

SHORT NOTE

Mammal remains in *Tyto furcata* (Tytonidae: Strigiformes) pellets from Serra do Amolar, Mato Grosso do Sul

Restos de mamíferos en egagrópilas de *Tyto furcata* (Tytonidae: Strigiformes) de la Serra do Amolar, Mato Grosso do Sul

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- Received: 07/Abr/2020
- Accepted: 02/Sep/2020
- Published online: 14/sep/2020

Citation: Brandão MV. 2021. Mammal remains in *Tyto furcata* (Tytonidae: Strigiformes) pellets from Serra do Amolar, Mato Grosso do Sul. *Caldasia* 43(1):211-213. doi: <https://dx.doi.org/10.15446/caldasia.v43n1.85928>.

ABSTRACT

Tyto furcata pellets provide important ecological data on its diet, as well as on the preyed mammals. The present study furnishes data on the diet of *T. furcata* in a Pantanal area, including records of rare mammals species and a variety of preys with different habits, furnishing evidence of the owl foraging areas.

Keywords. Barn Owl, Chiroptera, diet, Pantanal, Rodentia

RESUMEN

Las presas en egagrópilas de *Tyto furcata* proporcionan importantes datos ecológicos acerca de su dieta, así como de los mamíferos depredados. El presente estudio proporciona información sobre la dieta de *T. furcata* en un área del Pantanal, incluidos registros de especies raras de mamíferos y una variedad de presas con diferentes hábitos, proporcionando evidencia de las áreas de alimentación de la lechuza.

Palabras clave. Chiroptera, dieta, Lechuza de campanario, Pantanal, Rodentia



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In South America most data on raptor pellets comes from the Barn Owl *Tyto furcata* (Temminck, 1827), with several important published data on mammals on recent decades (Pardiñas *et al.* 2016, Rocha *et al.* 2011). As *T. furcata* is an open and semi-open habitat dweller species (Sick 1997), most data on pellets from Brazil comes from open vegetation areas, such as Cerrado (e.g. Motta-Júnior and Talamoni 1996, Bonvicino and Bezerra 2003, Bueno and Motta-Júnior 2008, Rocha *et al.* 2011), Caatinga (Jesus and Oliveira 2017, Mancini *et al.* 2018), and disturbed Atlantic Forest areas (e.g. Scheibler and Christoff 2004, 2007, Souza *et al.* 2010, Faria and Passamai 2013). Despite the increasing records in Brazil, there are scarce data from western region (e.g. Escarlate-Tavares and Pessôa 2005). In the present study its provided new data on *T. furcata* pellets from the Pantanal, of Mato Grosso do Sul, western Brazil, a yet poorly investigated area with the use of this important method.

Pellet samples were collected at RPPN Acurizal, Serra do Amolar, Mato Grosso do Sul, Brazil, in April 2019. Twenty pellets were found in an abandoned house near the Paraguay River (17°49'52.02" South, 57°33'8.35" West), where a single owl nested. The general area comprises different phytophysionomies: deciduous and semideciduous forests, savanna (Cerrado), pioneer formations, ecotonal, and anthropic areas. Specimens were identified according to diagnostic characters from Gregorin and Taddei (2002), Brandão and Nascimento (2015) and Pardiñas *et al.* (2016), and are deposited at the Universidade Federal de Viçosa, Minas Gerais, Brazil.

A total of four vertebrates species were preyed, two species of sigmodontine rodents (*Holochilus chacarius* and *Oecomys franciscorum*), one molossid bat (*Promops cf. nasutus*) and one undetermined small bird. The record of *O. franciscorum* is noteworthy since it was recently described based on few records (Pardiñas *et al.* 2016), thus specimens are still scarce in museum collections. The most consumed prey were rodents (80 %), with *O. franciscorum*

(nine individuals, 60 %) and *H. chacarius* (three, 20 %) individuals. Only two specimens of bats (13.3 %) and one bird (6.67 %) were found (Table 1).

The species preyed indicate that the owl used different habitats for foraging, since it fed on semi-aquatic, arboreal and volant preys (Table 1). The most consumed prey was an arboreal rodent, which contrast with literature since most published data for other Brazilian open vegetation areas report cursorial species as the most consumed prey, with only limited records of semi-aquatic, arboreal, scansorial and/or volant small mammals, and other vertebrates (Motta-Júnior and Talamoni 1996, Bonvicino and Bezerra 2003, Scheibler and Christoff 2004, 2007, Bueno and Motta-Júnior 2008, Souza *et al.* 2010, Rocha *et al.* 2011, Mancini *et al.* 2018). Notably, only Jesus and Oliveira (2017) reported a major consumption of bats on a cave from Bahia, and Escarlate-Tavares and Pessôa (2005) reported 450 specimens of *H. chacarius* and only one *Oecomys* sp., contrasting with the present data despite also referring to a Pantanal area. Therefore, the present results might be due to local abundance of preys and/or the foraging areas used by the owl considering the local heterogeneous phytophysionomies.

The present study provides new data on the diet of *T. furcata* in a Pantanal area, a poorly investigated area on this issue. It also corroborates the elevated consumption of small mammals by this owl, specially rodents, and also the fact that *T. furcata* might consume different type of preys in higher frequencies due to local abundance and/or local environmental conditions (Roda 2006, Jesus and Oliveira 2017, Mancini *et al.* 2018).

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Table 1. Vertebrate prey found in Barn Owl (*Tyto furcata*) pellets from RPPN Acurizal, Serra do Amolar, Mato Grosso do Sul, Brazil.

Taxa	Species	Abundance (%)	Habit
Aves	Undetermined	1 (6.67%)	Volant
Chiroptera	<i>Promops cf. nasutus</i> (Spix, 1823)	2 (13.33%)	Volant
Rodentia	<i>Holochilus chacarius</i> Thomas, 1906	3 (20%)	Semi-aquatic
	<i>Oecomys franciscorum</i> Pardiñas <i>et al.</i> , 2016	9 (60%)	Arboreal

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CONFLICT OF INTEREST

The author declares that he has no conflict of interest.

ACKNOWLEDGMENTS

I would like to thank A. Carmignotto, G. Lessa, Eleandro for help with specimens and to H. Brandão and RPPN Acurizal staff for collecting the pellets at the local site.