

Information Sheet on Ramsar Wetlands

1. **Date this sheet was completed/updated:** February 1996
2. **Country:** VENEZUELA
3. **Name of wetland:** Parque Nacional Archipelago Los Roques
4. **Geographical coordinates:**

11°45'N - 12°00'N
66°30'W - 67°00'W

5. **Altitude:** an average of 30 metres above sea level
6. **Area:** 213,220 hectares
7. **Overview:**

The archipelago forms a rectangle 36.6 km from west to east and 24.6 km from north to south. In the southern part, an area of shallow water (80 cm to 1 metre deep) forms a lagoon similar to the coral atolls of the Pacific. The 45 islands and keys of the archipelago are scattered around this lagoon. More than 250 sand banks and reefs form the archipelago. There are two large coral barriers: Oriental (also known as Cabecera de Los Roques or Gran Arrecifal del Este) and the Gran Barrera del Sur.

8. **Wetland type:**

A, B, C, G, H, J

9. **Ramsar criteria:**
10. **Map of site included? Please tick yes -or- no**
11. **Name and address of the compiler of this form:**

Instituto Nacional de Parques (INPARQUES)
Dirección General Sectorial de Parques Nacionales

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

The Parque Nacional Archipelago Los Roques is the most visible geomorphological remains and the least known of the island systems in the Caribbean Sea. The complex is formed by more than 50 keys and 250 sand banks and coral reefs in the south central part of the

archipelago, an area of shallow water that forms a lagoon similar to the coral atolls in the Pacific Ocean.

Three tropical marine ecosystems interact: coral reefs, beds of marine phanerogams and mangroves. There are two large coral barriers. This is a unique nature area in the Caribbean Sea and the Atlantic Ocean.

13. General location:

Situated approximately 180 kilometres off shore in the Caribbean Sea north of the continent.

14. Physical features:

The various keys have a uniform structure. The Gran Roque is formed from igneous rocks with acidic intrusions. The flat part of the island is composed of sedimentary rocks of continental origin formed by alluvial depositions at the base of the broken-down elevations. The igneous rocks are usually diabase of medium or fine grain. The acidic rocks are diorite of quartz origin of large grains and pegmatite. There are phosphate deposits of the guano of sea birds. The sedimentary rocks are of marine origin and are formed from sand combined with coral fragments, the remains of calcareous algae, sea shells and foraminifera. These sedimentary materials form beaches and the bottom of the lagoon.

The geological history of Gran Roque island has not been well established, but it is probable that during the Upper Cretaceous an important geosynclinal shift was produced covering the whole arc forming the Greater and Lesser Antilles. The Los Roques ensemble is an incomplete marine atoll still in the process of formation on a submarine tabletop that rises sharply 850 metres from the surrounding ocean floor. The southern sector of the table top drops sharply about two kilometres from the edge of the lagoon. Just outside the lagoon, the water is only 40 metres deep and then drops to 1000 metres.

The climate is characterized by high temperatures and full insolation throughout the year. The average temperature in the shade is 28°C with a low at dawn of 18°C.

The prevailing winds are from the E, ENE, NE or SE at a maximum of 25-30 kilometres/hour.

This area is characterized by an absence of precipitation. Rains are very light or fall in the form of heavy showers.

15. Hydrological values:

None

16. Ecological features:

17. Noteworthy flora:

The islands in the archipelago have scarce mangrove, savanna and thorny vegetation.

The following species of mangrove are found here:

<i>Mangle rojo</i>	(<i>Rhizophora mangle</i>)
<i>Mangle negro</i>	(<i>Avicennis nitida</i>)
<i>Mangle amarillo</i>	(<i>Laguncularia racemosa</i>)
<i>Mangle de botoncillo</i>	(<i>Conocarpus erectus</i>)

Tabaquillo (*Batis maritima*) grows on the sandy soil.

Mangroves grow in shallow water in the lagoons and bays and in the transitional zones where tidal influences penetrate. They help capture sediments, nutrients and prevent coastal erosion. Mangroves are found from the northern Cayo Esparquí to Sebastopol and in almost all of the keys in the archipelago.

