

**A NEW RECORD OF THE RESTINGA TYRANNULET *Phylloscartes kronei*
(AVES, RYNCHOCYCLIDAE) AT ILHA DO CARDOSO STATE PARK, SOUTHEASTERN BRAZIL
(SCIENTIFIC NOTE)¹**

**NOVO REGISTRO DE MARIA-DA-RESTINGA, *Phylloscartes kronei* (AVES, RYNCHOCYCLIDAE)
NO PARQUE ESTADUAL ILHA DO CARDOSO, SUDESTE DO BRASIL
(NOTA CIENTÍFICA)**

Augusto João PIRATELLI^{2,4}; Gabriela Rodrigues FAVORETTO³

ABSTRACT – During an expedition to Ilha do Cardoso State Park, in Cananéia, São Paulo, Brazil, two individuals of the Restinga Tyrannulet (*Phylloscartes kronei*, Aves: Rynchocyclidae) were captured with a 36 mm mesh mist net in a restinga area (25°12.243'S and 47°59.502'W) at Núcleo Marujá. This random record highlights the relevance of this protected area for this globally threatened species (vulnerable), where it is apparently abundant, due to the existence of suitable sites for its survival and reproduction.

Keywords: IUCN red list; distribution; protected areas.

RESUMO – Durante uma expedição ao Parque Estadual Ilha do Cardoso, em Cananéia, SP, dois indivíduos de maria-da-restinga (*Phylloscartes kronei*, Aves: Rynchocyclidae) foram capturados com uma rede de neblina de malha 36 mm em uma área de restinga (25°12.243'S e 47°59.502'O), no Núcleo Marujá. Esse registro fortuito ressalta a relevância desta Unidade de Conservação para esta espécie globalmente ameaçada (vulnerável), onde ela aparentemente é abundante, devido à existência de habitats adequados à sua sobrevivência e reprodução.

Palavras-chave: Unidades de Conservação; lista vermelha da IUCN; distribuição.

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²Universidade Federal de São Carlos/CCTS, Depto. de Ciências Ambientais, Rod. João Leme dos Santos Km 110, Itinga, 18052-780 Sorocaba, SP, Brasil.

³Universidade Federal de São Carlos, Programa de Pós-Graduação em Conservação de Fauna, Lab. Ecologia e Conservação, Rod. João Leme dos Santos Km 110, Itinga, 18052-780 Sorocaba, SP, Brasil.

⁴Autor para correspondência: Augusto João Piratelli – piratelli@ufscar.br

1 INTRODUCTION

The lowland forests of the southeastern Brazilian coast are considered as the most important conservation areas for birds in the Atlantic Forest, for harboring almost half of the endangered species of this biome (Marini and Garcia, 2005). The restinga, a coastal sand ridge woodlands, is particularly vulnerable because it is often neglected in conservation strategies and has been severely degraded by farmers and buildings (Gomes et al., 2008).

Two globally threatened bird species depend particularly on the restinga, the Restinga Antwren

(*Formicivora littoralis*) and the Restinga Tyrannulet (*Phylloscartes kronei*) (Develey and Pongiluppi, 2010; Gussoni, 2010). *Phylloscartes kronei* is a recently described species (Willis and Oniki, 1992), documented primarily in salt marshes and coastal lowland forests (BirdLife International, 2014), with records up to 40 km from the coast (Barnett et al., 2004). It is an endemic species of the Atlantic Forest of southeastern Brazil (Sick, 1997), having an estimated area of distribution of about 5,500 km² restricted to the southwest of the state of São Paulo to the northern Rio Grande do Sul (Gussoni, 2010; BirdLife International, 2014) (Figure 1).

