

## THE TEAM

### CIESIN, Columbia University (USA)

Alex de Sherbinin  
John Mickelson

### IBAMA (Brazil)

Valdir Steinke (CSR)

Sérgio A Monteiro (Rio Grande do Sul)

Amauri de Sena Motta (ESEC-Taim)

### PROBIDES (Uruguay)

Alicia Torres

Ignacio Porzecanski

Gonzalo Picasso

Carlos Prigioni

### U.S. Fish and Wildlife Service (USA)

Frank Rivera

### American Embassy Brasília

Gislaine Disconzi

Andrew Dowdy

## CONTACT US

CIESIN, Columbia University  
P.O. Box 1000  
Palisades, NY 10964 USA  
Tel. +1-845-365-8988

IBAMA-CSR  
Scen Trecho 2 - Ed. Sede IBAMA  
CEP: 70.818-900 - Brasilia - DF  
Tel. +55-61-316-1449

PROBIDES  
Casilla de Correos 35  
Rocha, Uruguay  
Tel. +598-47-25005



The team (left to right): Valdir Steinke, Alicia Torres, John Mickelson, Gonzalo Picasso, Ignacio Porzecanski, Gislaine Disconzi, Alex de Sherbinin, Marcondes (driver), and Sergio Arraes Monteiro

## LOCATION OF LAGUNA MERIN



## FOR MORE INFORMATION:

<http://sedac.ciesin.columbia.edu/rs-treaties/laguna.html>

## Remote Sensing Technologies for Ecosystem Management Treaties



Funded by the US Bureau of Oceans and  
International Environmental and Scientific Affairs  
(OES) of the U.S. State Department



## INTRODUCTION

➤ This project focuses on the utilization of satellite remote sensing data to improve the effectiveness of ecosystem-oriented multilateral environmental agreements (MEAs). These agreements include, among others, the Ramsar Convention on Wetlands of International Importance, the Convention on Biological Diversity, the World Heritage Convention, and UNESCO Biosphere Reserves.

➤ These conventions and site designations serve to protect natural resources and biodiversity of international importance, yet they are often constrained by lack of data and information to support implementation.

➤ The project is testing applications of remote sensing at a Ramsar and Biosphere Reserve site in northeastern Uruguay, and in the adjacent transboundary freshwater lake (*Laguna Merin* in Spanish and *Lagoa Mirim* in Portuguese) that is threatened by land use practices, agrochemical pollution, and over-fishing.

## FIRST COMPONENT

➤ In this component we will identify remote sensing instruments and applications that are relevant to specific ecosystem management treaty provisions.

➤ By examining treaty texts and resolutions, we will focus on those provisions that address environmental monitoring and natural resource management. Appropriate instruments and applications will then be mapped onto these provisions. The result will be a report to be distributed to Contracting Parties and treaty secretariats.

## SECOND COMPONENT

➤ In the second component we are developing a pilot application of remote sensing applied to a specific wetland site, the *Bañados del Este* in northeastern Uruguay and the Taim Ecological Reserve in Brazil, and the associated freshwater lake, *Laguna Merín*, which straddles the border between the two countries.

➤ The overall purpose of the pilot application will be to improve ecosystem management and treaty implementation through the use of remote sensing technologies, with the goal of promoting sustainable economic development of *Laguna Merín* and the surrounding area. A report will be distributed to management authorities in both countries.

## THIRD COMPONENT

➤ In this component we will organize an expert workshop in which the results of parts one and two are presented, and representatives of the remote sensing research community and the ecosystem MEAs can discuss concrete approaches to strengthening linkages between remote sensing researchers and the MEA community, including the utilization of remote sensing data to harmonize treaty reporting requirements.

➤ This workshop will be organized in late 2004 in conjunction with an appropriate Conference of Parties or possibly the 3<sup>rd</sup> World Conservation Congress (November 2004)



Capivara herd (*Hydrochoerus hydrochaeris*)