



## Park Profile - Venezuela Parque Nacional Terepaima

**Date of most recent on-site evaluation:** August 2003

**Date posted:** January 2004

**Location:** States of Lara and Portuguesa

**Year created:** 1976

**Area:** 18.650 ha

**Ecoregion:** Andean montane forests of Venezuela.

**Habitat:** Semi-deciduous, evergreen, and rain forests; deciduous shrublands.



### Summary

#### *Description*

Terepaima National Park is situated in the municipalities of Palavecino and Irribarren, in the State of Lara, and in the municipality of Araure in the State of Portuguesa. The park sits on the Portuguesa Range (Sierra de Portuguesa). The Park was created in 1976 to preserve relevant samples of the ecosystems and geographic spaces that characterize the spurs of the Andean ridge and to protect hydrographic basins and biodiversity. Terepaima not only preserves the environments where threatened species subsist; it also protects the springs of the Sarare River, which is of utmost importance to the State.

#### *Biodiversity*

Terepaima is a very important biodiversity refuge of the Andean montane forests ecoregion, as is Yacambú National Park, located a few miles away. Vegetation varies from semi-deciduous forests and shrublands in the lower zones to evergreen cloud forests in the mountain peaks of the park. Terepaima shelters many threatened species, among them the spectacled bear and the helmeted curassow. The park's total biodiversity, however, has not been completely researched.

#### *Threats*

Terepaima Park is [critically endangered](#), which means that emergency actions are of the essence to mitigate the pressure it is under, and to protect and guarantee its future survival. One of the most worrisome threats is human intervention, which gives way to other pressures like illegal hunting, forest fires, and wood extraction. Lack of adequate infrastructure, personnel, and signs make the problem worse.

## Description

### *Physical Description*

Terepaima National Park is located on the southern slope of the Portuguesa Range, whose waters flow into the Orinoco River basin. It is located in the State of Lara, a few miles from Yacambú National Park. The name “Terepaima” originates from an Indian word that means “Milk-producing Mountain”, due to the creamy hue of the waters of Río Claro.

The park is located between 69° 11' and 69° 20' longitude West and 9° 45' and 10° longitude North. It covers approximately 18.650 hectares and the altitude varies from 300 to .755 meters above sea level, which promotes exuberant vegetation, especially cloud forests.

The landscape sharply contrasts with the xerophytic vegetation that abounds in the northern area of the park. Semi-deciduous forests are predominant in altitudes from 500 to 700 meters; savannah pastures are also present, although to a lesser degree. Terepaima’s climate is generally mild; the temperature ranges from 19 to 26 °C. Annual rainfall varies from 800 to 2.000 mm, generally from April to November.

The national park encompasses the springs of the Sarare River, which drain into the State of Portuguesa and into the Las Majaguas reservoir, which is of utmost importance for the agricultural and industrial development of the State of Portuguesa (National Cartography Service).



*Satellite image of the Portuguesa Range. Note the limits of Terepaima, Yacambú and Guache national parks, and the ecological corridor that links the parks of Yacambú and Terepaima. (Courtesy of Fudena).*

### *Biodiversity*

The geographic location of Terepaima, on the spurs of the Andean ridge, endows the park with exuberant vegetation that has not been as extensively studied as Yacambú’s. The forest communities of Yacambú and Terepaima might be very similar because the habitats are akin and also because the biological corridor promotes genetic exchanges between animal and plant populations.

The first sample of a specimen of the *Cryptocarya* (Lauraceae) genus in Venezuela originated in Terepaima (Van der Werff and Smith 1989), as well as the *Cousserae terepaimensis* and *Licania montana* trees, which are endemic to the region (Crespo *et al.* 1999).



Forest-covered mountains of Terepaima National Park and the Guamache Gorge. Photo: César Aponte.

There are no fauna inventories of Terepaima that might help describe the park's biodiversity. Paradoxically, the most accurate information about Terepaima's fauna comes from studies of the impact of illegal hunting in the park (see Threats: Hunting). Scientists and inhabitants have seen several locally- or globally-endangered fauna species in the park. Such is the case of the spectacled bear (*Tremarctos ornatus*), the only bear species of South America, and the helmeted curassow (*Pauxi pauxi*), one of the most endangered cracids. Terepaima is situated inside the feline distribution area, where jaguar (*Panthera onca*) and puma or American lion (*Felis concolor*), as well as other mammals such as the paca (*Agouti paca*) and the golden agouti (*Dasyprocta leporina*) thrive. *Thysania agripina*, a nocturnal butterfly and the largest lepidopteron of the planet (Kongs 1998), also resides in the park. One of the specimens that helped describe the *Maecolaspis forsteri* beetle was collected in Terepaima (Savini 1993).

Fauna inventories of the area are necessary to learn more about the park's biodiversity and ecology.

### **Management**

The National Parks Institute (Instituto Nacional de Parques) – ([INPARQUES](#)), – is in charge of the management and administration of all the national parks of Venezuela. Although Terepaima was created in 1976, a Legislation Plan and Use Prescription (PORU<sup>1</sup>) have not been developed. INPARQUES is drafting the PORU, which will probably be finished by 2004. A copy of the first version of this legislation plan is available [here](#).

While the PORU is finished, the management of Terepaima is prescribed by the Partial Ruling of the Organic Law for the Legislation of the Territory About Administration and Management of National Parks and Natural Monuments (“Reglamento Parcial de la Ley Orgánica para la Ordenación del Territorio Sobre Administración y Manejo de Parques

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<sup>1</sup> PORU: Plan de Ordenamiento y Reglamento de Uso

Nacionales y Monumentos Naturales”), which establishes general rules that govern the administration, management and regulation of activities in parks and monuments. Cartographic charts of the park have not been produced.

The act that legalizes the creation of the park establishes limits and zones, but demarcation signposts have not been positioned. Seven rangers patrol the park. The acting Superintendent has been in office since May 2002. Of the four ranger stations of the park, only one is used; the rest is either totally or partially destroyed. Rangers do not have patrol vehicles; the park’s sole automobile is in complete disrepair. There is a shortage of radios and any other communication systems. Five 4 x 4 vehicles allocated to the INPARQUES Regional Directorate in the State of Lara were stolen in the past 6 months.



*Ranger station at the park’s main entrance. This is the only station that is in operation. (Photo: César Aponte).*

### ***Human Intervention***

Before being legally declared a national park, the Terepaima mountain range was divided into several *conucos* (crop plots), small plantations, and cattle pastures. Remnants of what used to be small but profitable cattle herds that would graze in the highest zones of the mountain can still be seen. Today, the area is devoted to subsistence plantations, cattle pastures, and sparsely populated human settlements.

Many luxury homes were built in the “Las Antenas” region before the area was legally protected. In the days of yore, the pleasant climate and surrounding forests of the area were highly coveted as resort lands, and many vacation homes were erected therein. To this day, the abandoned houses remain inside the park and have lost all commercial value because the law prohibits their sale or reconstruction without INPARQUES’ authorization. INPARQUES cannot compensate the owners for the very high prices of the homes.

Telecommunications antennas also represent human intervention, and they have been positioned in Terepaima peak, the highest point of the park. Besides large television dishes and telephone antennas, lodging facilities have been built to shelter maintenance personnel that use the park's main access trail to reach the antennas. Inside and around Terepaima there are many small human settlements that subsist by cultivating coffee and other products and tending to goat and bovine herds.



*Telecommunications antennas in the highest peak of the park; vacation homes, left (photo: César Aponte).*

One dirt road runs throughout the park, from the Agua Viva development in Cabudare to the telecommunications antennas. Park visitors and antenna maintenance personnel frequently travel on the unprotected road and use it as a garbage dump. Settlers that live in and around the park almost exclusively use the weather-beaten road that runs from Río Claro.

### *Tourism*

Although Terepaima's natural wealth makes it an ideal tourist attraction, it is not used as such. Every day, Cabudare citizens jog and climb the hills of the park. No records exist of the number of visitors.

### ***Conservation and research***

Many local organizations are directly involved in conservation activities. The CERA-Lara assembles all the environmental groups from the State of Lara, including Guardians of Terepaima (Guardianes de Terepaima) and the Terepaima National Park Conservation Committee ([Comité Pro-defensa del Parque Nacional Terepaima](#)), voluntary groups that help INPARQUES accomplish education activities, awareness campaigns and the public consultations recently carried out to approve the legislation plan. Since 1999, Guardianes de Terepaima has organized a celebration on the park's anniversary.

[Fudena](#), the Venezuelan representative of WWF, has been working in the national parks of the Portuguesa Range promoting the legal protection of an [ecological corridor](#) that links Terepaima and Yacambú Parks. This project is based on the original idea of researchers Robert Smith and Antonio Rivero, who chose the indigenous word "Quisuidi" ("Land of Currasows") as the name of the ecological corridor.

[BioParques](#), the ParksWatch counterpart in Venezuela, is developing the Network of Allies of Terepaima and Yacambú National Parks ([Red de Aliados de los Parques Nacionales Terepaima y Yacambú](#)), an association that involves the communities and other local stakeholders in the monitoring and conservation tasks of national parks.

## *Threats*

Terepaima is a [critically endangered](#) park, which means that emergency actions are necessary to respond to the many existing threats and therefore guarantee the protection and maintenance of the biological diversity therein.

The most worrisome threats to the biological integrity of Terepaima National Park are:

- Lack of facilities and signs
- Shortage of personnel and equipment
- Illegal hunting
- Forest fires
- Illegal logging
- Land ownership problems
- Agriculture, cattle ranching and other illegal uses
- No legislation plan

### *Lack of facilities and signs*

The very few facilities that remain in Terepaima are so degraded that they have become virtually useless. The only operational ranger station is the one located at the park's entrance and surveillance operations from it are very limited. Three other ranger stations are totally or partially destroyed. The ranger station at Las Cumbres, abandoned since 1993, was recently remodeled, but during our evaluation we discovered that it had been ransacked, doors and windows destroyed, and the roof pilfered. The Superintendent and ParksWatch personnel reported the delinquent acts. Another ranger station, located in the neighboring Río Sarare (Las Mayitas) Recreational Park, was totally abandoned 12 years ago. No boundary monuments have been posted in this area either.

Due to the lack of acceptable facilities, the rangers cannot adequately patrol the highest and deepest areas of the park.

The park's administration (Superintendencia) operates from the INPARQUES office in Barquisimeto, some 20 km from the park's main entrance. Approximately eight years ago, the Palavecino Municipality sponsored the construction of a building for the administration's headquarters. The funds available, however, were not enough to finish the building; only the wall foundations could be erected. Today, the structure is deteriorated and might succumb to the natural elements.



*The Terepaima ranger stations are completely destroyed and are therefore not available for surveillance purposes (photos: César Aponte).*

Most recreational facilities are abandoned and some visitors have further destroyed them. A short time ago, the bodies of two murder victims were left in the El Mirador recreational facility, a short distance from the park's main entrance.



*Uncompleted facilities of the Terepaima Park's Administration (Superintendencia) Headquarters operate from the INPARQUES offices in Barquisimeto.*



*The sign shown here and another one posted at the entrance are the two only signs of the park.*

There is only one large poster at the main entrance and a few others in the Cocodrilo area. The park limits are not marked and only the most experienced rangers know the boundaries. It is almost impossible to distinguish where the park begins or ends.

### *Shortage of personnel and equipment*

Although seven park rangers have been contracted for Terepaima, not all work regular hours in the park, mostly due to inadequate infrastructure. Of the six park rangers in Terepaima's payroll, only the most experienced ranger works full-time. During our evaluation we had the opportunity to talk to another ranger who must work from his house and make occasional visits to the park due to the lack of adequate facilities. Patrols are, therefore, very sporadic.



*Fires have started to modify the vegetation and some forest patches have become fern communities or savannah (Photo: César Aponte)*

The park does not own a vehicle for regular patrols and to reach distant areas; hand-held communications radios are not available either. The staff's morale is low because INPARQUES is having a difficult time meeting legal deadlines for the payment of salaries and other work benefits.

### *Illegal hunting*

Frequent visitors, local conservationists, and the rangers interviewed believe that illegal hunting in Terepaima is very common. Updated data about illegal hunting is not available. A study carried out in 1991 determined that deer (*Mazama americana*) and crested curassow (*Pauxi pauxi*) (Silva and Strahl 1991a) were the species preferred by hunters. Around that year, birds were under extreme pressure, especially *Ortalis ruficauda*, *Penelope agytotys*, and the mammals *Agouti paca* and *Mazama americana*. Peccari (*Tayassu tajacu*) and wattle guan (*Aburria aburri*) were also in high demand.

Hunting in Terepaima is mainly for sports and trade and not for subsistence. Around the dates of the study, each hunter would yield around 54 Kg of meat per year (Silva and Strahl 1991a). Another study (Silva and Strahl 1991b) reports around 30 fauna species that were heavily pursued for ornamental, medicinal and crafts purposes.

Hunters have sometimes been caught although not prosecuted. The impact of hunting activities on the park's animal populations during the last decade is not known, but authorities report an increase in the hunting of birds for commercial purposes.

### *Forest fires*

Forest fires are perhaps the single most serious problem faced by Terepaima National Park. During the 2002-2003 period, 41 fires that destroyed 988 vegetation hectares were reported inside and in areas adjacent to the park. Gallery forests covered 190 of the hectares affected by the fire (MARN 2003). Fires are recurrent and there is no equipment to fight them.



## *Illegal logging*

Another problem the park faces is the extraction of wood for trade and subsistence. Recently, authorities began 27 administrative processes against citizens that depleted the forest in the southern region of the park. Cedar, which is highly valued in the market, abounds in the mid



and low areas. For a long time and up to last year, organized groups chopped down whole cedar trees until a joint action between INPARQUES and the National Guard successfully put an end to their actions. However, illegal extraction of cedar (although at a lower scale) and other woods is still prevalent in the park. During our visit we saw areas where large cedars had been chopped down, as well as several planks of less precious timber that had been recently cut and prepared for transportation.

*An illegal corn plantation surrounds a massive cedar inside the park's limits (Photo: César Aponte).*



*Illegal logging of high-valued woods is a constant activity inside the park (Photos: César Aponte).*



*A park ranger discovered a large pile of illegally cut wood during our visit (Photo: César Aponte).*

### ***Land ownership***

Even though the park was created more than 20 years ago, land ownership problems are far from being a thing of the past. Several years ago, a reimbursement program was started to relocate the original inhabitants, but the project was never finalized and most of the inhabitants still reside in the park. One of the park rangers believes that although several park dwellers were compensated for their properties, they were never relocated. Others simply returned when they became aware that the project had not been successful. Some families were reimbursed many years ago, but the beneficiary died and the present occupants request additional compensation. There are approximately five families in the Río Claro, San Rafael, and Las Delicias regions that have recently returned.

That the State does not own the lands makes the problem worse because most residents carry out activities that are not consistent with the national park's objectives. In some cases, the landowners do not acknowledge the existence of the park and have collided with the authorities.

### ***Agriculture, cattle ranching, and other illegal uses***

Most park dwellers perform agricultural activities and tend to their sheep and goatherds. Most of the times, cattle (bovine, goats and sheep) are set free to graze in the remaining patches of forest. Recently, an inhabitant of the Loma Redonda area decided to start a coffee crop and tried to convince his peers to follow suit. This individual unleashed a severe fire when razing his land for planting. He does not acknowledge the authority of INPARQUES in the area and recently took it upon himself to widen a road with a tractor. Hacienda Los Panchos, in the municipality of Simón Planos and located inside the park, is a 150-hectare property used for cattle ranching.



*Sheep and bovine herds often graze inside the park's limits (photos: César Aponte).*

Many users and visitors believe that the removal of sands and clays for trade is among the illegal activities that take place more often.

### ***Lack of a legislation plan and institutional presence***

Another severe threat is the lack of a Terepaima-specific Legislation Plan and a Use Prescription (PORU). The PORU allows defining the authorized, regulated and prohibited uses, as well as planning and management of resources at the medium and long terms. It is hard to implement administrative sanctions without a legislation plan. Zoning plans and regulations are the only methods that grant legal character to the park, which relies on the goodwill of its residents as well as the criteria of those who have managed the park.

### **Proposed Solutions**

#### ***Lack of facilities and signs***

The lack of facilities may be resolved if government agencies provide funds additional to INPARQUES' financial contribution. The park's present administration has developed accurate and feasible proposals for the improvement of facilities, such as negotiations with the tourist and environmental commission of the Palavecino municipality, which has funds available for and is willing to complete the park's administration building.

An existing plan of the Inter-government Fund for Decentralization ([Fondo Intergubernamental para la Descentralización](#)) – FIDES– might be used to rebuild and reinstate operations of the damaged ranger stations and build new posts. FIDES provides funds to infrastructure-improvement civil projects through the municipalities.

#### ***Illegal hunting, illegal logging, agriculture, cattle ranching and others; lack of personnel and equipment***

The first action to counter these problems is to increase the presence of INPARQUES in the national park, which will only happen if and when the facilities are improved. We believe that the presence of INPARQUES could diminish transgressions and delinquent actions common in the park.

On the other hand, using horses or other beasts of burden may solve the shortage of patrol vehicles more quickly and inexpensively. Motor vehicles should not be used in the poorly

kept roads of the Loma Redonda, Cocodrilo, La Cima and Sector IV regions, because they would fall apart and there are no funds available to repair them. Locals and INPARQUES personnel move around the area on horseback.

### *Forest fires*

Although there has not been any institutional presence in Terepaima during the last few years, the park has recently become an example of how to carry out negotiations and solve problems with little resources. An association between the park and municipal fire departments, several rescue groups, motor associations, and public and private regional enterprises resulted in a corps of 800 fire-fighting volunteers for the park and surrounding areas. Funds obligated by the National Command Against Forest Fires have been used to stimulate the participation of voluntary groups in the program in exchange for a scholarship-work arrangement. During the 2002-2003 season, volunteers fought fires in 988 vegetation hectares, at a ratio of almost one volunteer per hectare on fire. Eighty percent of the fires occurred in areas adjacent to the park, which could have affected both the sponsoring enterprises and the park itself.

### *Lack of a legislation plan, land ownership*

Both the legislation plan and use prescription for Terepaima must be approved without prejudice to the quality of them. More information about the socio-economic conditions of the present population of the park must be collected and then compared with former surveys, to define trends that might be relevant to the park's management. Once the management plan is in place, a relocation and reimbursement program must be implemented, perhaps using the policies of the Ministry of Agriculture and Lands ([Ministerio de Agricultura y Tierras](#)), which has funds and lands available for the purpose.

In this sense, INPARQUES is already designing a legislation plan that should be reviewed in the next few months and be ready by mid 2004. The first draft of this document is included [here](#). Regarding the lack of institutional presence, unquestionably the improvement of infrastructure and the contracting of more officers would solve the problem half way. However, we must work to change the opinion of the citizens towards INPARQUES and the National Park, so they will be seen as beneficial and not obstacles for development. For this purpose, recreational-educational activities should be promoted to strengthen the links between the park and the institution. For many years already, Guardianes de Terepaima has been celebrating the anniversary of the National Park. In 2003, the Municipality of Palavecino, the Agua Viva Parochial Association, INPARQUES and the Children's Foundation (Fundación del Niño) participated in the anniversary celebration.

Through the National Park Allies Network ([Red de Aliados de Los Parques Nacionales](#)), [BioParques](#) has tried to contribute with the initiatives to establish the Terepaima National Park Festival as a regular and permanent activity to inform the community of the park's values and to encourage new relationships with Lara society.

### **Conclusions**

Terepaima National Park faces several major problems that can still be overcome. Generally, all the problems have to do with lack of institutional presence and a legislation plan and substandard relationships with the park inhabitants.

We believe that if the present status of Terepaima is not reversed, the biological integrity of the ecosystems therein cannot be guaranteed and the objectives of the park will not be met.

Although Terepaima is [critically endangered](#), we believe that strengthening the actions of the new staff will result in many changes that can be implemented in a short time, because the solutions depend on negotiations and relationships with private and public institutions. The efforts of the park administration and the INPARQUES' regional office will very likely succeed.

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