

COURSE REPORT

Biodiversity Conservation in Tropical Landscapes: Protected Areas and Complementary Strategies

Madre de Dios, Peru
November 2-29, 2008

A course jointly sponsored by:
Environmental Leadership & Training Initiative (ELTI) and
Organization for Tropical Studies (OTS)

Background: Humans have modified all but a small percentage of the Earth's emergent land surface. Approximately 10% remains in a mostly unchanged state, and only 12% is under some form of protection or management. Protected areas (PAs) remain one of the most effective tools for conserving biodiversity in situ. An important percentage of biodiversity, however, remains outside of these pristine and/or protected areas, thereby being subject to numerous threats and pressures and in need of some level of protection. If not, the integrity and viability of these natural systems, their key ecological functions and evolutionary processes, and the ecosystems services they render will be compromised. In addition, local communities will continue to lose access to natural resources and, therefore, will not be able to benefit from the goods and services generated by nature. The adequate protection of the biodiversity over the following decades is most probably going to hinge on two highly interdependent processes: (1) a marked improvement in the management of PAs; and (2) the creation of more favorable conditions for the survival of biodiversity in broader, multiple-use landscapes. This course was conceived to strengthen and build the capacity of key individuals from the Andes-Amazon region to effectively engage in both courses of action.

Course objective: To develop and strengthen the competencies and practice of local governmental authorities, representatives from non-governmental organizations and leaders from organized community groups to protect forest ecosystems and biodiversity in key landscapes throughout the tropical Andes. The course was structured to serve a thought-provoking and action-motivating forum that explores the theoretical and practical aspects of a variety of conservation strategies that are employed in the Andes-Amazon region to protect biodiversity in areas that have had minimal, moderate, and intense levels of human intervention. By strengthening the participants' technical understanding of the function of natural systems, the activities that threaten their integrity, and the array of traditional and novel strategies that exist to abate these pressures and impacts, the course aimed to stimulate concrete actions to conserve biodiversity at a landscape level in the region.

Specific objectives:

1. Analyze current social, economic, political, and environmental trends and events that have an effect on biodiversity and conservation efforts in the Andes-Amazon region.
2. Review the approach and context for conserving nature at a landscape level, including the land-use types and configurations that are functional for the survival of biodiversity.

3. Introduce the fundamental natural resource management and ecological principles and concepts that underlie biodiversity conservation.
4. Study the functions and values of biodiversity and the ecosystem services it renders.
5. Explore the complex relationships between humans and nature and consider how conservation efforts can be designed and implemented to improve livelihoods in human-modified landscapes.
6. Examine the major sources of pressure and threats that affect tropical forests in Andes-Amazon region and their possible implications for biodiversity, ecosystem services, and human well-being.
7. Review sustainable land-use and biodiversity conservation planning methodologies and tools.
8. Review the conceptual and practical aspects of protected areas management.
9. Consider a variety of conservation strategies, complementary to protected areas, which serve to create functional landscapes for biodiversity.
10. Inspire, motivate, and challenge course participants to design and pursue a conservation initiative that will improve the status of biodiversity in the Andes-Amazon region.
11. Strengthen teamwork approaches and create opportunities for peer-to-peer learning and professional network formation.

Why the Andes-Amazon? The Andes-Amazon region was selected for the course because it is a unique area in terms of biodiversity, natural resources, and cultural diversity. It is one of the last bastions of large, intact expanses of tropical rainforest on earth and is the largest river basin in the world. The region contains some of the highest concentrations and diversity of plants and animals on the planet, of which a great proportion are endemic. It also is home to over 350 ethnic and indigenous groups that depend on its biodiversity and natural resources for their survival. The Andes-Amazon region, however, also is subject to a complex and growing number of impacts and pressures, namely logging, agriculture, cattle ranching, mining, and the construction of large-scale infrastructure, that threaten biodiversity, ecosystem services, and human cultures.



Top: Participants work with Carlos Manuel Chacon (stripped shirt) on creating a baseline for the establishment of an ecological easement in Los Amigos Conservation Concession. **Center:** Roman Pineda (Venezuela) presents the results of a land-use planning practicum. **Bottom:** Participants learn about the establishment of the Los Amigos Conservation Concession during a field trip.

Course format: The course was a field-based training event that provided participants first-hand contact with a range of issues and management responses, as well as with an ideal environment for focusing on learning and establishing a peer-to-peer network. The course drew upon a number of pedagogical strategies and tools to enrich and facilitate the learning experience of participants. The primary training strategies utilized included classroom lectures, field-based activities and trips, case study analyses, independent and group work, and experience sharing opportunities.

Course sections and modules: The course was structured around eight sections and modules:

- The context for conservation in the Andes-Amazon region, Peru and Madre de Dios.
- **Module 1:** The context for biodiversity conservation at a landscape level
- **Module 2:** Ecological principles and human dimensions of biodiversity conservation
- **Module 3:** What is at stake? State of the environment and natural resources
- **Module 4:** Land use planning – towards sustainable landscapes
- **Module 5:** Protected areas management
- **Module 6:** Complementary strategies for biodiversity conservation outside of PAs
- **Module 7:** Project design workshops and practicum

Participants: The course was attended by 12 representatives from governmental agencies, non-governmental organizations, and organized community groups from Bolivia, Colombia, Peru and Venezuela that manage protected areas or are stewards of governmental, private, or communal lands. Unfortunately, despite numerous attempts, it was not possible to secure the participation of Ecuadorian representatives. Participants were selected from areas in each country where conservation efforts are most needed and where actions implemented or catalyzed by participants following the course are bound to have the greatest impact in protecting biodiversity and improving livelihoods.

Coordinators and instructors: The course was coordinated by Dr. Victor Hugo Inchausti (IUCN and former head of Bolivian PA service) and Dr. Luis Antonio Tovar (Deputy Director of Centro de Datos para la Conservación of the Universidad Nacional Agraria La Molina), two experienced and well-respected conservation experts. The course was divided into eight sections and modules that were led by the coordinators or guest experts. Each module was enriched by lectures and field trips delivered or led by a complementary group of international, national or local conservation experts, project managers, and community leaders.

Course location: The course took place in the Peruvian department of Madre de Dios, known as the “Biodiversity Capital of Peru”. Located in southeastern Peru, Madre de Dios is comprised almost entirely of low-lying Amazonian forests. The course visited a number of protected areas and sites where a variety of complementary conservation strategies are being employed by private land-owners, concession holders, and communal groups. During the course, four sites served as temporary home bases from which day trips were made to visit the projects, communities, and resource extraction sites including Puerto Maldonado (capital of Madre de Dios), Bello Horizonte (lodge and reserve), Los Amigos Conservation Concession (Amazon Conservation Association), Explorer’s Inn (Lodge and reserve abutting the Tambopata-Candamo Nature Reserve).

Course dates and duration: November 2-29, 2008. The course lasted 28 days, including travel time between sites and rest days for the coordinators, instructors, and participants.

This event was possible thanks to Arcadia Fund, whose Environmental Conservation grants support programmes that protect and enhance biodiversity, and provide field training and academic research.