

Great Green Macaw Research and Conservation Project San Juan – La Selva Biological Corridor

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Report to The Rainforest Alliance

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Ever since Dr. George Powell initiated the Great Green Macaw Research and Conservation Project in the Northern Zone of Costa Rica in 1994, the goals have always been:

1. To study the natural history of the Great Green Macaw (*Ara ambigua*) with the objective to generate information that can be applied for the protection of the species.

Throughout the years of research, we have come to learn much about the ecology of the Great Green Macaw: distribution of nests, reproduction, principal feeding sources, type of habitat and range of distribution (area of migration). Since the beginning of the year 2000, it was decided to concentrate efforts of the investigation principally on the monitoring of the population of the Great Green Macaw with the goal of responding to the concerns of various organizations that work in a zone where the threat of extinction exists for this species in Costa Rica.

2. Ensure that this information is applied for conservation actions that benefit the Great Green Macaw and its habitat.

Our principal goal for the years 2002-2003 was to work on the implementation of the San Juan-La Selva Biological Corridor and its associated Maquenque National Park. The corridor was designed based on the data of the Great Green Macaw research team and connects the Indio Maíz Biological Reserve in Nicaragua with the Central Volcanic Cordillera Range System in Costa Rica. Thus ensuring the protection of the nesting area and migration area of this species as well as protecting important migratory wildlife corridors. Our research verified that these actions are critical for the conservation of the species and its habitat in Costa Rica. The establishment of an extensive protected area (59,717 hectares) is urgent in that it constitutes the only viable option to stop the destruction of forests and to

guarantee the preservation of a core area that can sustain a reproductive population of the Great Green Macaw in the country.

Summary of the most outstanding activities in 2002 and 2003

The Great Green Macaw Research and Conservation Project was engaged in a wide range of activities, including field research, with the aim to precisely define the critical habitat of this species in Costa Rica, and also activities that were focused on improving the protection of the Great Green Macaw habitat. The research focused on monitoring reproductive activities and continued resolving the migratory pattern outside of the nesting season.

The intention of our activities was to implement the protection of critical habitat, including the elaboration of a proposal, a petition from the government of Costa Rica for the creation of a national park to protect the nesting range of the Great Green Macaw, and of a biological corridor that would protect the critical habitat outside the nesting range.

A group of organizations, driven by the Great Green Macaw Research and Conservation Project, decided to form a strategic alliance, creating an Executive Committee to manage the actions of the San Juan-La Selva Biological Corridor. Thus, the Executive Committee for the San Juan-La Selva Biological Corridor was officially formed in March 2001 and consolidated in November 2001, as a result of an alliance between the Tropical Science Center (TSC), the Wildlife Conservation Society (WCS), the Organization for Tropical Studies (OTS), the Mesoamerican Biological Corridor (MBC), ABAS, APREFLOFAS, ASCOMAFOR, Friends of the Great Green Macaw, Asociación VIDA, CEDARENA, CODEFORSA, MINAE, La Tirimbina Biological Reserve, the Municipalities of San Carlos and Sarapiquí, and the Great Green Macaw Research and Conservation Project. The Committee has their headquarters in the Tropical Science Center, in San Pedro, and the Great Green Macaw Research and Conservation Project assumes the responsibility to coordinate and promote the implementation of the San Juan-La Selva Biological Corridor, and also to secure the necessary funding for the development of the project.

In 2002, the Minister of Environment and Energy, Carlos Manuel Rodríguez, joined these organizations and delegated the responsibility to follow up the actions undertaken for the establishment of Maquenque National Park with Etilma Morales, MINAE. In addition, MINAE's Arenal Huetar Norte Conservation Area (ACAHN) named Juan Luis Méndez as the responsible officer from ACAHN to follow up the work done on Maquenque National Park.

In addition, legal actions were undertaken in November 2001 by the Great Green Macaw Research and Conservation Project against the Ministry of Environment demanding, among others, cautionary measures that "the Costa Rican State,

through MINAE, issue a decree to prohibit in total and absolute form the cutting and utilization of the Almendro tree (*Dipteryx panamensis*), in all of the national territory". This demand was accepted in 2002. The Ministry of Environment declared through the General Direction of the National System of Conservation Areas (SINAC):

1. No authorization to harvest standing or fallen Almendro tree will be issued for the next nine months.
2. Approved solicitudes of harvest will stay valid in all their extensions.
3. All Subregional Offices will elaborate an inspection plan of current authorizations that involve Almendro harvesting.
4. The General Direction will name an Internal Commission with officials from the ACAHN, ACTO, ACLAC and ACCVC Conservation Areas that will be assigned the temporary task for nine months to administrate the functioning of a technical advisory team and coordinate institutional management. Furthermore, this Commission will present a strategy that will facilitate the process of obtaining the technical studies and scientific information that will help the Administration make an adequate decision related to protection and conservation of the Great Green Macaw and Almendro.

Goals for 2002-2003

The goals for the Great Green Macaw Research and Conservation Project for the year 2002 and 2003 were:

1. To follow up the natural history study of the Great Green Macaw with special emphasis in the monitoring of nesting intents, with the aim to document the state of the population.
2. Ensure that this information is applied to conservation actions that benefit the Great Green Macaw and its habitat.
3. To place, in collaboration with the Ministry of the Environment, 200 tags in Almendro trees with nests, drinking holes, and/or potential nests of the Green Macaw (with funding from The Rainforest Alliance).
4. To follow up binational action in the Southeast of Nicaragua within the scope of the Binational Commission of the El Castillo-San Juan-La Selva Biological Corridor, participate in the organization of the Second Binational Festival of the Macaws (Nicaragua) and assess the Great Green Macaw Research and Conservation Project of Fundación del Río, our partner in Nicaragua.

5. Achieve the prohibition of harvesting the Almendro at the national level.
6. To work with landowners and the communities bordering the proposed area for the creation of Maquenque National Park.
7. To create and publish the San Juan-La Selva Biological Corridor Newsletter, "La Hoja de Almendro".
8. To work, as the principal method, in the implementation of Maquenque National Park and its associated biological corridor, which will connect the La Selva Biological Station and the Central Volcanic Cordillera with Maquenque and the Biosphere Reserve in Southeast Nicaragua.

Community Conservation Entreprises Program (CCE)

Funds

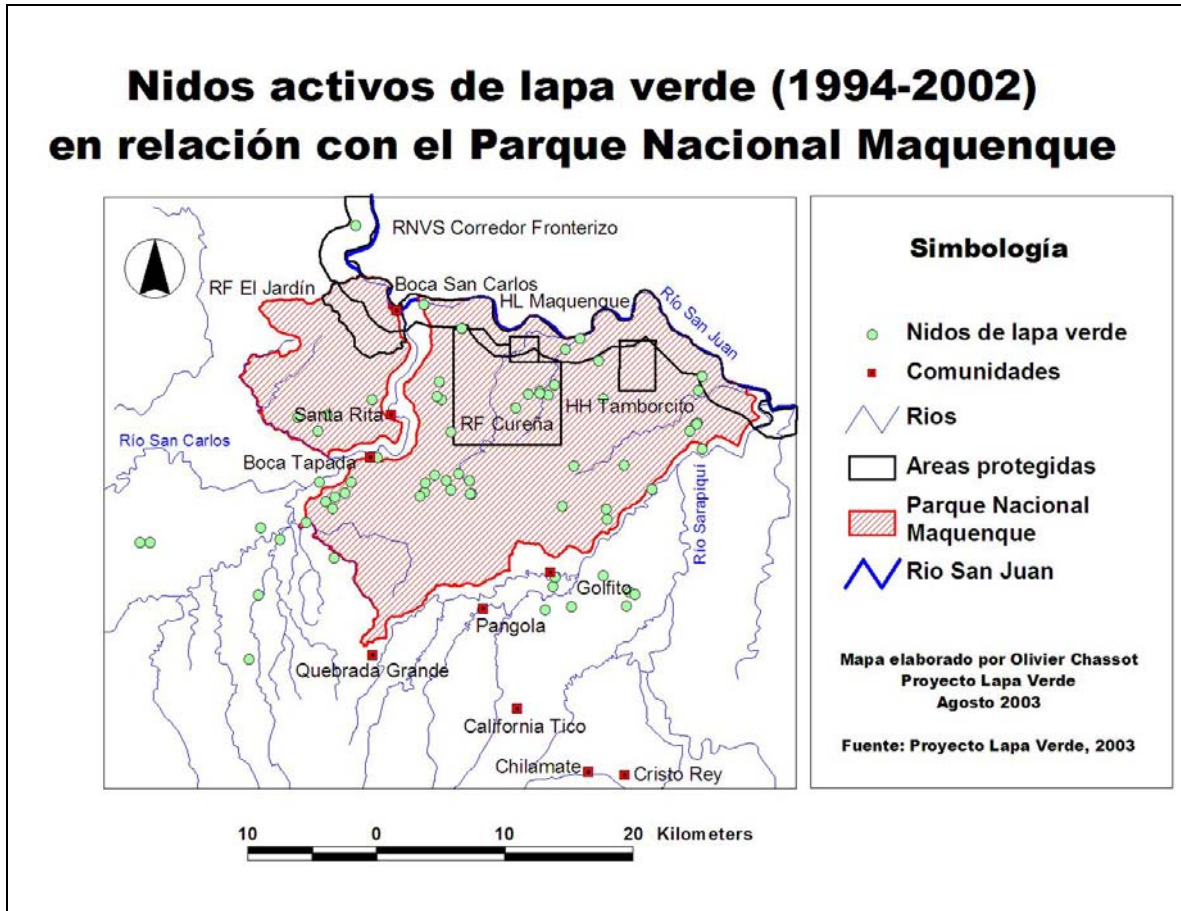
Funds for a total amount of \$2,115.00 US received from the Rainforest Alliance in April 2002 through the Community Conservation Entreprises Program were spent as follow:

