

# Pro-Natura Newsletter

july 2000

Member of UICN, World Conservation Union

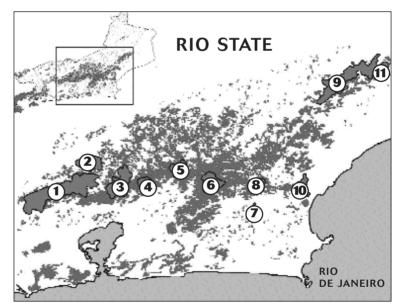
# THE NORTHEN RIO DE JANEIRO "biodiversity corridor"



PRO-NATURA HAS BEEN INVOLVED IN BRAZIL FOR FIFTEEN YEARS, WORKING TOWARDS THE PROTECTION OF THE REMAINING ATLANTIC RAIN FOREST IN THE NORTH OF RIO DE JANEIRO STATE. TO ACHIEVE THIS GOAL, THE FIRST SUSTAINABLE DEVELOPMENT PROJECT IN THE AREA WAS ESTABLISHED IN 1993 NEAR THE NORTHERN BORDER OF RIO STATE, IN THE BUFFER ZONE OF THE DESENGANO STATE PARK, TO REDUCE THE PRESSURE OF RURAL POPULATIONS ON THE FOREST

WHILE IMPROVING THEIR QUALITY OF LIFE. THIS PROJECT IS NOW BEING EXTENDED TO ALL THOSE RURAL AREAS WHICH LINK 11 PROTECTED AREAS OF ATLANTIC RAIN FOREST IN NORTHERN RIO DE JANEIRO. THE OBJECTIVE IS TO REFOREST THESE AREAS, THUS CREATING A "BIODIVERSITY CORRIDOR" LINKING THE PROTECTED ZONES.

The eastern coast of Brazil, which extends over 3 000 km along the Atlantic Ocean, has been dramatically deforested since the arrival of Europeans in the 16th Century. Today, the region is home to 70% of Brazil's population of 165 million and is the locus of the nation's principal urban-industrial areas. The remnants of the Atlantic rain forest that still survive contain the richest biodiversity of all the Brazilian forests. As a result, the Atlantic forest was defined as a national patrimony in the 1988 constitution, and was recognised in 1991 by UNESCO-MAB as a Biosphere Reserve. However, the Atlantic rain forest is still under serious threat, particularly in Rio de Janeiro State where the only remnants of the majestic forest that once stretched the length of Brazil's eastern coast are a few dispersed patches. These have survived because they are in relatively inaccessible mountainous or coastal areas. The 11 areas protected by law in northern Rio cover about 87 000 ha. Around and between

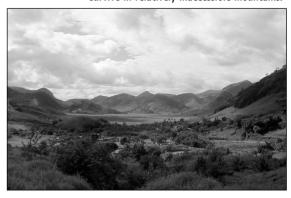


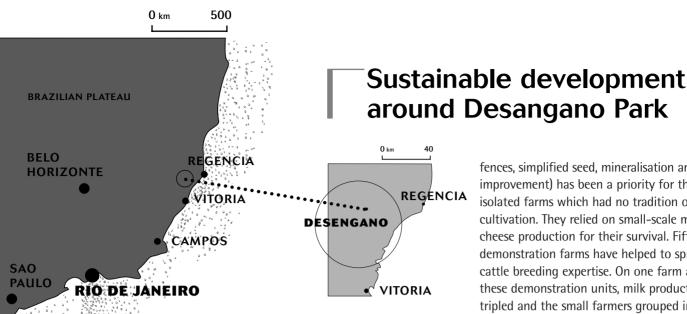
these protected areas, the rural populations live in extreme poverty and are forced to destroy the forest to survive (logging, poaching fauna

and flora, clearing forest for pastures).
The objective of Pro-Natura's programs in the area is to provide these people with an acceptable standard of living, thus reducing pressure on the forest.

The biodiversity corridor will link 11 protected areas in the north of Rio State.

The only remnants of Atlantic rain forest survive in relatively inaccessible mountains.







A stone handycraft school

> Those in charge of the project

#### **DESENGANO AND BIODIVERSITY CORRIDOR**

- General co-ordinator : Antonio HORTA BARBOSA, agronomist (until 1999) Since 1999, Valéria GONÇALVES DA VINHA, socio-economist
- Project manager : Since 1997, Luis BUENO, agricultural technician
- Field assistant : Roberto FROSSARD forester.

Pro-Natura has been working in and around Desengano State Park since 1989, beginning with a program for environmental education, in collaboration with the State Forest Institute. Its objectives soon evolved to focus on sustainable development in the buffer area surrounding the park, involving 25 000 people. This project is the first step of the biodiversity corridor that will link the 11 protected forest areas in the north of the state. In the beginning it was financed entirely by White-Martins SA. but more recently has obtained complementary sources of support (see below).

The Desengano State Park is situated near the northern border with Espirito Santo State and is the largest state-protected forest area in northern Rio, 22 400 ha. This represents 20% of all the protected forest in the State of Rio de Janeiro. During the 1980s, the pressure of the rural population had grown to the point where the park was under very serious threat.

## An integrated project implemented over the last 7 years

The sustainable development project began in 1993 with a wide consultation involving local small farmers and the four local town councils in the area (São Fidelis, Campos das Goytacazes, Santa Maria Madalena, and Conceição de Macabú). The socio-economic basis of the project was established in collaboration with the Federal University of Rio de Janeiro. A botanical inventory of the park was carried out by the Botanical Gardens of Rio de Janeiro.

## Helping people to develop news and sustainable activities

Improvement in dairy cattle management (for example the introduction of a rustic breed of Indian bulls called Red Sind, vaccinations,

fences, simplified seed, mineralisation and pasture improvement) has been a priority for the small, isolated farms which had no tradition of cultivation. They relied on small-scale milk and cheese production for their survival. Fifteen demonstration farms have helped to spread the cattle breeding expertise. On one farm among these demonstration units, milk production has tripled and the small farmers grouped into a co-operative of 300 producers have now entered into an agreement with Pro-Natura to disseminate this expertise more widely.

Since 1995, the project has been developing agroforestry systems, starting with 5 demonstration plots and 2 nurseries. The resulting techniques have reduced the areas dedicated to cattle, and introduced fruit trees, vegetables and cash crops. The cultivation of the pupunha (cabbage) palm tree, in particular, has led to rapidly increasing revenues. This miracle palm tree originated in Peruvian Amazonia. After only 3 years, a regular crop of hearts of palm can be extracted without destroying the tree. Cultivation of medicinal plants and orchids, which before were poached from within the Park, is also part of the agroforestry system.



Small farmers training programme.

Training centres for bakery, woodworking and stone handicrafts have been established in co-operation with a local NGO, called Instituto Pró-Labor, in Santa Maria Madalena.

- A medical programme was inaugurated in 1994 in collaboration with Helen Keller Worldwide to counter severe eyesight problems encountered in the local population. This programme includes cataract operations and the provision of glasses, and is ongoing.
- A seed bank of regional native species from the Atlantic rain forest has been created for future reforestation work. This bank has been recognised as a public service by the Rio de Janeiro State Government since 1994.

## The biodiversity corridor

This project was initiated in 1999, based on experience in the buffer zones around Desengano Park. Similar socio-economic programmes will be extended and developed to include extensive reforestation. The project involves approximately 1/2 million people in the buffer zones around the 11 biodiversity reserves. It is financed by White-Martins SA, Shell Brazil, The Summit Foundation and the Ford Foundation.

## Restoring degraded lands linking the protected areas and reforesting

These 11 reserves are spread out in the north of Rio de Janeiro State and cover about 87 000 ha. Among them are two privately owned areas, Macaé de Cima and Guapi-Açu, which are co-managed by Pro-Natura with their respective owners. The others are State and Federally owned reserves. These areas are the only significant publicly protected remnants of the Atlantic forest along the Serra do Mar Mountains and they contain an extremely rich biodiversity. The vast majority of Atlantic Forest remnants (over 80%), however, lie on private lands, with no official protection. The project aims to link these 11 biodiversity reserves to ensure better protection, by reforesting the corridor between them and motivating protective uses of remaining forests on private lands while promoting sustainable development, using experience gained around the Desengano Park as a basis.

## An important official partnership

The results of the work in and around the Desengano Park have led to a partnership for the creation of the biodiversity corridor with: the Environmental Secretariat of Rio de Janeiro (SEMADS-RJ), the State Forest Institute (IEF), local municipal governments, the Federal Rural University of Rio de Janeiro (UFRRJ), the Northern Rio de Janeiro State University (UENF), the Federal Fluminense University (UFF) and many other regional actors.

## One hectare of new forest for Technical Assistance

The idea is that the same small farmers who have often been responsible for



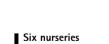
Introduction of a rustic breed of Indian bulls helped to improve cattle management.

the destruction of the forest in the past will instead lead the reforestation programme. A simple but effective strategy is used to encourage them to take part in the programme. The bargain is that in exchange for being able to re-plant one hectare of the farmer's degraded land with native species, Pro-Natura provides technical assistance in reforestation, pasture improvement and cattle breeding to the owner. As the programme has developed and the results have become more widely known throughout the region, local farmers have become increasingly enthusiastic. In addition, Pro-Natura is using the issue of water conservation to persuade the farmers. Due to accelerated deforestation, the project region has begun to suffer the early stages of desertification. Water resources in the whole region depend upon forest conservation. The Pro-Natura team which visits the farms for training and monitoring gives practical technical advice and helps to educate the farmers about the wider environmental effects, especially on the water supply.

## Nursery and seed banks: opportunities for new income sources

Agroforestry, which creates a synergy between forest, agriculture and animal husbandry, can guarantee reforestation and conservation of the forest while creating new sources of income.

To make agroforestry attractive for small farmers whose traditional livelihood comes from cattle.



ave been created.



### **NIGERIA**

#### > SPECIAL GRADE

We are proud to announce that Philip Hall, Head of Pro-Natura in Nigeria, has been made an Officer of the British Empire for his achievements in the field of Environment and Development.

#### **MADAGASCAR**

> A BIOMASS CHARCOAL MACHINE, a new technology for domestic energy developed by Pro-Natura, has been installed in Madagascar at the time the 40th anniversary of the Independence

#### **BRAZIL**

> THE GEF\* FINANCE A MAJOR PRO-NATURA PROJECT IN MATO GROSSO

It is a project of conservation and sustainable use of biodiversity in all the North West of Matto Grosso. It covers an area of 12 million hectares.

→ For more information, contact Dr Peter May, Executive Director Instituto Pro-Natura : pmay@pronatura.org.br

\*GEF: Global Environment Facility Pro-Natura is helping to create a market to allow them to derive new income from their own nursery and seed bank. Six nurseries will be established before the end of 2001, with the help of students from the local Rêgo Barros Agriculture School. Agroforestry demonstration plots will be used to train local communities in this technique, and teach them to recognise wild seeds. The objective is to reduce cattle rearing which is the main cause of deforestation in the region, and create new sources of income generated, amongst other things,

from agroforestry.

Environmental education for the new generation

Students from Rêgo Barros Agriculture School benefit from practical experience in agroforestry,

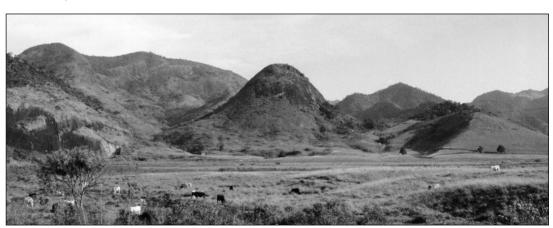
helping to set up nurseries and demonstration plots. Consultants from the Federal Rural University of Rio de Janeiro who work with Pro-Natura also teach them. Pro-Natura also supports a canoe club in Conceição de Macabù, near the Desengano Park. Its activities are based on sport and environmental education,



Students from the local Regô Barros Agriculture School benefit from pratical experience in agroforestry.

aimed at children from poor backgrounds from 10 to 15 years of age. They are now the champion youth kayak team in their class in Brazil, and they hope to go on to compete internationally. They use their prestige to highlight the problems of degradation of water quality and deforestation.

The Northern Rio de Janeiro Biodiversity Corridor is a long-term project, but the enthusiastic involvement of local populations means that there is every reason to believe that its objectives will be achieved.



## > Pro-Natura as an organisation

in Brazil in 1986, Pro-Natura is a non-governmental organisation that specialises in sustainable development. In 1992, after the Rio Conference, Pro-Natura became one of the first NGOs in the Southern Hemisphere to gain international status. Today it is a global organisation that is composed of two major hubs: Instituto Pro-Natura in Brazil, which is responsible for the Americas and Pro-Natura International in France, responsible for Europe, Africa and Asia.

A strategic co-ordination Council manages the organisation.

www.pronatura.org

## INNOVATION TOWARD SUSTAINABLE DEVELOPMENT

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