

Information Sheet on Ramsar Wetlands

Official translation by Charles Akin

1. **Date this sheet was completed/updated:** January 2000

2. **Country:** Ecuador

3. **Name of wetland:** Abras de Mantequilla

4. **Geographical coordinates:**

79 45' west longitude

1 30' south latitude

5. **Altitude:** 20-25 metres above sea level

6. **Area:** 22,500 hectares

7. **Overview:** Abras de Mantequilla is a natural and permanent system of swamps and lakes, influenced by the existence of small streams and seasonal winter lakes emptying into a large lake with a dendritic pattern. The area has an important biological diversity.

8. **Wetland type:** Continental, "P", intermittent seasonal freshwater lakes (more than 8 hectares), including lakes in flood plains.

9. **Ramsar criteria:** 1-4, 6-8

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

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

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

Criterion 1: It is a representative wetland because of its habitat and large area.

Criterion 2: There are five migratory species, four endangered species, two vulnerable species and two species with limited distribution.

Criteria 3 and 4: The aquatic plant populations have not been altered by human activity and offer refuge, food, nesting or egg-laying sites for several species of animals in the lakes, maintaining the biodiversity of the habitat.

Criteria 7 and 8: The area sustains a significant population of autonomous species of fish that interact with other species of animals in the food chain, contributing ecologically and economically to the community. Furthermore, it is a source of food, a breeding area and an area for the growth of native species.

13. General location:

This wetland is located 7.3 kilometres east of the city of Vinces, in the cantons of Isla de Bejucal, Pueblo Viejo and Vinces in the province of Los Rios in the coastal region. Vinces has approximately 40,000 inhabitants (Anonymous, 1998).

14. Physical features:

Geology: This area is on an alluvial plain with low elevations of 5 to 10 metres created during the Holocene. A system of natural and permanent lakes is formed by the damming of water in the San Francisco de Chojampe and Mapancillo swamps. The flow of water is influenced by seasonal streams and lakes in the rainy season. These streams empty into the main lakes of Central, Mantequilla and Mapancillo, whose dendritic pattern may have been formed by the natural deepening of stream beds.

Climate: During the rainy season, the concentration and distribution of nutrients in the Abras de Mantequilla are influenced by runoff produced during this season and the processes of synthesis and decomposition of organic material produced in situ (Ayer, 1996; Chalén, 1983). During the dry season, concentrations increase because of sedimentation of a large quantity of organic material. The average depth of the water is 4.5 metres. Under Köppen's climatic classification, the area of the lake is Amw (tropical monsoon), with a predominant single winter, annual rainfall of 1376 mm and an average surface temperature of 25 °C. Rainfall data indicate a wet period between January and May and a dry period from June to December (Anonymous, 1998)

Soil: In general, this region has a combination of alluvial soils deposited by rivers of deep, heavy, black clays. Upon drying, the soil breaks into hard large blocks used to grow rice under irrigation. Its texture is too heavy for other crops (Cañadas, 1983).

15. Hydrological values:

The Abras de Mantequilla are formed by the natural damming of the San Francisco de Chojampe swamp, creating dendritic patterns surrounded by low elevations of 5 to 10 metres. The depth of the water increases during the rainy season when floods cause it to overflow to the Río Nuevo through the Caimito swamp. The main lake (Abra Central--El Aromo) is formed in a slight depression and has created branches among the low elevations without an outlet for water. During the dry season, the lake's surface decreases. The Abras de Mapancillo are formed by the Mapancillo swamp, which creates shallow dendritic formations that increase the water surface after rains. This swamp drains into the Río Chojampe (Río Nuevo). The Río Nuevo empties, in turn, into Río Vinces and then into Río Babahoyo.

16. Ecological features:

Bio-climatic zone: dry tropical

Life zone: dry tropical forest

Flooded area: herbaceous and shrub strata

Floodable area: Strata of herbaceous shrubs, trees and creeping plants

Agricultural area: rice, grazing and garden plots

17. Noteworthy flora:

Aquatic vegetation: *Eichornia craccypes*, *Tipha latifolia*, *Lemna* spp.

Herbaceous vegetation: Asteraceae, Ciperaceae, Cucurbitaceae, Poaceae

Shrubs: *achiote* (*Bixa orellana*), *Gossypium herbaceum*, *ortiga* (*Urera* spp.), *caña* (*Bambusa guadua*)

Trees: *guasmo* (*Guazuma ulmifolia*), *nigüito* (*Muntingia calabura*), *mate* (*Crescentia cujete*), *palo prieto* (*Eritrina poppigiana*), *guaba* (*Inga* spp.), *ciruela* (*Spondias purpurea*), *guayaba* (*Psidium guajaba*), *guachapeli* (*Samanea guachapeli*), *pechiche* (*Vitex gigantea*), *algarrobo* (*Prosopis* spp.), *moral fino* (*Clorophora tinctoria*), *laurel* (*Cordia alliodora*), *Fernán Sánchez* (*Triplaris* spp.), *papayo* (*Carica papaya*), breadfruit (*Artocarpus altilis*)

Introduced species: rice (*Oriza sativa*), maize (*Zea mais*), teak (*Tectona grandis*), cerezo (*Malpighia retusa*)

18. Noteworthy fauna:

Mammals (Carpio, 1996)

long-tailed otter (*Lontra longicaudis*), armadillo (*Dasybus novencinctus*), zorro (*Didelphys marsupialis*), cuatro ojos (*Phylander opusum*), brown-throated sloth (*Bradypus variegatus*), murciélago pescador (*Noctilio leporinus*), mantled howler (*Alouatta palliata*), squirrel (*Sciurus granatensis*)

Birds (Félix Man-Ging, 1996-2000)

quail (*Crypturellus transfasciatus*), pájaro de vaca (*Tigrisoma lineatum*), gallaretón (*Gallinula chloropus*), gallareta azul (*Porphyryla martinica*), jacana (*Jacana jacana*), great egret (*Casmerodius albus*), white egret (*Egretta tula*), cattle egret (*Bubulcus ibis*), garza morena (*Florida caerulea*), chuque (*Butorides striatus*), osprey (*Pandion haliaetus*), pato rodador (*Anas discors*), fulvous tree-duck (*Dendrocygna bicolor*), muscovy duck (*Cairina moschata*), celestial parrotlet (*Forpus coelestis*), cigüeñuela (*Himantopus mexicanus*), pataleta (*Tachybaptus dominicus*), paloma tierrera (*Columbina talpacoti*), ajicero (*Saltator striatipectus*), colemba (*Casicus cela*), azota gavián (*Myiozetete cayanensis*), kingfisher (*Megaceryle torquata*), punta de estaca (*Nyctibius griceus*), barn owl (*Tyto alba*), hollero (*Furnarius cinnamomeus*)

Reptiles

brown caiman (*Caiman crocodilus*), tortuga mordedora (*Chelydra serpentina*), terciopolo (*Bothrops asper*)

Crustaceans

Machrobrachium spp., *Cherax quadricharinatus*

Fish (Barnhill, et al., 1973)

vieja azul (*Aequidens rivulatus*), vieja colorada (*Cichlasoma festae*), bocachico (*Ichthyolephas humeralis*), guanchiche (*Hoplias microlepis*), dica (*Curimatorbis boulengeri*), dama (*Brycon atricaudatus*), cachuela (*Astianax* spp.), chame (*Dormitator latifrons*)

19. Social and cultural values:

There are two important tourist activities in this wetland: local and national regatas that take place in March and April. At the time of Carnival and Easter, local inhabitants use the lagoon for recreation. Important archaeological findings are often reported in the form of clay figures and pots from pre-Columbian cultures, which have not yet been studied. A local inhabitant, Samuel Arias, has informed us that these artifacts are sold in the city of Vinces.

20. Land tenure/ownership of:

Most of the inhabitants own their land, but there is also vacant land belonging to the government. The city of Vinces and CEDEGE are preparing a project for a topographic survey and land census for Recinto San Francisco de Chojampe. Any expansion of land holding is subject to legislation regulating land for the community's benefit.

21. Current land use:

At the site, fishing; in the surrounding area, agriculture and grazing. More water from the wetland is used during the winter than during the summer. Local inhabitants use water for growing rice, maize and for fishing for sale and local consumption. The grazing of livestock is another activity that provides food and income for some inhabitants (large land owners). During the dry season, wells are used for domestic water, and during the rainy season, local inhabitants take water from the lakes for domestic consumption. Hunting is not an additional subsistence activity because wildlife for hunting has almost completely disappeared during the past ten years. Many local inhabitants raise chickens and pigs for local consumption and sale.

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

At the site, overexploitation of aquatic resources and fishing with small-mesh nets have led to a decrease in native species of high commercial and nutritional value for local inhabitants. The introduction of tilapia, an exotic species, is drastically decreasing the population of native species, not only in this wetlands but also in all waters in the coastal region. Although no study has been made on pollution from pesticides in these lakes, the danger of pollution from the use of these substances makes studies necessary.

The area surrounding the lakes has slowly suffered from the deterioration of the forests to the point that there are now only remnant secondary forests that still conserve representative fauna such as the mantled howler.

23. Conservation measures taken:

There are currently no conservation measures for this area.

24. Conservation measures proposed but not yet implemented:

A proposal has been prepared for recognition of the full importance of the Abras de Mantequilla lakes as an important wetland for Ecuador. The proposal includes a survey of the wetland, which, once completed, will lead to the preparation of management plans.

25. Current scientific research and facilities:

None

26. Current conservation education:

None

27. Current recreation and tourism:

A local festival, the "Regatas Campesinas," is held after the rice harvest, during which the community selects a queen and holds the *chiva acuatica*, a celebration, during which inhabitants parade in boats with bands and musicians serenading the queen and princesses. This event takes place in March and April after the local regata with the participation of outboards from all over Ecuador. The regatas are held once a year.

28. Jurisdiction:

The city of Vinces has jurisdiction over this wetland.

29. Management authority:

Subsecretaria de Desarrollo Sostenible (Region Litoral)
Ministerio de Turismo y Ambiente

30. Bibliographical references: