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Educational Guides & Teacher Training Go Hand-in-Hand to Further Raptor Conservation in Panama

By Marta Curti, Neotropical Environmental Education, FPP

The Peregrine Fund—Panama’s Neotropical Environmental Education Program (NEEP) is currently focused on working in three main target areas within Panama. The first area consists of 16 communities surrounding Soberania National Park (SNP) where The Peregrine Fund-Panama is soft releasing young Harpy Eagles. The second area includes 21 communities in Darien, the region that borders with Colombia, and where a significant population of wild Harpy Eagles remains. Most recently, we have begun to work in 13 communities in the Bocas del Toro region, where we have already released several independent Harpy Eagles and where some wild Harpy Eagles still remain.

Work in these three areas consists of communicating with adults and children the importance of raptors in general and of the Harpy Eagle in particular. We use PowerPoint presentations, games, art, and interactive exercises in order to teach community members of all ages about the amazing world of birds of prey by disseminating accurate information about raptors while dispelling the many myths that surround these birds.

In an effort to further expand our raptor conservation message nation-wide, we have written an educational guide for elementary school teachers called Las Aves Rapaces (Raptors, in English). The guide contains five chapters on the biology, taxonomy, cultural importance and conservation of raptors while dispelling the many myths that surround these birds.

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Planning Underway for the 3rd Neotropical Raptor Conference in Colombia 2009

Following on the success of, and the great interest expressed in, the 2nd Neotropical Raptor Conference, held in Iguazu, Argentina in 2006, the 3rd Neotropical Raptor Conference is currently being planned for mid-2009 in Colombia. The location and date of the conference are yet to be determined, but you will be hearing more details about logistics and how you can participate in future newsletters, and through the Neotropical Raptor Network listserv. We hope to see you all in Colombia in 2009 to share your knowledge and interest in the conservation and scientific study of neotropical raptors. Stay tuned for more information!
Hawk Mountain Sanctuary, working together with colleagues in Venezuela, including Adrian Naveda at the Museo de la Estación Biológica de Rancho Grande, and staff at the Zoo in Maracaibo, placed color wing tags on approximately 170 Turkey Vultures over-wintering at the zoo in Zulia State, northwestern Venezuela. The birds were tagged as part of an ongoing study of long-distance migration in the species. Most, if not all, of the tagged birds appear to be members of the meridionalis or western North American subspecies of the Turkey Vulture (Cathartes aura), a race whose breeding range includes much the United States west of the Mississippi River and the western Canadian provinces of Manitoba, Saskatchewan, Alberta, and British Columbia. The birds, which were tagged shortly after they arrived in late autumn in northwestern Venezuela, are expected to begin migrating back toward their breeding grounds in February and March 2007. Their movements should take them through Central America and Mexico, and into the western United States and Canada.

The project has three goals: (1) to raise attention for Turkey vulture migration among bird watchers and conservationists in Central and North America, (2) to learn the breeding origins of the birds and whether or not they flew into and out of Venezuela as a cohesive group from a small breeding area in North America, and (3) to determine if they will over-winter in the same area next year. Reports of wing-tagged vultures will help Hawk Mountain scientists determine the timing and geography of migration in the species, as well as the eventual breeding areas of the birds. Some of the vultures carry red wing-tags with white numbers, others carry light-blue wing tags with black numbers. A “Wanted Poster” for the vultures is available at the Hawk Mountain website and as a PDF from Keith Bildstein (email below).

If you see a Turkey Vulture with a wing tag, please report the date and specific location of your sighting, together with the color of the tag, the number on the tag, the wing (right or left) to which the tag is attached, and the circumstances of the sighting including whether or not the bird was alone or in a group of vultures, flying or perched, feeding or roosting, etc. Dead birds also should be reported.

Report your sightings in writing to Keith Bildstein at the Hawk Mountain Sanctuary Acopian Center for Conservation Learning, 410 Summer Valley Road, Orwigsburg, PA 17961; by e-mail to Bildstein@hawkmtn.org; or by phone to 1-570-6433411 ext. 108. All reports will be recognized, and individuals reporting tagged birds will receive summary information on the study. We thank you in advance for keeping on the lookout for these special birds.

EU Bans Import of Wild Birds

The European Union decided unanimously on 11 January 2007 to prohibit the import of wild birds in order to prevent the introduction of infectious diseases including avian influenza. As a result, as many as four million birds a year will remain in the wild, spared from the international pet trade.

The EU passed a temporary ban on the import of wild birds in 2005 when a bird infected with the highly pathogenic strain of avian flu was found in a quarantine facility in the United Kingdom. This decision makes that ban permanent. Only captive-bred birds from approved countries will be allowed into the EU.

Prior to 2005, the EU constituted 90 percent of the world’s market for wild birds, importing some two million birds annually. Bird conservation experts estimate that roughly half of the birds harvested for sale in the EU died during capture and transport. Many of these birds, such as the African gray parrot and the scarlet macaw, are rare and endangered species.

Over the last two years, a coalition of some 240 conservation and animal welfare groups urged the EU to end all such imports because of infectious diseases, wild bird conservation and animal welfare concerns.
The Belize Harpy Eagle Restoration Program: It’s Soaring!

By Sharon Matola, Director, The Belize Zoo

The Peregrine Fund’s Harpy Eagle Restoration Program, aimed at restoring this rare species back into the forests of Panama and other portions of the Mesoamerican biological corridor (MBC), officially “migrated” to Belize in 2003. Since then, and thanks to a strong partnership between The Peregrine Fund, the governments of Belize and Panama, and The Belize Zoo, nine captive-bred Harpy eagles have been restored back into the forests of northern Belize.

This northern tropical forest landscape is known as “the Selva Maya” and, covering portions of Belize, Mexico and Guatemala, it is the largest tract of tropical forest remaining north of the Amazon basin. Through the information garnered from both VHF and satellite transmitters, which allow us to track the birds as they disperse, it is clear that the released eagles are taking full advantage of this vast forest and the abundant prey contained therein. In recent months, two birds that had been released in Belize have moved into southern Mexico, and two more have found a comfortable home in Tikal National Park, Guatemala. Tikal, a World Heritage Site, is home to stunning Maya ruins, and now adds to its list of stellar attractions, a possible sighting of a Harpy eagle. Indeed, the released birds have become “mega stars” in Tikal, drawing further attention to the important conservation work that has been brought to the northern segment of the MBC by The Peregrine Fund.

Due to the hard work of several biologists who track these birds on the ground, we have also been able to learn more about their prey base and hunting behaviors. The released Harpy Eagles have been seen feeding on a variety of prey including coatimundis, kinkajous, and anteaters. We have also found that Harpy eagles will prey upon Grey foxes, and anteaters. We have also found that Harpy eagles will prey upon Grey foxes, and anteaters. We have also found that Harpy eagles will prey upon Grey foxes, and anteaters. We have also found that Harpy eagles will prey upon Grey foxes, and anteaters. We have also found that Harpy eagles will prey upon Grey foxes, and anteaters. We have also found that Harpy eagles will prey upon Grey foxes, and anteaters. We have also found that Harpy eagles will prey upon Grey foxes, and anteaters. We have also found that Harpy eagles will prey upon Grey foxes, and anteaters. We have also found that Harpy eagles will prey upon Grey foxes, and anteaters.

In the future, it is hoped that more Harpy eagles will be released, awareness about the program stays on the increase, and this conservation program continues to maintain a successful profile in northern Central America.

“A greater awareness about the Harpy eagle and the valuable role this raptor plays in tropical forest ecology has been realized.”

Released Harpy eagle in Rio Bravo

Marta Curti performing Harpy eagle outreach


www.afonet.org/english/meeting


Capture & handling techniques, mist nets, broadcast call surveys, tree climbing & rappelling, clutch counts, reading molt, video surveillance & telemetry equipment. www.raptorresearch.com/workshop


(more info to come under “News”).

Continued on page 4...
Raptor Medicine Studies Available Online

By Diego Soler Tovar, MV, Wildlife Veterinarian Assoc. (VVS) Ornithological Assoc. of Colombia (ACO)

Note: These articles are available online in Spanish only.

