ISSN-L 1561-0837

Revista peruana de biología 23(3): 347 - 350 (2016) doi: http://dx.doi.org/10.15381/rpb.v23i3.12875

#### FACULTAD DE CIENCIAS BIOLÓGICAS UNMSM

# NOTA CIENTÍFICA

# Distribution and status of the Rufous-tailed Jacamar Galbula ruficauda (Aves: Galbulidae) in Paraguay

Distribución y estado del Jacamar Galbula ruficauda (Aves: Galbulidae) en Paraguay

Silvia Centrón 1\*, Paul Smith 2, Hugo del Castillo 1,3, Rob P. Clay 4, & Nelson Pérez 5

- 1 Asociación Guyra Paraguay, Avda. Carlos Bóveda, Parque Ecológico del Rio, Biocentro Guyra Paraguay, Viñas Cue, Asunción, Paraguay.
- 2 Fauna Paraguay & Para La Tierra, Reserva Natural Laguna Blanca, Municipalidad de Santa Bárbara, San Pedro department.
- 3 Parque Ecológico Capital Verde, Viñas Cué, Asunción, Paraguay.
- 4 Executive Office, Western Hemisphere Shorebird Reserve Network (WHSRN), Asunción, Paraguay.
- 5 Entidad Itaipú Binacional, Hernandarias, Paraguay.
- \*Corresponding author.

Email Silvia Centrón: scentron@gmail.com
Email Paul Smith: faunaparaguay@gmail.com
Email Hugo del Castillo: hugofdelcastillo@gmail.com
Email Rob P. Clay: robpclay31@yahoo.co.uk
Email Nelson Pérez: guajaki@gmail.com

## **Abstract**

Rufous-tailed Jacamar *Galbula ruficauda* is known from few records in Paraguay, all during the last 20 years. The species has been recorded in the northern Chaco and Paraguayan Pantanal, with all confirmed records from Alto Paraguay department. Here we summarise all reports and localities of the species in Paraguay to date. The species is categorized as Data Deficient at the national level, but may be more widely distributed than is currently recognised.

Keywords: Chaco; distribution; gallery forest; Pantanal.

## Resumen

Galbula ruficauda es una especie que cuenta con pocos registros a lo largo de 20 años en Paraguay. La especie ha sido observada en la zona norte del Chaco y Pantanal paraguayo, departamento Alto Paraguay. En este trabajo reportamos los registros y localidades de ocurrencia de la especie en el país. Actualmente se encuentra en la categoría de Datos Insuficientes a nivel nacional, aunque puede ser que su distribución sea más amplia.

Palabras claves: bosque en galería; Chaco; distribución; Pantanal.

## Citación

Centrón S., P. Smith, H. del Castillo, R.P. Clay & N. Pérez. 2016. Distribution and status of the Rufous-tailed Jacamar Galbula ruficauda (Aves: Galbulidae) in Paraguay. Revista peruana de biología 23(3): 347 - 350 (Diciembre 2016). doi: http://dx.doi.org/10.15381/rpb.v23i3.12875

 Presentado:
 02/09/2016

 Aceptado:
 15/11/2016

 Publicado online:
 20/12/2016

# Información sobre los autores:

SC,PS, HdC y RPC compilaron los datos, PS revision de la literatura, NP datos de observaciones y SC, PS, HC y RPC redactaron y aprobaron el manuscrito.

Los autores no incurren en conflictos de intereses

## Fuentes de financiamiento:

 $\ensuremath{\mathsf{PS}}$  and  $\ensuremath{\mathsf{HdC}}$  are grateful to the Pronii program of CONACYT Paraguay for their support.

Journal home page: http://revistasinvestigacion.unmsm.edu.pe/index.php/rpb/index

© Los autores. Este artículo es publicado por la Revista Peruana de Biología de la Facultad de Ciencias Biológicas, Universidad Nacional Mayor de San Marcos. Este es un artículo de acceso abierto, distribuido bajo los términos de la Licencia Creative Commons Atribución-NoComercial-Compartirlgual 4.0 Internacional.(http://creativecommons.org/licenses/by-nc-sa/4.0/), que permite el uso no comercial, distribución y reproducción en cualquier medio, siempre que la obra original sea debidamente citadas. Para uso comercial, por favor póngase en contacto con editor.revperubiol@gmail.com.

The Rufous-tailed Jacamar *Galbula ruficauda* is the most widely distributed species in the family Galbulidae, with an extensive, but disjunct distribution in Central and South America. A northern population composed of four subspecies occurs from Oaxaca and southern Veracruz in southeast Mexico (Howell & Webb 1995; Tobias et al. 2002) to northern South America east of the Andes, but is absent from much of the Amazon basin (Tobias et al. 2002). The two southern subspecies (*G. r. rufoviridis* and *G. r. heterogyna*) are found in northern and eastern Bolivia, and much of Brazil south of the Amazon to Paraná state (Tobias et al. 2002, Scherer-Neto et al. 2011). The northern and southern populations have previously been split as two species *G. ruficauda* (northern) and *G. rufoviridis* (southern), but these are now generally treated as conspecific (Tobias et al. 2002).

The species was first reported for Paraguay by Bertoni (1914, 1939) as "Galbula rufoviridis Cab. - Mainumbíh wassú" without details, but as he never visited the known distribution of the species it seems probable that he used secondary sources for this report. The source may have been Ihering & Ihering (1907) a publication he is known to have relied upon heavily (Smith et al. 2015), and which include "Río Paraná" and "Matto Grosso" in the distribution of *G. rufo-viridis*. However this was based on a Natterer specimen collected on the "Río Paraná" in São Paulo state (Ihering 1899) and listed as G. maculicauda in Pelzeln (1871). Between these publications however Cory (1919) had specifically stated that the species was "not recorded from Paraguay", though he did include "Missiones" (sic) Argentina in the distribution, on the basis of a dubious citation by Dabbene (1910) from "San Pedro", and which may also have influenced Bertoni's inclusion in the Paraguayan fauna. Dabbene's stated source is Sclater & Shelley (1891), attributed to (perhaps fide?) "Carlos Burmeister", but those authors did not include Argentina or Paraguay in the distribution of their Galbula rufo-viridis.

Laubmann (1939) stated that Bertoni provided the only Paraguayan citation but noted that these reports were unconfirmed. Consequently the species was treated as "possible" by Hayes (1995) and Guyra Paraguay (2004).

Bertoni's listings were presumably the original source for the species being included in the Paraguayan avifauna by Peters (1948), de Schauensee (1970), Contreras et al. (1990), CDC (1995) and Parker et al. (1996), among others, however more recently Tobias et al. (2002) reaffirmed that there are "no confirmed records from Paraguay". The species had in fact been documented prior to this date, but the findings had not been formally published. Here we provide a critical commentary of the known records of the species in Paraguay, providing details for the first time in the technical literature.

## **Documented records**

In July 1996, Jorge Escobar and Ulf Drechsel caught an adult male *Galbula ruficauda* at Estancia Chovoreca, Alto Paraguay department (19°41'S, 58°42'W). A photograph of the bird was published in the Sunday supplement of the ABC Color national newspaper on 1 September 1996 (p 10-11), but the record was treated as "hypothetical-possible" (referring to the state of documentation) by Guyra Paraguay (2004) who were unable to source the publication. The same photograph

was subsequently reproduced by del Castillo (2013) when the species was officially added to the Paraguayan avifauna. The bird had been observed at the edge of a paleochannel, in an area of transitional forest between the Dry Chaco and Cerrado ecoregions, with a high density of *Copernicia alba* palms before being captured in a mist net.

In September 2008, Nelson Pérez photographed *G. ruficauda* at Pozón (19° 41' 18.44" S, 58°42' 19.40" W) (see FPAVE2580-2581PH http://www.faunaparaguay.com/galbula\_ruficauda. html), close to the locality of the 1996 record. As with the Estancia Chovoreca record, the bird was in transitional Dry Chaco-Cerrado forest, close to a lagoon, in an area which floods during the rainy season (usually November-December).

During April 2011, Andrea Ferreira and Cristina Díaz filmed an apparent pair of Rufous-tailed Jacamars along the Jurumí trail at the Tres Gigantes Biological Station (20°04'30"S, 58°09'51"W) in gallery forest along the banks of the Río Negro opposite Bolivia. Possibly the same birds were also seen, photographed and videoed at this site in July and August 2011, and September 2013 (Silvia Centrón, Hugo del Castillo, Carol Lively, Alberto Yanosky, Claudio Prieto and Paul Smith see FPAVE2975-2978PH http://www.faunaparaguay.com/gal-

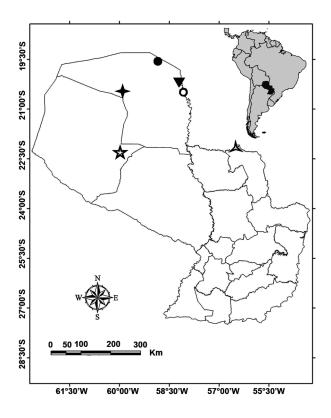


Figure 1. Distribution of Rufous-tailed Jacamar Galbula ruficauda in Paraguay. Circles: documented records; Others: undocumented reports. White Circle: Tres Gigantes Biological Station, Alto Paraguay department; Black Circle: Estancia Chovoreca and Estancia Pozón, Alto Paraguay department. 5-pointed Star: Parque Ecológico, near Filadelfia, Boquerón department; 3-pointed Star: Bella Vista Norte, Amambay department; 4-pointed Star: PN Defensores del Chaco, Alto Paraguay department; Triangle: Puerto Mercedes, Alto Paraguay department.

bula\_ruficauda.html) and the species has been observed there with regularity since. The Río Negro lies at the southern edge of the Pantanal, where the vegetation transitions to palm savanna typical of the Humid Chaco.

The species has also been observed on several occasions on the Brazilian coast of the Paraguay River opposite Paraguay a few kilometres to the north of Bahía Negra by HdC (12 September 2006 and 19 September 2009), suggesting that the presence of the species in Paraguayan territory around the town of Bahíia Negra is also plausible.

# **Undocumented reports**

Alto Paraguay department: In July 2007, Don Medina, a long-term inhabitant of Puerto Mercedes on the Río Negro (the border between Paraguay and Bolivia) told Hugo del Castillo and Silvia Centrón of a species he had recently seen for the first time. He described it as "similar to a kingfisher, but not in the water", with an "electric-blue back, a long thin bill", and reported that it was "trying to nest, possibly in a hole in a tree". However it should be noted that this species nests in holes in banks and not trees, though they may utilize arboreal termite nests. The description has been assumed to possibly refer to this species, however he added that it "climbs trunks, supporting itself with its tail" suggesting that the description may be confused. Given the geographical location close to the confirmed records at Tres Gigantes, the presence of this species at Puerto Mercedes would seem likely.

The species was listed without data for Parque Nacional Defensores del Chaco by Amarilla & Barreto (1999). This is an area of semihumid Chaco, and given the lack of details, exact locality and subsequent records we consider that proper documentation is required before this record can be considered.

Amambay department: A sight record by Sr Kii of Kii Fauna at his house in Bella Vista Norte, Amambay department in the year 1981/82 was reported to HdC on 23 March 2005. This is the only report we are aware of from the Oriental region of Paraguay.

Boquerón department: Nancy López de Kochalka reported the species from the Parque Ecológico, near Filadelfia, Boquerón department during 2003 (Guyra Paraguay 2004). This represents a considerable range extension and the first report from arid, purely Dry Chaco habitat for the species. Consequently we consider it best treated with some caution.

# **Discussion**

Galbula ruficauda would appear to be a locally distributed species in Paraguay, where it approaches the southwestern limits of its range (Fig. 1). All documented records in Paraguay are so far from the extreme northern Paraguayan Chaco and Paraguayan Pantanal, in woodland habitat close (at least seasonally) to water. Given that there are so few records and scant ecological data regarding its occurrence in the country, it is currently considered as "Data Deficient" at the national level (Guyra Paraguay 2005). The observation of a displaying pair at Tres Gigantes on 23 August 2011 suggests that the species probably breeds in the country, though no nests have yet been found.

In Brazil the species has been documented close to the Paraguayan border in Mato Grosso do Sul (http://www.wikiaves.com/mapaRegistros\_ariramba-de-cauda-ruiva), and its presence

along the Río Apa in north-eastern Paraguay in Concepción and Amambay departments might also be expected, consistent with the undocumented report of Sr. Kii from Bella Vista Norte. The species may also be expected to occur in suitable habitat on the western shores of the Río Paraguay in eastern Alto Paraguay department, perhaps as far south as northern Presidente Hayes department, and maybe even in the Salto del Guairá area of eastern Canindeyú department which shows a strong Pantanal influence to the local avifauna (Pérez Villamayor & Colmán Jara 1995). All of these areas are rarely visited by ornithologists and the species is thus potentially under-recorded in the country. Given the catholic habitat tastes of this species elsewhere in its range there is no need to assume that the species is under any conservation threat in Paraguay, but additional information as to its distribution and status in the country is desirable.

# **Acknowledgments**

The authors would like to thank Don Medina from Puerto Mercedes, Nancy López and Sr. Kii from Bella Vista Norte for sharing their observations; and the staff of Tres Gigantes Biological Station for their hospitality during our visits.

#### Literature cited

- Amarilla L.A. & R. Barreto. 1999. Aves. In: N. Rivarola, W. Sosa, M. Barreto, P. Ahern, W. Giesbrecht and M. Morales, eds. 1065
  Motivos Iniciales para Proteger el Parque Nacional Defensores del Chaco. Evaluación Ecológica Rápida. DPNVS/DeSdelChaco/TNC/USAID, Asunción, Paraguay: Pp31-34
  Bertoni A. de W. 1914. Fauna Paraguaya. Catálogos Sistemáticos de los Vertebrados del Paraguay. M. Brossa, Asunción, Paraguay. 86pp.
- Bertoni A. de W. 1939. Catálogos Sistemáticos de los Vertebrados en Paraguay. Mamíferos, Aves, Reptiles, Batracios y Peces Comprobados hasta 1937. Rev. Soc. Cien. Paraguay 4(4):1-49.
- BirdLife International. 2016. (online) Species Factsheet: *Galbula ruficauda*. Accessed http://www.birdlife.org on 23/08/2016.
- Contreras J.R., N. Gonzales Romero & L.M. Berry. 1990. Lista Preliminar de la Avifauna de la República del Paraguay. Cuad. Téc. Félix de Azara 2:1-42.
- CDC (Centro de Datos para la Conservación). 1995. Lista Preliminar de Vertebrados del Paraguay. Asunción, Paraguay: DPNVS/ SSERNMA/MAG.
- Cory C.B. 1919. Catalogue of the Birds of the Americas Part 2 No. 2. Field Museum of Natural History Publication 203, Zoological Series, 8:317-607.
- de Schauensee R.M. 1970. A Guide to the Birds of South America. Academy of Natural Sciences, Philadelphia. 498pp.
- del Castillo H. 2013. Actualización de la Lista Comentada de las Aves de Paraguay. Paraquaria Nat. 1(1):6-9.
- Dabbene R. 1910. Catálogo Sistemático y Descriptivo de las Aves de la República Argentina. Tomo Primero. An. Mus. Nac. Buenos Aires (11):1-513.
- Guyra Paraguay. 2004. Annotated Checklist of the Birds of Paraguay. Guyra Paraguay, Asunción, Paraguay. 200pp.
- Guyra Paraguay. 2005. Atlas de las Aves del Paraguay. Guyra Paraguay, Asunción, Paraguay. 212pp.
- Hayes F.E. 1995. Status, Distribution and Biogeography of the Birds of Paraguay. American Birding Association Monographs in Field Ornithology, Albany, USA. 230pp.
- Howell S. & S. Webb. 1995. A Guide to the Birds of Mexico and Northern Central America. Oxford University Press, Oxford, UK. 851pp.
- Ihering H. von. 1899. As Aves do Estado do São Paulo. Revista do Museu Paulista 3:113-476.
- Ihering H. von & R. von Ihering. 1907. As Aves do Brasil. Museu Paulista, São Paulo, Brazil. 483pp.
- Laubmann, A. 1939. Die Vögel von Paraguay I. Strecker und Schröder Verlag, Stuttgart, Germany. 246pp.

- Parker T.A. III, D.F. Stotz & J.W. Fitzpatrick. 1996. Ecological and distributional databases. In: D.F. Stotz, J.W. Fitzpatrick, T.A. Parker III and D.K. Moskovits, eds. Neotropical Birds: Ecology and Conservation. University of Chicago Press, Chicago and London. Pp. 113-436.
- Pelzeln A von. 1871. Zur Ornithologie Brasiliens. A. Pichler's Witwe, Wien. 462pp.
- Pérez Villamayor N. & A. Colmán Jara. 1995. Avifauna de las áreas protegidas de Itaipúa 1: Aves del Refugio Biológico Mbaracayú, Salto del Guairá, Paraguay. Biota 4:1-24.
- Peters J.L. 1948. Checklist of the Birds of the World volume 6. Harvard University Press, Cambridge, Massachussetts. 259pp.
- Scherer-Neto P., F.C. Straube, E. Carrano & A. Urben-Filho. 2011. Lista das Aves do Paraná. Hori Consultoria Ambiental, Curitiba. 136pp.
- Sclater P.L. & G.E. Shelley. 1891. Catalogue of the Birds in the British Museum Volume 19: Picariae. British Museum (Natural History), London. 484pp.
- Smith P., S. Rios & A. Cibois. 2015. Shedding More Light on Historical Hypothetical Records of Some Paraguayan Birds Listed by A. de. W. Bertoni. Rev. Suisse Zool. 122:407-413. http://dx.doi.org/10.5281/zenodo.30010.
- Tobias J., T. Züchner & T.A. de Melo Jr. 2002. Family Galbulidae (Jacamars). In: J. del Hoyo, A. Elliott and J. Sargatal, eds. Handbook of the Birds of the World Volume 7 Jacamars to Woodpeckers. Lynx Edicions, Barcelona. Pp. 74-101.