Information Sheet on Ramsar Wetlands

- 1. Date this sheet was completed/updated: 27 September 1993
- 2. Country: PANAMA
- 3. Name of wetland: Punta Patiño
- 4. Geographical coordinates:

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8°16'48"N - 8°21'32"N
78°10'00"W - 78°19'22"W
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- 5. **Altitude**: 0 to 10 metres above sea level
- 6. **Area**: 13,800 hectares
- 7. Overview:

This rocky ecosystem, with mud and sand areas of beaches and estuaries with mangroves and clearings.

The province of Darién covers 16,671 square kilometres. Topography is created by the Altos de Espavé, Bagre, Cordillera de Tacarcuna, Pirre, Sapo, Valle de Sambú and others. Important river basins are the Chucunaque and Tuira covering the largest part of the province. Tropical rain forest dominates the vegetation.

The Kuna and Choco ethnic groups are found in this area and cultivate plantain, yam and avocado and exploit timber and small-scale fishing.

8. Wetland type:

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

Asociación Nacional para la Conservación de la Naturaleza (ANCON)

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

13. General location:

This wetland is in the corregimiento of La Palma, district of Chepigana, Province of Darién, on the Pacific watershed at the mouth of the Río Tuira in the Gulf of San Miguel 8.25 kilometres southwest of the city of La Palma, the provincial capital of the province of Darién and 18.75 kilometres northwest of the town of Garachiné in the district of Chepigana.

14. Physical features:

The relief is formed by coastal lowlands and plains with flat to slightly slopping surfaces with limitations imposed by the salinity and frequent flooding due to the tides.

The geology of the area includes igneous and sedimentary formations.

There are three formations of sedimentary rocks:

Tertiary, Oligocene, Tonosí formation; sandstone, lutite, *tobas* and limestone in the area of Punta Barro Colorado in the estuary of the Río Mogocénega in central Mogue.

Tertiary, Miocene, Gatún, Gatún formation; sandstone, lutite, *tobas*, conglomerates and clays located in the extreme southwest near the Río Taimatí.

Quaternary, Recent, Aguadulce and Río Hato formations; conglomerates, sandstone, lutite, *tobas*, unconsolidated sandstone and pumice in the area of the estuary of Mogue and Quebrada Honda.

There is one formation of volcanic rocks:

Secondary, Cretaceous, Playa Venado, Playa Venado formation; basalt and pillow lava located in the west and in the east in the Cordillera de Bernal.

Geomorphology: In the region of low topography, there are formations corresponding to coastal mud flats (mangroves), high rocky coast and alluvial-colluvial plains.

Soils: Type VIII, unfit for ploughing with severe limitations that prevent their bring used for the production of commercial crops, but apt for wildlife, woodlands and limited grazing.

Life zones: Wet tropical forest and premontane moist forest.

Climatology: In Köppen's climatic classification, Punta Patiño is a tropical savanna (Awi) with annual average precipitation of up to 1,500 mm and a long dry season (months of less than 60 mm of rain); the average temperature for the coldest month is more than 18°C and there is a difference of less that 5°C between the coldest and the hottest months. All of this area is subject to dryness during the dry season and possibly during the wet season.

Hydrology: Punta Patiño lies within hydrographic basin 169 that includes the Mogocénega and Mogue rivers with a precipitation of between 500 and 1400 mm per year, increasing from Punta Patiño to the area of Mogocénaga.

Sea depth: The deepest sea in this area is 10 metres.

Drainage: There are two drainage patterns found here:

Dendritic: in the western part of the reserve. It is the most common pattern where tributaries join rivers of the next lower order at approximately the same angle. There are no or very few sudden turns in the flow of water.

Sub-parallel: in the eastern section of this reserve, the tributaries join forming sharp angles and then change direction flowing parallel to the river which they have joined. Normally, this pattern indicates uniform slopes and can also develop parallel to the direction of strongly folded sedimentary rocks. The long axes of the tributaries develop in the softer layers of soil.

15. Hydrological values:

Six rivers (Metezuana, Mogocénega, Mogue, Patiño, Plantal and Quebrada Honda) flow into the sea in this area forming estuaries with mangroves.

16. Ecological features:

Punt Patiño has three types of habitats: coastal-marine, sand beaches (created from volcanic and sedimentary rocks) and mud; rocky reefs; and estuaries, with mangroves and clearings. The tidal range is moderate and during the months of the dry season, there are strong north winds. These habitats are occupied by a large number of migratory or resident sea birds, including a large number of pelicans that occupy the area during the rainy season.

17. **Noteworthy flora**:

There are five species of mangrove: mangle rojo (Rhizophora mangle), mangle negro (Avicennia germinans), mangle blanco (Laguncularia racemosa), mangle botón (Conocarpus erectus) and mangle pi_uelo (Pelliciera rhizophorae). Associated with the mangrove are the alcornoque (Mora oleifera) and the jorra negra (Acrostichum sp.). The vegetation found on the beaches includes manzanillo (Hypomanne mancinella) and Pithecellobium sp. In the rocky areas are caracucha (Plumeria acutifolia) and an orchid (Brassavola nodosa) as well as an unidentified cactus.

The Metezuana, Mogocénega, Mogue and Pati_o mangroves cover 4,741 hectares situated primarily at the mouths of the Mogocénega and Quebrado Honda rivers and formed by primarily *Rhizophora* and *Avicennia*.

18. Noteworthy fauna:

During studies carried out in the area, 103 species of wildlife were recorded, including 19 species protected by law but threatened with extinction and 33 threatened species and 30 species exploited commercially. Included in this total are 20 species of amphibians and reptiles of which 4 are protected by law but threatened with extinction and 5 threatened

species and 5 exploited commercially.

There are 68 species of birdlife of which 4 are protected by law but threatened with extinction, 5 which are threatened and 5 are exploited commercially. This area shelters a large number of resident and migratory bird species. There are abundant numbers of fish eagles, blue heron, *gaviotin real*, *zarapito trinador* and *gaviotin puntiamarillo* as well as American oystercatchers which were first sighted in the province of Darién during a field visit for an ecological evaluation of the buffer zone for the Parque Nacional Darién.

Reptiles are represented by the *Iguana iguana* and *Ctenosaura similis* and the crocodilians *Caiman crocodilus* and *Crocodylus acutus*. Sea turtles (*Dermochelys coriacea* and the *Eretmochelys imbricata*) have been recorded at the Pati o beach.

There are 15 species of mammals recorded of which 12 are protected by law but threatened with extinction and 14 species which are exploited commercially. Among the mammals are gatos manglateros (Procyon lotor and P. cancrivorus). It is also common to see large felines (Felis sp.), Agouti paca and several species of deer. There is a large virgin forest at Punta Pati_o and a region of mangroves that has not been completely explored that serves as a sanctuary for a wide range of fauna.

19. Social and cultural values:

No information is available on the exploitation of the fishing and timber resources.

20. Land tenure/ownership of:

This area is part of the Punta Pati_o nature reserve which is the property of the Asociación Nacional para la Conservación de la Naturaleza (ANCON).

21. Current land use:

Large and small-scale fishing are the principal uses.

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

No data is available.

23. Conservation measures taken:

This is the first privately owned nature reserve in Panamá where ANCON will carry out the management of natural resources in close coordination with the Instituto de Recursos Naturales Renovables (INRENARE). Park rangers and policemen prevent the cutting down of trees and illegal hunting in this reserve.

24. Conservation measures proposed but not yet implemented:

A management plan has been prepared for this area.

25. Current scientific research and facilities:

The activities of ANCON, the organism responsible for the management of resources, assures the continuity in research programmes, infrastructure and equipment within this area.

Three scientific expeditions have visited this area.

26. Current conservation education:

There are environmental education programmes, an agro-forestry project and a fellowship programme.

27. Current recreation and tourism:

There are none. A ecological tourism road runs through the Mogue mangrove and is used by tour organizers such as ECOTURS.

28. Jurisdiction:

Asociación Nacional para la Conservación de la Naturaleza (ANCON)

29. Management authority:

Instituto Nacional de Recursos Naturales Renovables (INRENARE)

30. Bibliographical references: