

## Information Sheet on Ramsar Wetlands

1. **Date this sheet was completed/updated:** 17 February 1995

2. **Country:** PARAGUAY

3. **Name of wetland:** Reserva para Parque Nacional Río Negro

4. **Geographical coordinates:**

19°30'S - 20°13'S  
58°09'W - 59°00'W

5. **Altitude:** 86 metres above sea level

6. **Area:** 370,000 hectares

7. **Overview:**

This is an important ecotone at the confluence of the three bio-geographical provinces of Campos Cerrados, Bosque Húmedo Brasileiro and the Gran Chaco where the ranges of species from the Amazon, Cerrado, Pantanal and Chaco overlap.

8. **Wetland type:**

riparian, mangrove and lake

9. **Ramsar criteria:**

10. **Map of site included? Please tick yes -or- no**

11. **Name and address of the compiler of this form:**

Centro de Datos para la Conservación  
Dirección de Parques Nacionales y Vida Silvestre  
Ministerio de Agricultura y Ganadería

12. **Justification of the criteria selected under point 9, on previous page:**

13. **General location:**

This area is in the Occidental region, the department of Alto Paraguay in the Fuerte Olimpo district near the town of Bahía Negra.

#### 14. **Physical features:**

The soils are formed from sediment from the Cenozoic and are gley soils, solonetz and entisols; all soils with a high content of clay and salts. They have a high capacity to store water (sponge effect) through slow absorption and on the surface during the intense rainy season and then release them slowly to supply the Río Paraguay contributing to its hydrological balance.

#### 15. **Hydrological values:**

This area is in a region of active hydrological systems where the rivers drain the area. The Río Negro system, into which the Río Bambuzal a tributary of the Río San Rafael (flowing from the Sierra de Santiago in Bolivia) flows dominates this area. These rivers flood in the summer and dry during the winter without, however, drying up. "The flooding of the Río Paraguay has very slow repercussions on the rivers of the Humid Chaco up river (Ramella and Spichiger, 1989)." The channels are well defined by lateral banks, are narrower and deeper than the rivers with an irregular flow found in the Dry Chaco and stabilize currents throughout the river. Lateral erosion is less, and the form of the river bed is a function of the average volume of water that flows during the year. Its pattern is that of rivers in flatlands where many meanders form in a search for the Río Paraguay, its lowest level. At the same time, there are also degraded hydrological systems resulting primarily from an absence of slope. In the absence of slope, the rivers wander over many kilometres eroding the meanders and cutting them to open a bed or to return to former beds. The cut-off meanders form lagoons of many sizes that hold water during a large part of the year. "Sedimentation and vegetative colonization are the two factors that determine the later evolution of the lagoons into simple, isolated depressions (Ramella and Spichiger, 1989)."

#### 16. **Ecological features:**

Vegetation is influenced by climatic conditions (*quebrachal*), soil and climatic conditions (palm groves and mosaics) and other factors such as in gallery forests where the vegetation is not truly determined by climate but depends on the level of water in the ground and by xeromorphic characteristics. Among the natural communities to be saved are a mosaic of humid forest, the semi-humid forest, xerophytic to mesophytic forest and xerophilous forest, campos cerrados, savannas of Caranda'y and Mbocaja and aquatic environments of lakes, mangroves and stream banks. This area has an average temperature of 25°C and an average annual precipitation of 1100 mm in a sub-humid climate without seasonal differences of humidity.

#### 17. **Noteworthy flora:**

This area is considered by Vavilov (1951) and by the *Atlas do Meio Ambiente do Brasil* (EMBRAPA, 1994) to be one of the most important world areas of high genetic diversity. This is a semi-dry, semi-deciduous forest with various strata. The forest floor is covered with *karaguatá* and *aráceas*. There is also a semi-deciduous forest, dominated by *quebracho colorado* (*Schinopsis balansae*) and *urundey* (*Astronium urunseweri*) quebracho forests of *quebracho blanco*, *quebracho colorado* and *palosanto-labonal*.

The vegetative formations create mosaics of hygrophilous savannas, palm groves of *Copernicia alba*, gallery forests and groups of quebrachos. The presence of these vegetative formations is determined by their relationship to water. The gentle slopes formed by the wide river valleys in this area determine humidity gradients in the soil. Vegetation depends primarily on the soil's hydrological conditions and the subterranean layers rather than the climate which has an influence only in the driest sections, mainly on the higher elevations.

#### **18. Noteworthy fauna:**

This area has a permanent concentration of birdlife and unique habitats of rivers and seasonal lakes. New species of birds in Paraguay have been spotted in this area (Hayes et al., 1991). The following species have been recorded in the area: *taguató caracolero* (*Rosthramus sociabilis*), fish eagle (*Pandlon hallaetus*) (López and Morales, 1993), a large hummingbird (*Eupetomena macroura*) a rare species in Paraguay. Also recorded are *ciervo de los pantanos* (*Blastocerus dichotomus*), jaguar (*Panthera onca*), *taguato moroti* (*Leptodon cayanensis*), *jacu apeti* (*Pipile pipile*), broad-snouted caiman (*Caiman latirostris*) and *viborón* (*Dracaena paraguayensis*) a species considered to be threatened with extinction in Paraguay.

Also found here are the anaconda (*Eunectes murinus*), *jacaré hu* (*Caiman crocodilus*), *ka'f phyaré* (*Aotus trivirgatus*), *ka'f eléctrico* (*Callithrix argentata*), *ka'i paraguai* (*Cebus apella*), *mborevi* (*Tapirus terrestris*), puma (*Felis concolor*), *aguará guasú* (*Chrysocyon brachyurus*), *inambu mocoicogue* (*Tinamus solitarius*), *gavilan garfio* (*Chondrohlerax uncinatus*), swan (*Coscoroba coscoroba*) and *Nothura* spp.; all of which are threatened. This area has a large number of species of fish because it connects to the large Pantanal and tributaries of the Amazon River.

#### **19. Social and cultural values:**

Several indigenous communities live in this area. They are from the Chamacoco ethnic group of the Zamuco linguistic family (from south of Puerto Casado up to the Río Negro) and from the Ayoreo ethnic group of the Zamuco linguistic family (northeast of the proposed area).

#### **20. Land tenure/ownership of:**

It is believed that most of the land in the reserve is held as private property (primarily Brazilian settlers) although there is some government property. All of the surrounding area is private property.

#### **21. Current land use:**

Extensive ranching, the cutting of trees and illegal hunting are the main uses, but most of the area is still in natural conditions. In the surrounding area, the main activities are ranching and the extraction of *quebracho colorado* (*Schinopsis balansae*).

#### **22. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land use and development projects:**

In both the national park and the surrounding area, the greatest threat is from the proposed "Hidrovia."

**23. Conservation measures taken:**

**24. Conservation measures proposed but not yet implemented:**

In several previous studies, this area was found to be ideal for conservation. In 1994, two studies prepared by the Dirección de Parques Nacionales y Vida Silvestre of the Ministerio de Agricultura y Ganadería entitled "Strategic Plan for the National System of Protected Wildlife Areas (SINASIP)" and the "Basic Proposal for the Creation of Wildlife Areas on the Paraguayan-Bolivian Border" both propose this site as the Parque Nacional Río Negro (in the first study as part of the SINASIP and in the second study as one of the five border areas requiring conservation and protection on both sides of the Bolivian and Brazilian border).

**25. Current scientific research and facilities:**

None

**26. Current conservation education:**

None

**27. Current recreation and tourism:**

While there is no current programme, there is a high potential.

**28. Jurisdiction:**

Dirección de Parques Nacionales y Vida Silvestre  
Subsecretaría de Recursos Naturales y Medio Ambiente  
Ministerio de Agricultura y Ganadería

**29. Management authority:**

Dirección de Parques Nacionales y Vida Silvestre  
Ministerio de Agricultura y Ganadería

**30. Bibliographical references:**