

The first two records of Wing-barred Piprites, *Piprites chloris*, in the Pernambuco center of endemism

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Recebido em: 14/03/06. Aceito em: 17/10/2008.

RESUMO: Os primeiros dois registros do papinho-amarelo, *Piprites chloris*, no Centro Pernambuco. Apresentamos neste trabalho os dois primeiros registros de *Piprites chloris* na região do Centro de Endemismo Pernambuco. Observamos a espécie em duas localidades de municípios vizinhos em áreas de florestas de baixada no Estado de Pernambuco, Fazenda Morim (São José da Coroa Grande) e Engenho Cachoeira Linda (Barreiros).

PALAVRAS-CHAVE: Papinho-amarelo, *Piprites chloris*, Centro Pernambuco, floresta Atlântica, distribuição.

KEY-WORDS: Wing-barred Piprites, *Piprites chloris*, Pernambuco Center, Atlantic forest, distribution.

The Pernambuco center of endemism (*sensu* Silva and Castelletti 2003) encloses the Atlantic forests of northeastern Brazil north of the São Francisco River in the states of Alagoas, Pernambuco, Paraíba, and Rio Grande do Norte. This region harbors 434 species of birds (Roda 2003) representing approximately two-thirds of all bird species occurring in the Atlantic forest. Yet forested sites are now represented in the region mostly by small fragments that are immersed within a matrix of urban and agriculture areas (Ranta *et al.* 1998, Silva and Tabarelli 2000). Given the great diversity and fragmented condition of the region's forests, regional conservation efforts need to be intensified (Olmos 2005), because few forest sites north of the São Francisco River receive formal protection, and most are small and poorly protected (Uchôa Neto 2002). As a result of the present situation, Silva and Tabarelli (2000) suggested that about one-third of the tree species in this region are threatened with regional extinction due to an interruption of the process of seed dispersal following isolation.

The Wing-barred Piprites (*Piprites chloris*) is a tyrannid-like bird that is approximately 13 cm in length and with plumage that is mainly greenish-yellow and gray (Sick 1997). Although widely distributed throughout Amazonia, this species also occurs in two disjunct regions of the Atlantic Forest (Pinto 1944, Ridgely and Tudor 1994). Outside Amazonia, this species is known to occur in the southern Atlantic Forest (in Paraguay, northeastern Argentina, and the Brazilian states of São Paulo, Paraná,

Santa Catarina, and the northern extreme of Rio Grande do Sul), and at isolated sites along the Atlantic coast of eastern Brazil in the states of Bahia and Espírito Santo (Pinto 1944, Ridgely and Tudor 1994, Gonzaga *et al.* 1995; figure 1). Despite its extensive distribution, this species is uncommon and easily overlooked. It is heard more often than seen, in part because it is slow moving and frequents the canopy and edge of humid forests, including tall second-growth, where it regularly occurs in mixed-species flocks (Sick 1997).

We recently found *Piprites chloris* at two localities in the state of Pernambuco, Brazil: Fazenda Morim in the municipality of São José da Corôa Grande (8°51'38.3"S, 35°12'37.4"W), and at Engenho Cachoeira Linda in the municipality of Barreiros (8°48'08.5"S, 35°18'63.8"W). Both sites are located within the Una River basin about 20 km from the coast, and adjacent to the Saltinho Biological Reserve and Usina Trapiche, both extremely important areas for the conservation of forest-dwelling birds in the region (see Tabarelli and Roda 2005). The recently described Pernambuco Pygmy-Owl, *Glaucidium mooreorum* (Silva *et al.* 2002), for example, is known exclusively from these sites. Both sites are dominated by dense evergreen forest located on coastal plains. Rainfall at both sites averages 1750-2000 mm/year (FIBGE 1985).

Fazenda Morim is 1042 ha in size, of which about 50% is composed of forest fragments at different successional stages; the remaining area is covered by pasture and open marshes. Engenho Cachoeira Linda is 937 ha

in size, in which there is a single 350 ha forest fragment surrounded by sugarcane plantations and open grassy areas recovered by fields and pastures.

At Fazenda Morim, SAR observed an adult Wing-barred Piprites beside a tree-fall gap on 2 Oct 2004. The understory here was quite dense and the subcanopy represented 18 m-tall trees, predominantly *Praiba* (*Simabura amara*, Simaburaceae) and various species of palms (*Bactris* spp.). This bird was singing constantly and it approached following tape playback of its own voice, in response to which it moved nervously and constantly, remaining ca. 5-7 m high, where it was seen and identified with 8 × 40 binoculars. After playback, a second individual was heard singing nearby, but it was not seen. Both birds remained in the immediate vicinity for about 10 minutes before joining a mixed-species flock and disappearing. The flock frequented by these birds also contained *Tolmomyias flaviventris*, *Hemithraupis guira*, *Coereba flaveola*, *Vireo olivaceus*, *Tachyphonus cristatus*, and *Thraupis palmarum*. This species was heard at the same spot three hours later, and

again at dawn the following morning (03 Oct 2004). Jeremy Minns and José Fernando Pacheco later confirmed this bird's identity on the basis of our audio recordings.

At Engenho Cachoeira Linda one individual was heard singing from the forest canopy by SMD on 23 Nov 2003. The understory here was likewise quite dense with an average canopy height of about 25 m, but with some larger trees remaining. This bird also approached following playback, but it remained in the canopy, and was unseen. The identity of this individual was confirmed by comparing our recordings with available recordings of this species (e.g. Peter Boesman, Birds of Venezuela, CD-ROM; Elétronorte, Brasil 500 Pássaros, CD-ROM). Nearly a year later, on 10 Oct 2004, another individual of this species was seen foraging on small berries together with *Hemithraupis flavicollis* and *Tachyphonus cristatus* in a tree at the edge of a tree-fall gap within this same fragment. On 12 March 2006 three individuals was observed by SAR in the same locality but not with flocks.

Because of the geographic distance to other known centers of occurrence of this species, it is possible that plumage, size, and vocalizations of these birds are unique, as is true of populations of various other species that occur in both Amazonia and the Atlantic forests, like *Picumnus exilis*, *Xenops minutus*, and *Schiffornis turdina*.

The song of *Piprites chloris* represents a series of long and spaced notes, contrasting with a sequence of shorter and faster notes (del Hoyo *et al.* 2004). However, there's much variation in the quality of the song, both in Amazonian and Atlantic forests. According to J. F. Pacheco (*in litt.* 2005), there are songs from different areas that are quite similar, and songs from the same area that are quite different, to be able to present one variation, especially of rhythm. So, it's difficult to tell which one is the population of Pernambuco Center, by song analysis.

Importance of new records to bird conservation in the region

We report here the first records of *Piprites chloris* in the Pernambuco Center of endemism, which illustrates how poorly known is bird distribution in this region, a fact that was recently illustrated by the description of a new species of owl for a nearby site (e.g., *Glaucidium mooreorum*). The portion of the Atlantic Forest found to the north of the São Francisco River is home to 41 taxa of endemic birds that are threatened with global extinction (MMA 2003). Many of these species have no populations at all occurring at any protected area, and the entire range of some is restricted to areas less than 15 km² (Brooks and Rylands 2003, Rodrigues *et al.* 2004). As a consequence, the Atlantic forest north of the São Francisco River has been identified as one of the regions of the planet where conservation efforts are most needed to avoid global ex-



FIGURE 1: Distribution map of the Wing-barred Piprites (*Piprites chloris*) in South America (according to Ridgely *et al.* 2003) and the new site in the Pernambuco Center of endemism, State of Pernambuco, Brazil (dot indicated by black arrow in NE Brazil).

tinctions in the short-term (Silva and Tabarelli 2000, Rodrigues *et al.* 2004, Silveira *et al.* 2003, Olmos 2005, Tabarelli *et al.* 2005, Tabarelli and Roda 2005). We therefore feel the Pernambuco Center of endemism is best considered a hotspot inside one of the most important biodiversity hotspots in the world (the Brazilian Atlantic Forest).

ACKNOWLEDGMENTS

We wish to thank J. F. Pacheco, C. Marantz and anonymous revisors for comments on this manuscript. J. Minns and J. F. Pacheco for assisted and discussed the tape records. The Centro de Pesquisas Ambientais do Nordeste and Conservação Internacional do Brasil provided institutional support for studies birds in northeastern Brazil, and Fundo Nacional do Meio Ambiente (FNMA) and Programa Espécies Ameaçadas da Mata Atlântica (BIODIVERSITAS/CEPAN/CEPF) provided financial support for our fieldwork and conservation programs.

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