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The Ramsar Regional Center for Training and Research on Wetlands in the Western Hemisphere (CREHO) is a not-for-profit international organization that promotes management and wise use of wetlands in the Americas.

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EDITORIAL

With the slogan of the X Conference of the Ramsar Convention Contracting Parties (COP10), "Healthy wetlands, healthy people", this issue of *Infowetland* joins the celebration taking place in Chagwon, South Korea.

There are numerous examples in the Americas of the interdependence between wetlands and human populations, both in rural and urban communities. The Ramsar COP10 slogan invites us to reflect about the direct relationship between human populations and wetlands, highlighting the fact that as a species we depend on wetlands and, hence, their loss has a direct impact on people.

It is in this sense that the current issue of *infowetland* stress the link between wetlands and people as a function of the daily use we make of them when enjoying their scenic beauty, their rich biodiversity and benefitting from the services provided by these ecosystems in terms of food, water and raw materials, among others.

Thus, in this issue we present a series of informative capsules about the benefits we obtain from wetlands, one of them being the poisonous frog – *Dendrobates auratus* – as an example of indicatives fauna of the wetlands health, and an interesting article about the "Community Initiative for the Recuperation and Conservation of the Las Guacas Wetlands", in Colombia, an example of the strong interdependence between wetlands and people. We complete this issue with our usual sections about "News", "Publications Available for Download on the Web" and "Events and Courses".

We hope you will enjoy this last issue for the year 2008, with which we close a year full of challenges and accomplishments. We invite you to remain with us during 2009.



Rosa Montañez
Executive Director
CREHO



NEWS

CREHO AT THE 10TH MEETING OF THE CONFERENCE OF THE CONTRACTING PARTIES TO THE RAMSAR CONVENTION ON WETLANDS

With the slogan "Healthy Wetlands, Healthy People" the Ramsar COP 10 will take place in the Republic of Korea between the 28th of October and November 4th, 2008.



CREHO will use this occasion to share its experiences and the lessons learned during its development process as a regional initiative, which in only four years has allowed it to position itself and to have a positive incidence on issues regarding wetlands conservation in the Americas and the technical implementation of the Ramsar Convention.

Of special significance is the presentation by the Ramsar Regional Center for Training and Research on Wetlands in the Western Hemisphere of a side event entitled "Ramsar Regional Center, Strengthening Capabilities in the Americas", which will take place on the 30th of October, 2008, in room 603, between 18:00 and 19:00.

DESIGNATION OF NEW RAMSAR SITES IN THE AMERICAS

In past years, the Americas have designated an important number of new Ramsar Sites, which shows the ever growing commitment on the part of the countries in the Western Hemisphere towards the Ramsar Convention.

So far, this year, the following countries have added names to the list of Wetlands of International Importance: Mexico, 45 new Ramsar Sites, which was announced during the celebration of the 2008 Wetlands World Day; Argentina, Colombia and USA designated two new sites each and Ecuador added one new Ramsar Site.

Additionally, there is a list of countries that have submitted the documentation, now under review, for sites to be included in the list of Wetlands of International Importance.

Congratulations, and we hope that more countries in the Western Hemisphere will join the initiative of designing new Ramsar Sites for a better conservation of the environment.



WHAT IS THE COP?

Source: www.ramsar.org

The application of the Convention is based upon an on-going association between the Contracting Parties or Member States, the Permanent Committee and the Convention Secretariat, with advice provided by the Scientific and Technical Review Group (GECT, for its initials in Spanish), and the support of four non-governmental organizations associated with the effort. Every three years, the governmental representatives of the Contracting Parties get together as the Conference of the Contracting Parties (COP), the body in charge of producing the policies of the Convention, reviewing the general trends in the application of the Convention as they are reflected in the National Reports, and adopting decisions to improve its performance. The meetings of the Ramsar COP have become renowned as highly efficient events that promote an active intervention and participation on the part of the governments.



THE BENEFITS OF THE RAMSAR DESIGNATIONS IN MEXICO

Source: Flavio Chazaro Ramírez, Arturo Peña Jiménez, Carlos Eduardo Muñoz Córtes
National Commission of Natural Protected Areas, Mexico.

