

Conservation International Brazilian Biodiversity Corridor Implementation Program

FY03: March 31, 2003 – September 30, 2003

Leader Award LAG-A-00-99-00046-00

This Report covers the period of FY02, from March 31, 2003 through September 30, 2003 for activities completed under the USAID Leader Award LAG-A-00-99-00046-00. This Report includes supported activities in the Atlantic Forest and Pantanal, Brazil.

I. Highlights

Atlantic Forest

Bahia State Environmental Award

In June 2003, two projects developed by IESB in the field of rural development were awarded the "Sustainable Initiative Award", by the Bahia State Government, in a solemnity attended by the State Governor, Mr. Paulo Souto. Subsequently in July, IESB received the "Super Ecologia" award, in the "Flora" category during a solemnity attended by the Environmental Ministry Ms. Marina Silva.

Seed Money

In August 2003, the Seed Money Monitoring Committee, established through partnership between IESB, Conservation International and Citigroup Foundation, met for the first time for evaluating the first batch of funding requests submitted by small property stakeholders. At the occasion, 10 proposals averaging R\$25.000,00 each were approved for investments in Agro-Forestry Systems.

Institutional Support Fund

In July 2003, IESB launched the first announcement of the Institutional Support Fund to strengthen small non-governmental organizations with actions in the Atlantic Forest Central Biodiversity Corridor, in the States of Bahia and Espírito Santo. The fund received 75 applications from 73 institutions (35 from Bahia and 38 from Espírito Santo). In August, the External Evaluation Committee selected 16 of those (16 NGOs) for financial support averaging R\$20.000.

Pantanal

CI in partnership with IBAMA and EMBRAPA conducted the workshop “Fire Management in the Pantanal”, that took place in Campo Grande from May 28th to 30th. Around 130 people attended the workshop that was targeted to the scientific community, rural producers, undergraduate students and general public interested in the usage of fire as a management tool.

Launched in August 2003 by the governor of Mato Grosso do Sul, José Orcirio Miranda dos Santos, this year fire awareness campaign was joint efforts of CI-Brazil with Mato Grosso do Sul State Secretary for the Environment (SEMA), IBAMA and the Fire Department. The campaign reached the 77 municipalities of the State through TV and radio spots, billboards, folders and educational booklets.

In partnership with SEMA and IBAMA CI-Brazil also promoted a workshop for the local press about fire usage in the Pantanal this September in Campo Grande. Fifteen journalists from Campo Grande, Corumbá and Cuiabá (Mato Grosso State) attended to the meeting in order to cover gaps of knowledge and receive official data about forest fires in the Pantanal.



Workshop participants receiving compiled information on fire issues.

On August 2003 CI concluded the first phase of the project “Biodiversity Corridor Municipalities” by training municipal technical staff from 15 municipalities on GIS techniques and equipping local GIS labs. CI succeeded in engaging the following partners in this initiative: the Mato Grosso do Sul State Secretary for the Environment (SEMA), the State Land Department (IDATERRA), the NGO Oreades from Mineiros, the Brazilian Institute for the Environment (IBAMA) and the COINTA (Inter-municipal Taquari River Committee). Technicians from these institutions and municipal technical staff were trained (totaling 68 people) and the capacity-building process had 100 hours. Now people trained are working in teams locally to produce theme maps (i.e. vegetation, land-use, altitude, roads, soil and others). The application of the information generated by municipal technicians is unlimited and can assist strategic planning and decision making process regarding conservation, tourism, agriculture, urbanism, justice, education and health. The municipality of Bonito will be

one of the first to use the information to assist the recover of degraded areas in the Formoso basin where the Bodoquena National Park is located.

The brochure “Pantanal Organic Meat” is printed and is being distributed by CI among producers and other publics of interest like rural associations and food industry in partnership with the Brazilian Association for Organic Cattle and association responsible for the project “Organic Veal of the Pantanal”. The publication was financed by Conservation International's Center for Biodiversity Conservation with resources from the Moore Family Foundation. The publication presents the data collected and results of the Organic Beef project carried out by CI through FUNBIO's (Brazilian Biodiversity Fund) Program to Support Sustainable Production. The project introduced idea of the organic beef production in the Pantanal as a socially fair and environmentally sound development alternative and indicated the economic viability of this model for the region and neighboring Cerrado. From July to October 2003 the Pantanal farmers produced and sold 600 organic raised animals to the internal meat market.

II. Report by Objective

STRATEGIC OBJECTIVE 1: Environmentally and socio-economically sustainable alternatives for sound land use adopted beyond target areas.

Indicator 1: Number of conservation units in which government or private owners adopt aspects of sustainable management systems in addition to target areas.

Activities:

Atlantic Forest

1. Increase and disseminate knowledge about the region's biodiversity, and develop a regional program for biodiversity conservation units.

1.1 Prepare conservation planning maps.

Progress to date:

From July through September, Marcelo Araujo and Alessandro Marques, in partnership with the SEEDS NGO, organized a GIS data bank for the Northern Corridor region to produce a feasibility study for a carbon sequestration project supported by the National Environment Fund. The database integrated earth science variables, land use and remaining forest cover.

From April through September, maps of four additional properties were included in IESB's data bank, detailing their land use monitoring and implementation of their Legal Reserves. Other three properties were also mapped to support the creation of Natural Heritage Private Reserves - RPPN, in partnership with the PRESERVA – RPPN Landowners Association for Bahia and Sergipe States.

In September, a detailed interpretation of digital land use maps for 70 thousand hectares surrounding UNA Biological Reserve was finished. Currently, the cartographic basis is being

adjusted for comparison with 1997 land use data, in order to evaluate forest cover losses and other changes in the past five years.

In May, another study on land use changes was finished for the Conduru State Park region, in partnership with The Nature Conservancy – TNC. The data will serve as a background for the development of a carbon sequestration project through partnership between IESB, TNC and CI.

During this reporting period, IESB maintained the support to the following research projects:

- Joélia Sampaio in her master degree from UESC researching “Environmental Planning of the Itacanoeira River Basin, Ilhéus, BA”.
- Danusa Campos in her master degree from UFV researching “Landscape Units in the Santana River Basin, Ilhéus, BA”.
- In September, Adriana Meinking Guimaraes defended her MSc thesis “Distortions Between Ecotourism Concept and Practice: Itacaré as a Case Study”.

In August, UESC students and IESB’s trainees Alexandre Braga e Vitor Moura, under the supervision of Marcelo Araujo, submitted to the O Boticário Foundation the proposal entitled “Spatial distribution analysis and characterization of the forest cover between UNA Biological Reserve and Serra das Lontras, as a basis for an Ecological Corridor”. The application result will be defined in December 2003.

Problems, delays, shortfalls and proposed solutions:

- Nothing to report at this time.

1.2 Identify priority areas for conservation and scientific research to be developed within the corridor area.

Progress to date:

- Between May and August, IESB prospected forested land for acquisition with resources donated by TNC. Two properties totaling 973 ha with well-preserved forests were selected in late September and negotiations were initiated.
- In the same period, Gabriel Santos, Gustavo Canale e Carlos Guidorise, under the supervision of Cecília Kierulff, continued the assessment of *Cebus xanthosternus* populations all over the species distribution area, including the Southern portion of Sergipe and Northern Minas Gerais States. The assessment is being developed through interviews and field excursions. Maps are being prepared for the sites visited.
- Raquel Teixeira continues the population assessment and ecological studies of *Callistomys pictus* (Cocoa rat), endemic to Southern Bahia. New sites of occurrence were recorded and the species range is being mapped. In a new phase of the project, Raquel is beginning the ecological studies on the species.

- Paulo Cordeiro concluded the population assessment of *Crax blumembachii*, bird threatened with extinction also occurring in the south and extreme south of Bahia State.
- Camila Cassiano initiated a new phase on her sloth research, involving educational aspects aimed at rural communities of the Una region. This activity proceeds with support from O Boticário Foundation until June 2004.
- Gabriel Santos, Gustavo Canale and Raquel Moura, under the supervision of Cecília Kierulff, submitted two research proposals to the PROBIO-MMA fund, seeking support to continue their research on *Cebus xanthosternus* and *Callicebus*, having succeeded in the first.
- Adriana Martini concluded research on forest regeneration for areas affected by fire at the Una Reserve and is preparing papers for submission to scientific journals.
- IESB initiated, in partnership with the biologist Kristel De Vleeschouwer from the Royal Zoological Society, Antwerp, a research on *Leontopithecus chrysomelas*, at the Una Reserve.
- Raquel Moura, Marcelo Araujo and Alexandre Braga supported Conservation International in the assessment of geographic and biological data for the buffer zone of the Descobrimento National Park.
- Paulo Vila Nova, Alessandro Marques and Pablo Santana initiated the land use assessment of the Itacaré - Serra Grande Environmental Protection Area (APA), through use of forms and interviews with rural stakeholders.
- Economist Paulo Vila Nova started in September a research on environmental cost at the APA Itacaré-Serra Grande, in partnership with Gilca Oliveira, from the Federal University of Bahia.

Problems, delays, shortfalls and proposed solutions:

- Nothing to report at this time.

SO 1, Benchmarks I 1 A 1;2	Measure	By
Improved management plans for Protected Areas and watershed	Maps produced	Sep 2003
	Data base organized	Sep 2003
Forest effectively protected as a result of raised incomes	Farmer commitment to conserve areas on farm plan registered	Sep 2003
Identify priority areas for conservation	Small mammal research	Sep 2003
	Primates research	Sep 2003
	Zoning maps produced	Sep 2003

2. Support the farmers in implementing and managing RPPNs (Private Reserves) by working in partnership with the State Association of Private Reserve Owners (PRESERVA).

Progress to date:

- In April, IESB and PRESERVA gave technical support to four RPPN stakeholders in the preparation of proposals for the “Program to Support of RPPNs in the Atlantic Forest”, from the Alliance for the Conservation of the Atlantic Forest. The partners also produced a proposal for supporting tourism in Una Ecopark. All the projects submitted were approved and will last a full year. The resources will be managed directly by the stakeholders.

RPPNs	Activities	Resources Approved by the Alliance for the Atlantic Forest Conservation (R\$)
São João Farm	Enforcement and signs	8.000,00
Serra do Teimoso	Enforcement, research infra-structure, tourism support, renewal of equipments and broadcasting	30.000,00
Ararauna	Enforcement, signs, environmental interpretation and broadcasting	22.500,00
Paraíso Farm	Enforcement, signs, environmental interpretation and broadcasting	12.500,00
Una Ecopark	Research, infra-structure, tourism support and broadcasting	22.500,00
TOTAL (R\$)		95.500,00

- In a partnership between IESB, PRESERVA, Associação Caatinga and IPMA, with resources from the National Environment Fund (FNMA), the First Brazilian Northeast Congress on RPPNs was held in Maceió, Alagoas, between 22 and 25 of April. This event was a landmark in the RPPNs history, not only for the expressive participation of stakeholders – the largest ever recorded in a single event, with 84 reserves – but also for the results obtained. More than 170 participants attended the event, including representatives of the National RPPNs Association and of 10 of the 12 existing State Associations. In this event, three new State Associations were created in the Brazilian Northeast region.
- IESB, in partnership with Conservation International, formulated a proposal and applied for the Ecological Corridors initiative of the Pilot Project for the Protection of Brazil Tropical Forests – PPG7, seeking support to prepare a management plan for the Conduru State Park. IESB's proposal won the first place, with a R\$139.000,00 budget.
- In partnership with Conservation International, IESB formulated a proposal to revise the Ecological Zoning of the APA Itacaré – Serra Grande, with funding from another category of the Pilot Project for the Protection of Brazil Tropical Forests – PPG7. Again, IESB's proposal won the first place, with a R\$61.000,00 budget.
- FNMA approved a proposal from IESB, in partnership with PRESERVA and Santa Cruz State University – UESC, with a R\$270.000,00 budget to develop the management plans of the RPPNs Salto Apepiquei, Água Branca and Una Ecopark.

Problems, delays, shortfalls and proposed solutions:

- In this period, no new RPPN was created, for the Federal Agency in charge, IBAMA, started a revision process of RPPN creation procedures. This internal discussion has been going on for over a year and has been impeding the creation of new RPPNs. IESB, in partnership with PRESERVA, has been pressing for the procedure to be resumed.

Obj 1, Benchmarks II A2	Measure	By
RPPNs implemented and management improved	RPPN Serra das Lontras implemented	Jun 2003
	03 meetings held	Sep 2003
	60 RPPN owners trained	Mar 2003
RPPNs creation process disseminated	10 new RPPN processes sent to IBAMA	Sep 2003
	2 Pro-RPPN Regional Commissions organized.	
		Jun 2003

Indicator 2: Number of families outside target area who have adopted improved sustainable management systems.

Activities:

Atlantic Forest

1. Sustainable management systems adopted beyond target areas .

Progress to date:

- Joaquim Blanes e Walter Lima implanted four new demonstration projects with agroforestry projects related to cocoa, cupuaçu and pupunha, at the Barro Vermelho and Ribeirão das Navalhas communities.
- At the Rio do Engenho Community, Ilhéus municipality, IESB and Santa Cruz State University organized the Third Seminar on Agro-Ecology, which took place on June 8th. Approximately 50 producers, as well as CEPLAC, IBAMA and UESC technicians attended the event.
- In partnership with IMAFLORA and SOS Mata Atlântica and with financial support from CEPLAC, IESB organized the II Seminar on Forestry Certification in Southern Bahia, in September 2003. More than 30 people attended the seminar, including technicians and rural producers.
- One tree nursery for agroforestry purposes, with production capacity of 20,000 seedlings/year was created at the Barro Vermelho community. There are already 22,000 seedlings ready for commercialization until December 2003, contributing to the diversification of economic alternatives of the community. Another tree nursery is under construction at the Ribeirão das Navalhas community.
- Between April and September, a total of six meetings took place with the Una Organic Producers Group, which counts with the participation of 10 stakeholders associated to CooperUna. The group is now consolidated. Eight of the 10 producers had their proposals approved by the Seed Money Committee and the other two had their credit proposals approved by the Banco do Nordeste (Northeast Bank), with technical proposals prepared in collaboration with IESB's technicians.

- In June, with support from CARE do Brasil and CEPLAC, Joaquim Blanes and Walter Lima organized a “Field Day” about papaya and pineapple cultivation, with the participation of 45 producers of the whole region. At the occasion, a technical visit to the planting sites of the indigenous communities Acuípe and Una was organized.
- From April through September, IESB supported CooperUna with the commercialization of 6 tons of cocoa nuts, 3 tons of black pepper and 2 tons of guaraná, involving approximately 40 small rural producers.
- Luiz Lima is in charge of finalizing a deal with CARE do Brasil for financial support to CooperUna, aiming at strengthening commerce mechanisms, particularly the formation of work capital.

Problems, delays, shortfalls and proposed solutions:

- Nothing to report

Obj 1, Benchmarks I2 A1	Measure	By
Product sold though improved marketing	1,5 tons of açai palm heart	Sep 2003
	2,4 tons of organic fruits processed	Sep 2003
	100 tons of cocoa nuts sold	Sep 2003
	126 tons of fresh organic fruits produced	Set 2003
	22 tons of piaçava certified	Jun 2003
	25 tons of cocoa processed	Set 2003
	4 tons of black pepper sold	Set 2003
	4 tons of guaraná sold	Set 2003

INTERMEDIATE RESULT 1 – Systems for sound land use identified, promoted and adopted in target areas.

Indicator (IR 1.1): Sustainable management systems adopted and validated.