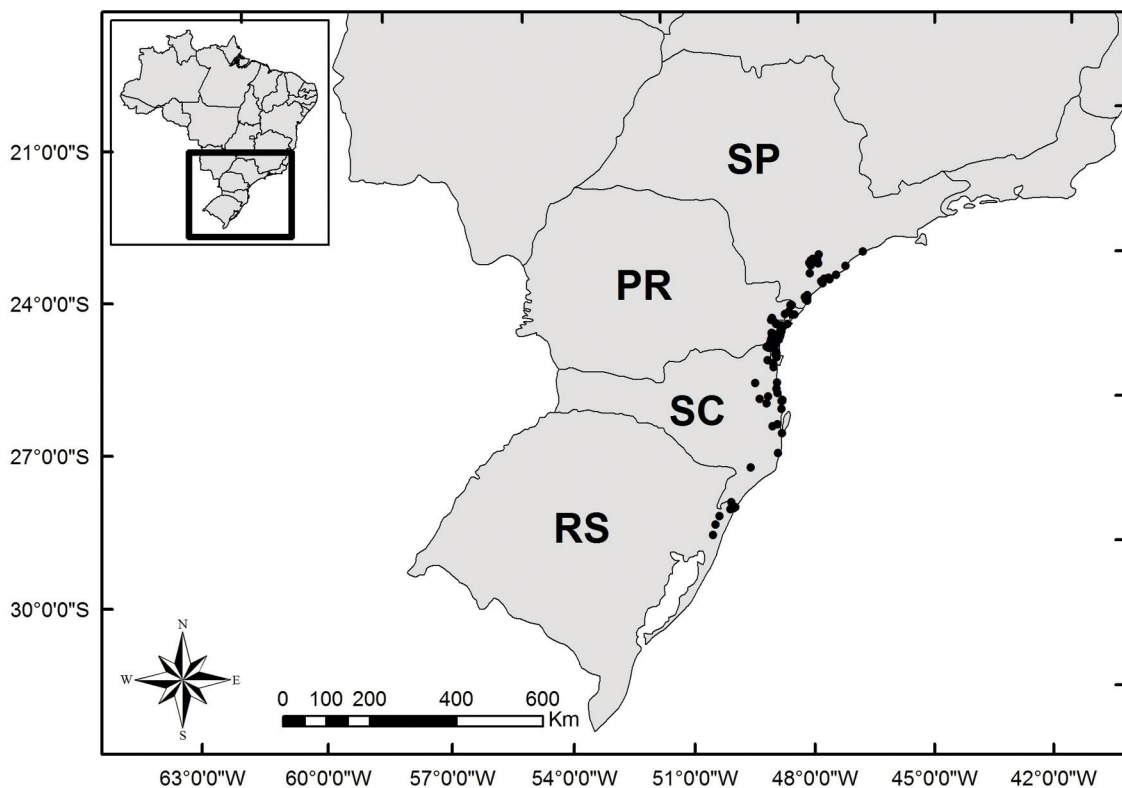


Figure 1. Range extension of *Phylloscartes kronei* (reprint from Gussoni 2010, with permit of the author). See exact location of our record at: <https://www.google.com/maps/place/25%C2%B012'14.6%22S+47%C2%B059'30.1%22W/@-24.8724616,-48.9502571,9z/data=!4m2!3m1!1s0x0:0x0>.

Figura 1. Área de ocorrência de *Phylloscartes kronei* (reproduzido de Gussoni 2010, com permissão do autor). Ver a localização exata do presente registro em: <https://www.google.com/maps/place/25%C2%B012'14.6%22S+47%C2%B059'30.1%22W/@-24.8724616,-48.9502571,9z/data=!4m2!3m1!1s0x0:0x0>.

Diet of *Phylloscartes kronei* consists mainly of arthropods collected by gleaning and sallying, and the bird eventually associates with mixed-species flocks while foraging (Gussoni and Santos, 2011). Breeds in austral spring and early summer (September to December) (Willis and Oniki, 1992). Listed as globally threatened by the International Union for Conservation of Nature – IUCN as vulnerable, this species probably has small populations, which are becoming isolated due to the loss and fragmentation of its habitats (Willis and Oniki, 1992; IUCN, 2012). Estimates of population density from known records indicate that their population corresponds to 3.5 to 15 thousand individuals, with a trend of declining (BirdLife International, 2014).

2 MATERIAL AND METHODS

The Ilha do Cardoso State Park is a 22,500-hectares integral protected area located at the southern of the state of São Paulo, being considered one of the areas with the highest concentration of endangered bird species of the Neotropics (Wege and Long, 1995).

We carried out a mist-netting activity on November 22 and 23, 2012 at the Núcleo Marujá in this park. During these days, we opened a line of

five 36 mm, 12 x 3 m-mesh mist nets in an area with predominantly low sandbank, near the hillside and the mangrove forest (25°12.243'S and 47°59.502'W; Figure 2), which remained open from 6 to 10am. It was an isolated didactic activity, and there was no further effort of bird banding on this site by the team since then.

3 RESULTS AND DISCUSSION

We captured two individuals of *P. kronei* (Figure 3) at 8:30 am on November 23. They were measured and released without banding. The area is 21 km south far from Willis and Oniki (1992) holotype and paratype of this species.

One of the individuals was slightly bigger (9 g; total length 11 cm) than the other (7 g; total length 10.4 cm) (Table 1). However, there was not an apparent sexual dimorphism, observation corroborated by Gussoni (personal communication), although Willis and Oniki (1992) consider the males slightly larger than the females (8.8 g and 7.8 g). The two individuals were apparently adult, due their size (Willis and Oniki, 1992) and due to the absence of an evident gape (which characterizes young for many passerine birds). We observed no evidence of feathers replacement (molt), brood patch or fat accumulation.



Figure 2. View of the sampled area at Núcleo Marujá, Ilha do Cardoso State Park. (Photo: A. J. Piratelli).

Figura 2. Vista da área amostrada no Núcleo Marujá, Parque Estadual Ilha do Cardoso. (Foto: A. J. Piratelli).



Figure 3. A Restinga Tyrannulet (*Phylloscartes kronei*) captured at Ilha do Cardoso State Park, southeastern Brazil. (Photo: A. C. Bellemo).

Figura 3. Maria-da-restinga (*Phylloscartes kronei*) capturada no Parque Estadual Ilha do Cardoso, sudeste do Brasil. (Foto: A. C. Bellemo).

Table 1. Measurements of two *Phylloscartes kronei* netted in November 2012 at Núcleo Marujá, Ilha do Cardoso State Park, state of São Paulo, Brazil.

Tabela 1. Medidas de dois indivíduos de *Phylloscartes kronei* capturados em rede de neblina em novembro de 2012 no Núcleo Marujá, Parque Estadual da Ilha do Cardoso, estado de São Paulo, Brasil.

Individuals	Weight (g)	Wing (cm)	Tail (cm)	Tarsus (cm)	Culmen (cm)	Bill width (mm)	Bill height (mm)	Total length (cm)
Indiv. 1	9.0	5.9	4.6	18.1	9.9	7.1	2.9	11.0
Indiv. 2	7.0	4.7	4.5	17.9	11.3	8.5	3.4	10.4

The Restinga Tyrannulet has a restricted area of distribution, ranging between 23°S and 28°S (Birdlife International, 2014); being 23% in protected areas (Paglia et al., 2004). The Ilha do Cardoso State Park has about 1.5% of the estimated living individuals (IUCN, 2012), and is one of the only three protected area that harbor this endemic species.

The species was described relatively recently, and has been subject of intense research

in the last years, mainly in the restingas of Ilha Comprida (24°20'-2503'S; 47°5'-47°55'W) (Gussoni and Santos, 2011), about 100 km north far from our record. This author has also been studying the natural history of *P. kronei*, in Paraná and Santa Catarina, aiming in the last years, to develop a National Action Plan for Conservation of this species (see also Projeto Maria-da-Restinga, 2013).

Despite already documented in Ilha do Cardoso State Park, accurate registers of *P. kronei* are still sparse in this protected area, where there are suitable habitats for this species which would make it locally abundant (but see IUCN, 2012; BirdLife International, 2014). Environmental changes resulting from global warming might worsen its status of threatened by extinction, by reducing its in future distribution areas (Souza et al., 2011), and this record helps to show that the Ilha do Cardoso State Park hosts conditions relevant to the maintenance of rare and endemic species that depend on these habitats, currently and in the future as well.

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