teachers; protection activities at 2 new roosting caves; bat monitoring in the Sea of Cortés; "Bats, a Treasure for All to Protect" children's book and teacher curricula (02-G206)

Building Conservation Awareness in the Yucatan Peninsula
Grantee: RARE Center for Tropical Conservation

Location: Yucatán, Mexico
Grant Funds: \$25,000.00
Matching Funds: \$75,784.00
Results: Education program between Ria Lagartos and Ria Celestun reserves; environmental education campaign; outreach materials (02-G211)

Regional Environmental Education Project for the Baja Peninsula
Grantee: San Diego Natural History Museum
Location: Baja California South, Mexico
Grant Funds: \$40,000.00
Matching Funds: \$164,068.00
Results: Training manual, brochures; regional environmental education facility; 500 trainees; teacher/classroom community action plans (02-G208)

Environmental Education in the Hualtepec Region of Hidalgo
Grantee: Sendero Verde, A.C.
Location: Hidalgo, Mexico
Grant Funds: \$10,000.00
Matching Funds: \$11,200.00
Results: Outreach plan; "Ecological Committee"; Community Reserve-200 hectares established; annual Ecological Fair; 12 school brigades; agreements with local businesses and fishermen; educational materials (02-G201)

INFORMATION EXCHANGE AND TECHNOLOGY TRANSFER

Training for Environmental Extension Workers in the Sustainable Use of Natural Resources
Grantee: Centro Campesino para el Desarrollo Sustentable, A.C.
Location: Hueyotlipan, Mexico
Grant Funds: \$31,000.00
Matching Funds: \$31,805.00
Results: School for Natural Resource Extension Workers created; 200 local farmers trained; 15 rural extension workers received specialized training; Advisory Group; and

community-based work plans and teams developed (02-G205)

Marine Diversity Conservation: Evaluation of No-take Areas Pilot Program in Loreto National Park
Grantee: Comunidad y Biodiversidad A.C.
Location: Sonora, Mexico
Grant Funds: \$15,000.00
Matching Funds: \$83,075.00
Results: GIS mapping of island fishing areas, current uses and breeding aggregations; documentation of various biological communities in the marine ecosystem; no-take area network established, manual for marine protected areas managers and fisheries in applying no-take areas strategies; outreach materials (02-G204)

Project for the Reinforcement of Inspection and Monitoring of Ports, Airports and Border Posts
Grantee: CONABIO
Location: Mexico, D.F., Mexico
Grant Funds: \$44,000.00
Matching Funds: \$35,050.00
Results: Short-term course developed and implemented; 71 PROFEPA agents trained. (02-G202)

Developing Indigenous Community Wildlife Management in the Proposed Protected Area of Pino Gordo
Grantee: Sierra Madre Alliance, Inc.
Location: Chihuahua, Mexico
Grant Funds: \$42,500.00
Matching Funds: \$75,400.00
Results: 4 community training workshops; specialized training to core group of 10 community research associates; wildlife and flora report; bilingual (Spanish /Raramuri) conservation field guide for local managers; maps and management plans for Ejido Pino Gordo; ornithological cards, brochures; Tarahumara birds catalog (02-G193)

Monitoring the Gray Whale in Mexico
Grantee: Universidad Autónoma de Baja California Sur
Location: Baja California South, Mexico
Grant Funds: \$30,000.00
Matching Funds: \$66,000.00
Results: Researched data for Mexican managers to base management decisions to protect the species (02-G200)

Ecosystem Management and Monitoring in Quintana Roo: a Collaborative, Hands-on Training Program
Grantee: University of Florida
Location: Quintana Roo, Mexico
Grant Funds: \$15,000.00
Matching Funds: \$27,875.00
Results: Training manual; 2 workshops; integrated hydrological/ecological monitoring program in the reserve (02-G210)

NETWORKS, PARTNERSHIPS AND COALITIONS

Community-based Monitoring and Riparian Restoration in the Santa Cruz River, Sonora, Mexico
Grantee: Sonoran Institute
Location: Sonora, Mexico
Grant Funds: \$30,000.00
Matching Funds: \$57,435.00
Results: Conservation/restoration plan; household water quality protocol; environmental education and conservation activities with schoolchildren; booklets; *Eco-Informativo* brochure (02-G207)

Program of Consolidation of the UNORCA's Environmental Action Network
Grantee: UNORCA, A.C.
Location: Mexico, D.F., Mexico
Grant Funds: \$30,000.00
Matching Funds: \$35,000.00
Results: 120 promoters; National Biodiversity Council; 6 workshops on watershed management, biodiversity conservation, soil and water conservation, agroforestry and ecotourism (02-G198)



Gray Whales. San Ignacio Lagoon. Baja. California Sur.



Environmental awareness community. Quintana Roo.

ANNEX J GRANTS AWARDED IN 2001

ACADEMIC AND TECHNICAL TRAINING

International Course in Wildlife Conservation and Management
 Grantee: Colegio de Postgraduados
 Location: San Luis Potosi, Mexico
 Grant Funds: \$30,000.00
 Matching Funds: \$45,800.00
 Results: 3 scholarships for Graduate Program students; 60 training manuals; Master's degree thesis (01-G840)

Master's Degree Program in Wildlife Management
 Grantee: Instituto de Ecologia de Xalapa, A.C.
 Location: Veracruz, Mexico
 Grant Funds: \$30,000.00
 Matching Funds: \$90,000.00
 Results: 2 scholarships for full-time study and 8 courses in wildlife and conservation management (01-G819)

Second National Course for Ecological Reserve Rangers of Mexico
 Grantee: Instituto de Historia Natural
 Location: Chiapas, Mexico
 Grant Funds: \$31,380.00
 Matching Funds: \$17,790.00

Results: Mexican Association of Ecological Reserve Rangers established; efforts to incorporate program into reserve management plans; created links with IAPR; produced 3 training manuals and outreach materials (01-G826)

GIS Diplomado at the University of Chiapas
 Grantee: Instituto para el Desarrollo Sustentable en Mesoamerica, A.C.
 Location: Chiapas, Mexico
 Grant Funds: \$25,000.00
 Matching Funds: \$24,600.00
 Results: Trained 15-25 participants in utilizing GIS in decision-making for conservation issues. (01-G064)

Master's Degree Program in Ecosystem Management
 Grantee: Universidad Autonoma de Baja California
 Location: Baja California North, Mexico
 Grant Funds: \$30,000.00
 Matching Funds: \$124,470.00
 Results: 6 graduates in 2002; obtained positions in natural resources management area (01-G822)

APPLIED RESEARCH, MONITORING, AND MANAGEMENT

Local Participatory Training in Natural Resource Management at the Monarch Butterfly Biosphere Reserve
 Grantee: ALTERNARE, A.C.
 Location: Michoacan, Mexico
 Grant Funds: \$98,770.00
 Matching Funds: \$287,188.00
 Results: 485 trainees; produced "How to Start an NGO," "Alternative Sources of Energy," and "Learning to Produce Honey" manuals and "2003 Calendar for the Peasant Farmer" (01-G823)

Reforestation Project at the Monarch Butterfly Biosphere Reserve
 Grantee: Michoacan Reforestation Fund
 Location: Michoacan, Mexico
 Grant Funds: \$30,000.00
 Matching Funds: \$71,847.00
 Results: 300,000 trees planted; 7 communities engaged in reforestation activities (01-G978)

Rio Laja Watershed Restoration Project
Grantee: Salvemos al Rio Laja, A.C.
Location: Guanajuato, Mexico
Grant Funds: \$27,560.00
Matching Funds: \$163,957.00
Results: 9 trainees in restoration techniques for wildlife habitat; management plans; outreach material (01-G066)

Conservation of the Islands of the Baja Peninsula
Grantee: Sociedad de Historia Natural
Location: Baja California South, Mexico
Grant Funds: \$26,700.00
Matching Funds: \$30,000.00
Results: State's environmental education curricula; trained cadre of local teachers in areas adjacent to 5 protected areas; produced educational and outreach material to be used in the schools of Baja California (01-G979)