Activities:

1. Support the formed farmers’ cooperatives IESB helped to establish (Una Producer’s Cooperative – COOPERUNA, and Organic Producers’ Cooperative – CABRUCA) especially promoting training in management capacity focusing on market product development and environmentally friendly processes.

Progress to date:

- Luis Lima helped organizing monthly meetings of the CooperUna Director Board, composed by 6 small rural producers. In July, the cooperative hired an administration technician through a proposal submitted to Ford Foundation.
- A renewal proposal for the support of M&M Mars and WCF-World Cocoa Foundation was submitted and approved, for the recovery of areas with cocoa agroforestry.

- In May, IESB supported the organization of the I Tropical Product Fair of Una municipality, promoted by CooperUna and local Municipality. The fair lasted three days and was visited by some 6,000 people from the whole region. A training program for 150 producers of pupunha, açaí and mangostão also took place in the fair.
- Between March and October 2003, CABRUCA commercialized 20 boxes of fruit and 22 boxes of palm heart.
- A sales point was established for selling CABRUCA products in Salvador, Bahia State Capital, through the Perini Delicatessen. Another was established in Ilhéus, by the Rede Mestre Cuca. Also, representations of CABRUCA products were established in São Paulo and Rio de Janeiro.
- During this period, six new rural producers became associated to CABRUCA, which is formed today by 34 associates.
- In April CABRUCA, together with IESB, CEPLAC and Planeta Orgânico/BIOFACH – Brasil, promoted the seminar “Organic Agriculture: New Market Opportunities”. The event was attended by ca. 300 people from several market segments (agronomy students, producers, industries, etc), and held a fair on organic products.
- In August IESB, UESC and CARE do Brasil promoted the I Agro-Ecology Seminar in Southern Bahia, attended by 35 students, technicians and teachers of the region.
- A partnership with SEBRAE was established for creating the CABRUCA home-page, to be finished by late October.
- Negotiations with CARGIL were initiated for processing organic cocoa nuts. Currently, the negotiations involve a technical visit to CARGIL industrial plant in Ilhéus, through the certifying agency Instituto Biodinâmico.
- In this period, nine samples of CABRUCA and CooperUna were sent to buyers in the US and Germany.

Problems, delays, shortfalls and proposed solutions:

- Nothing to report at this time.

Obj 1, Benchmarks IR 1.1	Measure	By
Agricultural alternatives developed and implemented	50ha of clonal gardens implanted.	Sep 2003
	200ha of piaçava certificated.	Mar 2003
	75 properties organic certificated.	Sep 2003
Administrative system of Cabruca and Cooperuna organized	Cooperative associates database updated	Sep 2003
	Cooperative management training	Sep 2003
	03 new projects submitted	Mar 2003

Pantanal

1. To map corridor areas through satellite imagery, and to identify fragments through videography and aerial photography techniques.

CI GIS Staff has completed the mapping, zoning and the identification of fragments along the Corridor. In order to support the monitoring of these fragments CI has launched the project "Biodiversity Corridor Municipalities", which aims to build capacity within Corridor's municipalities to guarantee ongoing local monitoring of existing fragments, identify areas to be recovered and generate incentives for the creation of new protected areas within Corridor, which is currently a priority of all municipalities due to the ICMS law. This initiative is a partnership of CI with the State Secretary for the Environment (SEMA), the State Land Department (IDATERRA) and the Brazilian Institute for the Environment (IBAMA) and eight municipalities of the Corridor.

A total of 42 technicians from Aquidauana, Bonito, Corumbá, Nioaque, Rio Verde, Rio Negro e Campo Grande were trained on GIS techniques. The capacity-building process comprised 4 training sessions, covering the following topics:

- The usage of geographic information and technologies in natural resources and environmental studies;
- GPS and Cartography;
- Environmental Legislation;
- Brazilian System for Protected Areas (SNUC);
- The usage of Remote Sensing and Geographical Information System in natural resources monitoring;
- Data base.

The technicians are producing maps of their municipality based on land use and occupation; hypsometry; declivity; watersheds, roads and protected areas. The maps generated will be presented to the local community and stakeholders in meetings that will be held in November and December 2003.

The municipalities of Bodoquena, Miranda, Jardim and Porto Murtinho are starting the capacity building process to be part of the network through the work of Neotropica Foundation and support of the Boticário Foundation. CI and Neotropica have held a meeting agreeing to work in partnership to involve other municipalities surrounding the Bodoquena National Park where Neotrópica Foundation has been working in the buffer zone with sustainable economic development.

2. Support existing and new private and public protected areas in the Corridor region and assist in the implementation of management plans for existing conservation units

CI continues to assist landowners interested in creating private protected areas by producing all the technical material required by environmental agencies. Two new Private Reserves were created during this fiscal year. In one of them, a rare specie of Falcon (*Spizaetus ornatus*) belonging to our regional Fauna was found, corroborating the biological

importance of this area. Moreover, another Private Reserve at Alegria Farm, comprising 1,578 ha is in the process to be decreed.

CI is also a member of the newly created association of landowners of private protected areas in Mato Grosso do Sul State – REPAMS. The association aims amongst other things to contribute for the creation of conditions to offer owners of private protected areas, social and economical sustainability.

Besides supporting the creation of private protected areas, CI is implementing at the State and Federal level pilot projects to design and implement Management Plans for Core-nuclei Protected Areas along the Corridor.

CI and SEMA are going to start data gathering for the Pantanal do Rio Negro State Park's management plan during the Large Vertebrate Monitoring Course, to take place at Rio Negro Farm, from November 17 to 28. This course, a partnership between CI and EMBRAPA, will train 12 people in camera trapping and aerial survey techniques, having as target large vertebrates' populations in the State Park area. Moreover, a member of the Serra da Bodoquena National Park staff will attend the course. His participation is part of CI's strategy to implement the same methodology in elaborating the Serra da Bodoquena National Park's management Plan.

In partnership with the Environment police, Oikos, the Catholic University Dom Bosco and Oreades NGO, CI will carry out the aerial photography of the Rio Negro State Park at the beginning of November. The aerial photography mosaic will be the basis for developing a participatory management plan of the area.

In partnership with the Environmental Attorney of Bonito and INPE (National Institute of Spatial Researches) is formatting a project to carry out an aerial inventory of the Formoso River Basin, covering an area of 100.000 ha using aerophotogrametry techniques. This survey intends to map all the Formoso River Basin in order to identify the extension of the gallery forest along the rivers that comprise the Basin. As a product we expect to identify erosion, deforested and degraded areas, specially observing the compliance with the Brazilian forestry code for the existence of Permanent Protected Areas and legal reserves. CI and the municipality of Bonito will support farmers to plan their legal reserves to promote connectivity within the corridor.

The Environmental Attorney will use these data to negotiate with landowners the adjustment of their conduct and will require the recovery of these reserves behind the gallery forest. This will assure the enlargement of the corridor area along the river, enabling species to move in the course of it. To support the recovery of those areas, CI is assisting the implementation of a seedling nursery in Bonito as a Pilot Project. Our purpose is to provide local technicians the information necessary to select, cultivate and plant seeds of appropriate native species, which will be an important resource to restore degraded areas, identified trough the maps generated by the "Biodiversity Corridor Municipalities" and the Formoso River Basin survey. This initiative will be replicated to other municipalities of the Corridor. CI has been receiving support from the Seed Network Project, financed by the National Fund for the Environment and EMBRAPA solos.

3. Diagnose and Monitor the health status of wildlife populations in the Cerrado-Pantanal Corridor.

3.1 Identify unknown infectious agents and create a monitoring scheme for known pathogens.

Conservation International and Oswaldo Cruz Foundation continues the first large scale study of domestic and wild animal health in the Pantanal region, focusing on diseases of great medical and veterinary importance in the Corridor area.

During this activity first year, the following pathogens have been identified and are now being monitored by the Fiocruz team.