Aim	Item	Amount (US\$)
Nest protection	Elaboration of 200 plastic tags	1,325.00
	Combustible	215.00
Vigilance Committee	Community workshops	469.00
Administration	Overhead (5%)	106.00
TOTAL		2,115.00

Accomplishment

1. Nest protection

Of the 60 nests of Great Green Macaws that were identified since our project initiated in 1994, 10 of them have been cut down by forest engineers working in forest management plans. Even if trees used by the Great Green Macaw for nesting substrate, drinking water and holes that can be considered as potential nests are strictly protected by MINAE's Decree 25663, the lack of professional ethics by some people involved in the timber industry, or the lack of these trees being clearly marked, the Great Green Macaw Research and Conservation Project agreed to collaborate with the local office of the Ministry of the Environment in Pital, San Carlos, from which the monitoring and patrolling of the Great Green Macaw's area of influence corresponds. Thus an agreement was taken between the two parties, given the fact that the Great Green Macaw Research and Conservation Project would edit the tags (see picture) and collocate them on identified nest trees with the help of the Ministry of Environment.



Fifty tags were collocated on nest trees, mostly almendro (*Dipteryx panamensis*) twenty were collocated on trees used for drinking water, thirty were collocated on trees with holes known to be potential nests for the Great Green Macaw, twenty five were collocated on almendros used by the Great Green Macaw as roosting sites, and 75 tags have not been used yet, due to the fact that every year, new nests trees and new potential nests are found.



2. Vigilance Committee

Prior to the constitution of Natural Resources Vigilance Committees (COVIRENAS), nine workshops were held in nine different communities located in the nesting and migration area of the Great Green Macaw with the aim to inform local community members about COVIRENAS work and to raise a list of people interested in founding a new COVIRENA Committee. Selected communities were: Boca San Carlos, Santa Rita, Boca Tapada, Quebrada Grande, Pangola, Golfito, California Tico, Chilamate and Cristo Rey (see map for location).

During the nine workshops, a total number of 122 community members attended the meetings. From this total, 43 people expressed interest in receiving a capacitating as COVIRENAS. Nevertheless, reasons invoked by local people for not actually considering joining a new COVIRENA team were repeatedly the lack of trust toward officers from the Ministry of Environment and the lack of presence and collaboration from the local office of the Ministry of the Environment located in Pital de San Carlos. This office is made up of seven officers but has only two vehicles in use and due to budget cuts have the right to spend less than \$100.00 US a month for fuel for patrolling the area, which is not sufficient to attend potential denouncement made by local people from these communities. Furthermore, COVIRENAS in the area feel that they have only a limited power that is useless without the back up from local police officers or local MINAE officers. Thus, in most cases, local people were reluctant to form a new COVIRENAS team, feeling uncomfortable with the idea to have to denounce their own neighbours.

Thanks to this survey, we feel that we will be able to request more funds explicitly for COVIRENAS in the San Juan-La Selva Biological Corridor from potential donors such as Costa Rica-Canada Debt Exchange and Mesoamerican Biological Corridor-Costa Rica Section. More follow-up is needed with more funds available.