CONSERVATION EDUCATION AND COMMUNITY OUTREACH

U.S. and Mexico Migratory Bats Conservation and Education Initiative
Grantee: Bat Conservation International
Location: Nuevo Leon, Tamaulipas, Michoacan, Mexico
Grant Funds: \$20,000.00
Matching Funds: \$167,500.00
Results: Educational curricula; training manuals for teachers/children, field manual; radio spots (01-G980)

Monarch Butterfly Researchers Meeting
Grantee: Monarch Watch, c/o U. of Kansas
Location: USA
Grant Funds: \$21,352.00
Matching Funds: \$56,966.00
Results: "2001 Monarch Population Dynamics Meeting - Meeting and Working Group Summaries" (01-G844)

Promoting Conservation through Pride
Grantee: RARE Center for Tropical Conservation
Location: Quintana Roo, Mexico
Grant Funds: \$35,000.00
Matching Funds: \$83,300.00
Results: "Model Tourism Conservation Strategy for World Heritage Sites"; Sian Ka'an Assessment Technical Report; SBR Ecotourism Work Plan and "*Introduccion a los Planes de Talleres*" training manual (01-G825)

The PROBEA Baja California Norte Sustainability Project
Grantee: San Diego Natural History Museum
Location: Baja California North, Mexico
Grant Funds: \$49,000.00
Matching Funds: \$49,000.00
Results: 1,000 teachers trained; networks of teachers; MOU with local organizations; FWS-San Diego National Wildlife Refuge Complex brochure translated into Spanish (01-G999)

NETWORKS, PARTNERSHIPS AND COALITIONS

Support for a RAMSAR Expert
Grantee: Colegio de Postgraduados
Location: Mexico, D.F., Mexico
Grant Funds: \$16,790.00
Matching Funds: \$30,208.00
Results: Plan to implement Mexico's RAMSAR commitments (01-G065)

Training Promoters in Natural Resource Management
Grantee: UNORCA, A.C.
Location: Nationwide, Mexico
Grant Funds: \$57,414.00
Matching Funds: \$37,380.00
Results: 120 promoters trained in sustainable natural resource use throughout Mexico; training manuals (01-G824)



White collared peccary. Coahuila.



Multidisciplinary group at work meeting, Yucatan.

ANNEX J
GRANTS AWARDED IN
2000

ACADEMIC AND TECHNICAL TRAINING

Master's Degree Program in Wildlife Conservation and Management
Grantee: Colegio de Postgraduados
Location: San Luis Potosi, Mexico
Grant Funds: \$35,000.00
Matching Funds: \$320,800.00
Results: 6 scholarships provided; 7th International Course on Wildlife Management (00-G617)

Two-week Course on Wildlife Management of Northern Mexico's Grasslands
Grantee: Instituto de Ecologia de Xalapa, A.C.
Location: Durango, Mexico
Grant Funds: \$16,086.00
Matching Funds: \$18,100.00
Results: 30 graduates; training manual "Wildlife Management of Grasslands" (00-G621)

Master's Degree Program in Wildlife Management
Grantee: Instituto de Ecologia de Xalapa, A.C.
Location: Veracruz, Mexico
Grant Funds: \$20,000.00
Matching Funds: \$75,000.00
Results: 2 scholarships; computer

equipment for computer laboratory (00-G567)

The First "National Course for Ecological Reserve Rangers of Mexico"
Grantee: Instituto de Historia Natural
Location: Chiapas, Mexico
Grant Funds: \$25,000.00
Matching Funds: \$17,770.00
Results: 30 graduates; training materials; uniforms (0-G568)

Training for Local Communities of the Calakmul Biosphere Reserve in Natural Resource Management and Wildlife Conservation
Grantee: Puck-Xic-Kan, A.C.
Location: Campeche and Quintana Roo, Mexico
Grant Funds: \$24,300.00
Matching Funds: \$32,725.00
Results: Management plan; training manual; 4 workshops (00-G618)

Second Training Courses (Diplomados) in Wildlife Management Principles and Practices
Grantee: Unidos para la Conservacion, A.C.
Location: Yucatan, Mexico

Grant Funds: \$78,000.00
Matching Funds: \$230,000.00
Results: 30 representatives from Mexico's state-level wildlife agencies were trained; Advisory Committee; training manual; network created (00-G554)

APPLIED RESEARCH,
MONITORING, AND MANAGEMENT

Local Participatory Training in Natural Resource Management at the Monarch Butterfly Biosphere Reserve
Grantee: ALTERNARE, A.C.
Location: Michoacan, Mexico
Grant Funds: \$75,000.00
Matching Funds: \$190,667.00
Results: 18 trainees 25,000 m of terrace; 4 adobe houses; training center constructed; increased yield of crops; first production of fruits and vegetables; 5,000 seedlings planted; monitoring teams to curtail illegal logging (00-G555)

Distribution Ranges of Mexican Populations of Baird's Tapir, White-lipped Peccary, and Collared Peccary
Grantee: Colegio de la Frontera Sur (ECOSUR)

Location: Chiapas, Mexico
Grant Funds: \$8,800.00
Matching Funds: \$27,750.00
Results: Recovery plan presented to Mexican authorities (00-G553)

CONSERVATION EDUCATION
AND COMMUNITY OUTREACH

U.S. and Mexico Migratory Bats
Conservation and Education Initiative
Grantee: Bat Conservation International
Location: Texas, USA; Tamaulipas, Mexico
Grant Funds: \$20,000.00
Matching Funds: \$184,000.00
Results: 300 children trained; educational/outreach materials produced reaching an audience of 26,000 (00-G539)

Promoting Conservation through Pride
Grantee: RARE Center for Tropical Conservation
Location: Chiapas, Mexico
Grant Funds: \$35,920.00
Matching Funds: \$49,237.00
Results: Improved management capacity at El Triunfo Biosphere Reserve; training material (00-G538)

A Bi-national, Community-based Environmental Education Program (PROBEA)
Grantee: San Diego Natural History Museum
Location: Baja CA Sur, Mexico
Grant Funds: \$24,720.00
Matching Funds: \$39,370.00
Results: 50 trainees; comprehensive environmental education program tailored to the needs of the region (00-G543)

Bilingual Report on Cooperative US/Mexico Borderlands Projects
Grantee: Unidos para la Conservacion, A.C.
Location: Mexico, D.F., Mexico
Grant Funds: \$13,000.00
Matching Funds: \$95,000.00
Results: 2,000 copies of report on wildlife conservation and management efforts during 1995-2000 (00-G620)

INFORMATION EXCHANGE
AND TECHNOLOGY TRANSFER

Protecting the Populations of Endangered *Crocodylus Acutus* in the C anon del Sumidero National Park
Grantee: Instituto de Historia Natural
Location: Chiapas, Mexico
Grant Funds: \$5,045.00
Matching Funds: \$60,000.00
Results: Recovery plan; rescued and incubated 70 eggs for hatchling release; workshops for local communities and wildlife management training for reserve guards (00-G619)

NETWORKS, PARTNERSHIPS
AND COALITIONS

State Wildlife Agencies Participation in USFWS Activities Related to Their Work in Mexico
Grantee: International Association of State Fish and Wildlife Agencies
Location: Nationwide, Mexico
Grant Funds: \$10,000.00
Matching Funds: \$5,600.00
Results: Participation at the Trilateral

Committee; 3 project evaluations (00-G705)

To Develop a Course Curriculum for Mexican and U.S. Decision-Makers and Conduct a Test Run of the Course
Grantee: Pronatura Noreste, A.C.
Location: Nationwide, Mexico
Grant Funds: \$20,000.00
Matching Funds: \$4,300.00
Results: Curriculum developed; course implemented; training materials produced (00-G707)

Training for UCIZONI, a Local Organization of Indigenous People, in Natural Resource Management
Grantee: UCIZONI, A.C.
Location: Oaxaca, Mexico
Grant Funds: \$39,000.00
Matching Funds: \$33,300.00
Results: 12 workshops for 195 individuals; training manual; educational signs for key sites; meeting facility constructed; 180 children participated in special events, monitoring teams to report illegal wildlife trafficking(00-G556)





Relocation of desert Bighorn sheep. Tiburón Island, Gulf of California.