Species	T. cruzi		T. evansi		Microfilaria		Helminths	
	Rio Negro	Alegria	Rio Negro	Alegria	Rio Negro	Alegria	Rio Negro	Alegria
Bats	negative	-	3,1(1/32)	-	3,1 (1/32)	-	-	-
<i>Calomys sp</i>	0 (0/3)	negative	0 (0/3)	negative	negative	-	-	In process
<i>Clyomys laticeps</i>	2,9 (1/34)	13,3 (2/15)	17,7 (6/34)	66,7 (10/15)	negative	negative	66,7 (12/18)	In process
Dogs	0 (0/8)	0 (0/23)	0 (0/8)	17 (4/23)	0 (0/8)	0 (0/23)	-	-
Equines	-	-	negative	2,2 (1/44)	negative	negative	-	-
Feral pig	15 (2/13)	-	0 (0 / 2)	-	3 (1/33)	-	-	-
<i>G. microtarsus</i>	0 (0/12)	negative	6,3 (1/16)	negative	negative	negative	66,7 (4/6)	In process
<i>Holochilus sp</i>	0 (0/17)	14,3 (1/7)	0 (0/17)	33,3 (2/6)	negative	33,3 (2/6)	100 (7/7)	In process
<i>Monodelphis domestica</i>	10 (1/10)	0 (0/3)	0 (0/11)	50 (2/4)	negative	negative	100 (3/3)	In process
<i>Nasua nasua</i>	50 (1/2)	-	negative	-	100 (2/20)	-	-	-
<i>Oecomys marmorae</i>	15,3 (9/59)	0 (0/26)	20 (13/65)	7,7 (2/26)	negative	negative	36,4 (12/33)	In process
<i>Oryzomys sp</i>	0 (0/4)	negative	0 (0/4)	negative	negative	negative	66,7 (2/3)	In process
<i>Philander opossum</i>	16,7 (1/6)	negative	0 (0/6)	negative	negative	-	77,8 (7/9)	In process
<i>Tayassu peccari</i>	negative	-	22 (11 / 50)	-	25 (13/51)	-	-	-
<i>Tayassu tajacu</i>	negative	-	25 (1 / 4)	-	100 (5/5)	-	-	-
<i>Thrichomys pachiurus</i>	5,6 (2/36)	10,7 (3/28)	7,5 (3/40)	53,6 (15/28)	negative	negative	96,4 (27/28)	In process
<i>Thylamys sp</i>	0 (0/1)	negative	0 (0/1)	negative	negative	negative	50 (1/2)	In process

Table 1- Percentage of individuals infected with *T. cruzi* e *T. evansi* in small mammal species collected in the projects two sites in the Pantanal.

The health and environment stability of protected can be measured by evaluating the parasites that threaten wildlife and human within an ecosystem and by evaluating the health of animal populations. For example, the high parasites prevalence's result in biodiversity loss due to increased mortality and decreased fecundity of their hosts.

It is an integral part of the greater goal of conserving ecosystem because viable animal populations are essential for balanced ecosystems, and healthy, reproductively normal animals are required to maintain this population viability. Therefore, understanding the role of endemic parasites (and their diseases) in the evolution of current animal populations could be of practical use for wildlife management.

The monitoring of host-parasite relationships in specific areas may prevent harmful effects on natural populations, avoiding important extinction events on local and global scales and to guide the selection of areas to be protected. Nevertheless, this is a long-term study and the information obtained during the first two years are still insufficient for any conclusion. Presently, we only partly understand the linkage between environmental damage with presence or absence of some parasites, changes in their prevalence and some effects under their host populations. However, it is increasingly clear that parasites diseases have been underreported and their effects underestimated in wild animals of the Pantanal region.

3.2 Design a monitoring program for infectious diseases for the Rio Negro core nuclei.

In the second year of the project, the long term monitoring program of small mammal populations and small mammal health was initiated at Rio Negro Research Center. We also performed the first two samplings in Alegria farm, to complement the health data previous collected at this site. From February 2003 to September 2003, we collected 155 blood samples in Alegria farm and 173 blood samples in Rio Negro farm. However the samples are still being analyzed and results will be available in December 2003.

The small mammals' surveys done in February and August 2002, were the first inventories carried out in the Rio Negro Research Center. In the current year we finished the surveys on Alegria farm in Nhecolandia sub-region of the Corridor Cerrado-Pantanal, which presents high degree of perturbation caused by ranching. The data obtained in 2003 showed that the diversity in both Rio Negro Research Center and Alegria Farm are similar. However, in Alegria farm we found a rodent species that was not found in Rio Negro farm. This species was captured in a modified environment with an introduced species of grass.

In order to relate the data concerning the health of the Pantanal mammals, the population dynamics and the regulatory effects of parasitism on mammal species with the land use, the data will be plotted in a detailed view of the landscape by computerized mapping system. Consequently, it will be possible to make inferences about impacts of human activities upon natural populations in the Cerrado-Pantanal corridor. The results of health study related to ecological data can help to identify areas where alterations in pattern of the diseases are very high, and therefore, may help to select areas to be protected or managed. Once we establish a straight relationship between health and ecological and land use, we could use the same methods in other sites.

Pantanal, Benchmarks / SO1- Indicator 1	Measure	By
1. Representative fragments in the corridor identified.	theme maps produced workshop held	Sept 2003 Jan 03
2. Monitoring of the regional deforestation level in place	Comparative maps produced (1965 and 2002)	Sept 2003
3. conservation planning for some of the highly degraded sites at the Formoso River Basin.	Plan produced	Sept 2003
2. Support existing and new private	At least 3 areas assisted for the creation of new private	Sept 2003

and public protected areas in the North/South Corridor region.	protected areas and Private Protected Areas Association Created.	
3. Monitor diseases in wild life species in Corridor.	Results reported.	Jul 2003
3.2 Draft of monitoring program completed.	Report on draft monitoring program completed.	Oct 2003

Indicator (IR 1.2): Conservation unit and buffer zone management plans developed and validated.

Activities:

1. Continue to support the Una municipal environmental and municipal “income and jobs” councils, attended by the elected leaders of communities associations, NGOs, municipal authorities, and state and federal development institutions.

Progress to date:

- Continuing revising the municipal legislation for the Council for the Environment, IESB contracted legal support from a lawyers’ office through PADIS-IIEB. After consultations with the local community, a draft for the Municipal Environmental Law was prepared and debated in the local deputy chamber, in July 2003, with participation of the local community. The draft states, among other measures, that the Municipal Council becomes a deliberative organ.
- Rui Rocha and Marcelo Araújo took part in regular meetings of the Ilhéus Environmental Council, responsible for the environmental licensing of potentially impacting economic activities. In this period, IESB refereed three licensing processes.
- Around Una Biological Reserve, as part of an environmental education program, Ana Cláudia Fandi and Ana Roberta Gomes worked to form a group of municipal teachers and hold discussions with rural communities for the creation of a Environmental Agenda for the municipality.

Problems, delays, shortfalls and proposed solutions:

- Nothing to report at this time.

2. Continue to assist in the reform of agrarian settlements around protected areas (Una Biological Reserve) in sustainable rural development.

Progress do date:

- Continuing activities on the Ipiranda Settlement, 20 teachers from rural schools attended a training period for the implementation of an interpretive trail. The community also took part in the discussions, which ended up with the choice of the trail location and implementation due to take place in November 2003. In this period, the program will train community members for keeping and managing the trail.

- At the Fortaleza settlement, Luis Lima took part of the discussions regarding the planning of crop production and commercial opportunities for guaraná to be commercialized through CooperUna.
- At the ASCOAE settlement, Walter Lima and Joaquim Blanes also developed planning activities for crop production, aiming the selection of better suit areas for agriculture, thus avoiding the clearing of forested land. In order to facilitate discussions, Alessandro Coelho prepared an aerial photograph map of the settlement.

Problems, delays, shortfalls and proposed solutions:

- Nothing to report at this time.

Obj 1, Benchmarks IR 1.2	Measure	By
Buffer zone management plan adopted by Una municipality	CONDEMA organized	Sep 2003
	02 settlements organic certified	Sep 2003
	Teachers trained	Sep 2003
	Rebio-Una implanted	Sep 2003

INTERMEDIATE RESULT 2 – Target institutions and local human capacity strengthened.

Indicator (IR 2.1):

Institutions strengthened.

Activities:

1. CI will continue its partnerships with Universities, NGOs and other institutions working in the North/South Corridor region.

CI Pantanal established partnerships with NGOs in the North – South Corridor to extend our actions in the Corridor. These partnerships with Oikos, Ecotropica, Oswaldo Cruz Foundation and Pantanal ComCiencia Foundations, universities and municipalities will continue during FY03. Data collected on biodiversity by these NGO’s strategically working in 3 different portions of the Corridor will be entered in the database and used by Corridor team to assist decision-making process, indication of new protected areas to be created and conservation measures that should be taken to counteract threats or monitor the Corridor’s biodiversity. All funds for these actions are from CI’s Center for Biodiversity Conservation (CBC).

Indicator (IR 2.2): Number of persons trained.

Activities:

Atlantic Forest

1. Training as strategy to strengthen and consolidate conservation initiatives in Central Corridor region.

Progress to date:

- From April through September 2003, the rural development team reached 150 rural producers with training related to sustainable agriculture, commercialization, community organization and environmental conservation.
- Eight UESC (Santa Catarina State University) students were trained in the fields of environmental planning, protected areas and agroforestry development.
- One student of the Vale do Itajaí, in Santa Catarina, initiated a trainee program in IESB, with rural tourism, through partnership established between both institutions.
- 22 media professionals from Southern Bahia attended the I workshop for Environmental Communication organized by IESB and CI, in July 2003.
- 60 environmentalists from 30 NGOs acting in the Central Biodiversity Corridor were trained in two workshops organized by IESB in July and September 2003. Themes related to legislation and the third sector, accountability/administrative techniques and work legislation were discussed. Two further training workshops are being organized, focusing NGOs and themes related to the Atlantic forest and public policies.
- 84 RPPN stakeholders were trained in protected areas Legislation and Management of Protected Areas, as part of the training and mobilization program for Northeastern RPPN stakeholders.
- 20 teachers from rural schools around Una Biological Reserve received training in Environmental Education and Environmental Interpretation, with support from CBC – CI and WWF.

Problems, delays, shortfalls and proposed solutions:

- Nothing to report at this time.

Obj 1, Benchmarks IR 2.3	Measure	By
Training	76 rural producers trained	Sep 2003
	60 RPPNs owners trained.	Mar 2003
	15 university students trained	Jun 2003
Patrolling plan improved	Fiscals trained	Sep 2003
	Priority areas for patrolling defined.	Sep 2003

Pantanal

1. Reduce the impact of uncontrolled fire on biodiversity by extending the ongoing fire program to indigenous areas, Conservation Units and farms in the North/South Corridor.

1.1 Develop and assist the implementation of a fire management plan to control the spread of wild fires at the Kadiwéus Indian Reserve in the Southern core nucleus of the North-South Corridor.

For 12 months, CI and OIKOS have been working on an agreement with FUNAI and ACIRK (the Kadiwéu Indigenous Community Association) to conduct Social and Environmental Inventories serving as bases for the design and implementation of a Management Plan for the Indigenous Land, focusing on the use of Fire as the main approach. However, the recent political scenario is not contributing to our efforts: FUNAI's President has recently changed, causing our negotiations to be postponed indefinitely.

As a new perspective to implement this work, CI and OIKOS were invited to join the Federal Government's Pantanal Program (PP) in their Diagnosis Program, supported by BIRD. These diagnoses were supposed to cover all the indigenous land in the MS State, including the Kadiwéu's. However, the Pantanal Program has been facing budget troubles and has not been able to cover all the Indigenous Land of the State. The association with CI would be a good way to mitigate their financial and technical difficulties to conduct the Diagnosis at the Kadiwéu's land. CI would use this partnership to leverage biodiversity conservation by including the perspective of fire management and conservation issues in the inventory.

In spite of all the efforts and advantages that this partnership would bring to both parties, CI has faced problems to sign an agreement with partners. Many meetings were carried out with the leadership of the Indigenous Community, FUNAI and the PP representatives, and ACIRK established that CI and OIKOS will not be directly involved with the data collection and the management plan design.

After a year of negotiation, we believe that, despite the interest that Kadiwéus have shown in dealing with fire and conservation issues on their land, they did not feel comfortable and confident enough to take part of a diagnosis program. Therefore CI and OIKOS have formally left these negotiations, but will continue to support our partners and maintain the door open for future collaboration anytime they feel they are ready to do it.

In spite of not achieving our primary target with this project, CI had learned important aspects about conflict management that we will be able to apply on future negotiations!

1.2 Design a fire control system for the newly created public and private protected areas in the Corridor's core nuclei by continuing to train and equip new and existing fire brigades.

CI in partnership with IBAMA and EMBRAPA conducted the workshop "Fire Management in the Pantanal", that took place in Campo Grande from May 28th to 30th. Around 130 people attended the workshop that was targeted to the scientific community, rural producers, undergraduate students and general public interested in the usage of fire as a management tool. Researchers who work with fire issues at EMBRAPA, University of Brasília (UnB), Federal University of Mato Grosso State (UFMT), IBAMA – Brasília and the NGO Friends of Earth attended and presented their results during the workshop. One of the most important topics highlighted during the workshop was the impact of exotic grasses species to biodiversity as it may represent an alternative to diminish the number of fires in the Pantanal. This subject seemed very controversial and different opinions rose about it. CI and partners suggested that the State Committee should keep fomenting discussions about the introduction of exotic grasses species with government, non-governmental organizations and mainly with research institutions to provide reliable data on the impacts of exotic species to native ones, as well as how it would contribute to mitigate fires in the region.

CI has supported IBAMA, SEMA and the Fire Department in the creation of 10 Volunteer Fire Brigades. This year partners have concentrated their efforts on rural settlements, training at least 250 small farmers. Over 7 trainings on rural settlements in Corumbá and 3 in the surroundings of the Serra da Bodoquena National Park are scheduled to happen, and were delayed due to the raining season that has started earlier this year.

In the Serra da Bodoquena National Park, 35 people were trained and 21, including Kadiwéu Indians and small farmers who leave in the rural settlements neighboring the Park, were hired. The Fire brigade will work from July to December on the fire prevention and suppression in the Park and its boundaries.

In the Rio Ivinhema State Park 12 volunteers including Park's staff and the municipal governments employees were trained and are aware to both prevent and fight against fire when necessary.

Pantanal, Benchmarks / IR2 - Indicator 2	Measure	By
Report on sources of uncontrolled fires; fire brigade created; volunteers recruited; volunteers equipped and firebreaks established.	40 indigenous Kadiweu people trained	Sept. 03
Training offered to create new fire brigades.	Minimum of 5 new fire brigades created 100 volunteers recruited	Oct. 03

INTERMEDIATE RESULT 3 – Target policies to support environmentally sound land use adopted and/or implemented.

Indicator (3.1): National and local policies which support biodiversity conservation and natural resources management implemented and/or policy implementation improved.

Activities:

1. Phase-out commercial logging.

1.1 Through the participation in the auditory on logging management plans and saw mills, identify gaps in legislation and resulting impacts.

- In July, Marcelo Araújo took part in the I Seminar on Environmental Enforcement for the Atlantic Forest, organized by IBAMA, in Pernambuco. On the occasion, Marcelo presented the results from the analysis of the Southern Bahia enforcement system, organized by IESB, with support from CI.
- In September, the lawyer Maria Quitéria Andrade Ramos, hired by IESB, concluded a study on environmental legislation in Bahia and on the competence of different enforcement institutions. The study is being used to subsidize for the planning of enforcement actions under the PPG-7 Ecological Corridors.

Progress to date:

Problems, delays, shortfalls and proposed solutions:

- Nothing to report at this time.

1.2 Work in partnership with the Atlantic Forest NGOs Network (Rede Mata Atlantica) in an effort to implement a “zero deforestation policy” in the Atlantic Forest.

Progress to date:

- Forest Management Plans for the Bahian Atlantic Forest are still suspended by judicial order, after suit motion demanded by Atlantic Forest NGO network, with support from IESB and Instituto Socioambiental – ISA.
- IESB, in partnership with NGO Network, developed a wide debate on the need to strengthen enforcement, particularly at the Northern Corridor area, which entirely lacks regular enforcement teams. As a result, the new executive management team from Ibama in Bahia already initiated the implementation of an Ibama office at the Valença region.
- IESB took part of workgroups in Regional Environmental Conference for Eunápolis and Ilhéus. The regional conferences are a preparation for the National Conference for the Environment, planned to take place on the 28th and 29th of November, in Brasília.

Problems, delays, shortfalls and proposed solutions:

- Nothing to report at this time.

2. Promote local and regional policies able to disseminate the use of economic incentives to promote conservation.

2.1 “ICMS Ecológico”

Progress to date:

- IESB continues promoting discussions on environmental taxes and environmental services at the institutional forums, the State Committee for the Biosphere Reserve and municipal councils for the environment. The ICMS Ecológico (Governmental fund attained by the creation of protected areas and implementation of sanitation measures) was included as a claim of the civil society during the Regional Conference for the Environment, in Ilhéus, in September 2003.

Problems, delays, shortfalls and proposed solutions:

- Discussions on the ICMS Ecológico depend on the taxation reform, in appreciation by the National Congress.

2.2 Sustainable Tourism Development

Progress to date:

- Rui Rocha took part of the meetings of the Southern Bahia Tourism Management Council, which aggregates representatives of 16 municipalities and is responsible for the management of the Program for Tourism Development – PRODETUR. In this period, the council defined priority actions to be financed by the PRODETUR II, at the ecotourism pole of the Cocoa and Dende Coast.

- Flávio Leopoldino and Alexandre Braga initiated a partnership with the RPPN Pedra do Sabiá, in Itacaré, aiming the implementation of an interpretive trail. Two field visits were made for site selection.
- The Una Ecopark received 1,710 visitors from April through September 2003, a slight decrease in comparison to the same period in 2002, due to increased wintertime pluviosity.

VISITORS 1998 TO 2003

	1998	1999	2000	2001	2002	2003	Total
January		324	730	999	936	1429	4418
February	66	170	223	322	361	316	1458
March	16	188	274	123	312	252	1165
April	115	319	259	200	100	139	1132
May	65	278	170	219	279	192	1203
June	166	266	340	324	292	151	1539
July	157	352	324	454	673	529	2489
August	93	156	320	229	397	336	1531
September	84	482	290	207	336	363	1762
October	135	504	352	539	452	--	1982
November	119	157	183	439	305	--	1203
December	235	226	235	395	256	--	1347
Annual Total	1251	3422	3700	4450	4699	3707	21229

Problems, delays, shortfalls and proposed solutions:

- Nothing to report at this time.

3. Develop partnership with regional institutions in order to implement and monitor the conservation status of the “Atlantic Forest Central Corridor”.

Progress to date:

- Marcelo Araújo coordinated regular meetings of the Bahian Managerial Committee for the Ecological Corridors – PPG-7. In this period the committee approved the hiring of management plans for three conservation units and helped organizing three planning workshops for revising enforcement procedures.
- IESB has been planning regular activities in partnership with Associação Flora Brasil, focusing the extreme south of Bahia. In 2002, both institutions developed gap analysis studies on the protected areas system of Southern Bahia. This year, both are elaborating a method proposal for a research on perception of Southern Bahian population regarding environmental issues, particularly the Atlantic Forest.

- In July 2003, IESB launched the first call for applications at the Institutional Development Fund, directed to small NGOs with actions in the Central Biodiversity Corridor. 75 proposals from 73 institutions were submitted. In August, the External Evaluation Committee met and selected 16 projects (16 NGOs) for financial support of average R\$20.000 budgets.
- IESB supported the creation of three new NGOs in Southern Bahia. The Floresta Viva Institute and the Tejuípe Institute, with actions in the region Itacaré, and the Terraguá Institute, with actions at the Camamu region. Last year IESB supported the creation of the SEEDS – Society for the study of ecosystems and sustainable development, with actions on the northern corridor area, and the creation of the Uiraçu Institute, with actions towards the Camacã region, in Bahia. IESB intends to work closely with these new institutions with the aim to promote the implementation of the central corridor.
- In September, IESB initiated discussions for the signing of a technical cooperation term with the Secretary for the Environment and Water Resources of Bahia State, aiming to the forest recovery of the Serra do Conduru State Park.
- An agreement regarding technical cooperation with Una city hall was signed in September, aiming the execution of environmental education actions at schools in the surroundings of the Una Biological Reserve.

Problems, delays, shortfalls and proposed solutions:

- Nothing to report at this time.

INTERMEDIATE RESULT 4 – Sound land use systems disseminated beyond target areas.

Indicator (4.1): Number of persons reached and amount of environmental materials produced.

Activities:

Atlantic Forest

1. Publish materials to disseminate information about biological “friendly” land use systems and biodiversity conservation.

Progress to date:

- In 2003 IESB published monthly, in partnership with the “Jornal Agora”, the “Caderno de Meio Ambiente”. The publication outreaches all municipalities in Southern Bahia and had a 12 months sponsorship promise. However, the publication ceased in July 2003. The production team is revising the journal editing for the inclusion of publicity articles, for allowing the continuation of the publication.
- The CD-ROM containing the results of the subproject “Abordagens Ecológicas e Instrumentos Econômicos para o Estabelecimento do Corredor Central da Mata Atlântica” (Ecological Approaches and Economic Instruments for the Establishment of the Atlantic

Forest Central Corridor), financed by PROBIO/MMA/World Bank/IESB/CI/USAID, is being finalized and will be released in November 2003. This publication will make available a large literature on the Southern Bahia Atlantic Forest, including cartographic information.

- In April 2003 the CD-ROM “Diagnóstico do Terceiro Setor no Corredor Central da Mata Atlântica” was finished with support from the CEPF - Critical Ecosystem Partnership Fund at Conservation International. 300 copies were distributed. This material contains information on the profile of NGOs based in Southern Bahia and Northern Espírito Santo.
- At the “I Congresso Nordestino de Reservas Privadas” (I Northeastern Congress of Private Reserves), Maceió-Alagoas, carried out between the 22nd and 25th of April, 1000 exemplars of the newspaper “RPPNs do Nordeste” were prepared and distributed, with information on the importance of the private preserves, legislation and procedures for creation.

Problems, delays, shortfalls and proposed solutions:

- Nothing to report at this time.

Atlantic Forest, Benchmarks / IR4 - Indicator 1	Measure	By
Publish materials to disseminate information about land use systems and biodiversity conservation.	3,500 monthly copies of the Environmental Supplement	Sep 2003
	3,000 bi-monthly copies of the APA Newsletter	Sep 2003
	CD with PROBIO results	Dec 2002
	Brochure about Forestry Legislation	Feb 2003

Pantanal

1. Maintain Corridor’s large Public Conservation Awareness Strategy to inform the local population about the Biodiversity conservation.

1.1 Continue the implementation of the environmental awareness raising strategy resulted from the 4-P Workshop for the Cerrado-Pantanal Corridor held in November 2002 at Fazenda Rio Negro.

- The brochure “Pantanal Organic Meat” was launched on June 2003. The publication presents the Organic Beef project carried out by CI through FUNBIO's (Brazilian Biodiversity Fund) Program to Support Sustainable Production. This bilingual 42 pages publication also includes basic information about the organic production and the results of a market research conducted in Sao Paulo with retailers and consumers. CI is distributing this among cattle raising farmers and agribusiness industry, agriculture government agencies, rural associations and professional associations related to farming.
- Besides the strategy based on the 4P workshop results CI has incorporated new actions to support Corridor implementation and to respond to good opportunities such as the launch of Conservation International's book “Wilderness: Earth's Last Wild Places” which identifies the Pantanal as one of the 37 wilderness areas around the globe. CI hosted the launch of the book “Wilderness: Earth's Last Wild Places” at

Campo Grande on June 2003 with the presence of Russell Mittermeier (CI President). The event gathered around 100 people, among them representatives of governmental and non-governmental partner institutions, land owners, researchers, conservationists, journalists and local authorities like Mr. Márcio Porto Carrero (Secretary of Environment of Mato Grosso do Sul State). The entire press of Campo Grande covered the event and featured interviews with Russell Mittermeier and CI local staff publicizing the Corridor as the conservation strategy for the Pantanal.

- In partnership with Embrapa CI launched on June 2003 a national contest of essays about the Pantanal to students from 10 to 14 years old. The contest was greatly publicized by local and national press and received around 3000 essays from all over the country. The authors of the eight best essays will travel to the Rio Negro farm to participate of a four day biodiversity workshop in October 2003.
- CI stands as a specialized source of information to local, national and international press. Besides media campaigns developed accordingly to the Corridor communication strategy vehicles spontaneously consult CI about a variety of themes regarding the Cerrado and Pantanal biodiversity, threats and related topics. This gives CI continuing opportunities to publicize the Corridor concept and the program. For example, the American National Geographic Magazine will feature next year a special and complete issue about the Pantanal pitched by CI.

Problems, delays, shortfalls and proposed solutions:

- New communication activities incorporated by the middle of this FY required much time to be organized and complete causing the delay of some activities already in progress. The last two months of the FY were dedicated to the production of the corridor web-site and the booklet for the Environmental Education project. The corridor web-site will be launched by December 2003 as well as the booklet for environmental education which will be distributed along the Corridor during 2004 school year.

1.2 Inform landowners and the general public of the ill effects of uncontrolled fires by continuing FY01 awareness raising campaign.

In order to broaden the scope of FY03 campaign CI-Brazil accepted the invitation of Mato Grosso do Sul State Environment Secretary (SEMA) to join its campaign with other partners such as IBAMA and the Fire Department. CI's previous campaigns were an incentive to SEMA to invite institutions to join forces this year. The campaign was launched on August 2003 by the The Mato Grosso do Sul State Governor José Orcírio Miranda dos Santos and reached the 77 municipalities of the State. The material produced to the campaign included TV and radio spots, billboards, folders, educational booklets, T-shirts and stickers.

In partnership with SEMA and IBAMA, CI-Brazil also promoted a workshop to local press about fire usage in the Pantanal, this September in Campo Grande. Fifteen journalists from Campo Grande, Corumbá and Cuiabá (Mato Grosso State) attended to the meeting in order to cover gaps of knowledge and receive official data about forest fires in the Pantanal. Although burns and forest fires are frequent subjects in the local press, journalists often misunderstand or are not familiar with some aspects regarding the fire issue in the Pantanal.

Erika Guimarães has carried out the Environmental Education Project targeting rural schools' teachers with the support of the Environmental Education team of CI's International Communication Department (InterCOM). The workshop "The usage of Fire and its implications" gathered 38 teachers and environmental education technicians from eight municipalities along the Corridor in Bonito from August 7th to 9th. CI-Brazil developed 19 interactive activities and a orientation manual based on the National Curricular Parameters defined by the Brazilian Ministry of Education. The tools provided during the workshop allow teachers to discuss Fire Issues with students throughout the disciplines. The Municipalities' Secretary for Education, Environmental Education Department of SEMA, the State Secretary of Education, IBAMA and Agupapé Network were crucial partners for this activity.

Multiplication of efforts from the trained teachers was immediate. In September they were involved in educational activities using CI-Brazil methodology in Corumbá and Porto Murtinho - the two municipalities with the highest numbers of fires in the Mato Grosso do Sul State. In Porto Murtinho the Municipality Secretary of Education promoted capacity building workshops to 180 teachers from public schools and teachers previously trained by CI-Brazil acting as facilitators. In Corumbá a technician of SEMA trained by CI-Brazil used some of the interactive activities in a forest fires prevention project with the Environmental Police. The project visited 4 schools and 1 rural settlement reaching 280 students and 37 adults. Also in Corumbá IBAMA is signing a partnership with CI-Brazil to offer the fire workshop to teachers in a project of forest fires prevention in 7 more rural settlements.

1.3 Publish the report with the results of the AquaRAP expedition to the Northern Portion of the Pantanal.

Chapters written by all the participating researchers have now been compiled, translated and formatted. An introductory chapter is being written by CI staff. The report will be completed and printed by December 03.

Pantanal, Benchmarks / IR4 - Indicator 1	Measure	By
Communication Strategy running	Corridor web-site implemented and specific content available.	Feb 03
Fire Campaign held	At least 35 municipalities reached during 3 months of radio and TV campaign. Educational component implemented.	Sep 03
AquaRAP reports distributed	Minimum of 600 paper copies and 300 CDs of the AquaRAP report distributed to stakeholders	Mar 03

III. Other

Atlantic Forest

- Flávio Leopoldino & Beto Mesquita. Presentation at the I Congresso Nordestino de Reservas Naturais Privadas. Maceió-Alagoas, 22nd to 25th of April 2003.
- Raquel Teixeira & Ana Cláudia Fandi. Presentation at the III Simpósio sobre Mico Leão, Petrópolis -RJ, May 2003.
- Raquel Teixeira de Moura. Presentation at the Congresso Brasileiro de Mastozoologia, July 2003.
- Marcelo Araujo & Anita Akella. Presentation about enforcement for the Environmental Control Board of Ibama, Brasília. July 2003.

- Marcelo Araújo. Presentation at the “Seminário de Fiscalização do Ibama na Mata Atlântica”, Tamandaré-PE. July 2003.
- Joaquim Blanes. Presentation at the “Encontro de Pequenos Produtores Rurais”, Altamira-PA. 11th to 13th of September, 2003.
- Marcelo Araújo. Presentation at the “Conferencia Regional de Meio Ambiente”, Ilhéus-Ba. September 2003.

Press releases and TV programs

TV Programs

- Raquel Teixeira de Moura took part in the recording of the tv show “Biodiversidade é aqui”, TV Cultura, June 2003.
- The “TVs regionais - Bahia, Santa Cruz e Cabralia” announced the “I Oficina para Jornalistas” organized by IESB and CI, June 2003.
- Rui Rocha was interviewed by “TV Santa Cruz (Regional)” in August, regarding deforestation at Southern Bahia.
- Camila Cassano & Raquel Teixeira de Moura took part in the recording of a report on the Atlantic Forest biodiversity (GW Produções & TV Cultura) - September 2003.
- “Rede GIFE” broadcasted in its monthly bulletin (May 2003) the “Programa de Fortalecimento Institucional do IESB/CEPF”.

Newspaper

- The “Boletim da Rede de ONGs” published report on the institutional strengthening program. May, 2003.
- The “Jornal Agora (Regional)” published report on the deforestation of Southern Bahia. August, 2003.
- The “Projeto Floresta Viva” was reported at the “Revista Super Interessante”, in July 2003.
- The “Projeto Empreendimentos Conservacionistas” was reported in the Bahia State website, in August 2003.