Without any doubt, the designation of Mexican wetlands has produced a series of benefits, national as well as local, which has allowed advanced in the management of these important areas.

Mexico has made an unprecedented effort in the region of the Americas to incorporate wetlands considered under-represented; thus, in the last years, its task has been to incorporate more than 100 wetlands containing reefs, mangroves, sea grass, cenotes, oasis and others and encompassing an area of more than 8 million hectares under this scheme of international recognition.

This has meant that the national political agenda approaches the wetlands issue from the legislative, financial and planning point of view, to face the challenge imposed by climate change which, without doubt, is bringing and will bring medium-term benefits to these ecosystems.

Of the current 112 Ramsar Sites in Mexico, about 50% is in the process of producing its Conservation and Management Plan and its physical delimitation and demarcation, with direct support from the National Commission of Natural Protected Areas, the focal point for the Ramsar Administrative Authority in Mexico. For the year 2009, it is expected that some US\$5,750,500 will be invested only in wetlands, in addition to the budget assigned to the protected areas system itself.

THE RAMSAR SITE CHINGAZA LACUSTRINE SYSTEM

Source: Hugo Forero R. Fundeparamos www.fundeparamos.org

The Cundinamarca Department, in the Colombian Andean Zone, has its first Ramsar Site, a complex of twenty (20) lakes of fluvial and glacier origin supplying water to the Aqueduct System of Bogota, DC, and Villavivencia, in the Meta. The declaration was made official last February by the Colombian Government Decree 233 of 2008.

The idea for the declaration came from Fundepáramos, a Colombian NGO that, with the support of IUCN NL-SWP and the participation of many social sectors, sensitized the national government on the need to declare the Chingaza Lacustrine System as a Ramsar Site. This Colombian NGO carried out the pertinent assessment and analysis to produce the Ramsar Informative Fiche (FIR, for its Spanish initials).

This Ramsar Sites is 4052 Ha in size and consolidates itself as a center of endemism of flora and fauna species, some of them on countdown to extinction. With this declaration, the Colombian community-based organizations and the organized community renew their commitment with the high-mountain ecosystems, taking into consideration that this geographic eco-region provides the country with 30% of the Net Internal Product.

OFICIAL DESIGNATIONS OF RAMSAR SITE IN THE WESTERN HEMISPHERE BETWEEN JANUARY AND SEPTEMBER 2008

Argentina

- . Reserva Natural Otamendi
- . Humedal Laguna Melincué

Colombia

- . Sistema de Humedales Laguna del Otún
- . Colombia Sistema Lacustre de Chingaza

Ecuador

- . Complejo Llanganati

United States

- . Francis Beidler Forest
- . U.S.A. Wilma H. Schiermeier Olentagy River Wetland Research Park

Mexico

- . Parque Estatal "Cañón de Fernández"
- . Ensenada de Pabellones
- . Humedal Los Comondú
- . Laguna de Babicora
- . Otoch Ma'ax Yetel Kooch
- . Santuario Playa Boca de Apiza – El Chupadero – El Tecuanillo
- . Humedales La Libertad
- . Bahía de San Quintín
- . La Tovará
- . Manglares de Nichupté
- . Parque Nacional Cabo Pulmo
- . Zona Sujeta a Conservación Ecológica Sistema Lagunar Catazajá
- . Arroyos y manantiales de Tanchachin
- . Laguna Xola-Paramán
- . Río Sabinas
- . Sistema Estuarino Boca del Cielo
- . Zona Sujeta a Conservación Ecológica Cabildo-Amatal
- . Zona Sujeta a Conservación Ecológica El Gancho-Murillo
- . Humedales de Montaña La Kisst
- . Playa de Colola
- . Estero La Manzanilla
- . Complejo Lagunar Bahía Guásimas – Estero Lobos
- . Estero El Chorro
- . Estero Majahuas
- . Oasis de la Sierra El Pilar
- . Oasis Sierra de La Giganta
- . Playa Maruata
- . Sistema de Represas y Corredores biológicos de la Cuenca Hidrográfica del Río de Necaxa
- . Sistema Lagunar Agiabampo – Bacrehuis – Río Fuerte Antiguo



MEMORANDUM OF UNDERSTANDING BETWEEN CREHO AND WETLANDS INTERNATIONAL , WI NEW OFFICE

Wetlands International announces with great pleasure the appointment of Julio Montes de Oca as its new Programme Development Officer for Latin America and the Caribbean.

Julio is responsible for coordinating and leading project and partnership development, as well as fund-raising in Latin America. His focus will be on activities and projects in the field of Wetlands and Livelihoods, but expanding later to encompass the full range of strategic goals of Wetlands International. The Ramsar Regional Center for Training and Research on Wetlands in the Western Hemisphere (CREHO) currently hosts Wetlands International's new office based in the City of Knowledge in Panama City. A Memorandum of Understanding between CREHO and Wetlands International supports this hosting arrangement.



In order to strengthen their collaboration, both organizations have stated their respective commitment to work together for the purpose of the promotion of the wise use, management and conservation of wetlands and their resources, as well as the support and strengthening of the Ramsar Convention in Latin America and the Caribbean.

You can contact Wetlands International Office in Panama at:

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DIRECTOR OF THE CENTRAL AMERICAN REEF PROGRAM VISITS CREHO

In the month of July, Nestor Windevoxhel, Director of the Central American Reef Program of The Nature Conservancy (TNC), visited CREHO.

During his visit, the following issues were reviewed: the diverse activities being undertaken within the framework of the TNC Central American Reef Program; the value of the regional courses offered by the Ramsar Regional Center as a training tool concerning wetlands-related issues, and the importance of promoting other sub-regional strategies.



Mr. Windevoxhel shared an afternoon with CREHO and let it be known that "it is a great pleasure to see that the work and the Convention are progressing after the 20 years that have been invested in these initiatives in Central America; I'm glad to see other enthusiastic people, full of energy, like you encouraging the work of the Convention".

We thank Mr. Windevoxhel for the time he dedicated us during his visit to Panama and we are sure that this meeting has been very productive and will signal the starting point of a collaborative relationship for the benefit of the wetlands ecosystems.



FORUM ABOUT THE MANGROVES DEFENSE

Among the activities carried out in Panama as part of the celebration of the International Day for the Defense of the Mangroves Ecosystems, a forum was held in order to generate knowledge, thoughts and actions in view of the serious threats being imposed onto this rich and important ecosystem, which is considered to be one of the five most productive ecological unit in the world.

The Forum took place at the Earl S. Tupper Auditorium, in the Smithsonian Tropical Research Institute located in Panama City. The lectures were very interesting and they demonstrated that the support of international agreements, research, education and community participation are important allies in the conservation of wetlands, in general, and of mangroves, in particular.

Other events took place to celebrate this date, such as educational tours for children, art displays and an environmental fair. The events were organized by Panama Audubon Society, Natura Foundation, Patronato Panama Viejo, Brader School, the National Environmental Authority, Panama Verde, PROMAR, CIAM, STRI, ANCON, Albatros Media, GITEC and CREHO.



WORKSHOP FOR THE CONSERVATION OF MIGRATORY SHORE BIRDS IN RICE FIELDS IN THE NORTHERN PART OF SOUTH AMERICA

Source: Vianey Ramírez. Calidris Association. www.calidris.org.co

Between October 15th and 17th, in Santiago de Cali, Colombia, Calidris Association and Wetlands International, with the support of the Hemispheric Network of Shore Birds Reserves, the National Fish and Wildlife Foundation (NFWF), and the Valle del Cauca Regional Autonomous Corporation will carry out the Workshops "Conservation of shore birds in rice fields: experiences in Northern countries in South America".



Rice is the most important food staple in the world and in the past years it has become an extremely important crop for the conservation of birds. Appropriately managed, rice fields can act as substitute ecosystems for bird species that depend on wetlands, because rice can grow in flooded conditions.

This workshop aims to share information at the regional level, to promote international cooperation and the establishment of working networks, and to identify challenges to conservation and main activities with respect to research, monitoring, diffusion, extension and promotion of "best practices" to manage rice cultivation.

Present at this event will be researchers, wildlife managers, and officials from governmental institutions, national and international NGOs and representatives from the rice sector from Colombia, Argentina, Ecuador, Venezuela, Cuba and the US.

For more information email to
calidris@calidris.org.co



AWARD TO THE PROGRAM FOR THE WISE USE OF WETLANDS IMPLEMENTED BY CHILE'S NATIONAL OIL ENTERPRISE

Source: Diego Luna. Corporación Ambientes Acuáticos de Chile-CAACH

In a ceremony that took place this past September in London, the Program for the Wise Use of Wetlands implemented by Chile's National Oil Enterprise (ENAP, for its initials in Spanish) took first place in the category "Best Corporate Social Responsibility Campaign" at the annual event of the "Petroleum Economist Award".

ENAP's Wetlands Program received the award for its actions promoting the wise use of those wetlands located within the area of influence of its operations throughout the country. Of special importance are those actions being implemented in the Bahía Lomas Ramsar Site, in Tierra del Fuego, in the Chilean Magellan's and Antarctic XII Region. Here, the ENAP's Program has contributed to build a process that will allow for the design and implementation of a Management Plan for the area and the incorporation of the site into the Western Hemisphere Shorebird Reserve Network (WHSRN).



TRAINING WORKSHOPS FOR TEACHERS AT SCHOOLS NEIGHBOURING THE HIGH-ANDEAN WETLANDS

Source: José Alí Moncada. EcoHumana Foundation www.fundacionecohumana.org

With the support of the Wetlands for the Future Fund and the EcoHumana Foundation, during the first semester of 2008 a training program for teachers whose schools are located in the neighbourhood of the El Batallón — La Cimarronera lake system, Los Paramos National Park, Tachira, Venezuela, was initiated.



In the first workshop a total of 25 teachers participated; field work was carried out in the Laguna Verde, one of the more than 100 high-Andean wetlands that make up this lake system. The program will last for two-years and includes a series of training workshops about the sustainable use and the conservation of the high-Andean wetlands, as well as about teaching strategies to facilitate the pedagogic approach.

In coming months, follow-up meetings will take place to provide continuity to the training in teaching strategies for environmental education.

CENTRAL AMERICAN WORKSHOP FOR BIRD MONITORING IN SWAMPS

In Palo Verde National Park, Palo Verde Biological Station, Costa Rica, between the 7th and 11th of December, the Central American Workshop for Bird Monitoring in Swamps will take place with the participation of a group of scholarship recipients from Central America and Colombia.

The workshop aims to provide participants with knowledge and theoretical and practical skills to apply the bird monitoring protocol in swamps, in order to build capabilities in the Central American region thus improving the level of knowledge of this bird group and promote its conservation.

The workshop is organized by the Conservation Council for Shore Birds, with the support of the US Forestry Service, the Costa Rica National Museum, the US Fish and Wildlife Service, PRONATURA Noreste (Mexico), the Organization for Tropical Studies and CREHO.



PUBLICATIONS AVAILABLE FOR DOWNLOAD ON THE WEB

On the web, you find interesting documents that talk about conservation, which are available for downloads for free. We invite you to send any publication you would like to share, to the following e-mail info@creho.org

Action for culture in Mediterranean Wetlands

The book is based on an analysis of culture-related activities in 22 Mediterranean wetland sites, under the prism of the Ramsar Convention work on the cultural values of wetlands and the related Resolutions VIII.19 and IX.21. A main conclusion of this painstaking work is that nature and culture are two interdependent elements and therefore “we cannot understand and manage the ‘natural’ environment unless we understand the human culture that shaped it”. Thus, the values resulting from cultural activities are important in strengthening the links of people with wetlands, which are a prerequisite for wetland conservation and for the sustainable use of their resources and services. PDF versions in English and in French are available from http://www.med-ina.org/mava01/04_progress/index.html, and for the print publication, inquiries can be made to Med-INA at afoutri@med-ina.org.



Guide for mangrove identification in the Bay of Panama wetlands

This full-colour brochure about mangroves in the Bay of Panama has been developed to be used as a technical tool that will facilitate the identification of the most commonly observed plant species in the wetland and Ramsar Site, Bay of Panama, on the basis of comparisons of characteristics and the visual identification of images that make it possible to differentiate the most representative elements of each one of the seven species of mangroves one orchid and one of ferns present in the area; it also provides general information about wetlands and mangroves.



Available in spanish at [http://www.panamaaudubon.org/images/publications/mangles%20doc.\(low\).pdf](http://www.panamaaudubon.org/images/publications/mangles%20doc.(low).pdf)

Treasures in the Sea

It is a new resource book that provides teachers with both the scientific information and a range of hands-on activities to help students discover the sea and all of its treasures.

The book is in English. If you go here <http://treasures.amnh.org/book.html> you can download the whole publication (7MB) or download by chapter.



The Root of the Matter. Carbon Sequestration in Forests and Peatlands

In tackling climate change, policy makers often overlook the role of the natural world in regulating greenhouse gases in the atmosphere: specifically, the unique role that forests and peatlands have to play in the battle against rising emissions.

Changing approach would significantly reduce the cost of tackling climate change and deliver a variety of other benefits.

Available in English on PDF format at <http://www.policyexchange.org.uk/images/libimages/419.pdf>

SPECIAL ISSUE

HEALTHY WETLANDS, HEALTHY PEOPLE

From wetlands we obtain lots of benefits and only through the conservation and wise use of these ecosystems they will be to continue doing so, which will undoubtedly be reflected on the quality of life of human beings.

If you want to know more about the relationship between human health and the wetlands, go to the following links: Evaluation of the Millennium Ecosystems: <http://www.millenniumassessment.org/en/Condition.aspx> (specially the chapters dealing with human health); Second UN Report on the development of water resources in the world: http://www.unesco.org/water/wwap/wwdr2/table_contents_es.shtml

COMMUNITY INITIATIVE FOR THE RECUPERATION AND CONSERVATION OF THE LAS GUACAS WETLANDS

Authors: Juan Carlos Chilito Piamba & Rubén Darío Caicedo, geographers. University of Cauca, Colombia.

The diagnostic and formulation of participatory strategies for the recuperation and conservation of Las Guacas wetlands was developed in order to carry out a participatory that would identify the dynamics, the players and the activities present in this territory.

The communities directly participating were the settlements of Brisas de San Isidro and Quebrada Pubús, people living in “vereda” Lame, Guacas and students from the vereda Los Llanos School, as well as administrative entities such as the Cauca government, the Popayan mayoralty and del Cauca University.

The proposal focussed on integrating the knowledge of the local population has about its territory with the scientific knowledge, in order to build a new knowledge useful to all players involved; it also developed practical activities in the wetlands that will improve the quality of life of its inhabitants and of the wetlands itself.

TERRITORY AND THE SOCIETY-ENVIRONMENT RELATIONSHIP

In spite of the many studies, conventions about environment and social development, and the commitments made by different governments, it has not been possible to slow down the multiple socio-economic problems present at the local, regional, national and international levels, because it is not common to take into consideration the territorial realities or the environmental vision of the local populations.

Step by step, this vision has been changing and now we see how the inhabitants of a certain place become the real knowledgeable ones about the attributes and the problems present in the territory where they live. Moreover, they are the ones structuring the landscape and, hence, they have a wider vision of their territory and are the ones who can diagnosis the situation in a holistic way, and this must be recognized when intervening in a population.

WETLAND FOOD

Adequate, good quality food is a prerequisite for healthy people, and wetlands are key contributors, supplying us with, for example, fish (including shellfish), and plants (including fruits, seeds, as well as the vegetative parts). However, there are many human actions that reduce or destroy the capacity of wetlands to provide food for human consumption: pollution, excessive water abstraction, poor sanitation, overharvesting and, of course, land use change.

Now the problem is: How do we get the populations to express and shape the knowledge they have about their territories, taking into consideration that such knowledge includes a material and symbolic appropriation process?

In the process of diagnosis and formulation of participatory strategies for the recuperation and conservation of Las Guacas wetlands a few elements stand out as methodological axis: community participation, dialog among different types of knowledge and social cartography, key elements when the time comes to analyze the social and environmental dynamics present in the wetlands territory.

COMMUNITY PARTICIPATION AND ORGANIZATION: KEY AXIS TO DEVELOP THE WETLANDS

Through a participatory process, the local communities related to Las Guacas wetlands were integrated to implement the following activities:

Environmental Participatory Diagnostic: the implementation of the participatory diagnostic for the recuperation and conservation of the wetlands made it possible for the community to explain what is going on in the territory, to identify the main problems and to design strategies to solve them, thus guaranteeing the conservation of the ecosystem through sustainable practices.

Multi-temporary analysis of the wetlands: in the analysis of the relation amongst society-nature from the geographic point of view, it is important to keep in mind the inter-relationship between space and time, which helps us understand the physic and anthropic processes that have intervened in the territory, in order to later determine their state and dynamics. Thus, by identifying the covering and use of Las Guacas wetlands in previous years and, mainly, now, a zoning is proposed (with corresponding map) in areas for use, conservation and recuperation.

Wetlands zoning: zoning takes into consideration that wetlands in general must be conserved, emphasizing some areas identified as critical due to the pressures they experience and, at the same time, guaranteeing that the community keeps making use of the wetlands resources as it has done so far. This zoning comes from the need to guarantee the recuperation of the most deteriorated areas and to generate a participatory process that would lead to the sustainable use of this ecosystem to benefit the community from an environmental, economic and social point of view.



WETLAND MEDICINES

Many wetland plants and a number of animal species have been used in traditional medicines for millennia and this continues today. They are also used in homeopathic medicines, an ever-growing industry in the developed world, and have a role in the development and production of modern medicines. Over-collection, destructive harvesting techniques, and habitat loss and alteration all challenge the capacity of wetland species to continue to fulfil these roles.

BIBLIOGRAPHY

- MIN. AMBIENTE, IGAC. Paisajes vivos paisajes observados, la percepción territorial en la zonificación ecológica del Pacífico Colombiano. Proyecto zonificación ecológica de la región Pacífica Colombiana— Programa de manejo de recursos naturales. Edit. . Gente Nueva. Bogotá 2000
- UNWIM, Tim. El Lugar de la Geografía, Ed. Cátedra, Madrid 1992



Formulation of Strategies:

the strategies have taken into consideration Colombia's National Policy for Inner Wetlands and the Ramsar Convention guidelines for the management of wetlands as strategic ecosystems at the social, economic, cultural and environmental level. Actions and activities that will be implemented for the recuperation and conservation of the Las Guacas wetlands were identified through a participatory process, in order to improve the environmental and social conditions of the sector, which represents a better quality of life for the population. Through this process the following strategies were developed: community organization and participation; institutional articulation management and wise use; conservation and recuperation; awareness and sensitizing.



These are some of the appreciations gathered in the social cartography workshops with respect to the relationships community-wetlands:

“The wetlands must be protected because when large projects are developed the first thing they use is the wetlands, covering them up or filling them up to be able to build things on top of them; then, the fundamental thing in this project is the wetlands, which will provide beauty to our project” (San Isidro neighbour).

“We dream of a better future for my “vereda”, with a big school with lots of space to play and that in the future the wetlands will be more beautiful and will have more trees...because they will be useful for the vereda and for the whole of Popayan”. (Student, Los Llanos School)

CLEAN WATER

Inland wetlands (rivers, lakes, ponds, marshes, etc.) perform a vital function in filtering and purifying freshwater, rendering it 'clean' for human consumption. And never has it been a more valuable service for human populations than today when over one billion people lack access to clean water supplies. But wetlands can only provide us with clean water if we keep them healthy through effective management. What happens when we destroy our wetlands is obvious: we lose this source of clean water.

FLOODS

While we cannot easily prevent major floods, we can ensure that we benefit from the flood protection services that wetlands supply free of charge. Rivers, lakes and marshes slow down and retain floodwaters but only if we do not build our urban centres on natural floodplains and are more thoughtful about the broader implications of channelling our rivers and draining our marshes.



This experience shows us how the environmental and social work must generate a commitment from the institutions as well as from society to attain the conservation and sustainable use of these ecosystems.

This represents a challenge and a common responsibility for the institutions and the communities at the regional, national and local levels to reach a consensus and to solve conflicts that might arise in the process of territorial appropriation of the areas identified and classified as wetlands, for which the many visions, relationships and interpretations expressed in those territories must be taken into account.

INDICATIVES FAUNA OF THE WETLANDS HEALTH

Green and black poison dart frog - *Dendrobates auratus*

Source: Jorge Gamboa Elizondo. Wetlands National Program MINAE-SINAC. Costa Rica

Frogs and toads are part of the planet's big biodiversity. These animals belong to the amphibians group and as such they live part of their lives in the water and the other part on land; hence their close relationship with the wetlands ecosystems.

They have a soft and permeable skin which makes them very sensible to polluting residues in the water, soil and air which, in turn, allows them to be used as pollution indicators, facilitating the follow-up of serious problems of extinction and then decline of a lot of species in this group.

Among them we find the green and black poison dart frog. This amphibian lives on the floor of humid forests; it can also be found in *Bromeliaceous epiphytes* at 3 to 25 meters high above ground; it feeds on ants and other small insects. To defend against its predators, it produces toxins which are very neurotoxin.

In the Caribbean ridge, it can be found from the South of Nicaragua to the Uraba Gulf, in Colombia, and from Costa Rica, through Panama, up to the lower part of the Atrato River watershed. It was introduced in Oahu, Hawaiian Islands, USA.

Individuals from this species are very appreciated to be used in "terrariums"; thus, they are taken from their natural habitats to be illegally sold. This species is listed in Appendix II of the CITES Convention (Convention on the International Traffic of Threatened Species).

The declining in populations of many amphibian species is an alarming sign about the health of our planet; thus, we must contribute to the conservation of our biodiversity because we ourselves and the future generations are part of it.

For more information go to: <http://www.amphibianark.org>





Events and Courses

CREHO's COURSES 2009

International Course on Wetlands Management: Formulation of Management Plans August 17th – 28th, 2009. Sinaloa, Mexico.

The course is geared towards strengthening the technical capabilities of professionals working in activities related to wetlands management. It addresses the different phases involved in the formulation of a management plan, taking into consideration the Guidelines for Planning the Management of Ramsar Sites and other wetlands.

The official language will be Spanish and all lessons, documents, presentations, expositions and group dynamics will use this language. Hence, those who are interested in participating should be fluent in Spanish. Depending on the number of English-speaking participants, simultaneous translation could be available.

International Course about Environmental Impact Assessment (EIA) and Environmental Strategic Assessment (ESA) for Wetlands Management November 23th to December 4th, 2009. Panama City, Panama.

The course is geared towards wetlands management from the point of view of professionals in their respective work fields involved in the formulation, evaluation and decision taking processes within the framework of the goals established by international agreements such as the Ramsar Convention.

It is a two weeks intensive course that will take place between November 24th to December 5th, 2008, in Panama City and is organized by the Ramsar Regional Center for Training and Research on Wetlands for the Western Hemisphere and the Ramsar Convention.



Costs

For both courses there are two options to cover the costs:

Option A: USD\$ 3,500.00 includes enrolling, working material, field trips, lodging and food (breakfast, lunch, supper and snacks), hotel/airport shuttle and insurance. It does not include: plane ticket, visas and taxes, tourism activities, phone calls, internet, laundry, health insurance nor any other expense that has not been previously agreed on.

Option B: USD\$ 2,300.00 includes: enrolling, materials, field trips, insurance, food (lunch and snacks, only). It does not include: lodging, food (breakfast and supper), hotel/airport shuttle, plane ticket, visas and taxes, tourism activities, laundry, phone calls, internet, health insurance nor any other expense that has not been previously agreed on.

**For information regarding the courses organized by CREHO
go to cursos@creho.org or visit periodically www.creho.org**



CMS COP9. 2010 and beyond wildlife renaissance.

1st – 5th December, 2008. Rome, Italy.

The Ninth Meeting of the Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals (CMS COP9) will be held in Rome, Italy, from 1 to 5 December 2008.

The conference, which is being hosted by the Government of Italy, will be preceded by the 15th meeting of the CMS Scientific Council (from 27 to 28 November) and the 33rd meeting of the CMS Standing Committee (30 November). All the events will be held at FAO (Food and Agriculture Organisation of the United Nations) Headquarters.

More information www.cms.int



Earth, our common home!
World Environmental Education
Congreso. May 10th to 14th, 2009
Montreal, Québec - Canada.

Caring for this household, in which all life exists, calls for strong ecological identity, solidarity, and sound action at this critical period of the Earth's history when we need to profoundly and urgently realign human endeavour within the capacities, limits, and systems of our home.

For more information:
www.5weec.uqam.ca/EN/



Bat Conservation International is now accepting applications for 2009 Student Research Scholarships. Deadline for receipt of applications: December 15, 2008.

Each year, BCI scholarships help talented students at universities around the world conduct research that contributes the new knowledge needed to conserve bats and their habitats worldwide.

The 2009 Special Scholarships are restricted to research on bats' pollination of either durian or Old World mangroves. The durian is the most commercially valued fruit in much of Southeast Asia and nearby Pacific Islands, but farmers often mistakenly assume that bats reduce (rather than enhance) durian production. Coastal mangroves are ecologically essential but are disappearing at alarming rates. Studies documenting bat roles as durian and mangrove pollinators are urgently needed.

Scholarship applications must be completed online at www.batcon.org/bcigrants/scholarintro.asp.

The deadline for receipt of applications for 2009 BCI Scholarships is December 15, 2008. More information www.batcon.org



International Workshop on Community Participation In Preserving Mangrove Ecosystem Services.
8-10th December 2008. Bhitarkanika, Orissa, India

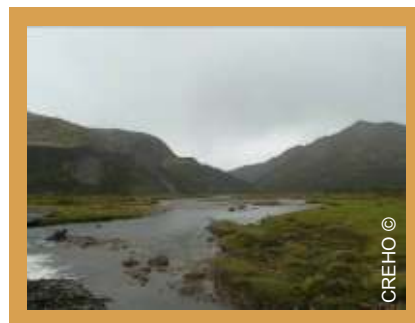
A special focus of the conference will be on the issue of securing access and user rights by small fishers, indigenous people on coastal resources that sustain their livelihoods. The workshop is organized by Coastal Community Resource Center at Village Gupti of Bhitarkanika in partnership with Indian Institute for Sustainable Development (IISD) and Supported by Sandhan Foundation. More information ccrc@sandhanfoundation.info



A call for articles ¡Collaborate with us!

Send us information about the activities, results and processes taking place in the Americas towards the implementation of the Ramsar Convention, or about actions in the wetlands. We are also interested in publishing information regarding training courses and events.

Send us your activities, events, processes, project outcomes or other positive news to info@creho.org. Remember that each article must have a maximum size of 1,300 characters, including the spacing. The images to illustrate your article must have a resolution higher than 72 dpi and must be accompanied by the name of the photographer and the copyright authorization in order to be reproduced in INFOWETLAND



Special Issue: "Wetlands and river basin management "



For the special issue featured in our next publication, we invite you to send us specialized information regarding the processes, techniques, experiences and outcomes around the theme of wetlands and river basin management . You can send chronicles, essays or technical analysis.

Format for the special issue: Send us your chronicle, essay or technical analysis to info@creho.org. Remember that each article must have a maximum size of 3,000 characters, including spacing. The images to illustrate your contribution must have a resolution higher than 72 dpi and must be accompanied by the name of the photographer and the copyright authorization in order to be reproduced in INFOWETLAND.

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Next INFOWETLAND will be out in March 2009.

The special issue will deal with wetlands and river basin management.

**Send your news, topics, events and information before February 28th, 2009
to the e-mail info@creho.org**

The Editorial Committee approves the content of each issue of the INFOWETLAND bulletin; thus, receiving an article does not guarantee its publication. Modifications made to the material received will be notified via e-mail to the author or information source, and if he/she does not object to the modifications, the committee will take it as the approval to publish the article with the proposed changes.