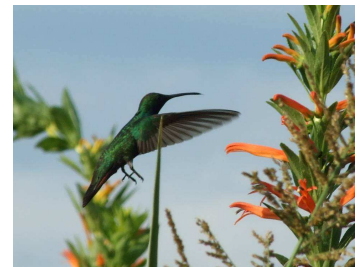




Trabajando por la conservación del Parque Nacional San Rafael

Asociación Pro Cordillera San Rafael (Pro Cosara) is delighted to introduce the first edition of the **ECOSARA Bulletin**, a quarterly publication that will summarise activities at the “**Estación Ecológica de San Rafael**” and developments of relevance to conservation in the San Rafael area. ECOSARA’s mission is to document and divulge information about the biodiversity of **Parque Nacional San Rafael (PNSR)** providing a scientific base for an understanding of the importance of the reserve at local, national and international levels.

Diverse zoological studies were performed during the month of November and the first two weeks of December in which biologists, volunteers and Pro Cosara forest guards all participated. A brief run-down of these studies is provided in the following pages:



Anthracothorax nigricollis
(Alberto Esquivel M.)



Laterallus leucopyrrhus

(Hans Hostettler: camera trap)

CENSUS AND INVENTORY OF BIRD POPULATIONS:

- a. A total of **218 species of birds** were recorded during an 18 day survey.
- b. Amongst them **three new species** for the park, the Wood Stork *Mycteria americana*, Spotted Rail *Pardirallus maculatus* and Red-and-white Crane *Laterallus leucopyrrhus*, making a new total of **413 bird species** recorded in the reserve. This makes Parque Nacional San Rafael the most biodiverse site in Paraguay for biRds, jointly with the Reserva Natural de Bosque Mbaracayú.
- c. During December an article about the Avifauna of PN San Rafael (Esquivel *et al.* 2007) was published in the journal **Bird Conservation International**.



Hypsiboas raniceps
(Alberto Esquivel M.)

HERPETOLOGICAL INVENTORY:

- a. A total of **12 species of amphibians** were recorded.
- b. **Three species of reptiles** were recorded.

MAMMAL INVENTORY:

- A total of **12 species of mammals**, were recorded, counting towards a total of 62 species known for PNSR.



Agouti paca (Hans Hostettler:
camera trap)



Heraclides astyalus (Chris Elder)

BUTTERFLY INVENTORY:

- a. A total of **124 butterfly species** were recorded.
- b. A total of **17 moth species** in the families *Sphingidae* and *Saturniidae* were recorded.

STUDIES OF BIRD REPRODUCTIVE BEHAVIOUR

- a. At least **21 species of birds** were observed to be involved in reproductive behaviour during November and December.
- b. Daily studies of nesting behaviour of **5 bird species** were performed during November and December (eg. Nest description, clutch size, chick development etc) including that of **one Atlantic Forest Endemic near threatened with extinction**, for which no data has ever been published about its reproductive biology.



Nest of *Myiozetetes similis*
(Alberto Esquivel M.)

DEVELOPMENT OF THE ECOSARA BIODIVERSITY DATABASE

- a. Databases of records of **amphibians, reptiles, mammals, butterflies, hawkmoths and emperor moths** from PNSR were established
- b. The Database of Bird Records was updated with new records.

COLLECTION OF PHOTOS AND RECORDINGS OF FAUNA OF PNSR



- a. Over **1400 photos** of the fauna, flora y landscapes of PNSR were taken during November-December 2007.
- b. More than **three hours** of recordings of vocalisations of birds, amphibians and mammals were also collected.
- c. The majority of the recordings and photographs will soon be available on the web pages **FAUNA Paraguay** and **Xeno Canto**.

Control and Vigilance of San Rafael NP

During this period **Pro Cosara's** programme of "Control and Vigilancia" detected numerous illegal activities within PNSR, amongst them **five significant sites** of illegal logging, **two cases** of poaching and **three fires requiring the intervention of forest firemen** caused by burning of grasslands and recuperating forests. Several of these illicit activities were discovered thanks to periodic overflights of the reserve by Hans Hostettler and daily patrols by forest guards. The Pro Cosara forest guard team, jointly with guards from SEAM were able to intervene on now fewer than 10 occasions, detaining those involved in illegal activities and handing those responsible over to the police for prosecution. Unfortunately many of these interventions have been in vain and the prosecutions unsuccessful due to a lack of resources on the part of the police and local law enforcement agencies in the **worst effected areas**, San Juan Nepomuceno, Edelira, San Pedro and Colonias Unidas.



Environmental Education

Pro Cosara continues to development activities with local groups as part of its "**Environmental Education**" programme., during November and December working in Edelira, Pirapó, Maria Auxiliadora, Bella Vista, Obligado, Hohenau y Pirapey, and involving the participation of approximately **1600 people**. It continues to support the development of "forest firemen" jointly with other institutions, recently holding the "**IV Curso de Capacitación de Bomberos Forestales**", in the **campesino settlement of Amistad**.

Recuperation of Ecosystems

The WWF Program "**Recuperation of Ecosystems**" which involves **Pro Cosara**, has consolidated the plant nursery in the municipality of Alto Verá. The nursery has a capacity for 100.000 native plants, including 30.000 yerba mate plants. **88 fincas** belonging to small producers in the **Colonia campesina de Libertad del Sur**, have been reforested with 50.000 native plants. This program is providing the incentive for local producers to manage the **natural regeneration of forest** along riverbanks and close to natural springs as a way of protecting both the forest and its water courses.

Acknowledgements

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Donations and Contributions

If you would like to help conserve Parque Nacional San Rafael by supporting our efforts, you can email us at ecosaraparaquay@gmail.com and we will send you details of the different membership plans available with Pro Cosara and/or other ways in which you can help support our activities. To find out more about ECOSARA (www.faunaparaquay.com/ecosarahome.html) and Pro Cosara (<http://procosara.org>) visit our web pages!