1. Date this sheet was completed/updated: 20 March 1996

2. Country: HONDURAS

3. Name of wetland: Punta Izopo

4. Geographical coordinates:

15°41'N - 15°46'N 87°17'W - 87°25'W

5. Altitude: sea level

6. Area: 11,200 hectares

7. Overview:

This wetland contains remnants of the original humid tropical forest in unaltered pristine condition which are the last existing samples of this type of broad-leaved forest on the coast of Valle de Leán, Hicaque, Plátano and the Lagunas de Hicaque. The rest of the lowland in the Valle de Leán is considerably altered and has been converted for growing African palm, citrus fruit and ranching.

The hydrological system of the reserve includes at least six permanent bodies of water in the far northwest corner of the Valle de Leán (one main river, three smaller rivers and several abandoned channels and two lakes).

The reserve has roughly 14 kilometres of coast and is about 9 kilometres wide. The reserve is almost completely flat except for the small outcroppings of Cerro Sal si Puedes (118 metres in elevation) in the central part of the reserve and the Cerro Izopo (108 metres in elevation) in the north.

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:

Director Refugio de Vida Silvestre Punta Izopo

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

13. General location:

This wetland lies in the municipalities of Tela and Arizona in the department of Atlántida, 8 kilometres east of Puerto de Tela.

14. Physical features:

The Río Leán begins in the Nombre de Diós range and flows through a basin of approximately 1,000 square kilometres. Five sub-basins make up the Río Leán basin: Río de Arizona, Río Mezapa, Río Nueva Florida, Río Santa María and Río Texiguat forming a large wetland of special importance because of existing biodiversity.

15. Hydrological values:

The dredging of the rivers in the middle course of the Río Leán to protect the Valle de Leán from flooding has caused serious problems in the reserve. In addition, canals and dykes have been constructed to drain large areas of the reserve that will be incorporated in development projects. This dredging does not take into account the impact on tides, the circulation of water, the natural dynamics of the fresh water, sedimentation in the lakes within the reserve, clearness and transparency of the water by destroying the coral reefs that are unique on the coast of Honduras.

16. Ecological features:

The reserve has a system of terrestrial, coastal and marine environments whose physical and biological characteristics have been changed. There are proposals to drain the flooded savannas, marshes, mangroves, rocky beaches, channels, lakes, marine coral reefs for agriculture and tourism in the surrounding areas.

Using Holdridge's classification of life zones, the reserve is considered to be very humid subtropical forest and humid tropical forest transitional to subtropical.

17. Noteworthy flora:

A total of 653 plants have been recorded in Bahía de Tela from 112 families, 342 genera and 499 species. Ten species of plants have been added to the "Nuevo Registro para la Flora de Honduras": *Acalypha skitchii, Capparis tuerckhemii, Cordia truncatifolia, Ormosia macocalyx, Phyllanthus elsiae, Rinorea hummelii, Salacia impressifolia, Sida antillensis* and *Sida troyana.*

18. Noteworthy fauna:

The patches of local primary forest in the reserve are the habitat for a large range of species of plants and animals of unique importance for the maintenance of regional biodiversity. This includes the manatee, crocodile, jaguar, monkeys, sea turtles and aquatic and terrestrial birds both resident and migratory. There have been no specific studies of species of fauna.

According to studies on biodiversity carried out in 1993 in the area near the reserve (P.N.P.S. and R.V.S. CUERO Y SALADO) about 300 species have been recorded. Present inventories identify almost double the number of vertebrate species present (544), while the number of invertebrates reaches 384 terrestrial and marine species.

Fish: Seventy species of freshwater fish in 30 families and 49 genera have been identified. Two local species are threatened with extinction throughout the country: *tepemechin* (*Agostomus monticoor*) and *cuyamel* (*Joturus pilchardi*).