Marine phanerogams are found in almost all of the shallow water and lagoons; the most common being *Thalassia testudinum* that forms beds of *Thalassia* and the grass *Syringodium filiformis*.

18. Noteworthy fauna:

Birdlife: There are sixty-two species of which 27 are migratory birds from North America. A 1993 survey reported 1,224 nests of 11 species.

Marine turtles (Chelonidae and Dermochelyidae): The following species are threatened with extinction in the Caribbean and protected within the archipelago: *Eretmochelys imbricata*, *Chelonia mydas* and *Caretta caretta* and *Dermochelys coriacea*. Of the 240 kilometres of coastline in the Archipelago Los Roques, there are roughly 28 kilometres of 32 sand beaches scattered over 25 keys and islands with conditions favourable for turtles to lay their eggs.

Sea snails: The sea snail *botuto* (*Strombus gigas*) has been designated a protected species owing to the over-exploitation that has drastically reduced the sea snail population. Gathering of sea snails has been prohibited since 1990. Sea snails are seriously threatened in the Caribbean and in the shallow waters of the Atlantic Ocean.

Shellfish: *Langosta* (*Panulirus argus*) is the most important species, but there also are specimens of *Panulirus guttatus* and *Panulirus laevicanda* members of the Palinuridae family. On sandy bottoms, the Spanish lobster (*Scyllarides aequinoctialis*) of the Scyllaridae family is found. This resource is protected by a special law banning gathering during other fishing activities and setting minimum size and weight for capture.

Fish: Among the fish of commercial importance are several species of shark (Carcharhinidae) and ray (Dasyatichae) which are sold either dried or salted. In addition, *rabo amarillo* (Engraulidae), *jurle* (Carangidae), *carite* (Scombridae) and *pargo rabirrubia* (*Ocyurus chrysurus*) are sold fresh or are transferred fresh to processing boats. Small-scale fishing is also regulated in the Parque Nacional Archipelago Los Roques.

19. Social and cultural values:

Celebrations in honour of the Virgen del Valle, the dance of the langosta (a traditional folklore dance) and the ceremony of the Velorio de la Cruz de Mayo are manifestations of the traditions held by the fishermen on the archipelago. There are frequent religious celebrations during Easter week.

20. Land tenure/ownership of:

The land is government property, although there are private concessions.

21. Current land use:

Tourism.

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

Tourism: The indigenous population has transformed houses into lodgings for tourists. As a result, large families live in cramped space. The local inhabitants use this argument to request the granting of new housing lots for the construction of additional houses.

Small-scale fishing: This activity directly affects species whose capture is permanently prohibited as is the case of sea turtles and the sea snail (*botuto*) as well as lobster, partially prohibited, but captured in order to satisfy the demand created by visitors.

23. Conservation measures taken:

This area was declared a national park in August 1972, and regulations were adopted in November 1990.

24. Conservation measures proposed but not yet implemented:

Management and operational plans are being prepared. The administrative headquarters on Gran Roque are being improved and stations are being constructed for park rangers for the monitoring and management of activities in different areas of the park. Staff is being hired in accordance with the contract signed in October 1995 between INPARQUES and the World Bank.

25. Current scientific research and facilities:

The Dos Mosquises Marine Biology Station is located on the Dos Mosquises Sur key forming part of the Fundación Científica Los Roques. This station has carried out research on fish, shellfish, coral, equinoderms, sponges, plankton and sea turtles.

26. Current conservation education:

Information days have been held for the school population in order to create an awareness in children of the importance of conserving natural resources. The park management and the Dirección General Sectorial are building an information centre which will serve as a base for

the development of programmes of environmental education.

27. Current recreation and tourism:

Tourist activities are concentrated on the island Gran Roque where there is a settlement of inhabitants and where lodging and meals are available. The other areas of the park included in the recreation area are of secondary importance and serve only as transit areas. It is important to point out that the **recreational area** is not included in the proposed Ramsar area. Tourist activities outside of the recreational area are very limited.

28. Jurisdiction:

The Instituto Nacional de Parques through the Dirección General Sectorial de Parques Nacionales is responsible for the management of the wetland.

29. Management authority:

30. Bibliographical references: