The juvenile of the Rufous-faced Crake Laterallus xenopterus

Marcelo Ferreira de Vasconcelos, Santos D'Angelo Neto and Filipe Cristovão Ribeiro da Cunha

Received 28 June 2007; final revision accepted 11 March 2008 Cotinga 30 (2008): 51–53

Nós descrevemos o jovem da sanã-de-cara-ruiva *Laterallus xenopterus* baseado em um espécime capturado em uma armadilha para pequenos mamíferos montada em um campo hidromórfico nos arredores de uma vereda na Fazenda Jacaré-Riachão (18°38'S 45°04'W; 620 m), município de Felixlândia, Minas Gerais, Brasil. O espécime foi taxidermizado e depositado na coleção ornitológica do Departamento de Zoologia da Universidade Federal de Minas Gerais (DZUFMG 4535). Sua plumagem difere da do adulto por ser predominantemente escura. Entretanto, o exemplar apresenta alguns caracteres diagnósticos da plumagem adulta, como as penas marromavermelhadas na cabeça e nos lados do pescoço, penas amareladas na garganta e no peito, abdômen esbranquiçado e flancos barrados de negro, além do barramento branco nas coberteiras superiores das asas.

Rufous-faced Crake *Laterallus xenopterus* is one of the least-known South American rails¹³. Described in 1934 from a single specimen taken at Horqueta, Paraguay³, it was only rediscovered in the 1970s, when four specimens were collected in Curuguaty, Paraguay and one in Brasília National Park, Brazil^{8,12,13}. Subsequently, *L. xenopterus* has been recorded at several isolated localities in Brazil, Bolivia and Paraguay, suggesting that its range is much wider than previously known^{1,2,4-6,9-11,14-17}. As juvenile plumage is unknown¹³, we describe here a juvenile specimen from Minas Gerais, south-east Brazil.

The bird was caught on 24 July 2004 in a smallmammal trap set in dense grassland surrounding a vereda palm grove, at Fazenda Jacaré-Riachão (18°38'S 45°04'W; 620 m), Felixlândia municipality, Minas Gerais¹⁵. The grassland type where the bird was caught is locally known as campo hidromórfico. The area was not flooded, had firm soil and the vegetation comprised dense clumps of native grasses (Poaceae), many Cyperaceae and sparse Eryngyum sp. (Apiaceae). The vereda was flooded and comprised several buriti palms Mauritia flexuosa (Arecaceae). The bird was found dead inside the trap, prepared as a specimen and deposited in the ornithological collection of the Department of Zoology, Universidade Federal de Minas Gerais, Belo Horizonte (DZUFMG 4535). The specimen, with its predominantly blackish plumage and white belly, could not be identified from the existing literature¹³ or though comparison with those Rallidae in the Museu de Zoologia da Universidade de São Paulo (MZUSP), Museu de História Natural de Taubaté (MHNT), Museu Paraense Emílio Goeldi, Belém (MPEG) and American Museum of Natural History, New York (AMNH). Photographs of the specimen were sent to Drs Storrs L. Olson and Barry Taylor, who identified it as a juvenile L. xenopterus based on the characters presented in Vasconcelos et al.¹⁵.

The following plumage description is based on Munsell *Soil color charts*⁷. Measurements were taken with digital callipers. The specimen is illustrated in Figs. 1–3.

Top of head and occiput black (10YR 2/1); postocular and auriculars black (10YR 2/1) with some dark reddish-brown feathers (5YR 3/4); malar region black (10YR 2/1) washed olive grey (5Y 5/2.5; chin light grey (5Y 6.5/1); throat light grey $(5Y\,6.5\!/1)$ with some olive-yellow $(2.5Y\,6\!/\!6)$ feathers at the base. Nape black (10YR 2/1) washed very dark brown (10YR 2/2): hindneck and mantle black (10YR 2/1); rump very dark grey (10YR 2.5/1); uppertail-coverts and tail black (10YR 2/1). Foreneck dark grey (10YR 3.5/1) washed yellowish brown (10YR 5/8); neck-sides very dark grey (10YR 2.5/1) with some dark reddish-brown feathers (5YR 3/4): breast-sides black (10YR 2/1) with dark reddish-brown feathers (5YR 3/4), becoming grey (10YR 4.5/1) in the centre of breast and a single yellowish-brown feather (10YR 5/6) on the lower breast; belly white (5Y 8/1) to pale yellow (5Y 8/1.5), barred brown (7.5YR 4/2), very dark brown (10YR 2/2) and black (10YR 2/1); body-sides black (10YR 2/1); flanks black (10YR 2/1) barred white (Gley Chart 1 8/N); vent predominantly black (10YR 2/1) with tips dark brown (10YR 3/3); undertail-coverts black (10YR 2/1) barred white (Glev Chart 1 8/N); thighs greyish brown (10YR 5/2) washed light grey (10YR 7/1). Bend of wing black (10YR 2/1); upperwing-coverts black (10YR 2/1) barred white (Gley Chart 1 8/N); remiges black (10YR 2/1); underwing-coverts very dark grey (10YR 3/1) barred white (Gley Chart 1 8/N).

The skull was only 15% pneumatised, which also indicates it was a juvenile. The specimen had a blackish bill and dark reddish tarsi. The irides colour could not be determined, as the bird had died some hours before it was found. When collected, it weighed 35 g and measured as follows (in mm): wingspan: 284; total length: 178; wing



Figure 1. Ventral view of the juvenile *Laterallus xenopterus* (DZUFMG 4535), showing the yellowish feathers appearing on the throat and breast (Carlos Henrique de Faria Vasconcelos)



Figure 3. Dorsal view of the juvenile *Laterallus xenopterus* (DZUFMG 4535), showing the white-barred upperwingcoverts (Carlos Henrique de Faria Vasconcelos)

(unflatenned): 85.77; tail: 50.92; tarsus: 27.08; culmen (total): 17.99; nares-tip: 8.39. Mass is lighter than reported for adults^{12,13}. Other measurements fall inside the range of adult *L. xenopterus*, except tarsus, which is slightly shorter in the juvenile, and culmen, which is slightly longer in the juvenile^{3,8,12,13}. Nevertheless, there are few specimens of *L. xenopterus*^{3,8,12,13} and it is possible that these measurements will fall inside the range of adults if more specimens become available.

The dark reddish-brown feathers (5YR 3/4) in the postocular region, the auriculars, and neck- and breast-sides; the olive-yellow throat feathers (2.5Y 6/6); and the yellowish-brown feather (10YR 5/6) in the lower breast are typical of adult *L. xenopterus* (Fig. 4), indicating that the bird had commenced moult to adult plumage. Furthermore, the whitish bars in the upperwing-coverts are also typical of the species. The undertail-coverts pattern, with black



Figure 2. Lateral view of the juvenile *Laterallus xenopterus* (DZUFMG 4535), showing dark reddish-brown feathers appearing in the postocular region, auriculars and neck- and breast-sides (Carlos Henrique de Faria Vasconcelos)



Figure 4. Ventral view of an adult *Laterallus xenopterus* (MNRJ 32661) collected in Brasília National Park, showing yellowish feathers in the throat and breast, the dark reddish-brown neck- and breast-sides, and white-barred undertail-coverts (Carlos Rodrigo Meirelles Abreu)

feathers barred white, agrees with the descriptions of Brace *et al.*¹ and Lowen *et al.*⁶, but not Myers & Hansen⁸ and Storer¹², who described this region as being entirely black. Many small rails, including other *Laterallus*, have a plain, dark brown or black post-natal plumage¹³. Some species, such as *L. melanophaius*, *L. ruber* and *L. albigularis*, possess a very dark, plain first plumage (B. Taylor *in litt.* 2005), making the juvenile Rufous-faced Crake's plumage consistent with what is known for the genus.

Acknowledgements

We thank the following institutions for financial support during this study: CAPES, Brehm Foundation, FAPEMIG, Sete Soluções e Tecnologia Ambiental, Plantar, and Programa de Educação Tutorial Sesu/MEC. Bárbara Maria de Andrade Costa assisted us in the field and set the small-mammal trap that caught the juvenile. Drs Storrs L. Olson and Barry Taylor identified the specimen and elucidated the species' diagnostic characters. Dr Marcos Rodrigues facilitated our study at DZUFMG. IBAMA provided permission to collect specimens in Minas Gerais. We are also indebted to Drs Luís Fábio Silveira, Herculano M. F. Alvarenga, Alexandre Aleixo, Joel Cracraft and Paul Sweet for enabling us to study specimens at MZUSP, MHNT, MPEG and AMNH, respectively. MFV thanks AMNH for a Collection Study Grant to work on Brazilian birds. Robert P. Clay made important comments on the manuscript. Carlos Henrique de Faria Vasconcelos and Carlos Rodrigo Meirelles Abreu photographed the specimens, and Marcos Maldonado-Coelho provided the colour catalogue used in the description.

References

- Brace, R., Hornbuckle, J. & St Pierre, P. (1998) Rufous-faced Crake *Laterallus xenopterus*: a new species for Bolivia, with notes on its identification, distribution, ecology and conservation. *Cotinga* 9: 76–80.
- Clay, R. P., Capper, D. R., Mazar Barnett, J., Burfield, I. J., Esquivel, E. Z., Fariña, R., Kennedy, C. P., Perrens, M. & Pople, R. G. (1998) White-winged Nightjars *Caprimulgus candicans* and cerrado conservation: the key findings of Project Aguará Ñu 1997. *Cotinga* 9: 52–56.
- Conover, H. B. (1934) A new species of rail from Paraguay. Auk 51: 365–366.
- Hayes, F. E. (1995) Status, distribution and biogeography of the birds of Paraguay. Colorado Springs: American Birding Association (Monogr. Field Orn. 1).
- Lowen, J. C., Bartrina, L., Brooks, T. M., Clay, R. P. & Tobias, J. (1996) Project YACUTINGA '95: bird surveys and conservation priorities in eastern Paraguay. *Cotinga* 5: 14–19.
- Lowen, J. C., Bartrina, L., Clay, R. P. & Tobias, J. (1996) Biological surveys and conservation priorities in eastern Paraguay. Cambridge, UK: CSB Conservation Publications.
- Munsell (2000) Soil color charts: revised washable edition. New Windsor, NY: Macbeth Division of Kollmorgen Corporation.
- Myers, P. & Hansen, R. L. (1980) Rediscovery of the Rufous-faced Crake (*Laterallus xenopterus*). Auk 97: 901–902.

- Negret, A. & Teixeira, D. M. (1984) The Ocellated Crake (*Micropygia schomburgkii*) of central Brazil. Condor 86: 220.
- Oniki, Y. & Willis, E. O. (1996) Morte acidental em aves comuns por fatores humanos. R. Cent. Cienc. Bioméd. Univ. Fed. Uberlândia 12: 33–37.
- 11. Sick, H. (1997) Ornitologia brasileira. Rio de Janeiro: Ed. Nova Fronteira.
- 12. Storer, R. W. (1981) The Rufous-faced Crake (*Laterallus xenopterus*) and its Paraguayan congeners. *Wilson Bull*. 93: 137–144.
- Taylor, B. & van Perlo, B. (1998) Rails: a guide to the rails, crakes, gallinules and coots of the world. Robertsbridge: Pica Press.
- Tobias, J. A. & Seddon, N. (2007) Nine bird species new to Bolivia and notes on other significant records. *Bull. Brit. Orn. Club* 127: 49–84.
- Vasconcelos, M. F., D'Angelo Neto, S., Kirwan, G. M., Bornschein, M. R., Diniz, M. G. & Silva, J. F. (2006) Important ornithological records from Minas Gerais state, Brazil. *Bull. Brit. Orn. Club* 126: 212–238.
- Willis, E. O. (2004) Birds of a habitat spectrum in the Itirapina savanna, São Paulo, Brazil (1982–2003). Brazil. J. Biol. 64: 901–910.
- 17. Willis, E. O. & Oniki, Y. (2003) Aves do estado de São Paulo. Rio Claro: Ed. Divisa.

Marcelo Ferreira de Vasconcelos

Departamento de Zoologia, ICB, Universidade Federal de Minas Gerais, CP 486, CEP 30123–970, Belo Horizonte, MG, Brazil. E-mail: mfvasconcelos@ gmail.com.

Santos D'Angelo Neto

Departamento de Biologia Geral, Universidade Estadual de Montes Claros, Av. Dr Ruy Braga, s/n°, CEP 39401–089, Montes Claros, MG, Brazil. E-mail: santosdangelo@gmail.com.

Filipe Cristovão Ribeiro da Cunha

Departamento de Ciências Biológicas, Pontifícia Universidade Católica de Minas Gerais, Av. Dom José Gaspar, 500, CEP 30535–901, Belo Horizonte, MG, Brazil. E-mail: filipecristovao@yahoo.com.br.