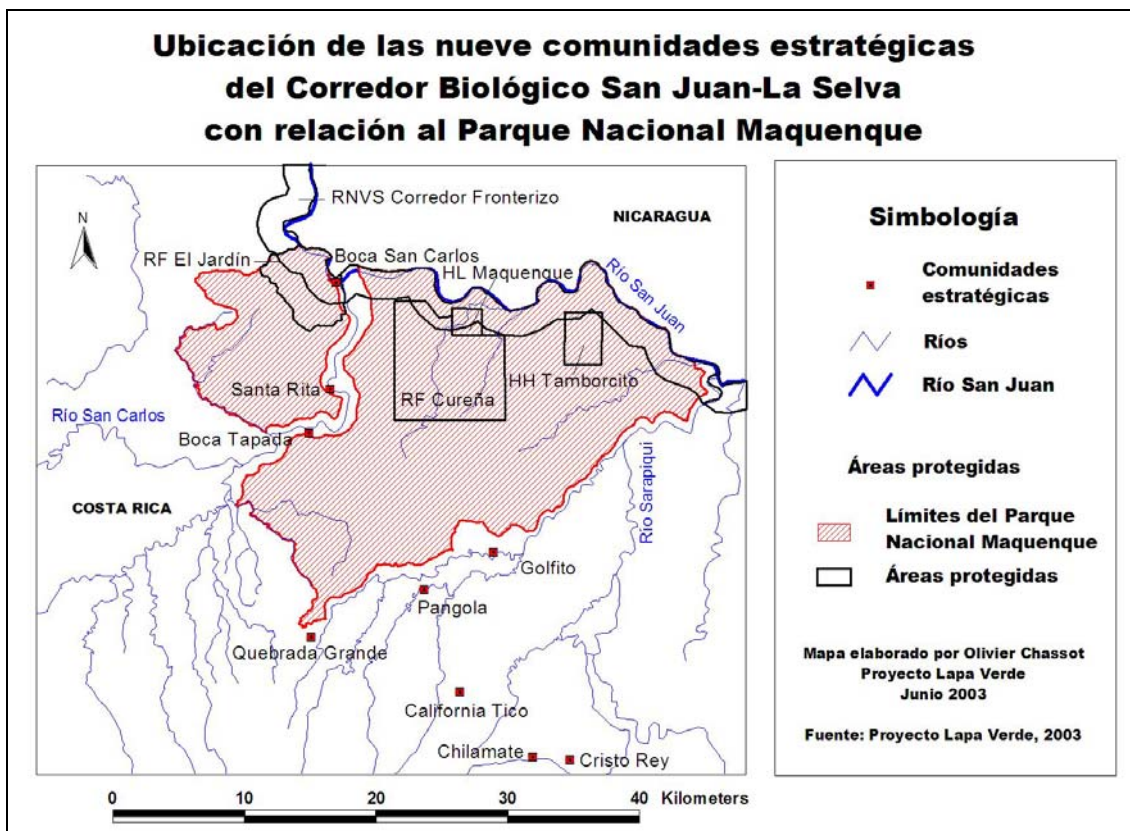
Impacts on the community

Recent analysis of nest poaching data reveals that the multi-layered approach to outreach and protection of nests is working: nest poaching rates have dropped from 25% in 1994 to 0% in 1999, and again in 2000, 2001, 2002, 2003. We consider the sharp decrease in nest poaching to be a small step towards protecting the future of Great Green Macaws in Costa Rica. We attribute



the positive results of this campaign to a combination of informal outreach on the part of our project (especially in very isolated areas), the financial incentives

offered for protecting nests, a 3.5 year intensive environmental education program started in 1996, widespread press on the plight of the Great Green Macaws, increased government willingness to confiscate illegally held macaws and our continual and unpredictable presence at nest sites throughout the nesting season. Additionally, the Costa Rican government stopped both issuing and renewing permits to hold great green macaws in captivity. The tagging of nest trees and potential nest trees is always discussed in community meetings and this is a good topic that encourage people to respect the law and to discard tagged trees when executing a management plan. Forest engineers now cannot ignore the tag on trees selected for harvesting as they recognize that they risk to be sanctioned by the law.



Publications

The following articles or books have been published during the year 2002-2003 and are related to our scope of action:

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MONGE Guisselle, CHASSOT Olivier, *Gestión del Corredor Biológico San Juan-La Selva*, **Puentes de Vida** 4, 2002, 15.

MONGE Guisselle, CHASSOT Olivier, *Corredor Biológico San Juan-La Selva, Costa Rica, Memoria del Simposio Conceptualización y Criterios para Corredores Biológicos en Mesoamérica.* Ed. T. Zúñiga, L. Ramos, C. Gómez y J. Mejía. V Congreso de la Sociedad Mesoamericana para la Biología de la Conservación, San Salvador, El Salvador, Serie Memorias No 6. Managua, Nicaragua: Corredor Biológico Mesoamericano, 2002, 23-25.

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WHITTAKER Leslie, *Great Intentions*, **The Tico Times**, May 24, 2002.

Zona fronteriza con Nicaragua: país tendrá otro parque nacional, **La Nación**, 26 de abril 2003.

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Protección preventiva para un reducto de lapa verde en Costa Rica, que será Parque Nacional, **Quercus** 209, julio 2003.