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Culture and Nature in the Protection of Andean Landscapes

Andean landscapes are rich with examples of traditional land uses that have proven sustainable over centuries, contribute to biodiversity and other natural values, and are living examples of cultural heritage. These landscapes and the diverse array of values they represent are, however, exceedingly vulnerable. As countries in the region strengthen existing national systems of protected areas, protection of these working landscapes—places where people live and work (Figure 1)—deserves greater attention and requires new and innovative approaches to conservation. Emerging trends in conservation and protected areas management are creating new opportunities to engage local people in the stewardship of the natural and cultural heritage of working landscapes. This type of community-based approach builds on years of experience yet extends conservation strategies in new ways and holds great promise as a foundation for sustainable land stewardship.

FIGURE 1 Indigenous village in the Sierra Nevada de Santa Marta. Working landscapes such as this require innovative approaches to conservation. (Photo by Ricardo Rey-Cervantes, courtesy of Fundación Pro Sierra Nevada de Santa Marta)

Conservation of natural and cultural heritage

In Latin America, as in other parts of the world, conservation strategies are becoming increasingly bioregional. The field of conservation biology has demonstrated the pressing need to work on the scale of ecosystems and wider landscape to conserve biological diversity. Worldwide, there is growing recognition that protected areas can no longer be treated as islands but must be seen in the context of overall land use. Concurrently, the definition of cultural heritage—with a traditional focus on monumental architecture—has broadened to include landscapes, places of cultural interest that may be large, hundreds or even thousands of hectares.

Another important trend lies in our growing recognition of the link between nature and culture, that is, the realization that landscapes are shaped by human culture as well as the forces of nature and that rich biological diversity often coincides with cultural diversity (Figure 2). Despite a long tradition of dichotomy between natural and cultural heritage conservation, there is growing interest in cultural landscapes within the nature conservation community. According to Adrian Phillips, this interest reflects "the realization that many disturbed ecosystems are important to [nature] conservation, that agri-biodiversity is a resource to be protected along with wild biodiversity, and the need to find models of sustainable land use." The evolving landscape perspective in the fields of historic preservation and ecosystem management is helping in bridging the gap between conservation of natural and cultural heritage.

Protected area managers today are turning to inclusive models, in which the interests of local communities are considered, resident populations are not displaced, and there is a high degree of local participation in planning and management of the protected area. Certainly Latin America's experience with paper parks—protected areas in name only—has demonstrated forcefully that approaches that rely solely on regulation and enforcement are costly and too often meet with failure. The concept of stewardship, with its focus on community-based management and local leadership, in heritage management holds great promise for conservation in the Andes and in many other areas of the world.

The stewardship approach

Stewardship means, simply, people taking care of places. In its broadest sense, it refers to the essential role individuals and communities play in the careful management of their natural and cultural wealth for now and for future generations. More specifically, it can be defined as efforts to create, nurture, and enable responsibility in landowners and resource users to manage and protect land and its natural and cultural heritage.

Stewardship taps our basic human impulse to care for our home and its surroundings—be it a parcel of land, a neighborhood, or an historic monument, or the larger area of a watershed, mountain range, or stretch of coastline. It builds on our sense of obligation to other people: our family, our community, and future generations.

The biological, cultural, and scenic qualities that make certain landscapes special are the result of the interactions of people with nature over time. Landscapes typically encompass diverse patterns of public, private, and customary land ownership. It follows that protection of these landscapes inevitably must rely on fostering stewardship among those who own and/or live on the land. The stewardship approach emphasizes the integration of people and nature and addresses conservation on land that is not removed from human existence and commerce. This approach can be of great value in mountainous regions such as the Andes, where, as Sarmiento et al. have pointed out, "the role of humans as stewards of their lands is a prerequisite to understanding the values of Andean cultural landscapes."

Taking advantage of new models for landscape conservation

While national parks and other strictly protected areas are essential, they alone cannot achieve biodiversity conservation objectives nor conserve the cultural heritage of working landscapes. There is a pressing need for new models of protected areas that can respond to the pressures on these landscapes. Two internationally recognized designations and their associated management approaches offer opportunities to further landscape conservation in new ways.

