

**CATIE'S ROLE IN TRAINING LATIN AMERICAN WILDLANDS MANAGERS**

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### RESUMEN

Un medio importante utilizado en América Latina para conservar los bosques tropicales, es la creación de áreas protegidas. Unas 300 de estas han sido establecidas en la región centroamericana. Sin embargo, el mero establecimiento de dichas áreas no es suficiente para asegurar su protección. Se requiere de administración cuidadosa y se tienen que desarrollar programas para la protección, la investigación y el manejo, los cuales tienen que ser planificados y ejecutados por personal bien entrenado y con muy alta motivación.

En este artículo, se hace una evaluación del papel del CATIE en el proceso de capacitación de personal para el manejo de áreas silvestres protegidas de América Latina, enfatizando las actividades de su Programa de Areas Silvestres desde su creación en 1976. Sin perjuicio de los éxitos logrados, se llega a la conclusión de que las necesidades de capacitación en la región superan las posibilidades de cualquier institución específica, por lo que se esperaría que otros programas de capacitación surjan en el futuro, y que las actividades de CATIE en este sentido se fortalezcan.

### SUMMARY

A major tool being used in Latin America to conserve tropical forests is the creation of protected areas. Nearly 300 of these have been established thus far in Central America. However, merely establishing such areas is not enough to ensure their protection. Careful stewardship is required and programs for protection, research and management have to be planned and executed by well trained and highly motivated conservation agency staff members.

In this paper, an assessment is made of the role played by CATIE in training Latin American wildlands management personnel, with emphasis on the training activities of the CATIE Wildlands Program since its creation in 1976. Successes notwithstanding, it is concluded that training needs in the region far outstrip any single institution's ability to tackle them. Further strengthening of CATIE's Wildlands Program and creation of other national and regional training programs on wildlands management are recommended.

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## **CATIE's Role in Training Latin American Wildlands Managers**

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Increasing press coverage in recent years has focused international attention on the growing threats to Latin America's tropical forests, and on the ecological, economic, and social consequences of tropical deforestation. Comparatively little attention has been devoted, however, to the increasing efforts on the part of many nations of Latin America to halt destruction of their forests.

One of the prime tools being used in Latin America to conserve tropical forests is the creation of protected areas, within which utilization of natural resources is either prohibited or strictly regulated. In Central America, for example, in spite of rampant deforestation, the governments of the region have still managed to establish nearly 300 protected areas encompassing almost 10% of the region's area in the past 15 years. Merely establishing such areas, however, is not enough to ensure their protection. This requires careful stewardship, including well planned and executed resource protection, investigation, and management programs, as well as interpretive, educational, maintenance, and administrative activities. Protected areas managers will also have to play an increasing role in efforts to stabilize land use and ownership outside the limits of protected areas to prevent possible encroachment on their resources.

Key to any good management program is the presence of well trained and highly motivated conservation agency staff members. The success of both nationwide conservation programs and the management of individual protected areas requires able leadership, professional integrity and expertise, and well trained and motivated staff members, both at the professional and field staff levels.

Unfortunately, as is typical with new fields of concern, there is a tremendous shortage of trained and experienced personnel in the wildlands conservation field in developing countries. A recent study by World Wildlife Fund (WWF) showed that throughout Latin America, the number of available university programs and skill training opportunities for existing conservation agency personnel was far below what was needed. The WWF report pointed out that thousands of new professionals and field personnel such as rangers would need to be hired and trained to adequately manage the region's parks and reserves by the year 2000.

While bemoaning the gross inadequacy of existing national and regional programs to train more resource managers, the WWF report also highlighted a small number of successful wildlands management training programs for which it recommended increased support from the international conservation community. These include the ranger training programs of the Argentine and Costa Rican Park Services, graduate degree programs of the Biotic Resources Institute of Mexico and La Molina Agrarian University of Peru, and the training activities for Latin American conservationists sponsored by the Wildlands Program of the Tropical Agricultural Research and Training Center, known by its Spanish acronym, CATIE.

CATIE sponsors by far the largest and most internationally oriented of existing Latin American wildlands training programs. It is an international center based in Turrialba, Costa Rica, and dedicated to promoting sustainable rural development throughout the tropical regions of Latin America. Unlike many international centers devoted to promoting rural development in the tropics, CATIE does not limit its focus to research on a limited number of crops, and emphasizes the need for an integrated approach to rural development. This philosophy is embodied in a farming systems approach combining research on plant breeding, cropping techniques and pest control with investigations to improve animal husbandry through better range management and development of improved livestock breeds. Considerable attention is placed on development of farming techniques in which annual and perennial crops, fast growing trees and forage are grown simultaneously on the fragile tropical soils which are quickly degraded using traditional single-crop farming. In addition, a key component of CATIE usually lacking at other such centers is its Renewable Natural Resources Department, including Silviculture, Agroforestry, Watershed Management, and Wildlands Programs.

The Wildlands Program, created in 1976, has as its objective the creation, planning, and development of protected areas systems throughout Latin America to safeguard biological resources while promoting sustainable development through production of a wide measure of goods and services to society. One way it does this is through provision of technical assistance to governments in the planning of protected areas systems and individual wildlands. It also serves as a liaison between local conservation agencies and international organizations such as WWF, the International Union for the Conservation of Nature, and Unesco, which provide technical and financial support to conservation efforts.

The Wildlands Program's most important role, however, is in training wildlands managers at all levels, from the ranger to the department head. It sponsors a small master's degree program in wildlands management, which to date has produced more than 25 graduates from throughout Latin America. Graduates of the program include national directors of forestry, parks, and wildlife agencies, leaders of private conservation groups, and university natural resource professors. Many of these graduates have gone on to organize undergraduate degree programs and skill training activities for conservation agency personnel in their own countries since graduation. Their well rounded education includes courses in tropical ecology, silviculture, agroforestry, farming systems, extension methods, land use planning, and watershed, wildlands, and wildlife management. They are urged to carry out their thesis research on important wildlands management problems in their own countries, and many of their theses have led to policy changes and creation of new protected areas.

In addition to the master's degree, the Wildlands Program also offers a large number of short term training activities for conservation agency personnel and key government leaders from throughout Latin America. With leading resource management agencies such as the Costa Rican National Park Service and the Kuna Indian Wildlands Project in Panama, it arranges in-service training opportunities for rangers and professionals from throughout the region. To obtain decision-maker support for conservation programs, with partners like WWF and IUCN and Unesco it has also sponsored short study tours of Costa Rican wildlands by politicians and ministerial level officials from several countries. It also has cosponsored a number of regional meetings for conservation leaders where they and representatives of international organizations have developed joint agendas for action, such as a regional wildlife management conference and a regional meeting of non-governmental conservation organizations. It has also initiated an internship program for university students and recent graduates, as well as young professionals seconded from their agencies. This program permits participants to work with the Wildlands Program to gain practical experience while contributing to research projects and training activities or carrying out their own thesis research.

Perhaps the Program's most important contribution has come through over fifty short courses, it has sponsored since 1977 for conservationists from throughout Latin America. Over 1500 Latin Americans have participate, including university students and faculty, employees and volunteers with non-governmental conservation groups, and personnel of government wildlands, forestry, wildlife, planning, and cultural resource management agencies. The courses, held not only in Costa Rica but in many other countries as well, range in duration from one week to three months, and are organized with the cooperation of local agencies. International agencies such as WWF, IUCN, Unesco, the U.S. Agency for International Development, the U.N. Environmental Program and Food and Agricultural Organization, and the Nature Conservancy often provide financial support. Instructors include not only CATIE staff members but also local experts and guest instructors often provided by the U.S. National Parks and Fish and Wildlife Services.

The content, length, and venue of each is specifically designed for a certain target audience, which varies from rangers with limited formal education up to chief planners from government ministries involved in resource management. The combination of lectures, readings, and practical exercises depends on course objectives and the target audience. For example, a ranger training course would probably last several weeks, be held at a remote wildland, and focus on practical exercises on topics such as orienteering, natural history, and first aid. A short course for busy planning agency officials, on the other hand, might last just a few days and be held at a hotel with many amenities near a well developed national park, and rely on computer gaming techniques to get across a message regarding the importance of the conservation component in national planning.

The Wildlands Program's most famous training event is its annual three month intensive wildlands management course, held annually since 1977. Over 250 wildlands managers have graduated form this course, by far the most extensive and comprehensive course available on the subject in Latin America. Course participants have come from every Spanish speaking country on the American mainland, as well as Haiti, the Dominican Republic, Brazil, Portugal, and the U.S.

The first month of the course is dedicated to readings and lectures on all aspects of wildlands conservation, including such topics as the history of conservation in Latin America, national and international environmental legislation and treaties, conservation biology, fundamentals of wildlife and watershed management, land use planning, landscape architecture, environmental interpretation and education, and wildlands planning and management techniques. Near the end of the reading and lecture period, several field trips are taken to protected areas in Costa Rica, where students and park staff members discuss management problems and strategies to deal with them. Throughout the course, guest lecturers are also invited to present talks on conservation and each course participant is requested to give an illustrated talk on their particular job responsibilities or on some facet of wildlands management in their country.

The final two months of the course are devoted to gaining practical experience in using techniques learned during the first month of the course to resolve real management problems. Each year, Wildlands Program staff meet with leading Costa Rican conservationists and select two or three important wildlands with serious management problems, and which lack updated planning and policy documents. Course participants, which include professionals from disciplines including forestry, biology, agronomy, economics, sociology, anthropology, and geography, break into interdisciplinary groups which are assigned to a specific wildland. There, working with staff of the reserve and responsible agency, they are assigned to prepare needed plan over a two month period. Depending on the characteristics of the area, these range from initial operational plans and funding requests for new or proposed protected areas to detailed master and interpretive plans for long-established and much visited wildlands near metropolitan areas.

Far from representing a strictly academic exercise, the documents which result from this process are usually accepted by responsible management agencies, and the funding proposals prepared have in several cases led to sizable outside support to important conservation projects. Before the end of the course, students have to present and defend the documents in public review sessions attended not only by their peers but also by government officials and local leaders. They must then incorporate valid suggestions into their plans and proposals.

The annual wildlands management course, and all training activities carried out by CATIE's Wildlands Program, are far from perfect, but are being constantly improved based on evaluations by course participants and instructors. In spite of their limitations, there is no doubt that are making a major contribution to increasing the capability of Latin American government and private conservation organizations to effectively protect and manage the region's outstanding wildlands resources. However, since the training needs in the region far outstrip any single institution's ability to tackle them, it is hoped that other agencies will draw from CATIE's experience and that the number of national and regional conservation training programs will continue to grow in the region.

- Notes:
- 1) This article is based on a presentation given by the author at the 27th Session of the IUCN Commission on National Parks and Protected Areas, Bariloche, Argentina, 9-14 March 1986.
  - 2) Since the preparation of this manuscript the Wildlands Program at CATIE has become a part of a new program named Integrated Natural Resources Management.

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