Illegal trafficking of raptors in Bogotá, Colombia: experiences in two rehabilitation centers. Colombia is the tropical country with the highest number of raptors – 77 species of Falconiformes and 26 species of Strigiformes. Among the several factors that affect the conservation of tropical raptors, deforestation and habitat fragmentation are the main issues, and in the last decade, smuggling of live raptors (trafficking to international markets) has also become significant. To learn about this situation in Bogota, information about nocturnal and diurnal raptors that arrived at the Wildlife Reception and Rehabilitation Center (CRRFS) and the Wildlife Rescue and Rehabilitation Unit (URRAS) between the year 2001 and 2005 was gathered and analyzed. During this period of time, 123 raptors were admitted at the CRRFS and 75 more at URRAS, most of them during April and August. The most common species were Buteo spp. and Falco spp. from the order Falconiformes, and Tyto spp. and Megascops spp. from the order Strigiformes. Most of them came from Bogota; and the main cause of admission was due to some kind of trauma, followed by infectious diseases such as candidiasis and tricomianosis.

For the entire study, visit: http://www.humboldt.org.co/chmcolombia/servicios/jsp/redes/rapaces/medicina.htm

Diurnal raptor medicine (Falconiformes). When you have a sick diurnal raptor bird, the first thing to do is to complete clinical examination, take X-rays, and administer the appropriate fluid therapy, when needed. Then you can diagnose the problem, and address its causes. Diseases affecting raptors include those of nutritional or infectious origin (bacteria, virus, fungus or parasites), intoxications, and metabolic problems. They can also be affected by a number of tumors, although this is not the most common problem. Injuries and trauma are the most frequent reasons people take their birds to the veterinarian. There are measures that can be taken to prevent diseases in captive birds.

For more information, please visit: http://www.humboldt.org.co/chmcolombia/servicios/jsp/redes/rapaces/trafico.htm

Holding Spizaetus tyrannus at a rehabilitation center

Trauma as the main cause of admission to the Wildlife Rescue and Rehabilitation Unit (URRAS) of the National University of Colombia (1996-2006). Trauma is the most common reason why raptors arrive at URRAS. Cephalic traumas are frequent among raptors, and the neurological problems derived may affect their complete recovery. Ocular trauma may cause lacerations in the cornea, lenticular proptosis and partial or complete retinal detachment. Raptor’s large sized eyes, in comparison to the size of its skull, facilitates the opportunity of traumas and intraocular hemorrhages. Therefore, evaluation of vision is complicated, and it compromises the full recovery of the bird. Fractures of long bones are also common findings. There are techniques described for repairing bones, but a good physical examination, appropriate X-rays and timely surgery (if necessary) will improve chances of recovery. Both external and internal fixation techniques for repairing bones are effective. Finally, a postoperative period of time must include a consistent exercising program to prepare the bird for release.

For more information, please visit: http://www.veterinariosvs.org/gifs/raptormed.html

Radiograph showing shoulder luxation caused by trauma

Upcoming Conferences and Meetings, continued from page 3

IV International Symposium on Breeding Birds in Captivity (Toronto, Ontario, Canada) 12 - 16 September 2007. The theme is “Conservation Through Aviculture ” and will host some 40 international speakers ranging from ornithologists, zoologists, conservationists & aviculturists. www.isabve.org

6th International Zoo & Wildlife Research Conference on Behavior, Physiology & Genetics. Leibniz Institute for Zoo & Wildlife Research & the European Association of Zoos & Aquaria (Berlin, Germany) 7 - 10 October 2007. To foster an exchange of ideas among international specialists from many disciplines working with free-ranging & captive animals. www.izw-berlin.de/de/veranstaltungen/index.html?6th-IZW-

Conference/6th_izw_conference.html-rechts

Raptor Research Foundation’s 5th Eurasian Conference (Batumi, Georgia) 9 - 13 October 2007. Hosted by GCCW and DENRA. www.gccw.org/conference/index


“Cunsi Pindo: the Mistress of the Monkeys”
A Book About the Harpy Eagle in Ecuador

By Ruth Muñiz-López, Scientific Director,
Harpy Eagle Conservation Program, Ecuador SIMBIOE

The Harpy eagle (Harpia harpyja) is one of the least-known members of the forest world of lianas and huge trees. Nevertheless, it is one of the most important spirits of the rainforest for indigenous cultures that share its habitat, the biggest raptor in the Americas, and the most powerful raptor in the world. Its claws can pierce the skull of a monkey or sloth—its main prey—as easily as one would expect for a bird with the longest claw of all forest birds, more than 7 cm long. Whereas we humans have to move through the forest at a “machete speed”, these eagles slalom between tree branches at 80 km/h during their silent hunting flights. The females—over one metre long and 10 kg in weight—can lift prey weighing more than 12 kg, tear it to pieces and carry it back to the nest.