FIGURE 2 The cultural landscapes of the Andes have been shaped by traditional patterns of grazing and cultivation, as on this slope in the Western Cordillera in Ecuador. (Photo by Jessica Brown)

The protected landscape approach: This is central to a new paradigm for protected areas, based on inclusive approaches, partnerships, and linkages. According to the *Guidelines for Protected Areas Management Categories* (1994) of The World Conservation Union (IUCN), the definition of a Category V Protected Landscape/Seascape is

> … an area of land, with coast and sea as appropriate, where the interaction of people and nature over time has

produced an area of distinct character with significant aesthetic, ecological and/or cultural value, and often with high biological diversity. Safeguarding the integrity of this traditional interaction is vital to the protection and evolution of such area.

The cultural landscape approach: Since 1992, cultural landscapes have been recognized as part of our global heritage protected through the World Heritage Convention, an international treaty. The 1996 UNESCO *Operational Guidelines for the Implementation of the World Heritage Convention* (1996) define cultural landscapes as

> …illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both external and internal and as a diversity of manifestations of the interaction between humankind and its natural environment.

Protected landscapes and cultural landscapes share much common ground. Both are landscapes whose essential character is defined by human relationships with the natural environment over time. The natural environment, biodiversity conservation, and ecosystem integrity have been the primary emphases in designating protected landscapes. In contrast, the emphasis in cultural landscape designation has been on human history, continuity of cultural traditions, and social values and aspirations. Yet despite the strong dichotomous tradition, there is growing recognition that the conservation approach could benefit from more integration. This is clearly the case for the landscapes of the Andean region, where natural and cultural heritage are inextricably bound together (Figure 3).

FIGURE 3 Ciudad Perdida, one of 300 archeological sites in the Sierra Nevada de Santa Marta, Colombia, offers an example of how human activity over time has shaped the landscape. (Photo by Ricardo Rey-Cervantes, courtesy of Fundación Pro Sierra Nevada de Santa Marta)

Both protected landscapes and cultural landscapes can provide valuable models of how to integrate biodiversity conservation, cultural heritage protection, and sustainable use of resources. These approaches are particularly appropriate for areas with a mosaic of land ownership patterns, including private and communally owned property. Both approaches

1. Emphasize the value of the interactions between people and nature over time and link conservation of cultural and natural heritage;
2. Seek to bring benefits to local communities and contribute to their well-being;
3. Accommodate diverse management regimes, including customary laws governing resource management. This can build on existing institutional responsibilities and continue traditional practices and governance within the culture.

A local commitment to management of cultural landscapes—from identification to description of their values to nomination, implementation, education, and long-term outcomes—is crucial to their sustainability. This point has been emphasized repeatedly at meetings on cultural landscapes in different regions of the world (including one in Arequipa, Peru), held under the auspices of the UNESCO World Heritage Centre. These findings demonstrate that, based on experience in many parts of the world, involvement of associated people and communities in the identification of cultural landscapes and the description of their values is fundamental to an effective process for both the short- and the long-term management of these places.

Experience with protected landscape conservation has also demonstrated that working with local communities is a critical component in the conservation strategy. The protected landscape approach has proven to work well in certain indigenous territories where strictly protected areas have failed, because it reinforces local responsibility for the area and accommodates traditional uses and customary tools for resource management. This can be of great importance in Andean countries, where the cultural landscapes provide evidence of the sophisticated systems of agriculture developed by indigenous societies to increase productivity in that complex environment. As Mujica argues, sustaining and restoring these cultural landscapes can therefore offer important opportunities for sustainable development of indigenous societies.

