

Project YACUTINGA '95: bird surveys and conservation priorities in eastern Paraguay

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Resumen

Desde el mes de Julio hasta Noviembre de 1995, el proyecto YACUTINGA '95 examinó la situación de la avifauna amenazada de la Región Oriental de Paraguay, evaluando la importancia de 14 sitios para la conservación de la biodiversidad. Estos sitios habían sido priorizados en la estrategia de conservación nacional por su importancia y la urgencia de realizar trabajo de campo. Los sitios estudiados se encuentran en pastizales naturales o en el bosque Atlántico. En total se registraron 15 especies amenazadas y 27 casi amenazadas. De gran importancia fue la población de *Caprimulgus candicans* descubierta en la Reserva Natural del Bosque Mbaracayú. Nuestros registros de seis especies no previamente conocidas para Paraguay ilustran la urgente necesidad de realizar mas trabajo de campo antes de que los recursos naturales que quedan en el país sean destruidos. Las iniciativas de conservación actuales estan dirigidas hacia las areas mas importantes, pero deberían ser rápidamente implementadas antes de que sea demasiado tarde.

Introduction

From July to November 1995, Project YACUTINGA '95 surveyed the threatened avifauna of eastern Paraguay, assessing the importance of 14 sites for biodiversity conservation (see Table). The project was a follow-up to work carried out in eastern Paraguay by Project CANOPY '92² and united 22 ornithologists and biologists from Paraguay, U.K., Argentina and U.S.A. Full results of the project will be presented in Lowen *et al.*¹²

Paraguay is not an affluent country. Its land and natural resources are understandably in demand as sources of food and revenue. In addition, the terrain is generally flat and consequently easily deforested, flooded, drained or otherwise developed. The two most important and threatened ecosystems in the country are its remnant tracts of Atlantic forest and its natural grasslands. The Atlantic forest region as a whole is one of the most urgent conservation priorities in the Neotropics¹⁰, and Paraguay presents an excellent opportunity to conserve the avifauna of its western arc. Just 15% of the country's Atlantic forest remains¹, and almost all of this is partially degraded. The grasslands of central South America are severely threatened by conversion for agricultural uses, and have been long neglected as a conservation issue⁵. As our results underline, eastern Paraguay still provides important opportunities for the conservation of both ecosystems.

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We targeted sites prioritised in the recently produced national conservation strategy⁷. These had been highlighted for their overall significance, apparent feasibility for conservation and the urgency of required fieldwork. Six sites are under the jurisdiction of the government's Dirección de Parques Nacionales y de Vida Silvestre (DPNVS) and three are established Private Nature Reserves (or Reservas Privadas) managed by Fundación Moisés Bertoni (FMB), the main conservation NGO and the BirdLife International partner in Paraguay. By working closely with these two organisations, our data will enable immediate management planning and reserve designation. The Private Nature Reserve scheme of FMB involves cooperation between landowners and the Fundación: such reserves have recently become legally recognised⁷. The scheme is an innovative approach to Neotropical conservation that could usefully be implemented elsewhere.

Birds were used as indicators of biodiversity to determine the global significance of each study site. Of 14 sites surveyed, 10 contained one or more globally threatened species⁶, and thus would qualify as "Key Areas" for their conservation¹⁴. In total, 15 threatened species and 27 near-threatened species were recorded (see Appendix). During fieldwork we estimated relative abundance from encounter rates, and mist-netted 145 species.

We surveyed four important Atlantic forest sites which covered a combined protected area of over 150,000 ha. Of these, the recently designated 78,000 ha Parque Nacional San Rafael (Departamento Itapúa) proved to be of highest conservation potential. In six days' survey work our total of 232 species included three threatened and eight near-threatened Atlantic forest endemics. More endangered species undoubtedly occur here because this large forest block is almost contiguous with the highly threatened Parque Nacional Caaguazú (Departamento Caazapá), where, despite its small size, five threatened and 12 near-threatened species were recorded in 10 days. We surveyed other important forest sites, including Reserva Privada Natural Itabó (see¹¹) and Parque Nacional Ybycuí (see⁹).

Five grassland sites were also studied. Of these, the Reserva Privada Natural Sombrero (Departamento Cordillera) was found to be particularly important, providing migration stop-over and breeding habitat for three threatened and eight near-threatened species. In the south of the country, the situation is less favourable. The remaining habitat on Isla Yacyretá (Departamento Itapúa), recently flooded for a huge hydroelectric dam project⁴, has been severely degraded. Nonetheless, one threatened and six near-threatened species were found here and at the adjacent Refugio de Vida Silvestre Yabebyry (Departamento Misiones). With careful management, all may not be lost.

The 63,000 ha Reserva Natural del Bosque Mbaracayú (Departamento Canindeyú) is Paraguay's most important site for global biodiversity conservation¹³. The site list of 400 bird species

now includes 11 that are considered threatened, ranking the reserve alongside the most significant Key Areas for threatened birds anywhere in the Americas¹⁴. Conducting fieldwork in the reserve's marshland, grassland, forest and cerrado, we recorded over 300 species. These included three new threatened species for the reserve, all at Aguara-Ñu, a recently purchased 4,000 ha area of dwarf palm cerrado.

Highlights

Our discoveries there included the ornithological highlights of the project. Most incredible and important was the location of a small population of the enigmatic and critically endangered **White-winged Nightjar** *Caprimulgus candicans*. In addition to providing the first confirmed records for Paraguay, the site is only the third reported anywhere this century. With the population at Brazil's Emas National Park not reported since 1990¹⁴, Aguara-Ñu is clearly of great importance to the future of this beautiful bird. Remarkably, whilst setting up mist-nets for the nightjar, a **Rufous-faced Crake** *Laterallus xenopterus* was trapped. This exceptionally poorly known rallid has now been recorded from seven localities in north-eastern Paraguay⁸, but is otherwise known from a few records in and around Brasília National Park, 1,200 km distant in central Brazil⁵. This is the first indication that the species occurs in a protected area in the main portion of its range¹⁴.

In total, around 480 species were identified during the project. Of these, the following six species were first records for Paraguay⁸: **Dusky-legged Guan** *Penelope obscura* (at Parque Nacional San Rafael), **Russet-crowned Crake**

Table. Summary of the 14 sites surveyed

Site	Department	Number of species recorded		
		Total	Threatened	Near-threatened
Parque Nacional Caaguazú	Caazapá	210	5	12
Parque Nacional San Rafael	Itapúa	232	3	9
Reserva Privada Itabó	Alto Paraná	243	4	12
Reserva Privada La Victoria	Pres. Hayes	125	0	2
Parque Nacional Ypacarai	Cordillera	120	1	0
Parque Nacional Ybycuí	Paraguari	126	0	0
Reserva Privada Sombrero	Cordillera	216	3	8
Estancia Núñez/Kaa'gua-Rory	Caaguazú	209	2	7
Reserva Natural del Bosque Mbaracayú	Canindeyú	305	6	13
Estancia Jiménez	Canindeyú	203	1	3
Parque Nacional Cerro Corá	Amambay	133	0	3
Refugio de Vida Silvestre Yabebyry	Misiones	166	0	5
Isla de Yacyretá	Itapúa	196	1	5
Reserva Privada La Golondrina	Pres. Hayes	173	2	7

Laterallus viridis and **Ocellated Crane** *Micropygia schomburgkii* (both these were discovered while searching for *Laterallus xenopterus* at Mbaracayú), *Caprimulgus candicans*, **Spot-tailed Nightjar** *Caprimulgus maculicaudus* (also trapped in a mist-net erected to catch the preceding species at Mbaracayú) and **Hellmayr's Pipit** *Anthus hellmayri* (at the Refugio de Vida Silvestre Yabebyry). We also found some 34 species recorded in Paraguay on fewer than five occasions^{3,8}. These included the first **Tiny Hawk** *Accipiter superciliosus* in Paraguay since 1934, **Speckle-breasted Antpitta** *Hylopezus nattereri*, last recorded in Paraguay in 1904, the first **Large-tailed Antshrike** *Mackenziaena leachii* since 1936, the first **Black-masked Finch** *Coryphasiza melanotis* since 1930, and **Red-rumped Warbling-finch** *Poospiza lateralis*, not reported since 1910⁸.

Our findings illustrate that much work is still needed to discover Paraguay's biological riches before they are lost. More importantly, they emphasise that country's threatened birds need not necessarily be destined to global or even local extinction. The species of greatest conservation priority occur within existing or proposed reserves, and the relevant areas thus require full establishment and protection. Project YACUTINGA '95 hopes to heighten awareness of this. Despite ongoing and inevitable environmental damage, there is the potential for an established reserve system to preserve the vast majority of the country's birds and other taxa. Paraguay possesses the governmental infrastructure and non-governmental initiatives required for successful habitat preservation. However, given the current rate of destruction, their combined impact may not come soon enough. The conservation of Paraguay's remaining natural resources is a task for today, not for tomorrow.

Acknowledgements

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Appendix. Threatened and near-threatened species recorded

Threatened species

Crowned Eagle
Black-fronted Piping-guan
Rufous-faced Crane
Blue-winged Macaw
Vinaceous Amazon
Red-spectacled Amazon
White-winged Nightjar
Helmeted Woodpecker
Strange-tailed Tyrant
São Paulo Tyrannulet
Russet-winged Spadebill
Rufous-sided Pygmy-tyrant
Temminck's Seedeater
Marsh Seedeater
Black-masked Finch

Harpyhaliaetus coronatus
Pipile jacutinga
Laterallus xenopterus
Ara maracana
Amazona vinacea
Amazona pretrei
Caprimulgus candicans
Dryocopus galeatus
Alectrurus risora
Phylloscartes paulistus
Platyrinchus leucocoryphus
Euscarthmus rufomarginatus
Sporophila falcirostris
Sporophila palustris
Coryphaspiza melanotis

Near-threatened species

Greater Rhea
Solitary Tinamou
Grey-bellied Goshawk
Harpy Eagle
Black-and-white Hawk-eagle
Ocellated Crane
Sickle-winged Nightjar
Pileated Parrot
Saffron Toucanet
Yellow-browed Woodpecker
Canebrake Groundcreeper
White-browed Foliage-gleaner
Bare-throated Bellbird
Cock-tailed Tyrant
Southern Bristle-tyrant
Bay-ringed Tyrannulet
Bearded Tachuri
Sharp-tailed Tyrant
Creamy-bellied Gnatcatcher
Green-chinned Euphonia
White-banded Tanager
White-rumped Tanager
Dark-throated Seedeater
Rufous-rumped Seedeater
Chestnut Seedeater
Blackish-blue Seedeater
Grey-cheeked Grassfinch

Rhea americana
Tinamus solitarius
Accipiter polygaster
Harpia harpyja
Spizastur melanoleucus
Micropygia schomburgkii
Eleothreptus anomalus
Pionopsitta pileata
Bailloniopsis bailloni
Piculus aurulentus
Clibanornis dendrocolaptoideus
Anabacerthia amaurotis
Procnias nudicollis
Alectrurus tricolor
Phylloscartes eximius
Phylloscartes sylvius
Polystictus pectoralis
Culicivora caudacuta
Polioptila lactea
Euphonia chalybea
Neothraupis fasciata
Cyphospiza hirundinacea
Sporophila ruficollis
Sporophila hypochroma
Sporophila cinnamomea
Amaurospiza moesta
Emberizoides ypiranganus



Solitary Tinamou *Tinamus solitarius*, Fazenda Intervalles, Brazil: June 1995 (Joe Tobias/Project YACUTINGA)



Ocellated Crake *Micropygia schomburgkii*, Reserva Natural del Bosque Mbaracayú, Paraguay: Sept 1995 (Joe Tobias/Project YACUTINGA)



Rufous-faced Crake *Laterallus xenopterus*, Reserva Natural del Bosque Mbaracayú, Paraguay: Sept 1995 (Alberto Madroño N./ Fundación Moisés Bertoni)



White-winged Nightjar *Caprimulgus candicans*, Reserva Natural del Bosque Mbaracayú, Paraguay: Sept 1995 (James Lowen/Project YACUTINGA)



Spot-tailed Nightjar *Caprimulgus maculicaudus*, Reserva Natural del Bosque Mbaracayú, Paraguay: Sept 1995 (Alberto Madroño N./ Fundación Moisés Bertoni)





Sickle-winged Nightjar *Eleothreptus anomalus*, Reserva Privada Sombrero, Paraguay: August 1995 (Jane Reid/Project YACUTINGA)



Speckle-breasted Antpitta *Hyllopezus nattereri*, Parque Nacional San Rafael, Paraguay: July 1995 (Joe Tobias/Project YACUTINGA)



Cock-tailed Tyrant *Alectrurus tricolor*, Reserva Privada Sombrero, Paraguay: August 1995 (Joe Tobias/Project YACUTINGA)



Strange-tailed Tyrant *Alectrurus risora*, Estancia La Golondrina, Paraguay: October 1995 (James Lowen/Project YACUTINGA)



Bearded Tachuri *Polystictus pectoralis*, Reserva Privada Sombrero, Paraguay: August 1995 (Joe Tobias/Project YACUTINGA)



São Paulo Tyrannulet *Phylloscartes paulistus*, Estancia Núñez, Paraguay: August 1995 (Joe Tobias/Project YACUTINGA)