

# Aves, Tinamidae, *Crypturellus noctivagus noctivagus* (Wied, 1820): Southward range extension and rediscovery in Rio Grande do Sul, Brazil

Luiz Liberato Costa Corrêa\*, Darliane Evangelho Silva and Lize Helena Cappellari

Universidade da Região da Campanha, Campus Caçapava do Sul, Curso de Ciências Biológicas. Rua General Osório 522. CEP 96570-000. Caçapava do Sul, RS, Brazil.

\* Corresponding author. E-mail: [lc\\_correa@yahoo.com.br](mailto:lc_correa@yahoo.com.br)

**ABSTRACT:** We present here the record of the rediscovery of *Crypturellus noctivagus noctivagus* in the state of Rio Grande do Sul, Brazil, in a forest area on the border of São Sepé and Formigueiro municipalities. The species was considered probably extinct in the state, being unrecorded for about three decades.

The Yellow-legged Tinamou *Crypturellus noctivagus* (Wied, 1820) is endemic to the Brazilian territory (Sick 1997). Its nominate subspecies was originally distributed in Brazil from southern Bahia, Espírito Santo and Minas Gerais states to Rio Grande do Sul state, living in areas of well preserved Atlantic Forest (Sick 1984, 1997; Bencke *et al.* 2003; Piacentini and Straube 2008). It was regarded as presumably extinct in Rio Grande do Sul (Bencke 2001; Marques *et al.* 2002), with the Itajaí river valley in Santa Catarina state as the southernmost occurrence limit currently known (Piacentini and Straube 2008). According to Piacentini and Straube (2008), *C. noctivagus* is a nationally endangered species, also considered as presumably extinct in Rio de Janeiro.

During a research project in the municipality of São Sepé, state of Rio Grande do Sul, in an area known as Ponta do Mato (30°05'35.3" S, 53°36'22.9" W), five individuals of *Crypturellus noctivagus noctivagus* were identified by direct visualization (Figure 1) and vocal recognition in September 2009. Additional visual records were periodically obtained until February 2010. Research in the area began on January 2008, with the inventory of the bird fauna in the area, a forest fragment of about 450 ha. Records were obtained while hiking in field areas and trails which were already present in the forest vegetation, with sampling effort of 16 hours/month.

The area is a riparian forest in the headwaters of the São Sepé river, which is connected to the escarpment forests to the north through the Vacacaí and Jacuí rivers. Among the tree species found in the area, these stand out: *Syagrus romanzoffiana* (Cham.) Glassman, *Parapiptadenia rigida* (Benth.) Brenan, *Myrciaria delicatula* (DC) O. Berg., *Myrcianthes pungens* (Berg) Legr., and *Gymnanthes concolor* Spreng. The region is characterized by rolling topography, a Cfa type 2 of Köppen climate classification, and an average annual temperature of 18.7 °C (Brasil 1973). According to the IBGE (2004) the area is located within the Pampas biome, a natural region that occupies the southern half

of Rio Grande do Sul, and is characterized by grasslands, riparian woodlands and savannas, with predominance of grasslands. This region is continuous with similar open areas in Uruguay and Argentina. However, São Sepé is close to the Atlantic forest biome border, being located in a transitional zone between the seasonal forests to the north and the open grasslands to the south (IBGE 1986). Therefore, the riparian forests along the São Sepé river form a biogeographic pathway that allows the southward dispersal of several forest birds into the Pampas, including *Chaetura cinereiventris* Sclater, 1862, *Drymophila malura* (Temminck, 1825) and *Synallaxis ruficapilla* Vieillot, 1819, as well as *Crypturellus noctivagus*.



**FIGURE 1.** *Crypturellus noctivagus noctivagus* recorded at São Sepé municipality, Rio Grande do Sul state, Brazil. Photo by L.L.C. Corrêa, 2009.

Historical data of specimens collected more than 50 years ago in Rio Grande do Sul indicate that *C. noctivagus* was possibly common in areas along the Serra Geral escarpment, from Torres to Santa Maria municipalities (Belton 1994). The last record for that state dates back to 1970's, from a valley on the central part of the escarpment

on the municipality of Soledade, where a small population was found at that time. However, this region was searched in mid-1981 and 2001 and no specimen was found (Belton 1994; Bencke *et al.* 2003). Belton (1994) mentioned the possibility of the species occurring in other isolated localities in the state. However, the lack of records during about 30 years leads to the categorization of the species as probably extinct in the state (Bencke *et al.* 2003).

This record is an important contribution to the knowledge of the geographical distribution and conservation of the species, as it represents a significant southward range extension for this Atlantic Forest endemic and also marks the discovery of the southernmost extant population of *C. noctivagus* and the only one currently known in Rio Grande do Sul. According to Bencke *et al.* (2003), the destruction and fragmentation of its habitat allied with hunting were the main causes for the decline of *C. noctivagus* in the state. According to locals, hunting is not common and deforestation is not noted in the region, which might explain the persistence of this population. The size of the population of *C. noctivagus* which inhabits the region is still unknown. Furthermore, this population is probably isolated from others that might occur in Rio Grande do Sul. Additional information on the ecology and distribution of this species is vital for the implementation of conservation programs.

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