Twenty-five species are the object of small-scale fishing. Four species are sought by sport fishermen: *sábalo (Tarpon atlanticus)*, sea bass (*robalo*) (*Cintropomus* sp.), *chunte (Aruis assimilis*) and *vaca (Bagre marinus)*. The mangrove and the Hicaque and Plátano lakes are important areas for the reproduction and feeding of these fish.

Amphibians and reptiles: In the reserve there are 103 specimens in 17 families, 31 genera and 36 species: 16 per cent are *anuros*, 22 per cent are turtles, 3 per cent are crocodiles, 33 per cent lizards and 25 per cent snakes.

In the area of the Bahía de Tela, 9 species of reptiles are considered to be threatened with extinction in Honduras: the American alligator (*Crocodylus acutus*), 4 species of sea turtles [*caguama (Caretta caretta)*, green turtle (*Chelonia mydas*), carey (*Eretmochelys imbricata*), *baula (Dermochelys coricea*)], the green iguana (*Iguana iguana*), garrobo gris (*Ctenosaura similis*), boa (*Boa constrictor*) and the Honduran python (*Loxocemus bicolor*).

Birds: Birds are the most conspicuous wild animals in the three protected areas and the most numerous of the vertebrates.

In studies of birdlife, a total of 245 species have been identified, including those reported by other ornithologists who have made studies of birds in the lakes of the wetlands in the Parque Nacional Jeannette Kawas, Jardin Botánico Lancetilla and the Punta Izopo wildlife reserve.

The 245 species recorded are distributed over 18 orders, 56 families and 232 genera which represents about 50 per cent of the birds reported in Honduras. An example of the biodiversity is that of the 20 orders of birds in Honduras, 18 orders are found in the Bahía de Tela and represent 60 per cent of bird orders in the world.

In the months of March and April, many birds mate and build nests. The garza real (Merodius albus), the garza nevada (Egretta thula) and a pelican (Pelecanus occidentalis) produce mating feathers during this period of the year. The oropéndulas (Psarocolius montezuma P. Wagler) forms colonies at this time of the year. In a coconut tree (Cocus nucifera) in Barra de Carbaja, 12 nests of this species were observed hanging.

Birds are perhaps the most attractive and the category of greatest importance for ecotourism. At least 80 local species have a potential ecotourist potential, especially migratory and resident waterfowl. An outstanding species is the *Jabiru mycteria*, a rare bird threatened with extinction throughout its range. The *espatula rosada (Ajaia ajaja)*, the white *bujaja* ibis (*Cochlearius cochlearius*), the *pichiche (Dendrocygna autumnalis)*, the *pato real (Cairina moschata)*, the *rayador negro (Rhyncops niger)*, the toucan (*Rhamphastos sulfuratus*) and

several species of parrots, parakeets and hummingbirds.

Birds of prey such as the fish eagle (Pandion haliaetus), black-neck hawk (Busarellus nigricollis), aguilucho negro (Spizaetus tyrannus), gavilán cangrejero (Buteogallus anthracinus), gavilán caracolero (Rhostramus sociabilis), gavilán murcielaguera (Galco rufigularis), zopilote rey (Sarcoramphus papa), an owl (Pusatrix perpicillata), lechuza mantequera (Tyto albus) and the buhito (Glaucidiun brasilianum) are all important for tourism in this area.

Of the 55 species of birds included in the list of threatened species in Honduras, 20 have been recorded in Bahía de Tela. With the exception of these 20 rare or threatened birds, all of the other species of local birds seem to have stable populations.

Mammals: In the area of Bahía de Tela (Parque Nacional Jeannette Kawas and the Punta Izopo wildlife reserve), a total of 47 species of wild mammals were reported distributed over 12 orders, 24 families and 44 genera. Of the 32 species recorded in the area, 13 species are considered to be threatened, 3 are extinct locally and 11 are important for hunting or commercial use.

There are 13 species of wild mammals that are important for ecotourism including the manatee (*Trichechus manatus*), dolphins (*Delphinus* spp.) and *Stenella* spp.). A total of six permanent trails for monitoring and ecotourism activities have been designated.

19. Social and cultural values:

The population in the reserve represents two well-defined groups.

The Garífuna ethnic community lives along the coast and numbers about 3,000 individuals. They maintain traditional cultural patterns reflected in their rites and costumes. The other group is composed of Spanish-speaking Indians or mestizos that have settled in the area from other parts of the country. Remains from the pre-Colombian and colonial periods and shards have been found in the reserve.

20. Land tenure/ownership of:

In the surrounding area, most of the land is the property of the government.

The Standard Fruit Company, a producer of bananas for export, had a concession of land granted in 1920 which it exploited for forty years, building a railway, drainage canals, dykes and several banana and forest plantations that where abandoned because of uncontrollable flooding.

Thanks to the railway along the southern border of the reserve and the north-south drainage canals, the area under exploitation was increased. At the same time, the cutting of firewood, hunting and fishing increased and indigenous groups who fish and grow coconuts and yucca settled near the beach in the northern part of the reserve.

Between 1950 and 1990 the increase in settlements remain static, although it was established that 30 per cent of the area is occupied, few of the local inhabitants have title to the land and

flooding is unpredictable. They plant only annual plants or raise cattle and grow crops on small farms.

21. Current land use:

Within the site there are four types of land use:

- plantations: extensive cultures of oil palm, banana or plantains originally planted by the banana companies in the south and southeast of the reserve

- small farms: small farms usually with a larger number of fruit trees are common throughout the reserve

- farms growing annual crops: this covers a small area of maize, beans, rice and yucca and sugar cane of approximately half a hectare. These farms are found throughout the reserve and present serious ecological threats because of the use of slash-and-burn techniques which destroy organic matter and accelerate erosion

- ranching: this covers areas of different sizes. It is extensive and presents serious problems of compaction and erosion especially in the basins that drain the reserve

In some areas, trees have been cut, but the major damage has been the destruction of fauna in all of the ecosystems of mangroves, swamps, lakes and marshes. The lowlands are the area in greatest need of protection.

In the surrounding area, the main introduced activities are large extensions of oil palm, agroindustrial animal production units, extensive ranching, and the uncontrolled cutting of trees in the upper parts of the basin that leads to sedimentation in a large part of the middle and lower basin.

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

Within the reserve, the main destructive influence is the encroachment of ranchers that have cleared and burnt large areas for growing rice and oil palm and for ranching thus destroying existing habitats in the reserve and eliminating species or forcing them to emigrate to other parts of the reserve leading to competition among species. Chemicals used in farming are washed towards the bodies of water contaminating them.

In the surrounding area, the lack of monitoring of the oil industry is a source of contamination and sedimentation in the reserve. The change in the courses of the rivers and the building of dykes and canals lead to sedimentation and flooding. The cutting down of trees, extensive cattle ranching and migratory agriculture are the main sources of threats to the upper basin.

23. Conservation measures taken:

The Punta Izopo wildlife reserve was created in 1992. In 1994, a management plan was

prepared as a first step to the rational management of natural, cultural, historic and economic resources.

An environmental impact study, surveys of birdlife, ecotourism, environmental education, self-improvement and community participation have been carried out. This has led to the awareness among local inhabitants as they discover that these studies are beneficial to them increasing their participation in activities that were formerly reserved for others.

24. Conservation measures proposed but not yet implemented:

The management plan establishes norms for the management and development of the reserve. The plan contains specific steps taking into account the national and regional context.

25. Current scientific research and facilities:

The following studies have been carried out in the reserve:

- an environment impact study
- a survey of migratory birds
- a management plan

There are no facilities for research and no visitors' centre. In the town of Tela, there is the office of PROLANSATE which has radio communications and boats.

26. Current conservation education:

27. Current recreation and tourism:

28. Jurisdiction:

29. Management authority:

30. Bibliographical references: