

Local and National Capacity Building in Nicaragua: The Initiation of a Community Co-management Plan for The Rio Escalante Chacocente National Wildlife Refuge

A proposal submitted by:



Community Conservation, Inc.
Route 1, Box 96
Gays Mills, WI 54631

phone (608) 735-4717
fax (608) 735-4765
ccc@mwt.net

Dr. Robert H. Horwich
Director

Dr. Jonathan Lyon
CC Associate

~ Community Conservation Mission Statement ~

In order to promote global biodiversity and sustainable land use, Community Conservation catalyzes, facilitates and empowers local people to manage and conserve natural resources within the social, cultural and economic context of their communities.

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Needs Statement

The *Rio Escalante Chacocente National Wildlife Refuge* (hereafter referred to as Chacocente) is a 4,800-hectare Refuge located in the southeastern part of the Department of Carazo approximately 50 km south of Managua, Nicaragua. Chacocente was established in 1983 to protect two critical natural resources: a major nesting beach for the olive ridley sea turtles (*Lepidochelys olivacea*) and a unique remnant of dry tropical forest. The beach at Chacocente is the largest turtle-nesting site in Nicaragua and one of the more prominent sites for nesting ridley sea turtles in the world. Turtle nesting occurs in large, synchronized arrivals or "arribadas" between June and December. The dry tropical forest found in the Refuge is one of the most extensive dry tropical forest remnants in Central America – 98% of these dry forests have been destroyed and few of the remnants have protected status. Due to its importance, in 1989 the Forestry School of the Agricultural University in Managua selected Chacocente as a research and training site for natural forest management.

Given its ecological significance, there is a large pool of basic ecological research and background information available about Chacocente. However, despite this informational base and its ecological importance, management of the Refuge has a problematic history. There have been a number of proposals posited for management of the Refuge. They have been unsuccessful due to lack of funds, unresolved issues of land tenure, inability to integrate and use the existing knowledge base on the Refuge, and lack of an effective management oversight body. Due to these problems, some of the previous management proposals have even led to conflict between local communities, the Nicaraguan government and the conservation community. To address this management crisis, we propose to develop and implement a community-based conservation program for the Chacocente Refuge.

The region surrounding Chacocente consists of a large number of small villages comprised of primarily subsistence farmers, small-scale cattle ranchers, and part-time fishermen. There are a total of 41 communities within the Municipality of Santa Teresa, and 17 communities (some 800 families and 4,000 individuals) around the Refuge that have the greatest impact on the ecology of Chacocente. We propose to include these 17 villages in the protection and management of Chacocente. We propose to build on an existing inter-institutional agreement formulated in 1996, between the Municipality of Santa Teresa (the largest in the region) and the national Department of Natural Resources (MARENA). This agreement created *COMAREN*, a local non-governmental commission for the protection of the natural resources within the municipality. However, *COMAREN* is a commission with limited authority and as such has limited influence to initiate coordination of any management programs and lacks specific management guidance and expertise. We propose to create an effective NGO of community members that could oversee 'co-management' of the Refuge in partnership with MARENA, with training from an emerging Nicaraguan conservation organization, *Fundacion Cocibolca*.

Project Philosophy and Overview

Co-management is a new approach to the long-term protection of natural and cultural resources embedded in human-dominated landscapes. Co-management establishes institutional means through which local people have a considerable voice in decision making about protected area management regulations, administration, and operation. In order to develop an effective and long-term management solution for Chacocente, we believe the following tenets should be and need to be met:

- Community-based conservation and co-management of natural resources must proceed from the bottom up with true empowerment for local communities;
- Development and Refuge management should proceed slowly and at a scale appropriate to the community to aid them in assimilating new tasks and responsibilities more effectively;
- Environmental education and economic concerns, such as ecotourism, be integrated into the process at every level and on a continuous basis. The goal is to strengthen the institutional capacity of Nicaraguan conservation groups and create a community-based plan tailored to the needs of Chacocente.

To meet these tenets, we propose to follow a two-pronged approach. First, we propose to hire a Nicaraguan professional, working in concert with *Fundacion Cocibolca*, to conduct and oversee the necessary turtle fact finding and research at the Chacocente site and work with the local communities surrounding the site. Second, we propose to establish an NGO that will oversee management of the Chacocente Refuge and land use around the Refuge.



Project Objectives

TURTLE PROTECTION

- Hire a full-time staff person to gather information on the human-wildlife interrelations with a focus on sea turtles and other wildlife species inhabiting the dry forest fragments within the Chacocente
- Collect and compile data on turtle nesting, egg distribution and seasonal turtle egg harvesting
- Place all written materials and resources on Chacocente in a centralized and accessible location
- Encourage active and informed participation of local communities in the conservation of turtles in the Chacocente Refuge

REFUGE MANAGEMENT

Hire a local Conservation Coordinator to work with a Community Conservation Associate to coordinate the following activities within the Municipality of Santa Teresa:

- Identify the training needs of individuals concerned with the conservation and wise use of natural resources of Chacocente and adjacent areas; Fundacion Cocibolca will help provide preliminary training for interested community members as the NGO develops
- Encourage scientific research on dry tropical forests, sea turtles and other species to inform management and in a manner to aid in the development of an ecotourism infrastructure.
- Develop and produce educational materials on sea turtles including a multi-use, bilingual guidebook for the area that could have future potential as a tool in tourism marketing
- Initiate a framework for a co-management plan for the Refuge and develop preliminary plans for research-based ecotourism and adventure tourism

Project Design and Action Plan

The proposed project will be run in partnership with the Richland Center, Wisconsin - Santa Teresa Sister City Project. Some of the specific activities proposed are outlined below.

Strengthen Fundacion Cocibolca as a National Conservation Organization - Fundacion Cocibolca has been working in Nicaragua with landowners and communities for a number of years. Cocibolca personnel will strengthen the proposed project through conducting turtle ecology studies, acting as liaisons with local people, and linking the project with other Nicaraguan ecological experts.

Creation of a Locally Based NGO for Eventual Co-Management of Chacocente - The Conservation Coordinator along with the Community Training Coordinator, working the Municipality of Santa Teresa, would initiate the process of to create a broad based local NGO that would focus on the 17 communities closest to the Chacocente Refuge. Initially general meetings would be held to identify appropriate stakeholders whom would eventually form a NGO. Feasibility analysis would be conducted to gather information from the communities on what they see as the problems and potential solutions that would result from a proposed community co-managed system for Chacocente.

Information Gathering on Chacocente - An effort would be made to gather all available information on Chacocente (legal, academic, land use, governmental) and house it at central and accessible locations. This information would then be available to all interested parties, including MARENA, COMAREN, Fundacion Cocibolca and the municipality of Santa Teresa. This information would be used as a foundation for constructing a management plan for the Refuge.

Developing a Co-management Plan – Project stakeholders will develop a practical co-management plan based on the agreements already existing between Santa Teresa and MARENA. The proposed NGO will take primary responsibility for designing and implementing the proposed co-management plan in accordance with recommendations from the Municipality of Santa Teresa and MARENA. A key component of this process will be



that all project partners aid the NGO in the co-management process. On site assistance will be provided by the Conservation Coordinator and the Community Training Coordinator.

Providing Training - New staff and local community members working under the proposed NGO would receive training in conservation management, administration and basic ecotourism approaches. The focus of this training will be to introduce concepts that can be integrated into the project. CC will help provide structure in this process and will be assisted by Fundacion Cocibolca in staff and project training.

Initiation of Conservation Practices - With the help of the NGO and adjacent communities, aquatic protective zones for the turtles would be established with buoys. A boat and motor has already been purchased by the Richland Area-Santa Teresa Sister City Project to assist the NGO with instituting patrols of the area when necessary to protect nesting turtles. Patrolling currently takes place during the turtle-nesting season. Additionally, the Sister City Project and The Wildlife Preservation Trust have contributed funding to initiate the buoy program.

Mapping of the Refuge - Jaimie Incer, a previous Minister of the Environment, noted that aerial photos of Chacocente are available. Additional mapping layers are also available from MARENA. CC staff in partnership with Fundacion Cocibolca could convert the existing mapping information into a geographic information system (GIS) for the Refuge. Any new mapping would be conducted with the help of local research assistants from the community who have knowledge of the area. Mapping is a necessary first step in the process of creating a management plan for the Refuge. It would also be a basic tool for aiding researchers to the area and in laying out trails for both researchers and tourists.

Initiating Low Level Ecotourism Based on Research-Oriented Tourism - Preliminary plans will be developed for beginning research tourism to the area. A guidebook and a brochure would help researchers orient themselves to the Refuge and would provide protocols and guidelines for the hiring of local guides to help them in their research or viewing of the Refuge. Some low level advertising or word of mouth advertising of the Refuge would be done to encourage researchers' use of the Refuge.

Community Economic Benefit - Tourists and researchers would be hosted by members of the local NGO and would pay for room and board to this organization. Thus, some money would be paid to some families for meals, guiding, and other activities to supplement their income.

Schedule of Activities

The project is slated to begin in June, 2000. During June we would meet with the Mayor of Santa Teresa and create the strategy for creating the NGO. Soon after this, hiring of personnel would be accomplished. During July-August protective buoys would be installed and boat patrolling would begin and extend through January when the main turtle nesting season ends. Patrolling would be dependent on the shrimp and fishing season as well as the turtle nesting season. The gathering of information on Chacocente and investigation of the land title situation would extend from April through September. Training of project staff would be done during August-September. A basic GIS vegetation map would be created between September and December. Preparing a basic brochure and guidebook would go on during most of the year, from July 2000 to April 2001. Translation of the booklet into Spanish would occur during the latter part of the project, in April, so that printing of the booklet could take place in May, 2001.

Project Evaluation

Evaluation work will assess the attainment of specific project objectives: Chacocente research compilation and completion of on-going work on written materials. Meetings with the NGO and discussions with other community groups and individuals will include an evaluation component as a part of the proceedings. This component will be a valuable tool in structuring a community-based conservation program geared toward success. Continuation of the project, and what direction it will take, will depend upon the successful completion of this proposed project. A positive response from the community and the NGO would give direction for a longer-term program to develop including the initiation of a management plan for the Refuge and the adjacent areas.



Project Budget

Budget Item	Cost
Transportation 5 trips (WI-Nicaragua) @ \$750	\$3,750
Consultant Stipends in Country 90 days @ \$15/day	\$1,350
Salaries Conservation Coordinator Turtle Researcher CC Inc. Associate	\$3,000 \$6,000 \$6,000
Educational Materials Turtle booklets, brochures, etc.	\$3,000
Buoys for Beach Marcation	\$1,000
Training Workshops for Communities	\$2,000
Map and Aerial Photo Acquisition	\$2,000
Misc Equipment	\$1,000
Total Project Budget	\$26,100
CC Inc., Administrative Costs (15% of Total)	\$3,915
TOTAL REQUESTED	\$28,015