



# Neotropical Raptor Network (NRN) Red de Rapaces Neotropicales (RRN)

Edited by Magaly Linares

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Translations by Magaly Linares unless otherwise noted

## CANOPY SURVEY OF ENDANGERED FALCONIFORMES AT RIO DOCE STATE PARK, MINAS GERAIS, BRAZIL

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Newsletter #5

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In 2004, a project to monitor the raptor community in the Rio Doce State Park (*Parque Estadual do Rio Doce*), Minas Gerais, Brazil, was initiated. This pioneer research in the country was carried out by the S.O.S Falconiformes team of researchers. Through secure climbing techniques (Fig. 1), the members of the organization could directly access points high up in the canopy from which to directly observe soaring raptor species at this 360 km<sup>2</sup> Atlantic Forest reserve (seasonal semi deciduous type of forest). To complement this pilot project, several other methods based on **The Peregrine Fund's** Maya Project were used to carry out a complete survey of the raptor community. After obtaining preliminary



Fig. 1 Climbing technique used for the study of the White-necked Hawk and other raptors.

results, sub-programs were designed for the monitoring of endangered species in the reserve.

One of these subprograms involved the study of the White-necked Hawk (*Leucopternis lacernulatus*) and the Mantled Hawk

(*Leucopternis polionotus*) with support from The Peregrine Fund. The study included population censuses, recording courtship behavior and monitoring movements of breeding pairs (breeding pair is de-

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### STUDENTS CONSERVING A MAGNIFICENT RAPTOR: THE

**HARPY EAGLE** By: Ileana Cotes  
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Children teaching about raptors to other school children at the National Scientific Fair. Panama City, Panama.

I had my first encounter with a live Harpy Eagle when members of The Peregrine Fund visited a group of school teachers in Gamboa, Panama, to talk about their work in raptor conservation. Inspired by this majestic bird and the information provided by The Peregrine Fund experts, I wondered what else could be done to help conserve this species. How could I get my students in-

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## First Record of the Orange-Breasted Falcon (*Falco deiroleucus*) in Quito

By Juan Manuel Carrión<sup>1</sup> y F. Hernán Vargas<sup>2</sup>

Photos by: Nicolás Svistonoff

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The Orange-Breasted Falcon *Falco deiroleucus* is a rare, local species in the subtropical humid forest along the Andean slopes and lowlands of eastern Ecuador, where it has been mainly recorded under 1400 masl (4593.17 ft) (Ridgely & Greenfield, 2001). Here we report the first record of the species in the Inter-Andean region of Ecuador, and document the expansion of its altitudinal range up to 2910 masl (9547.24 ft.)

Between July and mid-August 2007, two Orange-breasted Falcons were regularly observed in **Nicolas Svistonoff's garden** (see red arrow in Fig. 1; 0° 13'21.27"Sur, 78°30'13.10" West) in Quito, Ecuador. The presence of the falcons was noticed when a colony of Eared Doves *Zenaida auriculata* began vocalizing loudly in the garden. Judging by plumage variation and the size of

the feet, we think that the observed birds were an adult female (Fig. 2) and a juvenile female (Fig. 3). In spite of the fact that the two falcons were never seen together at the same time, either the juvenile or the

adult were observed regularly until mid- August. Their favorite perches were a log and the dry branches of an Eucalyptus tree *Eucalyptus globulus*. In July, the adult was photographed chasing an Eared Dove (Fig 2.); probably the Orange-breasted Falcons' main source of food during their temporary stay in Quito.

We now have to investigate the patterns of movements and/or altitudinal migrations of Orange – Breasted Falcons: how frequent are their movements; do they make prospecting visits, for how long do they stay in these high regions of Los Andes, and if adults and juveniles move together. For example, it would be interesting to find out if these two birds in Quito were mother and daughter.

Nicolas Svistonoff, one of the

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Fig. 1 Red arrow shows the observation site of the Orange-Breasted Falcons to the west of Itchimbia Park (green area underneath the arrow). This park is in the middle of the urban area of Quito.



The Peregrine Fund/Fondo Peregrino continues studying the Orange-breasted Falcon, *Falco deiroleucus*, in Central America by Angel Muela [amuela@fondoperegrino.org](mailto:amuela@fondoperegrino.org) The Peregrine Fund/ Fondo Peregrino Panama. Photos and translation by A. Muela



Red dots indicate the only known populations in Central America.

Since the late 1970's, The Peregrine Fund-Fondo Peregrino (TPF), a conservation organization based in Boise, Idaho, has

been studying a little known neotropical falcon species, the Orange-breasted Falcon, *Falco deiroleucus*.

The first studies were conducted by Peter Jenny in Ecuador, where he found several Orange-breasted Falcon nests on epiphyte growths in the tops of large emergent trees. These studies were continued by him and other members of TPF in several countries in Central and South America. Despite having looked thoroughly for the species in Central America, we have only been able to find small populations in Guatemala, Belize and Panama. The Orange-breasted Falcon population in Panama is located in the Darien province, relatively close to the Colombian border. It is possible that these known pairs,

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## Influence of natural components and current use of landscape in the raptor community in Magdalena Valley, Colombia.

By Henry Delgado [hendelmal@gmail.com](mailto:hendelmal@gmail.com) / César Márquez [cmarquez@humboldt.org.co](mailto:cmarquez@humboldt.org.co) Instituto de Investigaciones y Recursos Biológicos Alexander von Humboldt (I AvH)



Photo 1. Orange-breasted Falcon feeding while flying. 04/04/08, Alto el Chapetón, Municipality of Beltrán.

Natural landscape components (altitude, vegetation type, etc.), and an increase in human activities, especially agriculture and livestock management, have influenced the habitat of resident and migratory raptors. It is therefore important to measure abundance and raptor diversity in order to evaluate the population tendencies in the future, as well as its conservation status and associated ecosystems.

Alexander von Humboldt Institute and The Peregrine Fund, through its Neotropical Science and Student Education Program, are supporting this project. Undergraduate student Henry Delgado, from the INCCA University of Colombia is carrying out the project, under the supervision of researcher César Márquez. The main objective is to record abundance and composition of raptors at different places in the Magdalena Valley, and to determine the human impact on these raptor communities. These results will enrich

the information available in order to spread information about the species and achieve long-term conservation.

In our methodology we applied the sample technique known as “Point Count” and protocols described in Marquez and Quiroga (page 4 of this newsletter)

In the first stage of the survey, at the end of the summer and the beginning of the winter season (between March and April 2008) we recorded 22 species of resident and migrant raptors: *Cathartes aura*, *Coragyps atratus*, *Sarcoramphus papa*, *Elanoides forficatus*, *Elanus leucurus*, *Ictinia mississippiensis*, *Chondrohierax uncinatus*, *Buteo nitidus*, *Buteo magnirostris*, *Buteo platypterus*, *Buteo brachyurus*, *Buteo swainsoni*, *Spizaetus tyrannus*, *Polyborus plancus*, *Milvago chimachima*, *Herpetotheres cachinnans*,

*Falco sparverius*, *Falco femoralis*, *Falco columbarius*, *Falco rufigularis*, *Falco deiroleucus*.

The Orange-Breasted Falcon *Falco deiroleucus* was seen (altitude 1365 masl; Lat. 04°45' 45.0"; Long.

This is important information since this is the first record of Orange-breasted Falcons in Magdalena Valley, Colombia.

74°42'58.0"), on April 4 and 9, 2008 at Alto El Chapetón in the Municipality of Beltrán, Cundinamarca. On April 4<sup>th</sup>, the falcon was seen over-flying the area for about 10 minutes and we were able to take pictures (Photo 1 and 2) and identify the species. The habitat where this bird was observed is a mosaic of forest and agricultural lands (coffee and banana plantations), and also contains areas for livestock. The falcon was seen on a mountain hillside, next to a cliff and a patch of undisturbed primary forest (Photo 2).

Photo 2. Habitat where this OBF was seen.



By its size we can conclude it was possibly a juvenile female. This is important information since *this is the first record of the species in Magdalena Valley, Colombia.*

## North Star to Award PTT at the III NRC

North Star Science and Technology, LLC will sponsor the 2009 Third Neotropical Raptor Conference in Bogotá, Colombia. The company will provide an opportunity for a single research project on Neotropical raptors to acquire 3 battery powered PTTs for free. For program details visit [www.neotropicalraptors.org/2009NRC.NorthStaraward.i.htm](http://www.neotropicalraptors.org/2009NRC.NorthStaraward.i.htm)

Visit [www.northstarst.com](http://www.northstarst.com) for additional information on the company and the PTT units. North Star has teamed in this effort with the Neotropical Raptor Network to provide expert advice and to convene a review committee to assess applications for this award and to select the awardee.

Application materials should include contact information and a not-more-than-three-page narrative that includes a full budget for the project including the awarded PTTs. Proposals are due by 15 July 2008. The award will be announced

no later than 15 October 2008, and the PTTs will be presented to the awardee at a special ceremony during the Third Neotropical Raptor Conference in Bogotá, Colombia, in 2009.

Please send proposals no later than 15 July 2008 to:

**Dr. Keith L. Bildstein**  
**Hawk Mountain Sanctuary**  
**410 Summer Valley Road**  
**Orwigsburg, PA 17961**  
[Bildstein@hawkmtn.org](mailto:Bildstein@hawkmtn.org)

## Diurnal raptors as bioindicators along an altitudinal gradient in the Andes, Colombia

By Sandra Quiroga

[sandra.qd@gmail.com](mailto:sandra.qd@gmail.com) and César Márquez [cmarquez@humboldt.org.co](mailto:cmarquez@humboldt.org.co)

Instituto de Investigaciones y recursos Biológicos Alexander von Humboldt (IAvH) Photos by Henry Delgado

Within the framework of the Neotropical Science and Student Education Program, The Peregrine Fund has joined forces with the Alexander von Humboldt Institute, to conduct a study of raptors in Colombia. Sandra Quiroga, a student from the District University Francisco Jose de Caldas in Bogota, will carry out this study, under the supervision of César



Photo 1. Female juvenile Orange-breasted Falcon. September 2007. Alto Los Alpes. This same bird was possibly observed later in March 2008.

Márquez.

The study's main objective is to measure the changes in distribution and abundance patterns of diurnal raptors along an altitudinal gradient located in the jurisdiction of the Autonomous Corporation of Chivor, Corpochivor, which is the entity in charge of the management of natural resources in the region. The area of study is located to the south and east of the Andean Mountain Chain in the department of Boyacá. This project aims to evaluate the conservation status of raptors in three different ecosystems: 1) Basal Forest 0-1000 masl., 2) Sub-Andean forest 1000-2000 masl., and 3) Andean forest 2000-3000

masl.

We used the survey technique known as "Point Count" to inventory raptors from nine different observation points along mountain tops. For each forest type, we selected three points that fit the necessary characteristics utilized in the Point Count method. At each site we made observations for three days, for four hours each day, during the summer and winter months; which is equivalent to a 24 hour effort at each one of the nine selected sites, for a total of 216 survey hours.

During the first part of the survey, in the summer season (Dec – April) we observed 20 resident and migratory raptor species. We identified two species of New World vultures: *Cathartes aura* and *Coragyps atratus*; four species of kites: Grey-headed Kite (*Leptodon cayanensis*), Swallow-tailed Kite (*Elanoides forficatus*), White-tailed Kite (*Elanus leucurus*) and Mississippi Kite (*Ictinia mississippiensis*); seven species of hawks: Plain-breasted Hawk (*Accipiter ventralis*), White Hawk (*Leucopternis albicollis*), Grey Hawk (*Buteo nitidus*),

Roadside Hawk (*Buteo magnirostris*), Broad-winged Hawk (*Buteo platypterus*), Short-tailed Hawk (*Buteo brachyurus*), and Swainson's Hawk (*Buteo swainsoni*); two species of eagles: Black-chested Buzzard Eagle (*Geranoetus melanoleucus*) and Black Hawk-Eagle (*Spizaetus tyrannus*); five species of Falconidae: Crested Caracara (*Polyborus plancus*), Yellow-headed Caracara (*Milvago chimachima*), Laughing Falcon (*Herpetotheres cachinnans*), American Kestrel (*Falco sparverius*) and Orange-breasted Falcon (*Falco deiroleucus*).