Progress and opportunities to protect landscapes in the Andes

A number of recent developments present new opportunities for protecting Andean landscapes. Throughout Andean South America, nongovernmental organizations (NGOs) are advocating the use of protected landscapes and are pushing for supportive legislation. For example, Peru has recently adopted new legislation to include Category V in its protected areas systems. In Bolivia, the government is making an effort to ensure that conservation programs include a cultural perspective, recognizing the importance of maintaining cultural values and practices. It has recently developed new mechanisms to allow the participation of local and indigenous communities in the management of protected areas.

The recent enactment of legislation for private reserves in many Latin American countries further supports protection of landscapes because it typically recognizes the conservation efforts of NGOs and communities, as well as the connection between biodiversity and traditional uses of natural resources. In Colombia, where private land conservation was granted legal recognition in 1993, the government is currently considering a proposal to create regional systems of protected areas, based on private and local government initiatives.

In many countries of the region, new sites are being proposed for designation either as Category V protected landscapes or cultural landscapes. For example, in Ecuador, there is growing interest at local and national levels in declaring the Quijos river valley as the country's first protected landscape. This designation would create a natural corridor among three important protected areas, consolidating them into Ecuador's largest protected area and fostering conservation on an ecoregional scale.

Finally, the emergence of networks of private reserves in many Andean countries (notably Colombia, Ecuador, and Chile) offers great potential for encouraging stewardship of the region's landscapes. While relatively recent in their inception, private reserves are already making significant contributions to conserving cultural and natural heritage, and the movement is gaining momentum.

In 1998, a meeting on cultural landscapes in the Andes was organized in Arequipa, Peru, by the UNESCO World Heritage Centre, in coordination with the UNESCO office in Lima. The purpose of the Arequipa meeting was to review the potential application of the cultural landscapes concept in the region and to identify potential sites for designation under the World Heritage Convention as well as other options for protection. Fifteen case studies of cultural landscapes from every country in the Andean region were presented.

The Arequipa meeting affirmed the importance of the cultural landscapes of the Andes since they are "among the world's most diverse and complex heritage properties." The meeting explored such issues as the distinction between natural and cultural landscapes and the importance of community involvement in the designation and management of cultural landscapes.

A regional initiative to link Andean landscapes

One highly promising development is an emerging regional effort to link protected landscapes throughout the Andean region along the *Ruta Cóndor/Wiracocha*. The project concept, which grew out of a recent international working session on stewardship of protected landscapes (see below), has been developed by a network of colleagues from Bolivia, Colombia, Ecuador, and Peru.

By adopting the condor as a biological flagship and Viracocha, as a mythological flagship, the *Ruta Cóndor/Wiracocha* project brings together cultural, natural, and spiritual elements in landscape protection. The geographic scope of the project will follow the ancient Wiracocha route, a pre-Hispanic route devised by Wiracocha, a mythical wise man. The Wiracocha route links culturally and biologically important points along the Andes, including sacred sites and areas of high biodiversity, in a line extending from Colombia to Argentina.

The *Ruta Cóndor/Wiracocha* concept draws on several case-study sites, which include (Figure 4):

1. Ciudad Perdida, Sierra Nevada de Santa Marta, Colombia.
2. The Quijos river valley, near Baeza, Ecuador.
3. Alto Cañete, Cochas Pachacayo, Huayhuash, Peru.
4. The Valley of the Kings, near Pisac, Peru.
5. Sajama community in the Sajama National Park, Puna of Bolivia.

These sites, many of which are within or near currently protected areas, include examples of indigenous management, traditional agriculture, sacred sites, ecotourism, and production alternatives. Each of these sites is rich in cultural and natural values and can be sustained only through the stewardship of local and indigenous communities (Figure 5). Over time, it is envisioned that the scope of the project will be expanded to encompass other cultural landscapes in Venezuela, Peru, Ecuador, and Chile. The *Ruta Cóndor/Wiracocha* project offers great potential to support the stewardship of Andean landscapes on a regional basis.