ANNEX J GRANTS AWARDED IN 1999

ACADEMIC AND TECHNICAL TRAINING

Master's Degree Program in Wildlife Conservation and Management
Grantee: Colegio de Postgraduados
Location: San Luis Potosi, Mexico
Grant Funds: \$49,500.00
Matching Funds: \$366,600.00
Results: VI International Course on Wildlife Conservation and Management; thesis research (99-G341)

Master's Degree Program in Wildlife Management
Grantee: Instituto de Ecologia de Xalapa, A.C.
Location: Veracruz, Mexico
Grant Funds: \$46,200.00
Matching Funds: \$65,177.00
Results: Thesis research; new student enrollment into the Program; and 4 scholarships were granted. (99-G340)

Master's Degree Program in Ecosystem Management
Grantee: Universidad Autonoma de Baja California Sur
Location: Baja CA, Mexico
Grant Funds: \$31,000.00
Matching Funds: \$196,600.00
Results: 15 graduates; 8 management plans (99-G339)

APPLIED RESEARCH, MONITORING, AND MANAGEMENT

Local Participatory Training in Natural Resource Management at the Monarch Butterfly Biosphere Reserve
Grantee: ALTERNARE, A.C.
Location: Michoacan, Mexico
Grant Funds: \$85,980.00
Matching Funds: \$132,935.00
Results: Video; evaluation plan; two energy-efficient technologies training manuals (99-G297)

Sustainable Natural Resource Management Training for the Local Communities of the Montes Azules B.R.
Grantee: Asociacion de Productores del Rio Perlas y Montes Azules
Location: Chiapas, Mexico
Grant Funds: \$20,000.00
Matching Funds: \$29,000.00
Results: 4 workshop proceedings; 120 trainees; 4 training manuals; 22 community leaders trained (99-G345)

Reforestation Project at the Monarch Butterfly Biosphere Reserve
Grantee: Michoacan Reforestation Fund
Location: Michoacan, Mexico
Grant Funds: \$17,500.00
Matching Funds: \$17,500.00
Results: Community reforestation projects; established sustainable forestry-related industry; monitored reforestation sites and propagated additional trees for planting (99-G432)

Training Program for the Local Communities of the Monarch Butterfly Biosphere Reserve
Grantee: PROFAUNA, A.C.
Location: Coahuila, Mexico
Grant Funds: \$19,800.00
Matching Funds: \$6,800.00
Results: 3 workshops; "El Correo Real" newsletter; Protected Area Manager's courses; educational materials for schools in the Reserve (99-G363)

Natural Resource Management Activities in the El Cielo R.B.
Grantee: Terra Nostra, A.C.
Location: Tamaulipas, Mexico
Grant Funds: \$25,000.00
Matching Funds: \$51,700.00
Results: Ecotourism interpretative plan; 34 signs marking reserve limits, 4 workshops; 2 information centers; pamphlet and 3 brochures for trails; training manuals (99-G357)

Restoration of White-Winged Dove Populations in an Important Wintering Site in the Parras de la Fuente R.B.
Grantee: U.S.-Mexico Chamber of Commerce Chapter-Monterrey, A.C.
Location: Tamaulipas, Mexico
Grant Funds: \$20,000.00
Matching Funds: \$39,067.00
Results: 10 Biologist/game wardens trained in wildlife and habitat management techniques; wildlife drinking areas established in the reserve and white-winged

dove brochure produced in Spanish and English (99-G361)

Sustainable Natural Resource Use Training for local Communities of El Triunfo R.B. and La Sepultura R.B.
Grantee: Universidad de Chiapas
Location: Chiapas, Mexico
Grant Funds: \$16,500.00
Matching Funds: \$46,866.00
Results: Nurseries established in buffer zones of El Triunfo and La Sepultura reserves; training manuals on harvesting techniques of palm and Cycas developed (99-G350)

Program to Protect and Recover the Endangered Manatee in One of Its Last Remaining Habitats
Grantee: Universidad de Veracruz
Location: Veracruz, Mexico
Grant Funds: \$20,000.00
Matching Funds: \$29,896.00
Results: 6 environmental education workshops; state level meeting; recovery plan; decal; educational manual; poster; 4 newspaper articles; diplomas; brochure (99-G343)

CONSERVATION EDUCATION AND COMMUNITY OUTREACH

U.S. and Mexico Migratory Bats Conservation and Education Initiative
Grantee: Bat Conservation International
Location: Nuevo Leon, Tamaulipas and Michoacan, Mexico
Grant Funds: \$20,000.00
Matching Funds: \$42,700.00
Results: video; children's books; teacher's educational kit and curriculum; 5 audio radio programs; community education exhibit "Bats, a Myth in Our Culture"; bilingual children's book "Don Sabino" (99-G342)

Environmental Outreach for Locals and Visitors on the Area's Biological Diversity
Grantee: CARACOL, A.C.
Location: Baja CA, Mexico
Grant Funds: \$7,743.00
Matching Funds: \$6,070.00
Results: 585 endangered wildlife/protected areas posters; 35,000 brochures; 10,000 ecosystem/gray whale conservation brochures; 65,000 endangered species brochures; 115 posters and traveling exhibit of endangered species (99-G344)

Environmental Education for Local Schoolchildren of the Monarch Butterfly Biosphere Reserve
Grantee: Monarch Butterfly Sanctuary Fund
Location: Minnesota, USA; Michoacan, Mexico
Grant Funds: \$7,000.00
Matching Funds: \$7,583.00
Results: Developed environmental educational manuals for schoolchildren (99-G368)

INFORMATION EXCHANGE AND TECHNOLOGY TRANSFER

Conservation of Forest Ecosystems of Mexico Through Thick-billed and Maroon-fronted Parrot Studies
Grantee: Instituto Ecologico y de Estudios Superiores de Monterrey
Location: Nuevo Leon, Mexico
Grant Funds: \$18,000.00
Matching Funds: \$97,320.00
Results: Species/habitat recovery plan for these species; 6 Mexicans trained in conservation techniques; habitat requirement analyses; distribution and population monitoring; educational material (99-G355)

Reintroduction of Mexican Bighorn Sheep into Chihuahua and Coahuila
Grantee: Unidos para la Conservacion, A.C.
Location: Chihuahua and Coahuila, Mexico
Grant Funds: \$20,500.00
Matching Funds: \$555,540.00
Results: 75 sheep reintroduced to Chihuahua; links with local ranchers and land owners; breeding facilities established; selected management practices training manual and recommendations for desert sheep management plan (99-G358)

NETWORKS, PARTNERSHIPS AND COALITIONS

Environmental Education Program for 6 Rural Communities Involved in Wildlife Trade
Grantee: UCTVACO del Estado de Puebla, A.C.
Location: Puebla, Mexico
Grant Funds: \$18,000.00
Matching Funds: \$14,610.00
Results: bird conservation training manual; 90 trainees; Puebla birds guide (99-G356)

Training Program in Sustainable Natural Resource Management
Grantee: UNORCA, A.C.
Location: Mexico
Grant Funds: \$44,200.00
Matching Funds: \$31,900.00
Results: 40 trainees 6 training modules in natural resource management topics; 6 training sessions; community-based natural resources work plans for 20 communities; comprehensive long-term training plan for UNORCA (99-G362)



Caribbean Manatee. Chetumal Lagoon. Quintana Roo.



U.S. Fish and Wildlife Service officials releasing a black-footed ferret. Janos, Chihuahua.