The Orange-breasted Falcon (*Falco deiroleucus*) is considered very rare locally, and is restricted to South and

*This is the first record of the species on the eastern side of the Oriental Cordillera in Colombia.*

Central America. In Colombia it is classified as Data Deficient (DD). During the present study, at least one individual (Photo 1) was observed from the top of Los Andes (Lat. = 04 51' 24.8"; Long = 73 09' 22"), in the municipality of San Luis de Gaceno, at an altitude of 819 m. in habitat composed of a mosaic of pasture and secondary forest (photo 2). This type of landscape is the product of human development in the region, mainly for cattle and agricultural purposes.



Photo 2. Mosaic of pasture and remains of secondary forest where the Orange-breasted Falcon was seen.

César Márquez observed one Orange-breasted Falcon two times, on the 10<sup>th</sup> and 11<sup>th</sup> of September 2007. It was seen again on March 1, 2008 by Sandra Quiroga. On both occasions we observed the falcon engaging in territorial defense; the falcon was vocalizing and

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## First Record of the Orange-Breasted Falcon in Chile

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On 4 June 2007 I observed, and photographed an Orange-breasted Falcon *Falco deiroleucus* in Calama, Chile. I frequently observed this falcon over a 98-day period; until mid October when the falcon was seen for the last time. The falcon was recorded in the city of Calama, which is located **in the midst of the world's driest** desert, at 2.248 m.a.s.l.. Due to the presence of the Loa River, small patches of desert vegetation, with some scattered trees, are found in the area, and some limited agricultural activity is also practiced. There are 97 local bird species, mainly seed and insect eating passerines, as well as shorebirds. Diurnal and nocturnal raptors are represented by 8 and 4 species, respectively.

At first sight, I could not identify the falcon because its morphological characteristics did not match any of the known falcons in Chile. It had the shape of a dark Peregrine Falcon and was the size of an Aplomado Falcon. I wondered if it could be a wandering Orange-breasted Falcon *Falco deiroleucus*, a tropical falcon that has never been recorded in Chile and is associated with rain forests. The closest record for this species occurred in Calilegua National Park, in Argentina, at ca. 440 km. in a straight line (G Pugnali, pers. comm.). Based on plumage similarities, the other likely species was a Bat falcon *Falco ruficularis*, which occurs in the lowlands (<1600 m, Birdlife International 2008) in a wide range of tropical forest types.

The photographs I took were not sufficient to identify the falcon to the species level (see photos). This limitation made me realize that I needed to think of another method to achieve proper identification. I decided to compare the size of the feet and body length of the observed falcon with actual measurements of the antenna it used as a perch. Using software for managing antennas and photographs of the falcon, I estimated



Roost site

Hunting site; open with few trees (chaparral, agriculture, livestock)

In parks where *Z. auriculata* is abundant, where I most observed the falcon

that body length measured between 35.6 and 39.4 cm and the middle toe length between 4.7 and 4.9 cm, which confirmed that the size of the observed bird would be considerably larger than the Bat Falcon (body length 25 to 29 cm, see <http://www.birds.cornell.edu/obf/ID>). Therefore, with the results of these measurements and evaluation of plumage coloration I concluded that the observed falcon was indeed an Orange-breasted Falcon, probably a young male. Several falcon experts agreed with this conclusion. The buff coloration on the upperparts and chevrons on the breast also corroborated that the individual was a sub-adult (1-2 years) Orange-breasted Falcon.

The falcon was observed, on a daily basis, perched on the antennas of buildings in downtown Calama (22°27'48.27"S, 68°55'32.39"W) or flying in nearby farms. I visually **tracked the bird's movements**, determining that it used an area of approximately 150

km<sup>2</sup>, which included the city of Calama and adjacent forested areas. It frequently moved to the Ojo de Apache Valley where I believe it had its roosting perches.

Based on prey remains found under perches, I could determine the following prey items caught: 4 *Zenaidura auriculata*, 3 *Zonotrichia capensis*, and 2 undetermined passerines.

I appreciate the contributions and comments of Bob Berry, Hernán

Vargas, Angel Muela, Clayton White, Mark Prostor, Bud Anderson, Jaime Jiménez and Christian González.



Photo 1. Calama, Chile. Habitat characteristics and areas where the Orange-breasted Falcon was most frequently observed.

Photo 2. Young Orange-breasted Falcon perched on antenna, urban area in Calama, Chile.



Photo 2.

## Searching for the Black-collared Hawk *Busarellus nigricollis* in Panama.

By Edwin Campbell-Thompson [ecampbell@fondoperegrino.org](mailto:ecampbell@fondoperegrino.org) and F. Hernán Vargas [hvargas@fondoperegrino.org](mailto:hvargas@fondoperegrino.org)

Despite its wide distribution in the Neotropics, from south-western Mexico to Bolivia, and northern Argentina to southern Brazil, the Black-collared Hawk has not received much attention from those who study and care about the conservation of raptors. There is insufficient information about its natural history; we only know its main prey is fish and its preferred habitat is shallow wetlands with still or slow moving water. There are only anecdotal data on their nesting habits.

Since the middle of last century, this species has been likely declining in Central America, possibly due to drainage of wetlands for agriculture and urban development. But even with this regional decline, the Black-collared Hawk has not been listed by the IUCN as a globally threatened species (IUCN 2007, BirdLife International 2004). However, in Panama, this species is considered *critically endangered* (Angehr 2003, Important areas for Birds in Panama, Audubon Society of Panama) and it is the only raptor species included in this cate-



Fig. 1 Bayano Lake, Panama

October and November 2007 and March 2008, we organized a pilot study in Panama, with three main objectives: 1) locate viable populations of the species, 2) validate its conservation status and design a research project to identify the causes of population decline and 3) promote a conservation program.

To conduct this study we selected the survey sites according to historical and recent records of the species. Historical records were obtained from publications and more recent data by interviewing naturalist guides and tourism operators. We focused our search in the Bayano Lake area, in the Province of Panama, where the last record for this species occurred in 2000. We also visited Punta Patiño, in the Province of Darien, where naturalist guides have observed the species in 2006-2007. Both sites are listed as “Important Bird Areas” in Panama (Angehr 2003). The two places have different characteristics: Bayano Lake has areas with aquatic vegetation and there are emergent logs or trees (Fig. 1). This lake is surrounded

by semideciduous forest in the lowlands and some areas are deforested. Punta Patiño, a private reserve, property of the National Association for Conservation (ANCON), is characterized by wetlands where mangroves (Fig. 2) are the main feature in the river marsh and where lagoons are flooded in the rainy season.

We visited Bayano Lake on October 5-6 and November 2, 2007 and Punta Patiño in March 14- 16, 2008. For this search we used wooden canoes propelled by 15 HP outboard motors (Fig. 3). We surveyed 221 km of wetland shore and did not detect any single individual Black –collared Hawk. At present, we do not understand why we failed to find the species, but we can identify some factors that may be affecting its abundance

and distribution in Panama. Between August and December, when raptors are migrating from north to South America, Bayano Lake has an increased visitation of thousands of Ospreys *Pandion haliaetus* which may be competing for food (fish) with the resident Black –collared Hawk, influencing its distribution and abundance.

In Punta Patiño some inhabitants informed us that they had seen the Black-collared Hawk in lagoons close to the beach (<1 km) during the rainy season (May - Dec). Our visit in March was during the dry season (Jan -Apr) and these lagoons were dry. Consequently, we predict that during the rainy season it will be more likely to find the species.

Knowing that the Black-collared hawk is abundant in some places in South America, such as the Llanos of Venezuela and Pantanal in Brazil, we take this opportunity to ask all mem-

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Fig. 2 Punta Patiño Reserve, Darien, Panama



gory. The last reliable record from Panama is from 2000 at the Bayano Lake, east of Panama Province.

In response to this critical conservation status in Panama and to the lack of knowledge about the species, in

(Black-collared Hawk in Panama.....Continued from page 6)



Edwin Campbell looking for the Black-collared Hawk in Punta Patiño, Darién.

bers of the Neotropical Raptor Network to please forward us information about habitat characteristics, and locations that hold high density of individuals. With this information we hope to improve our selection of survey sites in Panama and in the future extend and direct these efforts to South America.



## Arsonous fire burns the urban nest of Grey Eagle-Buzzards in southeast Brazil

Article and photo by Luiz Salvador: [neotropicalresearch@hotmail.com](mailto:neotropicalresearch@hotmail.com)

Since 2000, the Serra do Curral mountain ridge, famous for sheltering the only known urban nest of the Grey Eagle-Buzzard, has not seen such a sad day as last August 5, 2005. The target of arson, two-thirds of its entire extent for 18 consecutive hours, resulting in much damage to wildlife, including the loss of the Grey Eagle-Buzzard's nest. Although breeding activity has not been detected on this ridge since 2005, the burning of the nest structure, composed only of dry sticks, is one more factor to discourage nesting attempts in the area. The fire brigade



and collaborators worked together in a desperate effort to save the ridge's vegetation cover and associated fauna, but despite the help of two agricultural airplanes and a helicopter, they were unable to stop the fire damage due to the strong winds that fed the flames and the bad maintenance of the anti-fire system kept by a mining company that explores the ridge. One

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### Canopy Survey ....Continued from Page 1...

efined here as two birds of different sizes, presumably male and female, carrying out courtship displays together). During the breeding season (September- December), I conducted simultaneous counts of neighboring pairs observed in flight or in courtship displays and was able to identify at least seven breeding pairs of the White-necked Hawk in an area of 360 km<sup>2</sup>. I only observed one pair of the Mantled Hawk and recorded quality data to fully describe their courtship behavior.

As no nesting records for any of the two species exists for this part of Brazil, a great portion of the researcher's time was devoted to searching for nests. Between January 2004 and December 2007, the researcher spent > 400 hours of field effort searching for nests, and no nests were found. However, a nest structure belonging to a presumed medium sized raptor species' was found in the center of the territory of one of the

monitored pairs of White-necked Hawks. A new fieldwork season will be carried out in late 2008.

Although we did not find nests, important data on the breeding cycle, display behavior and courtship, relative density of pairs (seven pairs identified until now for the White-necked Hawk and one active pair for the Mantled Hawk species), pattern of movements and vocalizations were obtained for both

species. Also, despite the high frequency of elaborate display behavior over the canopy, the White-necked Hawk, which is not only a canopy but also middle and under story species, was not seen at all carrying any nest material or prey to a particular location. I recorded up to 34 vocalizations (a harsh, loud and short scream) of the White-necked Hawk in one morning. Despite the fact that the observer was unable to know if the vocalizations were emitted by the same bird or from the pair, it was possible to record their locations and collect data on habitat use.

Through this study we also found a Black-and-White Hawk Eagle (*Spizaetus melanoleucus*) nest (Fig. 2) and gathered data on other species within the raptor community.

Fig. 2 Black-and-White Hawk Eagle young at nest. M. Canuto gathering data on nest structure



## OBFs in Central America....from page 2...



**Female Orange-breasted Falcon with chick, Darien, Panama**

most likely represent the northernmost South American population.

With the goal of gaining information about productivity and reproductive success of the Orange-breasted Falcon in the wild, TPF is currently monitoring ten nests in Belize, four in Panama, and five in Guatemala. Some of these nests, mainly the ones located in Panama, are found in very remote areas of difficult access. Because of this, it is only possible to visit these specific nests twice or three times per year to evaluate the reproductive success of those pairs. However, in Belize and Guatemala there are several nests located in areas of easy access, which allows for a less complicated and more detailed follow-up of those pairs' productivity.

Even though there are records of nests found in the tops of large trees, all nests currently studied in Belize, Guatemala and Panama are found in limestone cliffs. Most of these are found within well preserved neotropical forest, or

close to the forest's edge, where there appears to be a relative abundance of prey species. Most of these nests are close (<1 km) to rivers, and at least two are also close (<1 km) to areas that have been deforested for farming or cattle fields.

Similar to other species of falcons, the Orange-breasted Falcon often lays its eggs on a ledge, with or without vegetation, or within a crevice on a cliff, which affords the nest at least some protection.

We have found that more than 60% of the nests we are studying are oriented to the north or the east, probably because they are shielded from direct exposure to the sun during the hottest hours of the day. One of the nests we are studying is on top of one of the Maya Temples in Tikal National Park, Guatemala. This area of Peten has very few appropriate natural walls where the falcons could nest. This is similar to what has been seen with the Peregrine Falcon in many cities around the world; where they use ledges on top of buildings as places to raise their chicks instead of natural structures. However, a big difference is that the Orange-breasted Falcon not only needs suitable ledges, but also high quality forest with abundant prey base.

During the past few years (2003-2008), we have been collecting productivity information on several of the nests in Belize in order to compare it to the data collected from the same nests during the

90's. Preliminary data suggest that there is a decrease in the yearly production of chicks fledged per pair of falcons. To date, we have not been able to determine the exact reasons for this possible decline in the productivity of these birds. However, we theorize that several factors have affected their ability to successfully reproduce. One cause may be the instances of deforestation close to a pair's territory, which can affect, directly and indirectly, the productivity of chicks and the permanency of a pair of falcons in a given area. It is also possible that the proximity to human encroachment increases the number of other bird species like the Black Vulture, *Coragyps atratus*, which may not

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Maya Temple in Tikal, Guatemala similar to where an Orange-breasted falcon nest has been found.

## (Arsonous fires..... Continued from page 7)

more time, wildlife paid for human acts. The fire was started by teenagers looking for fun. During the fire, no adult Grey Eagle-Buzzards were seen, although a juvenile of the species was observed searching for prey over the flames. Aplomado Falcons and a White-tailed Hawk were also seen taking advantage of the fire. The first were seen hunting from high perches, while the latter was observed gliding over the ridge, even enjoying the water dropped by the aircraft. In spite of the damage caused by the fire, at least this event brought some good news: the Minas Gerais government is going

to transform the slope facing the city of Belo Horizonte into the Paredões da Serra municipal park. Maybe, in this way, the Grey Eagle-Buzzards may enjoy better days on the Serra do Curral mountain ridge.



What would you like to see in this newsletter? If you have ideas or recommendations for the editors, please send a message to Magaly at [mлинаres@fondoperegrino.org](mailto:mлинаres@fondoperegrino.org) Do you have your article ready? Send it anytime for the next edition!





## Students conserving..... Continued from Page 1...

involved? I spoke with my students at Brader School in Panama City, Panama, where I am a science coordinator, and they were very enthusiastic about helping to protect Panama's national bird.

On a warm April morning in 2004, I brought some of these students to visit The Peregrine Fund's Neotropical Raptor Center in Clayton, Panama. There, students and teachers were amazed to see a live Harpy Eagle for the first time. After our visit, we discussed ways in which we could help. Out of these discussions grew a student group called Mission Harpy Eagle, whose main goal is to educate as many people as possible about the magnificent Harpy Eagle. Since then, we have gotten so much support and

*Through the voices of the students, we are delivering a message that cannot be forgotten, and a reminder that we are all Earth's keepers.*

information from The Peregrine Fund experts. They provided us with all the information we needed to get our project underway.

In the beginning, Mission Harpy Eagle was composed of only 7<sup>th</sup> grade students. They decided to focus their efforts first on educating the rest of the students at our school. Club members started sharing information about the Harpy Eagle with children from Preschool to Twelfth Grade. The response was incredible. Everybody wanted to know more about our national bird; many of these children had no idea the Harpy Eagle was so important to our tropical rainforest.

Today, Mission Harpy Eagle membership has grown and we have students from 7<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> grades working to spread information about the wonders, biology, conservation and importance of this impressive eagle.

The group has also grown to such an extent that we have already worked in different schools around Panama City.

We have also participated in events such as Festiarpía (hosted by Fondo Peregrino Panamá), Biofest, Earth Day and Scientific Fairs, and Eco-walks. Some group members have also participated in video conferences broadcast from Barro Colorado Island (a Smithsonian Tropical Research Institute scientific research site). Through these video conferences, they have been able to share valuable information with children from the United States of America.

To better promote Harpy Eagle conservation at these events and during school visits, Mission Harpy Eagle members have designed a great amount of activities and promotional items that include: CD's, videos, posters, puzzles, pictures, key chains, caps, table games, and more. The group uses the funds collected from those items to create new products that have educational value and that can be shared with other students and the public in general. The income is also used for organizing group meetings; transportation to school presentations; designing of banners, fliers, and stand decorations. Every year, the upcoming group of members brings new ideas that are then taken into consideration for development.

It is important to mention the highest honor the group has achieved so far. Because of the hard work displayed by Mission Harpy Eagle, three of the members (Anais Jurado, Michelle Wong, and Yvonne Bennett) were chosen to participate in the TUNZA Conference 2008, in Norway. The topic of the conference is "Climate for a Change."

I will accompany these students to the conference, where they will have the great opportunity to share their work so it can serve as a

model for other children and teachers around the world .

Mission Harpy Eagle has come a long way since it started. Every year, we welcome new members that have the motivation, devotion, and desire to better our planet. Their goal is not only to conserve the Harpy Eagle but nature in general. *Through the voices of the students, we are delivering a message that cannot be forgotten, and a reminder that we are all Earth's keepers.*

Mission Harpy Eagle website: <http://missionharpyeagle.tripod.com/>

Other related links:

[http://www.usaid.gov/locations/latin\\_america\\_caribbean/country/panama/panama\\_eagle.html](http://www.usaid.gov/locations/latin_america_caribbean/country/panama/panama_eagle.html)

[http://www.usaid.gov/stories/panama/ss\\_pa\\_eagle.html](http://www.usaid.gov/stories/panama/ss_pa_eagle.html)



Morning Assembly celebrating "Harpy Eagle Day" at Brader School.



*Orange-breasted Falcons... From page 8*

only compete with the falcons for places to nest, but can also predate on their eggs and/or chicks.

If we can determine that, indeed, there is a significant decline in the production of Orange-breasted chicks in Belize and Guatemala, it would be important to identify the specific causes of such a decline, and to consider the possibility of supplementing the natural production of birds with the release of captive-bred individuals.

*(First record of Orange-breasted Falcon in Quito....Continued from page 2)*

most important painters from Ecuador and a diligent bird watcher, lives at the edge of Itchimbia Park, a public urban space of 54 ha that has been recently ecologically restored by the Municipal Administration in Quito (Fig 1). Until six years ago, this park was treeless and occupied by settlements of impoverished people. Nowadays, Itchimbia Park shows an improved landscape; 50,000 trees of several species have been planted, and include, among others, *Oreopanax* sp. *Myrcianthes hallii*, *Alnus acuminata* and *Cedrela montana*. A small artificial pond was also made available. These modifications have transformed



Itchimbia Park into a real "green lung" in the historical center

Fig 2. Adult Orange-breasted falcon (possibly a female) feeding on an Eared Dove *Zenaida auriculata* in Quito. July 2007

*Diurnal raptors... From page 4*

stooping a Short-tailed Hawk (*Buteo brachyurus*) and a Grey-headed Kite (*Leptodon cayanensis*).

By the size of the individual observed, we conclude it was possibly a subadult female (Photo 1) that is perhaps a year-round resident in "Los Alpes". This sighting is important because it is the first record of this species on the eastern side of the Eastern Chain in Colombia.



of Quito (Fig 1), a cultural city declared as the the first Cultural World Heritage Site by UNESCO.

If the small Itchimbia Park provides the Orange-breasted Falcon sufficient food to temporarily reside in a city like Quito, it might be possible, then, for conservation biologists and urban developers to improve the habitat on the landscape scale and provide conditions for increased food availability and successful reproduction. By doing this we could attain ecological greenways and self-sustainable populations of falcons in a mosaic of urban-rural landscapes connected to wild, pristine areas within the Neotropical region.

Since 2006, when ongoing bird watching activities were initiated at Itchimbia Park by members of the current municipal administration and other birdwatchers, several photographs of unusual bird species have been recorded. Some of these records are of particular interest because they document sightings of species that had not been reported in urban areas before in Quito or its surroundings, or had not been seen for over 40 years. That is the case

for *Larus cirrocephalus*, *Anas dis-*

*Special thanks to Hernán Vargas, Russell Thorstrom, Saskia Santamaría, Marta Curti, and Rick Watson for helping in reviewing all articles before publication.*

*cors*, *Asio flammeus*, and *Butorides striatus*, among others.



Fig 3. Juvenile Orange - breasted Falcon (possibly a female) perched on an Eucalyptus branch in Itchimbia Park, August 2007.



## Recent Articles on Neotropical Raptors compiled by César Sánchez.

Copies can be sent as PDFs via email:

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- Actkinson, M. A., W. P. Kuvlesky JR., C. W. Boal, L. A. Brennan, & F. Hernandez. 2007. Nesting habitat relationships of sympatric Crested Caracaras, Red-tailed Hawks and White-tailed Hawks in south Texas. *The Wilson Journal of Ornithology* 119: 570-578.
- Aleixo, A. & F. Poletto. 2008. Birds of an open vegetation enclave in southern Brazilian Amazonia. *The Wilson Journal of Ornithology* 119: 610–630.
- Alvarado-O., S., R. A. Figueroa-R., I. Shehadeh & E. S. Corales-S. 2007.
- Diet of the Rufous-legged Owl (*Strix rufipes*) at the northern limit of its distribution in Chile. *The Wilson Journal of Ornithology* 119:475–479.
- Cabanne, G. S., & I. Roesler 2007. A description of a nest and nestlings of the Rufous-thighed Kite (*Harpagus diodon*), with additional comments on diet and behavior. *Ornitología Neotropical* 18: 469-476.
- Donadio, E., M. J. Bolgeri, & A. Wurstten. 2007. First quantitative data on the diet of the Mountain Caracara (*Phalcoboenus megalopterus*). *Journal of Raptor Research* 41: 328-330.
- Eduardo, C., A. Carvalho, and M. Â. Marini. 2007. Distribution patterns of diurnal raptors in open and forested habitats in south-eastern Brazil and the effects of urbanization. *Bird Conservation International* 17: 367-380.
- Figueroa-R., R. A., S. Alvarado-O, D. González-Acuña & E. S. Corales-S. 2007. Nest characteristics of the Chilean Hawk (*Accipiter chilensis*, Falconiformes: Accipitridae) in an Andean *Nothofagus* forest of northern Patagonia. *Studies on Neotropical Fauna and Environment* 42: 1–4.
- Johnson, J. A., R. Thorstrom, D. P. Mindell. 2007. Systematics and conservation of the Hook-billed Kite including the island taxa from Cuba and Grenada. *Animal Conservation* 10: 349-359.
- Navarro R., R., G. Marín, & J. Muñoz G. 2007. Notas sobre la ecología reproductiva de tres accipítridos en Venezuela. *Ornitología Neotropical* 18: 453-457.
- Piana, R.P. 2007. Anidamiento y dieta de *Harpia harpyja* Linnaeus en la Comunidad Nativa de Infierno, Madre de Dios, Perú. *Revista Peruana de Biología* 14: 135-138.
- Ramírez-Llorens, P., & M. I. Bellocq. 2007. New records clarify the southern distribution of the Spectacled Owl (*Pulsatrix perspicillata*). *Journal of Raptor Research* 41: 268-276.
- Röhe, F. & A. Pinassi Antunes. 2008. Barred Forest Falcon (*Micrastur ruficollis*) Predation on Relatively Large Prey. *The Wilson Journal of Ornithology* 120: 228–230.
- Sarasola, J. H., J. Bustamante, J. J. Negro, & A. Travaini. 2008. Where do Swainson's hawks winter? Satellite images used to identify potential habitat. *Diversity and Distributions* doi:10.1111/j.1472-4642.2008.00477.x.
- Sarasola, J. H., & R. Jovani. 2006. Risk of feather damage explains fault bar occurrence in a migrant hawk, the **Swainson's hawk** *Buteo swainsoni*. *Journal of Avian Biology* 37: 29-35.
- Sarasola, J. H., & J. J. Negro. 2006. Role of exotic tree stands on the current distribution and social behaviour of **Swainson's hawk**, *Buteo swainsoni* in the Argentine Pampas. *Journal of Biogeography* 33: 1096–1101.
- Sarasola, J. H., J. J. Negro, K. A. Hobson, G. R. Bortolotti, & K. L. Bildstein. 2008. **Can a 'wintering area effect' explain population status of Swainson's hawks? A stable isotope approach.** *Diversity and Distributions* doi:10.1111/j.1472-4642.2008.00475.x
- Sarasola, J. H., M. A. Santillán & M. A. Galmes 2007. Comparison of food habits and prey selection of the white-tailed kite, *Elanus leucurus*, between natural and disturbed areas in central Argentina. *Studies on Neotropical Fauna and Environment* 42: 85-91.
- Scheibler, D. R. 2007. Food partitioning between breeding White-tailed Kites (*Elanus leucurus*; Aves; Accipitridae) and Barn Owls (*Tyto alba*; Aves; Tytonidae) in southern Brazil. *Brazilian Journal of Biology* 67: 65-71.
- Seipke, S. H., & G. S. Cabanne. 2008. Breeding of the Rufous-thighed Hawk (*Accipiter erythronemius*) in Argentina and Brazil. *Ornitología Neotropical* 19: 15-29.
- Silva-Rodríguez, E. A., J. E. Jiménez, M. A. Sepúlveda-Fuentes, M. A. Sepúlveda, I. Rodríguez-Jorquera, T. Rivas-Fuenzalida, S. A. Alvarado, & R. A. Figueroa-R. 2008. Records of the White-throated Hawk (*Buteo albigula*) along the Chilean coastal forests. *Ornitología Neotropical* 19: 129-135.
- Suárez, W. & S. L. Olson 2007. The Cuban fossil eagle *Aquila borraasi* Arrendondo: a scaled-up version of the Great Black-Hawk (*Buteogallus urubitinga* Gmelin). *Journal of Raptor Research* 41: 288-298.
- Trejo, A. & S. Lambertucci. 2007. Feeding habits of Barn Owls along a vegetative gradient in northern Patagonia. *Journal of Raptor Research*, 41: 277-287.



## Contributions to raptor research in urban areas. Mendoza, Argentina

Viviana E. Gómez, [vgomez@lab.cricyt.edu.ar](mailto:vgomez@lab.cricyt.edu.ar) Geobotánica y Fitogeografía (CRI CYT), CC 507, 5500 Mendoza.

**Summary:** In order to make a list of the raptors found within urban areas, and to learn about their habitats and behaviors, we organized three weekly surveys, on average, during the early morning and early afternoon hours, between January 2003 and 2005. The study was conducted in General San Martín Park, in areas where birds are more likely to be seen, based on vegetation type (Gómez 2006). We intend to contribute to raptor research with a list of the raptors living in urban areas, given that this is a little known subject in this province. Usually raptor research studies are carried out in areas far from cities, according to the revised literature. We registered and analyzed seasonal changes in composition and abundance of raptors and made observations on ecology and behavior of three orders, four families and eight species of raptors. The orders were Ciconiformes, Falconiformes and Strigiformes. Families were Accipitridae, (two species); Falconidae (three species); Cathartidae (two species) and Strigidae (one species).

**TO READ THE COMPLETE ARTICLE, PLEASE CONTACT THE AUTHOR.**

## Determination of clinical reference values, prevalence of selected diseases and exposure to heavy metals in captive and wild Crowned Solitary-Eagles (*Harpyhalieetus coronatus*) in Argentina.

Miguel D. Saggese<sup>1</sup> DVM, PhD y Agustín Quaglia<sup>2</sup> Est. Cs. Veterinarias

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The Crowned Solitary-Eagle (*Harpyhalieetus coronatus*), (Order Falconiformes, Family Accipitridae), can be found in north and central Argentina, in the south of Brazil, Paraguay, Uruguay and in the eastern part of Bolivia. Internationally, it has been classified as “endangered” and it is currently considered one of the most threatened raptors in South America. There is little information about its biology and natural history. Like other large raptor species, it requires vast territories to live and find prey. The majority of the existing reports about its reproductive biology suggest this species raises only one chick every two years. Direct persecution, habitat loss, collision against vehicles and electric lines, and a decline in prey availability are among the known causes for the low numbers and continuing decline.

In 2007 we initiated a study to determine clinical reference values, prevalence of selected diseases and exposure to heavy metals in captive and wild Crowned Solitary-Eagles,

because no such information exists in **this species’ natural history**. It is fundamental to understand the role of macro and micro parasites and the effects of heavy metals as causes for the decline of the species in the wild;



**Vet student A. Quaglia and park ranger R. Pereyra Lobos drawing blood samples from a Crowned Eagle chick at the Reserva Provincial Bosques Telteca, provincia de Mendoza, Argentina. Photo: R. Pereyra L.**

and also in ex-situ conservation projects, to better manage and conserve the species. The specific objectives are: 1) to obtain information about basal reference values in hematology, blood biochemistry and plasmatic cholinesterase; 2) to

investigate the prevalence of exposure to infectious and parasitic diseases, and heavy metals; 3) to train veterinarians, biologists, park rangers and advanced students in biomedical sampling in raptors, and 4) to inform and educate local **communities about the species’** conservation problems and its importance in natural ecosystems.

For the first time, this study will generate accessible data about basic health parameters and will allow a better understanding of the role that heavy metals such as lead might have on its decline. Because of the large number of eagles that are currently being rehabilitated, this information will contribute to improving the management and treatment of these captive birds.

The field work is being done in La Pampa and Mendoza, in collaboration with several research groups that study the biology and

*Continued on page 14*

## Searching for the elusive White-collared Kite (*Leptodon forbesi*) in northeastern Brazil

Translation and photo by Sergio Seipke [seipke@yahoo.com.ar](mailto:seipke@yahoo.com.ar)

In 1882 W. A. Forbes collected an odd-looking, medium-sized kite in the small state of Pernambuco in northeastern Brazil, and this specimen was deposited in the British Museum of Natural History (Tring). Forty years later, in 1992, the specimen was formally, though sketchily described by H. Kirke Swann, who named it the 'Forbes's Kite', and assigned it the scientific name *Odontriorchis forbesi*. By the 1950s the genus name *Leptodon* had replaced *Odontriorchis* and currently the kite is known as *Leptodon forbesi*, the White-collared Kite, or occasionally by its former name, the Forbes's Kite.

This rare, mysterious bird, known for decades by the one museum specimen, has been questioned by many scientific authorities as to the validity of its species status. The specimen at Tring has been consistently referred to as an aberrant individual of the common and broadly distributed Gray-headed Kite (*Leptodon cayanensis*). Currently, a number of biologists do consider it a valid species, and also one of the most critically-endangered birds in the world deserving more appropriate conservation action.

Pernambuco and Alagoas States in northeastern Brazil are important to biological diversity conservation due to their high endemism, but unfortunately about 95% of the Atlantic rainforests have been lost to sugar cane plantations, and this region is one of the most heavily deforested areas in Brazil. Several species of forest birds, and even more subspecies, are only known from this area. These two small states have received increasing attention from biologists and bird watchers as new and unique avian species have been recently discovered in this region. The White-collared Kite, despite many unconfirmed sightings and reports of its existence, continues to elude the efforts of biologists searching for them in northeastern Brazil.

In May 2007, Bill Clark, Jean-Marc Thiollay and I joined Francisco Denes and Luis Fabio Silveira from the Zoology Museum of the University of Sao Paulo,

Brazil, to try and solve the long standing question: are there any White-collared Kites remaining in the wild? Conducting a carefully planned investigation would be the best, and perhaps most effective way to determine its status, and hopefully settle this issue. I received kite survey support from The Peregrine Fund, the Neotropical Bird Club, and The Fundação de Amparo à Pesquisa do Estado de São Paulo.

This White-collared Kite was photographed on the first day of field work in Murici, Alagoas. Note the wide white band on the tail, the all-white underwing coverts and the high contrast between outer primaries and the rest of the remiges.



The Institute for the Protection of the Atlantic Forest, a nongovernmental organization (NGO) based in Murici, helped us with contacting landowners and establishing priority areas for White-collared Kite surveys. Bill Clark and Jean-Marc Thiollay were so excited and confident about the expedition they decided to contribute financially as well. So did Ildiko Tzabo, who also provided much appreciated help in the field. The Peregrine Fund even made yet another contribution to the project... Russell Thorstrom would add his vast experience to the team, and Argentinean photographer Dario Podesta joined the team too.

We conducted a three-week White-collared Kite survey during October 2007. In three busy weeks we surveyed for kites in a dozen sites owned by three different *usinas* (sugar mills): Serra Grande and Caete in Alagoas state, and Trapiche in Pernambuco state. Beyond all expectations we found White-collared Kites in ten out of twelve study sites surveyed! Nine sites contained kite pairs, and at two sites we observed what we believe were neighboring pairs displaying simultaneously over the forest. Overall, we detected thirty White-

collared Kites. News couldn't be any better; not only were White-collared Kites still in existence in the wild, but they also seemed to be more common from what has been reported on them during earlier investigations, and than we expected. We detected White-collared Kites predominantly during display flights above the forest early in the morning. After display flying, the birds perched for a few minutes, and then dropped into the forest for the rest of the day. Outside this relatively narrow window of display flying (30 – 90 minutes) the kites were virtually undetectable, and perhaps one of the reasons why they had been largely overlooked.

In February 2008 we conducted a follow up kite survey to confirm the presence of birds at selected sites previously surveyed in October 2007. Marco Granzinolli from the University of Sao Paulo, Brazil joined Francisco Denes, Russell Thorstrom and myself this time. Not only did we confirm several kite pairs in the sites surveyed, but we also recorded a pair of near threatened Mantled Hawks (*Leucopternis polionotus*), another Atlantic rainforest endemic.

**What's next? Team members and supporting institutions agree that now that we know how to detect White-collared Kites we need to survey other areas to determine their presence and distribution throughout Alagoas, Pernambuco, and neighboring states. Knowing the geographic range of the White-collared Kite is crucial in establishing a conservation strategy for this species. It is important to determine, once and for all, the taxonomic status of this species, and to learn more about its ecology while involving local personnel and organizations, landowners, students and conservationists too. Achieving a sound understanding of the biology of the White-collared Kite and making information available to local stakeholders are important objectives for the future - a future now brighter than ever for the White-collared Kite.**



Newsletter #5



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To join the NRN please send an email to [mлинаres@fondoperegrino.org](mailto:mлинаres@fondoperegrino.org), introducing yourself and stating your interest in Neotropical raptor research and conservation.

We're online!  
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NRN Coordinator Magaly Linares  
[mлинаres@fondoperegrino.org](mailto:mлинаres@fondoperegrino.org)

The NRN is a membership-based organization. Its goal is to aid the research and conservation of Neotropical raptors by promoting communication and collaboration among biologists, ornithologists, raptor enthusiasts, and other conservationists working in the Neotropics.

## Conferences and Meetings

XII CONFERENCE OF THE MESOAMERICAN SOCIETY FOR BIOLOGY AND CONSERVATION El Salvador, November 10—14, 2008. For more information visit <http://www.smbcelsalvador2008.com/>

25th INTERNATIONAL ORNITHOLOGICAL CONGRESS August 22-28, 2010. Campos do Jordao, Sao Paulo, Brazil. For more information visit <http://www.ib.usp.br/25ioc/>

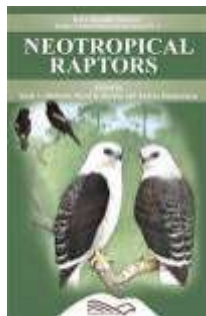
3<sup>RD</sup> NEOTROPICAL RAPTOR CONFERENCE October 28-30, 2009 Bogotá, Colombia: Please stay tuned for more upcoming information through the Neotropical Raptor Network! [www.neotropicalraptors.org](http://www.neotropicalraptors.org)

THE ORGANIZATION FOR TROPICAL STUDIES AND THE UNIVERSITY OF COSTA RICA announce the Tropical Ecology and Conservation course, Jan 14—Feb 23, 2009. For more information visit contact or visit [academic@ots.ac.cr](mailto:academic@ots.ac.cr) <http://www.ots.ac.cr/index.php?lang=en>

## BOOKS

NEOTROPICAL RAPTORS, 2nd Neotropical Raptor Conference Proceedings, Iguazú, Argentina, June 2006

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### *Crowned Solitary-Eagle... from page 12*

conservation of this species. Also a significant number of captive birds were studied at zoos in Argentina. For further information or to collaborate, please contact Dr. Miguel D Saggese and/or Agustin Quaglia. This work is possible thanks to the generous support of Schubot Exotic Bird Health Center.

#### Project Participants:

Park Ranger Roberto Pereyra Lobos y collaborators: Reserva Provincial Bosques Telteca, Dirección de Recursos Naturales, provincia de Mendoza.

Lic. Juan Jose Maceda and collaborators: **Fundación de Historia Natural Félix de Azara**, provincia de La Pampa.

Dr. Jose H Sarasola y collaborators, CECARA, Province of La Pampa.

PCRAR – Zoo de Buenos Aires, Zoo Cordoba, Zoo Mendoza, Zoo San Rafael, Guira Oga, Zoo Tatu Carreta, Zoo Pte. Sáenz Peña.