FIGURE 4 Location of 5 study sites on which the Ruta Condór/Wiracocha project draws in its attempt to link culturally and biologically important areas along the Andes. See also the article by Fausto Sarmiento et al., "Andean stewardship: Tradition linking nature and culture in Protected Landscapes of the Andes" in a special issue of The George Wright Forum (vol. 17.1, 2000). (Map by Andreas Brodbeck)

International working session on stewardship of protected landscapes

In June 1999, the Conservation Study Institute and QLF/Atlantic Center for the Environment convened a working session of IUCN's World Commission on Protected Areas to discuss new directions in protecting landscapes with natural and cultural value. Twenty-two landscape conservation practitioners from around the world participated in the working session, which was held in Vermont (USA). They presented case studies from regions as diverse as Andean South America, Oceania, the Eastern Caribbean, Europe, and northeastern North America. Participants discussed challenges and opportunities for protecting landscapes in diverse settings. This consortium of organizations recognized the pressing need for new models of protected areas that respond to the pressures on landscapes in many countries around the world.

A key outcome of the working session was the establishment of a Task Force on Protected Landscapes through IUCN's World Commission on Protected Areas. This task force is charged with developing a 3-year global program to promote and demonstrate the use of the protected landscape designation. The program will identify key partners, evaluate and research existing protected landscape areas, organize and develop case study material, help develop training and building professional skills, and work closely with specific regional protected landscape projects. Another important outcome was a plan for a pilot project on protected landscapes for the Andean region, focusing on themes that recognize the great diversity of cultural and natural resources of the region (see description in this article).

FIGURE 5 El Chimborazo in the western cordillera of Ecuador—an example of an Andean landscape where local stewardship can play a valuable role in sustaining the natural and cultural heritage. (Photo by Jessica Brown)

Conclusions

Any strategy for the protection of Andean landscapes will require tools adapted to the special characteristics of the Andean context, which can be applied across a mosaic of land ownership and use patterns. It will respect the land and resource rights of indigenous and other traditional peoples. It will rely on approaches that engage local residents and communities and will build on long traditions of caring for natural and cultural heritage.

The convergence of strategies in nature conservation and cultural heritage protection creates an important window of opportunity for the protection of special landscapes. New models of landscape conservation that are tailored to particular cultural and ecosystem contexts, that integrate nature and culture, and that cultivate leadership and a stewardship ethic in local communities offer tremendous potential for sustaining special landscapes in the Andes and in other regions of the world.

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FURTHER READING

Borrini-Feyerabend G. 1996. *Collaborative Management of Protected Areas: Tailoring the Approach to the Context. Issues in Social Policy.* Gland, Switzerland: The World Conservation Union (IUCN).

Brown J, Mitchell N, Sarmiento F, guest editors. 2000. *Landscape Stewardship: New Directions in Conservation of Nature and Culture*. Special issue of the *George Wright Forum*. 17.1. Hancock, MI: The George Wright Society.

Lucas PHC. 1992. *Protected Landscapes. A Guide for Policymakers and Planners*. London: The World Conservation Union (IUCN) and Chapman and Hall.

Mujica E. 1995. Authenticity and heritage diversity: archaeological sites and cultural lanscapes in the Andean countries. In: Larsen K-E, editor: *Nara Conference on Authenticity in Relation to the World Heritage Convention*. Proceedings, Nara, Japan, 1-6 November 1994. UNESCO, World Heritage Centre; Agency for Cultural Affairs, Japan; International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM); International Council on Monuments and Sites (ICOMOS). Trondheim: Tapir Publishers. 233-250.

Phillips A. 1998. The nature of cultural landscapes: A nature conservation perspective. *Landscape Research* 23:21–38.

Stolton S, Dudley N, editors. 1999. *Private Initiatives for Protected Areas in South America. Partnerships for Protection: New Strategies for Planning and Management of Protected Areas.* Gland, Switzerland: World Wildlife Fund/The World Conservation Union (IUCN).

von Droste B. Plachter H, Rössler M, editors. 1995. *Cultural Landscapes of Universal Value. Components of a Global Strategy*. Jena, Stuttgart, New York: Gustav Fischer Verlag in cooperation with UNESCO.