In Ecuador, SIMBIOE (Ecuadorian Biodiversity Research and Monitoring Society) is developing a program related to this peculiar species. The focus is on conservation biology, a field different from simply “preservation of natural resources”, which is a concept more static that tries to avoid management interventions in ecosystems. In areas targeted for conservation, there are often human populations using their natural resources, and we have to consider them in addition to plant and animal species. In a conservation strategy, which often includes active and sustainable management of a resource, the cultural, social and economical aspects have to be taken into account, in addition to biological and geographical attributes. In doing so, we can contribute toward the conservation of the eagles, as well as the social and ecological systems they are tied to. In this spirit, the National Strategy to Conserve the Harpy Eagle in Ecuador was born, handled by the Environmental Ministry of Ecuador.

To increase the limited knowledge about this species we have developed a research agenda that is an essential piece of the overall program. It involves locating nests to understand the Harpy eagle’s behaviour, their relationships with other species, and the condition of their habitat. It also includes following the growth of juveniles to determine what they need to survive. One of the main goals is to increase the Harpy eagle’s cultural and natural value in Ecuador, and to incorporate these values into government action and policies.

This research and our experiences are compiled in a new book titled “Cunsi Pindo: the Mistress of the Monkeys”, edited by SIMBIOE – the first book in the world about the Harpy eagle. It describes the Harpy eagle conservation program, how it was started, and how it has grown over time.

The book has a format of 28x28 cm and includes more than 100 incredible photographs by the accomplished nature photographer Pete Oxford. It contains more than 250 pages, with presentation in Spanish and English languages. The book contains two main sections: one more general and visual, and the other more scientific. Included is a chapter dedicated to Harpy eagle bioacoustics. The book comes accompanied by a 15 minute DVD documentary about the project and the Ecuadorian Harpy eagles, produced in the Ecuadorian Amazon Basin by AVATAR PRODUCCIONES from Spain. All the funds collected from the book will go toward the Harpy eagle conservation program.

Educational Guides & Teacher Training

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raptors and a sixth chapter with a variety of educational activities that use birds of prey to teach concepts in language, science, art, math and even physical education. We have printed the first 500 copies of the guide and distributed roughly one-third of them to educators both locally and internationally.

Our goal for this guide is two-fold. First, we hope to distribute it throughout Panama, so that in the next few years, most, if not all elementary school teachers in the country will have a copy. The second step is to ensure that teachers will actually utilize the information and feel comfortable teaching the material contained within the guide. In order to make this happen, we knew that merely having a copy of the guide would not be enough. We had to provide teachers with an opportunity to develop an interest and affection for raptors while building on their general conservation knowledge to include raptor biology, ecology, and behavior.

“...we had to provide teachers with an opportunity to develop an interest and affection for raptors while building on their general conservation knowledge to include raptor biology, ecology, and behavior.”

Education. To date, we have hosted six workshops and trained roughly 135 teachers.

Though we still have a long way to go to reach all the educators within Panama, we are very happy to report that we have already seen some teachers using the activities from the guide in several different communities and schools.
The following are a few of the recently published books of interest to ornithologists, biologists, conservationists and raptor enthusiasts working in the Neotropics.

**English**

**Soaring with Fidel: An Osprey Odyssey from Cape Cod to Cuba and Beyond** by David Gessner. Beacon Press, 2007, 320 pages.


**Spanish**


**Arboles y Arbustos de Panamá** (Trees and Shrubs of Panama) by Luis G. Carraquilla R. / Universidad de Panamá. Imprelibros S.A. (Colombia) para Editora Novo Art, S.A. - Panamá, 2006, 478 pages. Also available in English.

To join the NRN please send an email to mlinares@fondoperegrino.org, introducing yourself and stating your interest in Neotropical raptor research and conservation.