ANNEX J GRANTS AWARDED IN 1998

ACADEMIC AND TECHNICAL TRAINING

Fifth International Course on Wildlife Conservation and Management
 Grantee: Colegio de Postgraduados
 Location: San Luis Potosi, Mexico
 Grant Funds: \$8,000.00
 Matching Funds: \$13,500.00
 Results: Produced course curriculum and materials. (98-G092)

On-the-job Training Program for SEMARNAT Employees
 Grantee: CONABIO
 Location: Nationwide
 Grant Funds: \$76,000.00
 Matching Funds: \$388,483.00
 Results: Curriculum; seven-week course with field work; 25 graduates; training modules and manual, and course evaluation. (98-G197)

Training and Outreach Program at Regional Center for Confiscated Wildlife
 Grantee: Grupo de Vigilancia Social para Recursos Naturales en Monte Escobedo, A.C.
 Location: Zacatecas, Mexico
 Grant Funds: \$20,000.00
 Matching Funds: \$101,250.00
 Results: Regional center for confiscated

wildlife; Advisory Committee; trained 52 individuals; educational material for 150 school children; local NGO created to monitor endangered species violations (98-G082)

Master's Degree Program in Wildlife Management
 Grantee: Instituto de Ecología de Xalapa, A.C.
 Location: Veracruz, Mexico
 Grant Funds: \$24,500.00
 Matching Funds: \$42,525.00
 Results: 3 scholarships; training for INE/SEMARNAP personnel (98-G094)

Training Course for Park Rangers from Reserves of Six States in Southeastern Mexico
 Grantee: Instituto de Historia Natural
 Location: Chiapas, Mexico
 Grant Funds: \$32,000.00
 Matching Funds: \$10,050.00
 Results: Teaching aids instructional materials, reserve management manual, law and regulations pocket guide, forest fire manual, posters, brochures, diplomas, T-shirts and videos (98-G101)

APPLIED RESEARCH, MONITORING, AND MANAGEMENT

Local Participatory Training in Natural Resource Management at the Monarch Butterfly Biosphere Reserve
 Grantee: ALTERNARE, A.C.
 Location: Michoacan, Mexico
 Grant Funds: \$57,348.00
 Matching Funds: \$128,375.00
 Results: 200 local peasant farmers trained in sustainable natural resource use; 15 community work plans; 200 site visits; 3 workshops; 3 training manuals; project evaluation (98-G165)

Technical Assistance and Surveying Priority Habitat Areas
 Grantee: CALIXAXAN, A.C.
 Location: Veracruz, Mexico
 Grant Funds: \$18,000.00
 Matching Funds: \$37,456.00
 Results: video; brochure; report (98-G102)

Restore Natural Vegetation in Rio Alamo Riparian Zone & Enhance Existing Rio Grande/Rio Bravo Corridor
 Grantee: Los Caminos del Rio, A.C.
 Location: Tamaulipas, Mexico
 Grant Funds: \$21,152.00

Matching Funds: \$37,822.00
Results: Trained 4 individuals in reforestation techniques; 8,000 seedlings planted by 700 volunteers; 5 workshops and educational materials (98-G079)

CONSERVATION EDUCATION
AND COMMUNITY OUTREACH

U.S. and Mexico Migratory Bats
Conservation and Education Initiative
Grantee: Bat Conservation International
Location: Texas, USA; Tamaulipas, Mexico
Grant Funds: \$12,000.00
Matching Funds: \$22,300.00
Results: Radio spots; school activity packages (98-G091)

Environmental Education along
US-Mexico Border in Management of
the Tijuana River Watershed
Grantee: San Diego Natural History
Museum
Location: Tijuana, Mexicali, Ensenada,
Mexico
Grant Funds: \$25,000.00
Matching Funds: \$47,570.00
Results: Teachers manual; 36 teachers
trained (98-G080)

INFORMATION EXCHANGE
AND TECHNOLOGY TRANSFER

Training Program for Local
Communities of the El Vizcaino B.R.
Grantee: Pro Esteros, A.C.
Location: Baja CA, Mexico
Grant Funds: \$19,700.00
Matching Funds: \$29,800.00

Results: 6 workshops in natural resource
management for 80 participants;
environmental education kits (98-G075)

Training in Watershed Management for
the Tarahumara Indigenous Community
of Rowerashi

Grantee: Native Seeds-SEARCH
Location: Chihuahua, Mexico

Grant Funds: \$7,296.00
Matching Funds: \$7,910.00
Results: 20 individuals trained in natural
resource management, and pamphlet
(98-G076)

Nature-based Tourism Training Program
Grantee: RARE Center for Tropical
Conservation

Location: Quintana Roo, Tabasco,
Yucatan, S. Baja CA, Michoacan, Mexico
Grant Funds: \$29,755.00
Matching Funds: \$64,630.00
Results: Portfolio of promoter tools
(98-G106)

Field Research to Assess Game and
Nongame Wildlife in Tlaxcala

Grantee: Universidad Autonoma
de Tlaxcala

Location: Tlaxcala, Mexico
Grant Funds: \$17,850.00
Matching Funds: \$37,215.00
Results: Field Guide; Illustrated Guide to
Wildlife Hunting in Tlaxcala; 3 BA Theses;
CD and video (98-G098)

To Conduct a Field Study of the
Jack rabbit Species *Lepus Flavigularis*
Grantee: Universidad Nacional Autonoma
de Mexico

Location: Oaxaca, Mexico

Grant Funds: \$13,875.00

Matching Funds: \$13,875.00

Results: Recovery plan (98-G093)

NETWORKS, PARTNERSHIPS
AND COALITIONS

Management Plan for the Sierra Gorda
B.R. Through a Training Program for
the Local Communities

Grantee: Grupo Ecologico Sierra
Gorda, A.C.

Location: Queretaro, Mexico

Grant Funds: \$30,000.00

Matching Funds: \$108,900.00

Results: 45 workshops; 675 trainees;
environmental education material;
management plan (98-G074)

Bilingual Newsletter to Promote a
Regional Vision in the Conservation of
the Sonoran Desert Ecoregion

Grantee: International Sonoran Desert
Alliance

Location: Arizona, USA; Sonora, Mexico

Grant Funds: \$8,458.00

Matching Funds: \$9,546.00

Results: Bilingual newsletter on
conservation activities at the Sonoran
Desert on the U.S./Mexican Border
(98-G073)



Gambel's quail. El Pinacate Desert, Sonora.



Yellow-headed parrot. Tamaulipas.

ANNEX J
GRANTS AWARDED IN
1997

ACADEMIC AND TECHNICAL TRAINING

Master's Degree Program in Wildlife Conservation and Management
Grantee: Colegio de Postgraduados
Location: San Luis Potosi, Mexico
Grant Funds: \$55,500.00
Matching Funds: \$406,500.00
Results: 4 scholarships; IV International Course on Wildlife Management (97-G105)

Masters Degree Program in Environmental Education
Grantee: National Pedagogic University-Mexicali
Location: Baja CA, Mexico
Grant Funds: \$45,000.00
Matching Funds: \$75,000.00
Results: 5 workshops on resource management for 235 participants; 8 scholarships; information outreach center; 32 graduates of the Certificate Course on Environmental Education for Teachers (97-G102)

Training Workshops Related to Ecological Reserve Management
Grantee: PROFAUNA, A.C.
Location: Coahuila, Mexico
Grant Funds: \$20,000.00
Matching Funds: \$38,600.00
Results: Conducted 2 training workshops,

and 50 resource managers trained (97-G185)

To Train Mexican Personnel on Management Practices Related to Endangered Pronghorn Antelope
Grantee: Unidos para la Conservacion, A.C.
Location: Chihuahua, Mexico
Grant Funds: \$21,800.00
Matching Funds: \$70,000.00
Results: Conducted two pronghorn management training workshops with 30 participants (97-G106)

APPLIED RESEARCH, MONITORING, AND MANAGEMENT

Strengthen the Capacity of Local Wildlife Authorities (PROFEPA) in Wildlife Conservation and Management
Grantee: ANPALPA, A.C.
Location: Oaxaca, Mexico
Grant Funds: \$10,000.00
Matching Funds: \$62,235.00
Results: 5 training workshops for 85 people; Center for Confiscated Wildlife (97-G183)

Monitor the Distribution and Abundance of *Crocodylus moreletii* in Veracruz
Grantee: CALIXAXAN, A.C.
Location: Veracruz, Mexico

Grant Funds: \$4,500.00
Matching Funds: \$20,400.00
Results: List of species in area surveyed and newspaper article highlighting the activities (97-G131)

Involving Local Populations in Wildlife Conservation and Management in Oaxaca
Grantee: Comision Oaxaquena de Defensa Ecologica, A.C.
Location: Oaxaca, Mexico
Grant Funds: \$10,000.00
Matching Funds: \$52,625.00
Results: Conducted 5 workshops with 150 people trained and one "Citizens Committee" integrated (97-G182)

Monarch Butterfly Conservation
Grantee: IMERNAR, A.C.
Location: Michoacan, Mexico
Grant Funds: \$30,000.00
Matching Funds: \$45,000.00
Results: Establishment of presence at Monarch Reserve to provide technical expertise in natural resource management to local communities (97-G181)

Conservation of Forest Ecosystems of Northern Mexico Through the Study of the Thick-billed and the Maroon-fronted Parrots
Grantee: Institute of Technology of Monterrey

Location: Nuevo Leon, Mexico
Grant Funds: \$23,000.00
Matching Funds: \$125,000.00
Results: Granted 4 scholarships; 2 Master's degree theses (97-G099)

Conservation of *Chameadorea Pochutlensis* Through Involvement of local Communities in Natural Resource Management

Grantee: Universidad de Nayarit
Location: Nayarit, Mexico
Grant Funds: \$10,000.00
Matching Funds: \$158,132.00
Results: Produced testimonial video, photos, and slides (97-G141)

CONSERVATION EDUCATION AND COMMUNITY OUTREACH

U.S. and Mexico Migratory Bats Conservation and Education Initiatives
Grantee: Bat Conservation International
Location: Texas, USA; Tamaulipas, Mexico
Grant Funds: \$20,000.00
Matching Funds: \$50,000.00
Results: "Marcelo the Bat" storybook, education materials, and the Management Plan for Cueva la Boca (97-G146)

Educational Outreach to Consumers and Travelers to Curb Illegal Wildlife Trade
Grantee: NATURALIA, A.C.
Location: Mexico D.F., Mexico
Grant Funds: \$21,715.00
Matching Funds: \$13,000.00
Results: Produced/distributed 100,000 bilingual brochures on illegal wildlife trade in Mexico (97-G129)

Environmental Education Program for Schoolchildren of Canada/Mexico/US on Monarch Butterfly Migration
Grantee: PROFAUNA, A.C.
Location: Coahuila, Mexico
Grant Funds: \$17,450.00
Matching Funds: \$25,950.00
Results: Directory of participants; teacher evaluations; educational materials; 4 promotional posters (97-G104)

INFORMATION EXCHANGE AND TECHNOLOGY TRANSFER

Natural Resource Management Training for Rural Communities
Grantee: Centro Campesino para el Desarrollo Sustentable, A.C.
Location: Veracruz, Mexico
Grant Funds: \$31,000.00
Matching Funds: \$85,000.00
Results: Produced training manual and materials (97-G130)

Training in Communities of Sierra de San Juan Ecological Reserve to Curtail Illegal Trade of Orchid Species
Grantee: Universidad de Nayarit
Location: Nayarit, Mexico
Grant Funds: \$10,000.00
Matching Funds: \$33,963.00
Results: 4 workshops; 80 trainees; multi-sectorial networks for resource conservation (97-G175)

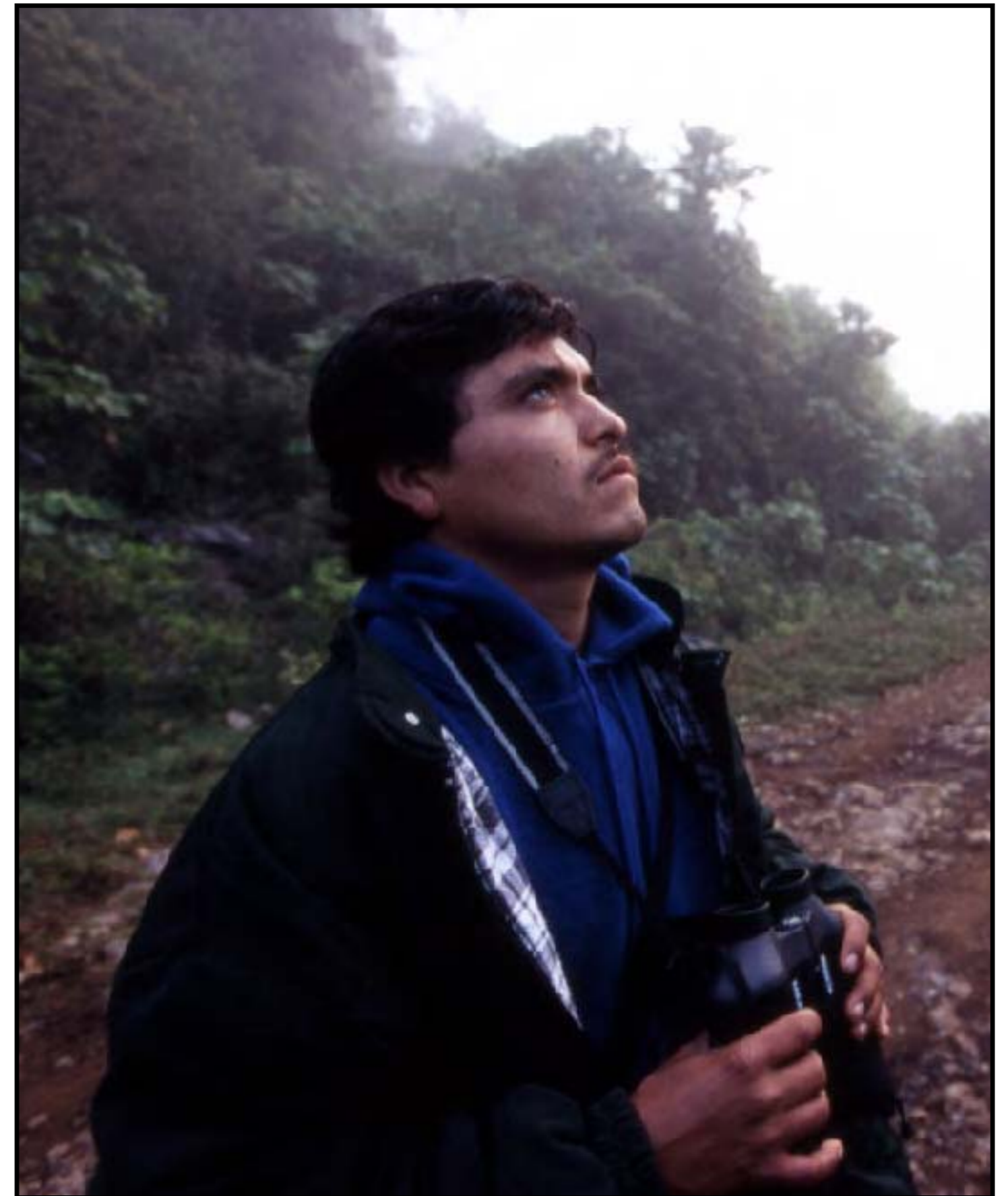
NETWORKS, PARTNERSHIPS AND COALITIONS

Training for SEMARNAP Personnel on Ecotourism Management; Migratory Species, and Wildlife Corridors
Grantee: Texas Parks and Wildlife Foundation
Location: Mexico

Grant Funds: \$10,000
Matching Funds: \$10,000
Results: 10 staff members trained in wildlife and natural resources management (97-G101)

1st Meeting of Mexican Wildlife Management Specialists
Grantee: Universidad Autonoma de Nuevo Leon
Location: Nuevo Leon, Mexico
Grant Funds: \$25,000.00
Matching Funds: \$65,300.00
Results: Inventory/findings; recommendations on research strategies/graduate education curricula (97-G107)

Training for Subsistence Agriculture Peasant Farmers
Grantee: UNORCA, A.C.
Location: Mexico
Grant Funds: \$50,026.00
Matching Funds: \$216,626.00
Results: 150 trainees; training materials; 20 management plans (97-G098)



Birdwatcher guide. El Cielo Biosphere Reserve, Tamaulipas.



Zapotec woman with iguanas. Tehuantepec. Oaxaca.

ANNEX J GRANTS AWARDED IN 1996

ACADEMIC AND TECHNICAL TRAINING

Conservation Education
on the Natural Resources of Chiapas
Grantee: CEFIDIC
Location: Chiapas, Mexico
Grant Funds: \$20,000.00
Matching Funds: \$15,000.00
Results: 4 workshops; 140 participants;
2 training manuals; work plans; newsletter
(96-1279)

Master's Degree Program in Wildlife
Conservation and Management
Grantee: Colegio de Postgraduados
Location: San Luis Potosi, Mexico
Grant Funds: \$45,000.00
Matching Funds: \$150,000.00
Results: 7 scholarships; 3 theses; 67
participated in the III International Course
on Wildlife Management (96-1261)

13-day Training Course on the
Identification, Planning, Management
and Conservation of Wetlands in
Mexico
Grantee: Institute of Technology of
Monterrey
Location: Sonora, Mexico
Grant Funds: \$40,000.00
Matching Funds: \$50,000.00
Results: 5 regional workshops;
52 participants; training manual; brochure;
poster (96-1280)

Masters Degree Program
in Environmental Education
Grantee: Instituto de Ecología de Xalapa, A.C.
Location: Veracruz, Mexico
Grant Funds: \$44,970.00
Matching Funds: \$200,000.00
Results: 4 seminars for 87 participants; text
book; 2 training manuals; revised curricula
(96-1282)

First Regional Course for
Ecological Reserve Wardens
of Southeastern Mexico
Grantee: Instituto de Historia Natural
Location: Chiapas, Mexico
Grant Funds: \$20,000.00
Matching Funds: \$45,000.00
Results: 40 trainees; teaching aids/
instructional materials; booklets; posters;
video (96-1293)

Training Program for the Local
Communities of the Monarch Butterfly
Biosphere Reserve
Grantee: PROFAUNA, A.C.
Location: Coahuila, Mexico
Grant Funds: \$15,000.00
Matching Funds: \$5,000.00
Results: Teacher's training manual;
environmental education kits;
incorporation of Canadian schools to U.S.-
Mexico network (96-1267)

Training Workshops on Ecological
Reserve Management
Grantee: PROFAUNA, A.C.
Location: Coahuila, Mexico
Grant Funds: \$18,000.00
Matching Funds: \$15,000.00
Results: 60 trainees; XII and XIII courses
on wildlife management; 2 areas designated
as protected (96-1277)

Master's Degree Program
in Ecosystem Management
Grantee: Universidad Autonoma de Baja
California Sur
Location: Baja CA, Mexico
Grant Funds: \$50,000.00
Matching Funds: \$130,000.00
Results: 17 scholarships; fully-equipped
Information/Environment Education
& Extension Center; management plan;
booklet for ranchers "*Pancho que haces con
tu rancho*" (96-1264)

APPLIED RESEARCH, MONITORING, AND MANAGEMENT

Sustainable Natural Resource
Management Training for the Local
Communities of the Montes Azules B.R.
Grantee: Association of Organic Producers
of Rio Perlas and Montes Azules
Location: Chiapas, Mexico
Grant Funds: \$20,000.00
Matching Funds: \$25,000.00

Results: 5 workshops; trained 153 participants; 5 training manuals; educational materials (96-1266)

Monarch Butterfly Conservation

Grantee: IMERNAR, A.C.

Location: Michoacan, Mexico

Grant Funds: \$63,000.00

Matching Funds: \$61,000.00

Results: Workshop for 55 participants; training materials; calendar; handbook; proposal (96-1330)

Training Workshop for Individuals Involved in the Management of the Islands of the Gulf of California

Grantee: Island Conservation and Ecology Group

Location: Gulf of CA, Mexico

Grant Funds: \$17,526.00

Matching Funds: \$35,000.00

Results: Management plan for 19 Gulf of California Biosphere Reserve islands; workshop-18 institutions (96-1275)

Restoration of the Endangered Pronghorn Antelope in Mexico

Grantee: Unidos para la Conservacion, A.C.

Location: Coahuila, Mexico

Grant Funds: \$20,514.00

Matching Funds: \$50,000.00

Results: Training manual; reintroduction of 60 endangered pronghorn; trained 5 officers in wildlife management practices (96-1263)

CONSERVATION EDUCATION AND COMMUNITY OUTREACH

Conservation Education

Program on 7 Endangered Species of the Region

Grantee: Centro Ecologico de Sonora

Location: Arizona, USA; Sonora, Mexico

Grant Funds: \$20,263.00

Matching Funds: \$40,000.00

Results: 7 videos on conservation of endangered species shared by Mexico and the U.S. along the border (96-1269)

Environmental Education Program for Teachers and Local Communities

Grantee: Daedalus Alliance for Environmental Education

Location: San Diego, USA; Baja CA, Mexico

Grant Funds: \$39,935.00

Matching Funds: \$50,000.00

Results: Training manual; 180 graduates; curricula; program expanded to Ensenada and Mexicali (96-1262)

INFORMATION EXCHANGE AND TECHNOLOGY TRANSFER

Collect and Analyze Information Regarding Production/Marketing of Traditional, Natural Handcraft

Grantee: AMACUP, A.C.

Location: Mexico

Grant Funds: \$40,000.00

Matching Funds: \$40,000.00

Results: 7 regional workshops for 110 participants; strategies determined; national workshop proceedings; inventory of products from genesis to final form of an art craft (96-1281)

Nature-based Tourism Training Program

Grantee: RARE Center for Tropical Conservation

Location: S. Baja CA, Mexico

Grant Funds: \$20,000.00

Matching Funds: \$70,000.00

Results: Conducted course with 27 nature guide trainees and produced 4 training publications (96-1276)

Training Program for the O'odham Communities Based on Traditional Knowledge

Grantee: The Tohono O'odham National

Location: Arizona, USA; Sonora, Mexico

Grant Funds: \$14,985.00

Matching Funds: \$5,000.00

Results: 15 workshops and 2 field trips for more than 200 trainees (96-1273)

NETWORKS, PARTNERSHIPS AND COALITIONS

Strengthen CES's Reserve Management Capacity to Integrate the System of Protected Areas of Sonora

Grantee: Centro Ecologico de Sonora

Location: Sonora, Mexico

Grant Funds: \$42,400.00

Matching Funds: \$40,000.00

Results: 12 workshops for 394 participants in 6 border Mexican states; 2 training manuals (96-1272)

Training Program in Resource Management for Local Communities Involved in the Reserve Management