Books

- MARTINI, A.M.Z.; JARDIM, J. G.; F. A. M. SANTOS. Floristic composition and growth habits of plants in understory, natural treefall gaps and fire-disturbed areas of a tropical forest in Southern Bahia State, Brazil. Memoirs of the New York Botanical Garden. No prelo.

Scientific papers and abstracts

- FANDI, A. C.;SANTOS,G.R.;GOMES, AR. Educação Ambiental para a Sustentabilidade do Entorno da Reserva Biológica de Una. III Simpósio Sobre Micos Leões. Petrópolis. Maio.2003.
- GOMES, A.R.; SANTOS, G.R.;FANDI, A.C. A região de Vila Brasil e sua história. II Encontro de Pesquisa em Educação Ambiental. São Carlos-SP. Julho.2003.
- SAMPAIO, J.; ARAUJO, Q.R.; ARAUJO, M. Planejamento Ambiental da Bacia Hidrográfica do Rio Itacanoeira. XXIX Congresso Brasileiro de Ciência do Solo. Ribeirão Preto. Julho. 2003
- SANTOS, P.S.;CAMPOS, D.; ARAUJO, M.;FIDELMAN, P. Caracterização dos Manguezais do Município de Ilhéus, Bahia. XXIX Congresso Brasileiro de Ciência do Solo. Julho. 2003.
- SANTOS, P.S. & LEOPOLDINO, F.S. Sistemas de Informações Geográficas no Monitoramento das Reservas Privadas. X Seminário de Pesquisa Estudantil da UESC. Ilhéus. Setembro. 2003

Training

- From April through September 2003, the activities carried out by the rural developing team allowed the training of 150 rural producers in the themes related to sustainable agriculture, commerce, community organization and environmental conservation.
- Eight UESC students were trained in the fields of environmental planning, protected areas and agroforestry development.
- One student from the Vale do Itajaí University, Santa Catarina State, was enrolled as a trainee at IESB's, in the field of rural tourism, through partnership established between the two institutions.
- 22 media professionals from Southern Bahia took part of the I Workshop on Environmental Communication, organized by IESB and CI, in June 2003.
- 60 environmentalists from 30 NGOs acting in the Central Biodiversity Corridor were trained in two workshops organized by IESB in July and September 2003. Themes related to legislation and the third sector, accountability/administrative techniques and work legislation were discussed. Two further training workshops are being organized, aiming NGOs and themes related to the Atlantic forest and public policies.
- 84 RPPN stakeholders were trained in legislation of Conservation Units and Protected Areas Management in the scope of the training and involvement of RPPN stakeholders in the Northeast.
- 20 teachers from schools at the surroundings of the Una Biological Reserve were trained in Environmental Education and Environmental Interpretation, with support from the CBC at Conservation International and WWF.

Pantanal

Press releases and TV programs

Newspaper

"Jornal Correio do Estado"

Seminar discuss fire in the Pantanal, 27/05/2003

Fire in the Pantanal, 28/05/2003

Book launch and photo exhibition in the Marco Museum, 22/06/2003

A foreign perspective on the Pantanal, 23/06/2003

"Jornal Diário do Pantanal"

Burns reduced in the State, 28/05/2003

Fire in the Pantanal, 28/05/2003

Book links environmental research and art, 23/06/2003

"Jornal Primeira Hora"

Marco hosts photo exhibition of German photographer, 23/06/2003

"Jornal O Estado de MS"

Environment - book that links scientific data and beautiful photos will be launch tonight in the Contemporary Art Museum in Campo Grande, 23/06/2003

"Jornal Folha do Povo"

Management seminar begins today, 28/05/2003

The nature in book and photos in the Capital, 23/06/2003

"Jornal de Domingo"

MARCO hosts book launch and photo exhibition, 22/06/2003

TV Programs

Morena TV

Fire management technical seminar, 28/05/2003

Book launch/Photo exhibition/Conservation International's work in the Pantanal, 24/06/2003

Photo exhibition and book launch, 24/06/2003

Campo Grande TV

Fire management technical seminar, 28/05/2003

Book launch/Photo exhibition/Conservation International's work in the Pantanal, 24/06/2003

MS Integração TV

Fire management technical seminar, 28/05/2003

Record TV

The Cerrado and the biodiversity corridor, 02/10/2003

Anhanguera TV

The biodiversity corridor, 17/07/2003

Globo TV

Eco-tourism and sustainability, June/2003

Cultura TV

The Cerrado biodiversity and the corridor, August/2003

III. Success Stories

Pantanal

Success Story 1 – Fire Control and Management in the Pantanal

The introduction of cattle to the Pantanal two centuries ago brought with it fire as a tool for ranchers to renew their grasslands. Routine burning encourages new growth and improves the palatability of pasture for cattle, but can also produce uncontrolled fires that threaten both biological diversity and local economies. Dealing with the negative impacts of burning is a serious challenge, one that Conservation International is working to meet with USAID support of local volunteer fire brigades.

The Fire Control and Management Program in the Pantanal relies heavily on local fire-fighting volunteers. Over the last two years, more than 70 people were trained and 30 were hired to form an official fire brigade for the Serra da Bodoquena National Park. In the Várzeas do Rio Ivinhema State Park, 60 people - park staff, municipal employees and local landowners - were trained in fire management techniques. To date, more than 1,300 Pantaneiros have received similar instruction.

As one would hope, the principal result of these efforts has been a decline in the incidence of uncontrolled and damaging fires, those that spread from cattle pasture to consume neighboring woodlands and forests, and typically result in the loss of habitat and native species. In fact, the decline in uncontrolled fires is highly correlated with properties on which fire management training has been conducted. In addition, the number of applications for authorized (i.e., legal - controlled) burns has more than doubled from 1999 to the present from just over 200 to almost 450. This clearly demonstrates the effectiveness of the training program, as well as serious compliance at local levels.

To augment the effects of training, Conservation International and five other partners' institutions and agencies are investing heavily in public awareness efforts including radio and television spots, billboards, booklets, etc. The overall campaign is entitled "Fire: Without Control, Everyone Loses". In 2003, one of the partners, SEMA, launched its own campaign based on the original model and sought additional regional partners.

The pilot Environmental Education training program entitled "The Use of Fire and its Implications" will have long-term applications in this region. Not only will the management

techniques be put to immediate use by resident ranchers, but the lessons learned from these endeavors will continue to be taught in rural schools as part of an expanding environmental education program to incorporate fire management in the local culture fabric. In 2003, 38 teachers and environmental education technicians from eight municipalities along the Cerrado-Pantanal Corridor received this special instruction. In September several of the teachers led follow-up educational programs in Corumbá and Porto Murtinho - the two municipalities with the highest numbers of fires in the Mato Grosso do Sul State. In Corumbá a SEMA technician used some of his training to launch a forest fire prevention project in collaboration with the Environmental Police. The project visited 4 schools and one rural settlement, reaching 280 students and 37 adults. In Porto Murtinho, the Secretary of Education subsequently approved support that would allow 180 public school teachers to serve as facilitators for future programs of this nature. These programs help ensure that the next generation of landowners will be well informed about the biological wealth of their region and the need to preserve it through the proper use of fire.

Atlantic Forest

At the end of 2001, IESBs agroforestry development team and COOPERUNA associated producers initiated a discussion on the formation of a net for commercialization of agricultural products, in partnership with six other producer cooperatives from Southern Bahia. This discussion evolved to the creation, in June 2003, of the Central Entrepreneurs Cooperative of Southern Bahia (CCESB), based in Camamu. The CCESB houses today seven associated cooperatives, totaling 3000 associated producers. The COOPERUNA is one of the founder members and is part of the Fiscal Council. In September 2003 the CCESB successfully develops the first joint commerce operation involving products of the seven cooperatives: eight tons of guarana were sold to the Centro Flora company, in São Paulo, with a prize of R\$11.200,00 above local market prices. The Centro Flora company commercializes ervas medicinais e extrato de plantas at the internal and external markets.



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