ANGE EXTENSION OF THE LADDER-TAILED NIGHTJAR, Hydropsalis climacocerca Tschudi, 1844 in the Brazilian Cerrado, with the first record for the state of Maranhão

KARLA DAYANE DE LIMA PEREIRA

Instituto Federal Goiano (IF Goiano), Programa de Pós-Graduação em Conservação de Recursos Naturais do Cerrado, Rod. Geraldo Silva Nascimento, Km 2,5, Zona Rural, 75.790-000, Urutaí, Goiás, Brazil, kd.limapereira@gmail.com

ARTHUR ÂNGELO BISPO DE OLIVEIRA

Universidade Federal de Goiás, Faculdade de Letras, Av. Esperança, Chácaras de Recreio Samambaia, 74690-900 Goiânia, Goiás, Brazil.

DANIEL DE PAIVA SILVA

Instituto Federal Goiano (IF Goiano), Rod. Geraldo Silva Nascimento, Km 2,5, Zona Rural, 75.790-000, Urutaí, Goiás, Brazil.

50 **Abstract**: The Ladder-tailed Nightjar, *Hydropsalis climacocerca*, bird with central distribution in the Amazon Basin, was recorded in the state of Maranhão and the middle of the Tocantins River for the first time. An individual adult of the species was recorded in 2016 on a temporary river island downstream from a hydroelectric dam. This record expanded the area of occurrence and distribution of this species in the Brazilian Cerrado.

Keywords: Amazon-Cerrado, geographic distribution, middle Tocantins River, new record.

EXPANSÃO DE DISTRIBUIÇÃO DE ACURANA HYDROPSALIS CLIMACOCERCA TSCHUDI, 1844 NO CERRADO BRASILEIRO, COM PRIMEIRO REGISTRO PARA O ESTADO DO MARANHÃO

Resumo: A acurana *Hydropsalis climacocerca*, ave com distribuição central na bacia amazônica, é registrada pela primeira vez no estado do Maranhão e região do médio do rio Tocantins. Um indivíduo adulto da espécie foi registrado em 2016 em uma ilha fluvial temporária, à jusante de uma barragem hidrelétrica. Este registro amplia a área de ocorrência e distribuição desta espécie no Cerrado brasileiro.

Palavras-chave: Amazônia-Cerrado, distribuição geográfica, médio Rio Tocantins, novo registro.

The Ladder-tailed Nightjar, *Hydropsalis climacocerca* Tschudi, 1844, is a bird species restricted to the lowlands, occurring up to 2,600 m in some intermontane valleys (Schulenberg et al., 2010; Smith, 2020). This species is common along side rivers, marginal lakes, and floodplain forests. Additionally, specimens of this species occupy shores, river islands, and sand bars (Smith, 2020). This nightjar, which is endemic to the Americas, occurs from the Guianas and Venezuela to Bolivia and eastern Brazil (Sick, 1997; IUCN, 2016; Smith, 2020). The first known record for the Brazilian Cerrado occurred

Rev. Biol. Neotrop. / J. Neotrop. Biol., Goiânia, v. 20, n. 1, p. 50-53, jan.-jun. 2023



from 2004 to 2006, in the center-west of the Tocantins state, in the Amazon-Cerrado transition area (Pinheiro & Dornas, 2009). Since then, new records of *H. climacocerca* have been observed for this ecotonal region and other locations in the Cerrado biome of Tocantins, mainly in the Araguaia River basin. Based on citizen science data obtained from eBird, GBIF, Macaulay Library and *WikiAves*, *H. climacocerca* occurs in the Cerrado biome from July to January during the dry and dry-rain transition periods for the biome.

On July 9, 2016, a single adult of H. climacocerca was photographed on a fluvial island in the middle of the Tocantins River, downstream of the UHE Estreito, in the municipality of Estreito, Maranhão state, Brazil (6º22'24.44" S, 47º24'49.94" W) (Fig. 1). In the region, these fluvial islands found in the middle of the river form in the summer when the river is low. When winter comes, most sandbars are submerged, including the island where this bird was recorded. This record was taken during the field activity of a Chelonian monitoring program at UHE Estreito. The boatman of the program, who is a local resident, was the one who took us to the encounter with the Ladder-tailed Nightjar and told us that he had already observed this species of "owl" (as he called the bird) before constructing the hydroelectric dam. The boatman also told us that H. climacocerca was not easy to observe and was observed only on that island. No nesting or nesting activity of the species was observed. Since the present record, new encounters with this species in the region have been unknown.

The record region is between 150 and 201 m in the Amazon-Cerrado ecotone area and is characterized by forest formations and savan-

nas, predominantly from the Cerrado biome (Medeiros & Walter, 2012). The registration location was accessed using a boat with a 40 hp outboard motor. An adult individual was photographed with a Canon PowerShot SX50 HS camera. The photographic record was available on the *WikiAves* portal under registration code WA3251043. The identification was made based on the habitat and morphological diagnosis of the specimen.

In the Brazilian Cerrado, H. climacocerca is abundant in the west central Tocantins state, in the ecotonal areas of the Amazon and Cerrado, the domain of the Araguaia Basin and its tributaries, mainly the Javaés River and the Coco River (Pinheiro & Dornas, 2009). Since the first record in the Bananal Island/Cantão Environmental Protection Area (APA) and the Cantão State Park (Pinheiro & Dornas, 2009), this species has been observed mainly in the Araguaia-Bananal ecological corridor. A complex of protected areas in the region forms this corridor. Documentary evidence is predominantly deposited in citizen science web portals, mainly in eBird, GBIF, Macaulay Library, and WikiAves. In the Tocantins River basin, the species H. climacocerca is found in the lower part of the river, from the Santo Antônio waterfall, in Itaguatins, state of Tocantins (Silva, 2010) to the UHE Tucuruí dam area in the state of Pará (Dantas, 2005). Based on reviews of information or records in the scientific and citizen science literature, the current record of H. climacocerca represents a geographic distribution extension of the species to the Brazilian Cerrado, with the first occurrence in the Maranhão state and the middle Tocantins River basin (Fig. 2). De Carva-Iho et al. (2020) compilated a list of 728 species of birds for the state of Maranhão. The Avibase (Lepage, 2023), database system, informs the



Fig. 1. Adult of *Hydropsalis climacocerca* Tschudi, 1844 in a temporary river island on the middle Tocantins River, municipality of Estreito, Maranhão state, Brazil (A, B). Photographic record deposited on the *WikiAves* portal under code WA3251043 (B). Photos: Pereira, K. D. L.

 (\mathbf{i})

occurrence of 822 species for the state, including our record available on the *WikiAves* portal under code WA3251043. However, we did not consider Avibase data, whose compilation of lists is based on data available from several sources, including other citizen science portals, without mentioning due credit to the authors of the records. The present study added the species *H. climacocerca*, thus increasing this total to 729 species of birds present with in the limits of the state of Maranhão, based on the list by De Carvalho et al. (2020).

This new record extends the known range of the species by about 70 km south of the clo-

52

sest observation in the Cerrado biome, located in the lower Tocantins River (Silva, 2010). The current register also extends approximately 289 km north of the occurrence observed in Couto Magalhães (Pascoal, 2014). Concerning the occurrence records of the species in the Araguaia-Bananal ecological corridor, the current record extends to the north for approximately 449 km of the Cantão State Park (Pinheiro & Dornas, 2009), 547 km of the Canguruçu – Private Reserve Natural Heritage (*RPPN*) (Moschini & Piovesan, 2019), and 637 km from the Javaés River in Bananal Island/Cantão *APA* (Pinheiro & Dornas, 2009) (Fig. 2).

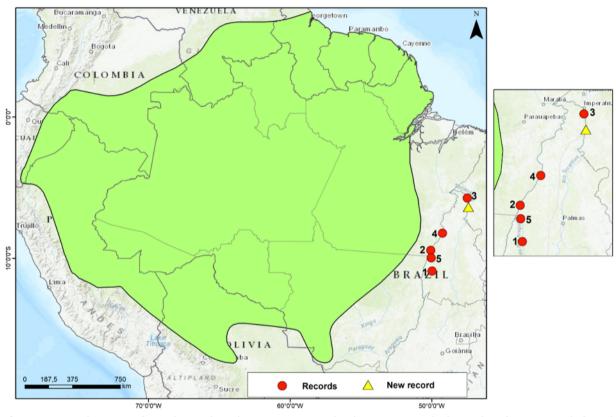


Fig. 2. Distribution of *Hydropsalis climacocerca* Tschudi, 1844, including the first record for the middle Tocantins River basin in state of Maranhão (Yellow triangle: present study) and review of records of the Cerrado biome in Tocantins state (Red circles). Records (References): 1. Javaés River in the Bananal Island/Cantão *APA* (Pinheiro & Dornas, 2009), 2. Coco River in the Cantão State Park (Pinheiro & Dornas, 2009), 3. Santo Antônio waterfall, in the municipality of Itaguatins (Silva, 2010), 4. municipality of Couto Magalhães (Pascoal, 2014), 5. Canguruçu *RPPN* (Moschini & Piovesan, 2019). Projection of mapping standards of the distribution area of the species (Green spot): IUCN (IUCN, 2016) and Handbook of the Birds of the World (Smith, 2020).

KDLP thanks José Alexandre Silveira Silva, boatman and riverine, and work friend for life, who provided us with the encounter with the species *H. climacocerca*, in addition to sharing experiences. We are also grateful to Andressa Carneiro do Nascimento for her cartographic contributions. Finally, the Consórcio Estreito Energia (CESTE) is acknowledged for supporting studies and authorizing the use of data.



REFERENCES

- Dantas, S. M. 2005. [XC4832, *Hydropsalis climacocerca*]. Available in: <www.xeno-canto.org/4832>. Access on 05 oct 2022.
- De Carvalho, D. L., S. M. Silva, T. Sousa-Neves, D. P. Silva & M. P. D. Santos. 2020. An updated documented inventory and new records of bird species for the Brazilian state of Maranhão. Ornithol. Res. 28: 77-85. DOI: https://doi.org/10.1007/s43388-020-00013-2.
- **IUCN**. International Union for Conservation of Nature. Red List of threatened species. 2016. Version 2022.1. *Hydropsalis climacocerca*. Available in: <www.iucnredlist.org/>. Access on 05 oct. 2022.
- Lepage, D. 2023. Avibase, the World Bird Database. Lista de verificação das aves do Maranhão. Available in: <https://avibase.bsc-eoc.org/checklist.jsp?region=BRma/>. Access on 25 apr. 2023.
- Medeiros, M. B. & B. M. T. Walter. 2012. Composição e estrutura de comunidades arbóreas de cerrado stricto sensu no norte do Tocantins e sul do Maranhão. Rev. Árvore 36(4): 673-683.
- Moschini, L. & L. Piovesan. 2019 [ML181232351; ML241388411 *Hydropsalis climacocerca*]. Available in: <https:// macaulaylibrary.org/>. Access on 05 oct. 2022.
- **Pascoal, W**. 2014. [WA1514990, *Hydropsalis climacocerca*]. Available in: <www.wikia-ves.com/1514990>. Access on 05 oct. 2022.
- Pinheiro, R. T. & T. Dornas. 2009. Distribuição e conservação das aves na região do Cantão, Tocantins: ecótono Amazônia/Cerrado. Biota Neotrop. 9(1): 187-205.

- Sick, H. 1997. Ornitologia brasileira. 3. ed. Rio de Janeiro, Nova Fronteira S.A., 912 p.
- Schulenberg, T. S., D. F. Stotz, D. F. Lane, J. P. O'Neill & T. A. Parker. 2010. Birds of Peru. New Jersey, Princeton University Press.
- Silva, C. P. 2010. [WA210031, *Hydropsalis cli*macocerca]. Available in: <www.wikiaves.com/210031>. Access on 05 Oct. 2022.
- Smith, M. 2020. Ladder-tailed Nightjar (Hydropsalis climacocerca), version 1.0. In: Schulenberg, T. S. (Ed) Birds of the World. Ithaca, New York, Cornell Lab of Ornithology. DOI: https://doi.org/10.2173/bow.latnig1.01

53

Editor Cientifico / Scientific Editor: Augusto João Piratelli, UFSCar, Brazil / Lucas Matías Leveau, UBA, Argentina Recebido / Recibido / Received: 13.03.2023 Revisado / Revised: 30.04.2023 Aceito / Aceptado /Accepted: 06.05.2023 Publicado / Published: 15.05.2023

Dados disponíveis / Datos disponibles / Available data: Repository not informed