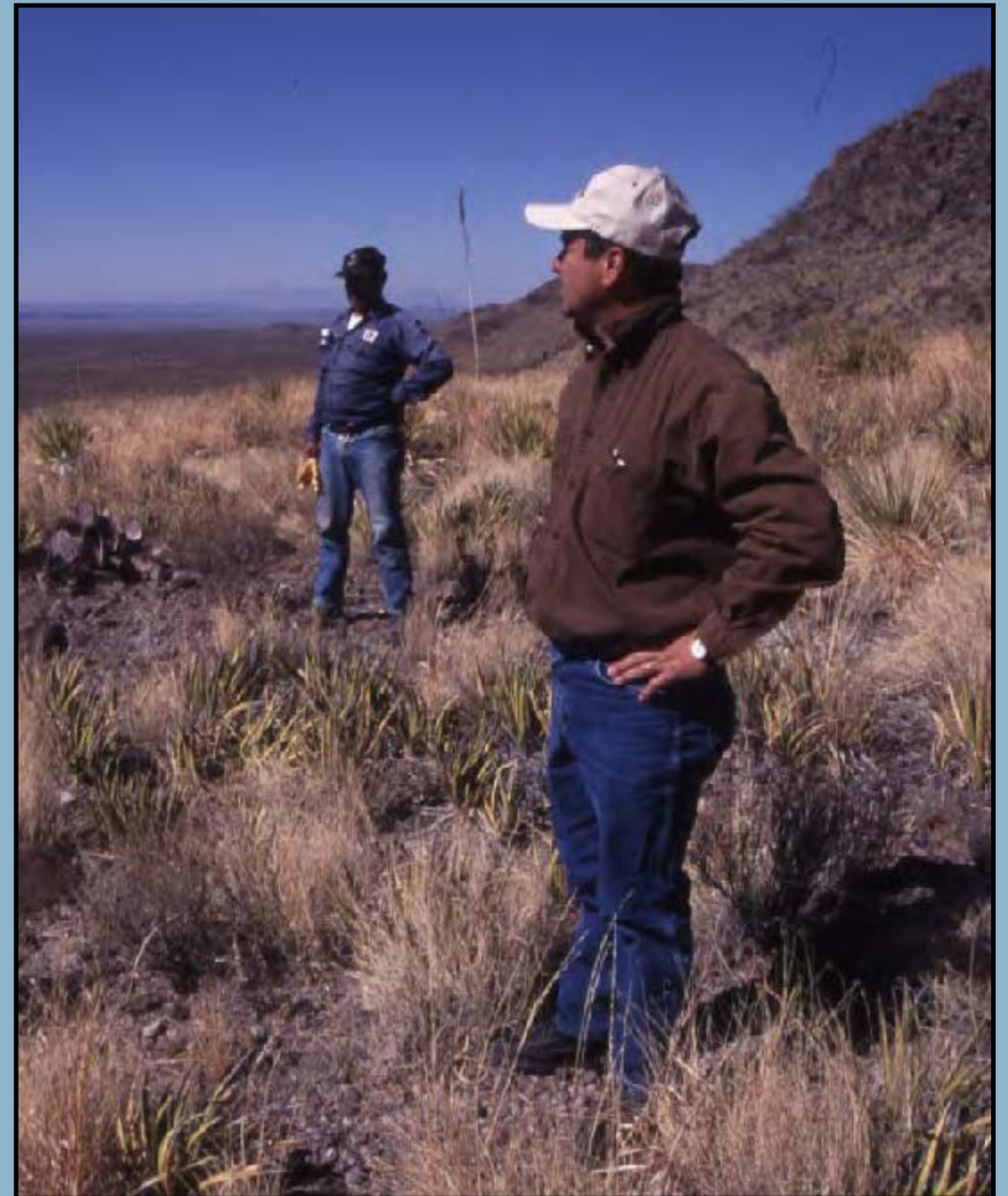
Grantee: Union of Bird Fanciers of Puebla, A.C.

Location: Puebla, Mexico

Grant Funds: \$14,000.00

Matching Funds: \$20,000.00

Results: 4 videos; training manual; brochure on Flor del Bosque management and the city aviary educational activities; produced and distributed other educational and outreach materials (96-1271)



U.S. game officials. Coahuilan Desert.



Fishing town. Laguna Madre. Tamaulipas.

ANNEX J
GRANTS AWARDED IN
1995

ACADEMIC AND TECHNICAL TRAINING

Enforcement, Conservation Education and Community Outreach in the El Cielo Biosphere Reserve

Grantee: Desarrollo Ecologica y de Sobrevivencia Integral, A.C.
Location: Tamaulipas, Mexico
Grant Funds: \$10,900.00

Matching Funds: \$128,000.00
Results: Developed 2 plant guides; interpretive trails in San Jose and Alta Cimas; workshops for locals, establishment of information centers (95-1318)

Training of Mexican Personnel Involved in Wetlands Conservation and Management
Grantee: Institute of Technology of Monterrey

Location: Guaymas, Mexico
Grant Funds: \$15,983.00

Matching Funds: \$20,000.00
Results: 100 trained in wetland conservation; program served as base in implementation of National Wetland Conservation Program (95-1330)

Masters Degree Program in Wildlife Management

Grantee: Instituto de Ecologia de Xalapa, A.C.
Location: Veracruz, Mexico

Grant Funds: \$44,893.00
Matching Funds: \$130,000.00
Results: Created Information and Training Center; 8 courses on CITES; 40 participants trained; educational materials produced (95-1317)

First Training Course in Mexico Specifically Designed for Reserve Guards

Grantee: Instituto de Historia Natural
Location: Chiapas, Mexico
Grant Funds: \$10,611.00
Matching Funds: \$25,000.00
Results: 22 participants; educational material; apparel, and bilingual radio spot (95-1290)

Graduate Program in Wildlife Conservation & Management
Grantee: Regional Center for Research on Arid and Semi-Arid Lands

Location: San Luis Potosi, Mexico
Grant Funds: \$45,000.00
Matching Funds: \$131,140.00
Results: Advisory Board; 9 courses; International Course on Conservation and Wildlife Management (95-1312)

Reserve Management Course for Natural Resource Managers

Grantee: The Cuixmala Foundation
Location: Jalisco, Mexico
Grant Funds: \$14,000.00
Matching Funds: \$126,000.00
Results: Trained 26 Mexican biologists in wildlife conservation techniques (95-1310)

State-wide Training Workshops Addressing Resource Management and Conservation

Grantee: Universidad de Veracruz
Location: Veracruz, Mexico
Grant Funds: \$43,981.00
Matching Funds: \$43,981.00
Results: 5,000 individuals trained; 3 videos produced; educational material; library (95-1287)

APPLIED RESEARCH, MONITORING, AND MANAGEMENT

Implement a Pronghorn Recovery Plan for El Vizcaino Reserve in Baja California

Grantee: CIBNOR, A.C.
Location: Baja CA, Mexico
Grant Funds: \$15,000.00
Matching Funds: \$73,000.00
Results: Trained 2 professionals in radio telemetry techniques; produced educational video and booklet; developed information links (95-1332)

Conservation and Management of the El Ocote R.B.

Grantee: Instituto de Historia Natural
Location: Chiapas, Mexico
Grant Funds: \$18,716.00
Matching Funds: \$185,170.00
Results: 36,000 hectares of primary vegetation were maintained; illegal wildlife trade was reduced by 50 percent; 3,200 local people adjacent to the reserve benefited from the program (95-1297)

Restoration of Migratory Seabird Colonies on Asuncion and San Roque Islands

Grantee: Island Conservation and Ecology Group
Location: California, USA; Baja CA, Mexico
Grant Funds: \$19,840.00
Matching Funds: \$45,300.00
Results: Training provided in island ecosystem recovery techniques; eradication program established for domestic species and increased public awareness (95-1325)



Banana boy. Veracruz.



Humpback whale. Bahía de Banderas, Jalisco.

Sustainable Management of the Montes Azules B.R.
 Grantee: Lacandonia, A.C.
 Location: Chiapas, Mexico
 Grant Funds: \$8,300.00
 Matching Funds: \$17,000.00
 Results: Society of Social Solidarity; 2 working groups (95-1289)

Binational Reforestation Project in a Critical Portion of the Rio Grande Wildlife Corridor
 Grantee: Los Caminos del Rio, A.C.
 Location: Tamaulipas, Mexico
 Grant Funds: \$7,056.00
 Matching Funds: \$10,000.00
 Results: Restored native vegetation with 15,748 trees; trained Mexican forestry/nursery personnel; created a technical team; produced a manual; implemented outreach activities for Mexican and US public (95-1292)

Development of Local Capacity to Manage the Island Sanctuaries of the Gulf of California
 Grantee: Pacific Sea Bird Group
 Location: Baja CA, Mexico
 Grant Funds: \$15,000.00
 Matching Funds: \$30,000.00
 Results: Trained 26 Mexican biologists in wildlife conservation techniques (95-1223)

Conservation of the Resources of the Cuatro Ciénegas B.R.
 Grantee: PROFAUNA, A.C.
 Location: Coahuila, Mexico
 Grant Funds: \$10,000.00
 Matching Funds: \$36,000.00
 Results: 2 leaflets; educational materials; 2 workshops for outdoor club leaders and teachers (95-1320)

Development of a Management Plan for Maderas del Carmen Wildlife Refuge
 Grantee: PROFAUNA, A.C.
 Location: Coahuila, Mexico
 Grant Funds: \$11,800.00
 Matching Funds: \$15,000.00
 Results: 25 school teachers trained; 2 ecological clubs; traveling exhibition;

5 hectares of land established for alternative foraging management (95-1322)

Conservation and Management of El Cielo B.R. Through Involvement of Local Communities
 Grantee: Terra Nostra, A.C.
 Location: Tamaulipas, Mexico
 Grant Funds: \$10,000.00
 Matching Funds: \$20,000.00
 Results: 7 community leaders trained in palmilla plant management; communities involved in maintaining nurseries and plantations; information exchange among local people, researchers and government officials (95-1342)

Promote the Conservation and Management of the Santa Elena Wildlife Refuge on the US-Mexico border
 Grantee: Universidad de Chihuahua
 Location: Chihuahua, Mexico
 Grant Funds: \$14,980.00
 Matching Funds: \$30,000.00
 Results: 45 trainees; management plan for the reserve; outreach materials (95-1326)

Conservation/Management Project Within the Pomaro Coire Region on the Michoacan Coast
 Grantee: Universidad Michoacan San Nicholas Hidalgo
 Location: Michoacan, Mexico
 Grant Funds: \$50,000.00
 Matching Funds: \$100,000.00
 Results: Local NGO "Tuanten Tic Lasojlalo in Ayult" created; University and NGO signed collaborative agreement; 283,838 baby turtles liberated from 3 types of nests; database created at the Ornithological Lab; publications (95-1333)

Sustainable Management Project Forest Resources of the San Juan Community, Adjacent to the Pico de Tacintaro National Park
 Grantee: Universidad Nacional Autonoma de Mexico
 Location: Michoacan, Mexico
 Grant Funds: \$49,500.00
 Matching Funds: \$215,000.00

Results: Community-based environmental education program; Technical Committee; GIS initiative implemented; community review of Forest Management Program (95-1300)

Study of Rhynchopsitta Parrots in Mexico: A Program in Ecosystem and Conservation Management
 Grantee: Zoological Society of San Diego
 Location: Jalisco, Mexico
 Grant Funds: \$55,000.00
 Matching Funds: \$100,000
 Results: Management plan; trained 8 Mexican nationals; produced 4 master's degree theses on management practices in ecosystem conservation relevant to these species (95-1311)

CONSERVATION EDUCATION AND COMMUNITY OUTREACH

Production and Distribution of a Series of Instructional Environmental Education Kits
 Grantee: Amigos de Sian Ka'an
 Location: Yucatan, Mexico
 Grant Funds: \$24,570.00
 Matching Funds: \$21,000.00
 Results: Produced and distributed "Mammals of the Rainforest" poster; "La Gran Selva Maya" book and other educational materials (95-1314)

U.S. and Mexico Migratory Bats Conservation and Education Initiative
 Grantee: Bat Conservation International
 Location: Texas, USA; Tamaulipas, Mexico
 Grant Funds: \$20,000.00
 Matching Funds: \$61,240.00
 Results: Established Migratory Bats of Mexico and USA Conservation Program; produced museum exhibit "Amos de la Noche"; GIS base map and relational database developed; management plan for caves produced (95-1316)

Educational Outreach Program for the Islands of the Gulf of California
 Grantee: Conservation International, A.C.
 Location: Gulf of CA, Mexico
 Grant Funds: \$21,820.00



Seri woman. Sonora Desert.

Matching Funds: \$50,820.00
Results: 10 bilingual information signs; fliers; brochures; tourism guide; fishermen's comic book (95-1291)

Conservation Education Project to Promote the Conservation and Management of Natural Resources in Chiapas
Grantee: COPLADE, A.C.
Location: Chiapas, Mexico
Grant Funds: \$20,000.00
Matching Funds: \$30,000.00
Results: Regional workshops; teachers information exchange/training; environmental databases (95-1296)

Conduct 7 Environmental Education Training Workshops in Mexico
Grantee: National Pedagogic University-Mexicali
Location: Baja CA, Mexico
Grant Funds: \$29,300.00
Matching Funds: \$172,340.00
Results: 30 graduates; management plan; information exchange among local institutions (95-1299)

Two Workshops in Reserve Management & Four 3-day Environmental Education Training Workshops
Grantee: PROFAUNA, A.C.
Location: Coahuila, Mexico
Grant Funds: \$20,000.00
Matching Funds: \$30,000.00
Results: 45 trainees, including 295 teachers from local communities; 4 projects in Alta Babicora watershed (95-1294)

State-wide Environmental Education Program to Raise Public Awareness of the Importance of the Region's Ecosystems
Grantee: Universidad de Guadalajara
Location: Guadalajara, Mexico
Grant Funds: \$5,000.00
Matching Funds: \$50,000.00
Results: statewide environmental education program focused on raising public awareness of the importance of the region's ecosystems; trained 150 teachers and community members (95-1309)

INFORMATION EXCHANGE AND TECHNOLOGY TRANSFER

Mexican Biologists to Attend Conference/Training Workshop on Ecology and Conservation of Grassland Birds
Grantee: Sutton Avian Research Center
Location: Tulsa, Oklahoma
Grant Funds: \$3,700.00
Matching Funds: \$46,300.00
Results: 3 trainees; educational material (95-1298)

NETWORKS, PARTNERSHIPS AND COALITIONS

Monarch Butterfly Conservation
Grantee: Consejo Nacional de la Fauna
Location: Michoacan, Mexico
Grant Funds: \$16,000.00
Matching Funds: \$50,797.00
Results: 73 trainees; management plan (95-1354)

Document the Nature and Extent of Subsistence Hunting in Mexico and Its Effect on Migratory Aquatic Birds
Grantee: Fundacion Ecologica de Guanajuato, A.C.
Location: Guanajuato, Mexico
Grant Funds: \$15,000.00
Matching Funds: \$15,000.00
Results: Database and maps of studied species; discovered main reasons for declining populations (95-1331)

Environmental Education Programs for Schoolchildren
Grantee: Grupo Ecologico Sierra Gorda, A.C.
Location: Queretaro, Mexico
Grant Funds: \$20,000.00
Matching Funds: \$576,027.00
Results: 16 trainees; 60 communities reforested 475 hectares; wildlife protection campaign; 150 schools involved; 1,290 cleaning marches organized; 2 booklets (95-1288)

Incorporate Local Communities of the Montes Azules Biosphere Reserve in Conservation Activities
Grantee: Na Bolom
Location: Chiapas, Mexico
Grant Funds: \$10,000.00
Matching Funds: \$46,000.00
Results: 5 workshops attended by 52 indigenous people; 162 schoolchildren participated in a special workshop; produced three plays attended by 450 persons, and created and displayed exhibits (95-1295)

Training and Environmental Education for Local Personnel and Groups of the Sonoran Desert Bioregion
Grantee: Sonoran Institute
Location: Arizona, USA; Sonora, Mexico
Grant Funds: \$42,000.00
Matching Funds: \$65,000.00
Results: 3 trained Reserve Managers; developed environmental education program; incorporated GIS technologies; Resource Center created; and VISTA bilingual newsletter published (95-1321)

Environmental Education Program at the City's Aviary
Grantee: Union of Bird Fanciers of Puebla, A.C.
Location: Puebla, Mexico
Grant Funds: \$15,811.00
Matching Funds: \$6,000.00
Results: Developed "Flor del Bosque" management plan; produced field guide to identify birds of the reserve; conducted conferences and trips; developed educational materials; negotiated for Aviary Renovation and established collaboration links (95-1313)



Alternative forest products, Yucatan Peninsula.



*We stand now where two roads diverge. But unlike
the roads in Robert Frost's familiar poem, they are not equally fair.*

*The road we have long been traveling is deceptively easy,
a smooth superhighway on which we progress with great speed,
but at its end lies disaster.*

*The other fork of the road –the one 'less traveled by'–
offers our last, our only chance to reach a destination that assures
the preservation of our Earth. The choice, after all, is ours to make.*

RACHEL CARSON
Silent Spring, 1962