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RAMSAR CONVENTION MONITORING PROCEDURE

Bañados del Este, Uruguay

by

Patrick J. Dugan & Antonio C. Diegues

1. PREFACE

The present report is the result of a four-day visit to Uruguay from 24-28 October 1988 by Patrick J. Dugan (Coordinator of the IUCN Wetlands Programme) and Antonio C. Diegues (Coordinator of the IUCN Wetlands Programme in Brazil). The purpose of the mission was to meet with government and non-governmental institutions concerned by the problems of wetland management in Uruguay, in particular those of the Bañados del Este, to hold wide-ranging inter-disciplinary discussions about the current status of the Bañados del Este and future prospects for effective conservation and environmentally sound management of this area, and to identify ... Meetings were held with the Sub-Commission for the Bañados del Este of the Institute for the Preservation of the Environment; the Laguna Merin Commission; the Environmental Commission of the Congress and the Environmental Commission of the Senate; the Society for the Conservation of the Environment; the Society for the Study and Conservation of Birds; the Institute for Legal and Social Studies; the National Museum of Natural History; and the Department of Biology of the University. Discussions were focused upon the current status of the Bañados del Este and the apparent conflict between conservation and development in the zone, the existing plans for further investment in development activities which are likely to change the ecological character of the zone, proposals for conservation measures within the Ramsar site and compensatory measures outside, and proposals through which the Ramsar Convention and associated international institutions might provide technical and other assistance to Uruguay in order that it might more effectively fulfill its obligations under the Ramsar Convention.

The present report introduces the Ramsar monitoring procedure, summarizes the status and likely prospects for the Bañados del Este, makes preliminary suggestions on approaches which may provide lasting solutions to the conflicts that exist in the zone, and makes recommendations to the Ramsar Convention as to how the Convention might most effectively follow up on this initial mission with more substantive support to Uruguay.

2. ACKNOWLEDGEMENTS

The consultants would like to thank the Institute for the Preservation of the Environment for organising the mission to Uruguay, and all the institutions with whom meetings were held.

3. INTRODUCTION

In ratifying the Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar Convention) each Contracting Party undertakes to "designate suitable wetlands within its territory for inclusion in a List of wetlands of international importance" (Article 2.1 of the Convention). Specifically, each Contracting Party is obligated to "designate at least one wetland to be included in the List" (Article 2.4) and "shall formulate and implement their planning so as to promote the conservation of the wetlands included in the List" (Article 3.1). Further, each Contracting Party "shall arrange to be informed at the earliest possible time if the ecological character of any wetland in its territory and included in the List has changed, is changing, or is likely to change, as the result of technicological developments, pollution or other human interference. Information on such changes shall be passed without delay to the organisation or government responsible for continuing Bureau duties" (Article 3.2). [Note to PD: include ref. to obligations under wise use]

At the Third Conference of the Contracting Parties held in Regina, Canada, in 1987, the Conference approved a recommendation (C.3.9) on the importance of avoiding changes in the ecological character of sites listed under the Convention. The recommendation (Annex I) urges Contracting Parties to take swift and effective action to prevent any further degradation of sites, and to restore as far as possible the value of degraded sites. The recommendation further requests Contracting Parties in whose territory are located sites whose ecological character has been degraded or are threatened, to report to the Convention Secretariat the actions undertaken to safeguard these sites.

At the Fourth Meeting of the Ramsar Convention's Standing Committee, the members and observers considered the best way of promoting the implementation of Recommendation C.3.9. A "monitoring procedure" (Annex II) was adopted by the Standing Committee as a procedure to monitor Ramsar sites, and has been used since February 1988 by the Convention Secretariat. The present report is the fifth prepared under this procedure.

4. BACKGROUND

Uruguay and the Ramsar Convention

In adhering to the Ramsar Convention on 22 May 1984, Uruguay listed as its first Ramsar site the "Bañados del Este and Franja Costera". This area covers a total of 325,000 hectares in the Departments of Rocha, Treinta y Tres, and Cerro Largo (Fig. 1).

The Bañados del Este

The area designated as the Ramsar site includes two large lakes (Castillos and Negra) and part of an international lake (Merin); part of the rivers Laguaton, Tacuari, Olimar, Cebollati and San Luis; various streams; low plains that are permanently, periodically or occasionally flooded and which adjoin the major water masses; and the section of coast that extends from the Uruguay/Brazil border to Cabo Polonia. It also extends to the Atlantic coastal islands of Coronia and Cabo Polonia (Vaz-Ferreira, 1987).

Within this area, a wide range of wetland habitats occur which support a great diversity of fauna and flora. The wetlands are particularly important for waterbirds, of which at least 120 species live for part or all of the year in the Ramsar site (Vaz-Ferreira, 1987). The Bañados also support an important mammal fauna, including Capybara Hidrochoerus Hidrochaeris, Coypu Myocastor Coypus and a residual population of "venado del campo" Ozotocerus Bezoarcticus. More than 30 species of amphibians and 5 reptiles are found in the site. Among the latter is the "yacaré" Caiman Latirostris. 80 species of fish occur, of which some 30 are important in commercial fishing or in sport fishing.

Legal status

In the Uruguayan national report to the Third Conference of Contracting Parties (Vaz-Ferreira, 1987) it was noted that listing of the zone has not brought about any effective additional protection of the Bañados. These are still controlled by national shooting laws and decrees rather than by any specific legislation directed at the Bañados. This is in part a consequence of the fact that although the major lagoons within the site are State property, more than 85% of the wetland habitats (excluding these lagoons) is privately owned. Consequently, these sites can be changed without present legislation being able to prevent it. In addition, public lands are not necessarily adequately protected.

5. CURRENT STATUS OF THE BAÑADOS

As emphasised in the Uruguayan report to the Third Conference of Contracting Parties (Vaz-Ferreira, 1987), the ecological character of the Bañados del Este was changed prior to listing of the site under the Convention. As early as the mid-19th century, plans to drain part of the Bañados were developed. In 1885, it was proposed to drain 20,000 hectares of the area via the Andreoni Canal. Although this was dropped from service in 1930, a second canal (Canal Number One) was subsequently built between the Bañados de India Muerta and the San Luis river. In 1978, Canal Number One was

continued, and a third canal (Canal Number Two) was built to link Canal Number One with the Andreoni Canal. Further, the India Muerta dam was built, covering 3,000 hectares in its reservoir.

Today, the principal government investment in the Bañados is coordinated through the Comision Mixta para el Desarrollo de la Cuenca de la Laguna Merin which was established in the 1960s by the governments of Uruguay and Brazil to coordinate development investment in the basin of the Laguna Merin. Under the auspices of the Joint Commission, funding was obtained from the InterAmerican Development Bank in 1986 (US$ 27.3 M) for the electrification of the existing water pumping system and for the improvement of 860 kilometres of roads. This investment was designed to improve irrigation of 80,000 hectares of the region of the Laguna Merin. Following this investment, there are today proposals for further investment in water management in the basin. These include the construction of a retaining dyke along the right bank of the Rio Cebollati (total length: 70 km); mechanization of the Estero de Pelotas; construction of a 40 km sump which will collect water from the San Miguel region and drain this to the Laguna Merin; a dyke to control flooding of the India Muerta. [Note to PD: Rio Olimar dam on right side? + embankment of Route 14?] The total cost of these investments is estimated at US$ 50 M and a study is now beginning with funds from the InterAmerican Development Bank to identify the viability of this investment. At the same time, an environmental impact study will be carried out. However, this will last for only six months.

6. ENVIRONMENTAL IMPACT AND WISE USE OF THE BAÑADOS DEL ESTE

There is little doubt that the Bañados del Este have enormous economic potential. The fertile soils currently support a major proportion of the country's rice production, which is valued at a total of US$ 80 M in export earnings. Further, the Bañados are extremely important in cattle production which each year also contributes a total of XXX to the national economy. At the same time, the natural ecosystem also yields a range of significant products. For example, between the years 1976 and 1986, Uruguay exported Coypu skins of a total value of US$ 52 M, and FAO has estimated that in the 1970s, some 40% of the rural families in the Department of Rocha benefited from the exploitation of this species. Along the coast, an important fishing industry depends upon the productivity of the coastal waters and the quality and quantity of freshwater inflow.

Given the range of benefits which the Bañados provide, and given the many ways in which the government might invest in exploitation of these resources, it is clearly essential that their full value, and

the full cost of their loss, be determined prior to any large-scale investment. This is particularly so as through careful planning and effective enforcement of existing or new legislation, it will be possible to integrate the many different activities which can be carried out in the Bañados. This will require limitation of certain activities, but such limitation will be based upon an assessment of the ways through which investment can yield long-term sustainable benefits from the resources, rather than short-term profit, and net long-term costs.

Available evidence suggests that previous investments in drainage in the Bañados have led to substantial socio-economic and economic costs. For example, by improving the drainage capacity of the Andreoni Canal in 1978, the Colonia beach was subject to increased flow of fresh water with the associated debris. This is reported to have led to a substantial decrease in the number of tourists visiting the area and to a consequent decline in economic inflow to the hotels and other infrastructure in the area. Similarly, the freshwater inflow is thought to have reduced the productivity of the offshore fishery and income from the associated artisanal and sport fishing activities. The loss of the wetlands and the associated fauna has led to a reduction in the exploitation of Coypu and to a decline in the importance of this source of income to the local communities. Also, certain of the water management works have led to an increase in flooding at certain times of year, rather than to a decrease. This increase in flooding has reduced the capacity of the wetlands to support the pastoral industry at certain times of year. Moreover, the return on investment has in certain cases been lower than anticipated. For example, the India Muerta dam now irrigates only 4,000 of the 10,000 hectares that had been forecast (Vaz-Ferreira, 1987). In the light of these observations, it is surprising that the 1986 loan from the InterAmerican Development Bank was preceded by an environmental impact assessment which detected no significant environmental impact that could destroy the renewable natural resources as a result of the project. This may have been a consequence of the short duration of the study, and it would therefore seem essential that, in future, environmental impact assessments are done in the most thorough possible manner. It is most likely that such studies, in order to be effective, will require to be undertaken over a period of at least one, and ideally two, complete annual cycles. Any study of shorter duration is likely to be superficial and of limited value in detecting the true environmental impact.

It is however certain that any investment in drainage in the Bañados will have an environmental impact. What needs to be determined is not what that impact is, but rather whether the true economic and social cost of that impact can be offset by the investment whose

impact is being studied. To determine whether this is indeed the case, attention needs to be focused not only upon the environmental impact of drainage investment, but upon the precise sum required to carry out the drainage, the effectiveness of that drainage, the precise return upon that investment, the distribution of benefits from that investment to the communities which currently use the resources, and the net impact upon the national economy. Unfortunately, we were unable to obtain copies of the detailed proposals for the Bañados, and it is therefore not possible at this stage to say whether such detailed analyses have been carried out. However, it is clear that the full value of the wetland resources of the Bañados, and their interaction with the economic activities in the region, are not clear. We therefore believe that prior to any further investment in the Bañados, a detailed ecological and hydrological study of the resources should be carried out in order to determine the full range and full value of the functions which these wetlands provide. These functions will range from flood control to provision of water supply, fisheries support, and species conservation. The impact upon these functions, and the economic consequences of their loss as a result of drainage, should be assessed, and this net loss to the economy should be compared with the net benefit as a result of the investment. In this context, specific consideration needs to be given not only to the yield in terms of rice production that would be generated, but to the investements (fuel, infrastructure, and running costs) which are required to achieve the drainage proposed.

Other neighbouring wetland areas

In addition to the areas included within the Ramsar site, several other wetland areas in the region are of international interest. Most notable among these is the Laguna de Rocha which is widely regarded as being one of the most important sites in Latin America for migratory waterbirds. More information is needed on this and other similar sites in order to identify their precise management requirements. This is of particular importance as effective protection of these sites could be an appropriate compensatory measure for loss of some of the wetland area within the Bañados del Este.

7. CONCLUSIONS

i) Despite the considerable national and international concern for the Bañados del Este, there is today a rising willingness on the part of the government of Uruguay to address these problems and to identify solutions. This effort should be supported by the Ramsar Convention and particular efforts made to ensure that solutions are pursued through an integrated inter-disciplinary approach, and

through an inter-institutional consensus which involves both government and non-governmental institutions.

ii) It is clear that large areas of the original site designated under the Ramsar Convention have been converted to agriculture, and can no longer be considered as wetlands. The limits of the Ramsar site therefore need to be revised, and those areas which are clearly under agricultural production or intensive grazing should be excluded. Areas where the agricultural production and grazing are extensive could be considered for inclusion in a buffer zone to the sites of highest ecological and hydrological value which would be those included on the Ramsar List.

iii) In order to identify such sites, a detailed analysis of the available information on the fauna and flora of the area should be effected. This should pay particular attention to the criteria for listing of sites of international importance under the Ramsar Convention and should result in the identification of specific sites within the Bañados which would be given special conservation attention by the government under its present development plan for the area.

Within this study, special emphasis should also be given to the wide range of hydrological and ecological functions which the wetlands of the Bañados serve, and to the economic importance of these. In addition to the sites designated as being of international importance, other wetlands in the Bañados should only be reclaimed for agriculture when it is clear that the value of drainage to the local people is greater than that of the functions currently provided by the wetlands.

iv) As part of any future investment in agricultural productivity in the area, special attention should be given to ways through which the existing natural functions of the wetland system can contribute more effectively to the local and national economy. Such methods may include rehabilitation of the fur industry dependent upon Coypu, and development of ecological tourism.

v) In addition to identification of sites of highest importance within the Bañados area, special attention should be given to identification of other wetland sites within Uruguay, in particular in the vicinity of the Bañados, which are of similar international importance. One such site is the Laguna de Rocha to which special consideration should be given.

vi) The Ramsar Convention Secretariat should liaise closely with the government of Uruguay and with the InterAmerican Development Bank to ensure that future investments are based upon a detailed study of the natural benefits of the wetland system and of the environmental and socio-economic impact of any economic investment in wetland drainage.

ANNEX III

Itinerary of Ramsar Mission
24-28 October 1988

MONDAY, 24 OCTOBER

19.35 hrs — Arrival in Montevideo. Meeting with Prof. Raul Vaz-Ferreira.

TUESDAY, 25 OCTOBER

10.30 hrs — Meeting with the Sub-Commission Bañados del Este of the Instituto Nacional para la Preservación del Medio Ambiente.

15.00 hrs — Meeting with the Environmental Commission of the Cámara de Diputados.

17.00 hrs — Meeting with the Joint Commission of Laguna Merin.

18.00 hrs — Meeting with the Environmental Commission of the Cámara de Senadores.

WEDNESDAY 26/THURSDAY 27 OCTOBER

Field visit to Bañados del Este and Laguna de Rocha.

THURSDAY 27 OCTOBER

20.30 hrs — Meeting with the Sociedad de Conservación del Medio Ambiente and selected journalists.

FRIDAY, 28 OCTOBER

07.30 hrs — Interview with El País.

10.30 hrs — Departure for Sao Paulo.

ANNEX IV

LIST OF PARTICIPANTS AT INDIVIDUAL MEETINGS

Meeting with the Instituto Nacional para la Preservacion del Medio Ambiente

29 October 1988 - 10.30 hrs

NAME	INSTITUTION
Ruben Doti	Ministerio Ganaderia, Agricultura y Pesca
Gustavo Sacco	Ministerio Ganaderia, Agricultura y Pesca APA (Amigos Preservación Ambiental)
Félix Pittier	Ministerio Defensa Nacional - RREE
Hugo Roldós	SOHMA
J. Villalba-Macias	TRAFFIC SUDAMERICA
Dora Alvarez	Ministerio Transporte y Obras Públicas
Raúl Vaz-Ferreira	Comisión Bañados del Este
José Pedro Porta	Sociedad de Conservación del Medio Ambiente
Jorge Luis Cravino	Sociedad de Conservación del Medio Ambiente
Gustavo Mangeney	Sociedad de Conservación del Medio Ambiente
Carlos Ferreira Ruella	Sociedad de Conservación del Medio Ambiente
Federico Achaval	Facultad de Humanidades y Ciencias
Marcelo Consillas	Ministerio de Educación, Cultura (Asesor Presidencia del Instituto Nacional para la Preservación del Medio Ambiente

Meeting with the Comisión Mixta para el Desarrollo de la Cuenca de la Laguna Merin

25 October 1988 - 17.00 hrs

NAME	INSTITUTION	POST
O. Rodriguez Erreca	Asociación Cultivadores de Arroz	Secretario
Juan Giribaldi	Direccion Nacional de Hidrografia - Ministerio de Transporte y Obras Publicas	Ingeniero Civil
Ricardo Cayssials	Asesor del Ministerio de Educación y Cultura en el Area de Medio Ambiente	Ingeniero Agrónomo
Luis Medina	Dirección Nacional de Hidrografia - MTOP	Director - Division Recursos Hidricos
Ruben Doti	Ministerio de Ganaderia, Agricultura y Pesca	Asesor - Direccion General de Recursos Naturales Renovables
Altamirano	CLM	
Artigas Durán	CLM	

Meeting with the Comision Especial sobre el Medio Ambiente
Cámara de Diputados

25 October 1988 - 15.00 hrs

Cayetano Capeche - Chairman

Javier Barrios Anza

Washington García Rijo

Carlos E. Negro

Meeting with the Comision Especial sobre el Medio Ambiente
Cámara de Senadores

25 October 1988 - 18.00 hrs

Alfredo Traversoni - Chairman

Juan Martín Posadas

Francisco Terra Gallinal

FIELD TRIP

26/27 October 1988

Raúl Vaz-Ferreira

Manuel R. Spinola - Student Coypu

Francisco Rilla - Ornithologist

Federico Achaval