## Speckled Rail Coturnicops notatus recorded for the first time in coastal south-east Brazil

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Speckled Rail Coturnicops notatus is widely distributed in South America, with records in south-east Colombia, western Venezuela, Guyana, northern Argentina, north Bolivia, Paraguay, Uruguay, and south and south-east Brazil. It inhabits grassy savanna, dense marshy vegetation, rice and alfalfa fields, but has also been reported in crop stubble, humid woodland edges and urban areas; in lowlands to 1,500 m (Sick 1997, Bodrati 2005, Dias et al. 2016, Berbare et al. 2017, Taylor 2020). In Brazil, the species has been recorded in the states of São Paulo and Rio Grande do Sul (Sick 1997). Records in São Paulo (in the south-east of the country) are concentrated in the east, in the municipalities of São Paulo (São Paulo plateau) and Pindamonhangaba, Tremembé and Taubaté (Paraíba do Sul Valley). It was first noted in the municipality of São Paulo, in Ipiranga in September 1924 (Pinto 1938), but was not recorded again until May 2019 in Itaim Paulista (in the east of the city), when one was found in a house and subsequently released near Tremembé (A. Magalhães pers. comm.). The species has been known in the Vale do Paraíba since the 1930s, always in flooded rice fields between April and August, and this part of São Paulo has the most records of the species (Pinto 1938, Teixeira & Puga 1984, Sick 1997, Willis & Oniki 2003, Taylor 2020). Although there is some evidence of even long-distance displacement or dispersal, seasonal migration is not definitely known (Blake 1977, Taylor 2020). As it is one of the least known members of the Rallidae, all available information is important to better understand the species' range and natural history.

On 23 May 2020, at c.10.00 h, an adult C. notatus was photographed by G. L. Cunha & T. Novaes de Senne within the SESC Bertioga (23°49'36.49"S, 46°06'40.44"W; 10 m), in the urban area of Bertioga, on the coast of São Paulo state (Fig. 1). The SESC is surrounded by 3-4 m-high walls, and the bird was 1 km from the sea in an area with many plants, a small vegetable garden, and an artificial water source, forming an environment akin to a natural flooded area. The bird was catching small insects and only hid in the vegetation when the observers approached to within less than 2 m. On 22-23 May, eastern São Paulo, including the coast, experienced very strong winds of c.30-40 km/h, associated with the arrival of a cold front from the south.

The bird was seen again on 24 May in the same place, again feeding on insects (Fig. 2). At about 10.00 h, it entered a house. As domestic cats were present, the bird was captured to prevent its predation. Biometrics were taken, and blood collected for subsequent sexing, now deposited at the Laboratory of Genetics and Molecular Evolution of Birds (LGEMA), University of São Paulo. It was marked with a category G metallic band from the Centro Nacional de Pesquisas e Conservação de Aves Silvestres (CEMAVE) of ICMBio. At around 15.00 h, we released the bird in an area owned by SESC Bertioga, c.1.3 km from where it was captured. This area possesses different types of flooded environments, open areas with low vegetation and an extensive forest bordering the Itapanhaú River (Fig. 1). During the period the bird was held it fed on mealworm larvae (Tenebrio molitor) and exhibited no obvious stress.





Figure 1. Eastern São Paulo state, south-east Brazil, with records of Speckled Rail *Coturnicops notatus*. São Paulo municipality (city of São Paulo): (1) Ipiranga, (2) Itaim Paulista; Paraíba do Sul Valley: (3) Taubaté, (4) Tremembé, (5) Pindamonhangaba; and coastal São Paulo: (6) Bertioga, A: main SESC Bertioga (public use); B: SESC Bertioga Reserve (restricted use) (© Google Earth, Landsat / Copernicus 2015)



Figure 2. Speckled Rail *Coturnicops notatus* in the environment where it was initially found (Emerson Luís Costa)



Figure 3. The Speckled Rail Coturnicops notatus after banding (Fabio Schunck)



Figure 4. Details of the wing of the Speckled Rail Coturnicops notatus (Fabio Schunck)



Figure 5. Sequence of images (left to right, top to bottom) showing the release of the Speckled Rail Coturnicops notatus (Fabio Schunck)

The C. notatus was an adult (25 g) with no apparent injury (Fig. 3). Mensural data: wing 73 mm, tail 33 mm, tarsus length 21.6 mm, tarsus diameter 3.1 mm, exposed culmen 18.5 mm and nostril to tip of bill 6.4 mm. It had no ectoparasites, active moult or incubation patch, but it had recently completed a moult (Fig. 4). The bird also lacked subcutaneous fat and had partially reduced chest muscles (category 2). The bird made three short sequential calls when captured, and twice emitted a low, hoarse call while being banded, but the vocalisations were not recorded. Playback was made before handling, release, and postrelease, using several recordings (including those made by Dias et al. 2016), but the bird did not respond. On release, it walked calmly out of the cage where it was held and disappeared into the low vegetation within a few seconds (Fig. 5).

The SESC Bertioga is 48 km from Itaim Paulista in the city of São Paulo (at 735 m), where a C. notatus was found in 2019, and c.100 km from Tremembé (also on the plateau, in the high part of the Paraíba do Sul Valley, 560 m). This rail has also been recorded in Rio Grande do Sul, including the coast (Maurício & Dias 1996, Dias et al. 2016, Berbare et al. 2017), but until now there were no records in coastal São Paulo (e.g. Olmos & Silva e Silva 2003, Willis & Oniki 2003, Silva e Silva & Olmos 2007, 2020, Simpson et al. 2012; https:// ebird.org; http://www.wikiaves.com.br, http://www.xeno-canto.org). The municipality of Bertioga possesses many natural wet areas, including around SESC Bertioga where ten species of Rallidae had been recorded previously (Bokermann & Pivelli 2019). However, in June 2018, a small, dark rail with some characters similar to C. notatus was observed by E. Gonçalves de Santana beside the Jaguareguava River, on the right bank of the Itapanhaú (23°49′50.09″S, 46°10′7.84″W; 10 m), c.6 km from SESC Bertioga.

The record at SESC Bertioga represents the third locality for the species in São Paulo, the first for coastal south-east Brazil, and the second anywhere on the country's coastal plain (after that in Rio Grande do Sul). It is the first individual in Brazil to be marked with a CEMAVE band. We consider that two principal hypotheses could explain this record: (1) the individual was forced into the SESC by the strong winds at the time, either from the São Paulo plateau, the Vale do Paraíba or elsewhere; or (2) the species is present somewhere in the Bertioga region but had previously been overlooked.

This record of *C. notatus* made by local people highlights the importance of a community environmental education programme ('Projeto Avifauna'), operated by SESC Bertioga since 1992. Bird observations are made by the Clube de Observação de Aves de Bertioga and there

is a replanting initiative using native species to attract local fauna. It also installs feeders and, via courses, informs people about the importance of birds and protecting nature. This work has already provided other important records for the Bertioga region, such as a Uniform Crake Amaurolimnas concolor found dead in the SESC in August 2018, also during the coldest period of the year. It appears that coastal south-east Brazil should be included in the search area for Speckled Rail, one of the least known bird species in Brazil.

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