

Discovery of Bahia Spinetail *Synallaxis cinerea* in north-east Minas Gerais, Brazil, with additional records of some rare and threatened montane Atlantic Forest birds

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Este artigo reporta o encontro do joão-baiano *Synallaxis cinerea* (= *S. whitneyi*²⁶), um pequeno Furnariidae globalmente ameaçado de extinção, na região de Almenara, extremo noroeste do estado de Minas Gerais. Até agora a espécie era conhecida apenas do centro-sul e sudeste do estado da Bahia, nas Áreas de Endemismos de Aves 076 e 073²¹. São dadas informações sobre seu hábitat e abundância local, bem como sobre outras espécies ameaçadas ou presumivelmente ameaçadas de extinção no mundo e/ou no Brasil e/ou em Minas Gerais (e.g. *Primolius maracana*, *Jacamaralcyon tridactyla*, *Lipaugus lanioides* e *Cercomacra brasiliana*) encontradas na área. É evidenciada a necessidade de se proteger esta área frente às ameaças de desmate que pairam sobre a mesma por parte do INCRA (Instituto Nacional de Colonização e Reforma Agrária).

Introduction

Bahia Spinetail *Synallaxis cinerea* (until recently known as *S. whitneyi*²⁶) is a member of the *S. ruficapilla*/*S. infuscata* complex, which inhabits several montane Atlantic Forest fragments in the Bahia portion of Endemic Bird Area (EBA) 076 (Montane Atlantic Forest), as defined by BirdLife International^{13,25}. Records are available from Serra de Ouricana, near Boa Nova, Serra das Lontras/Javi, above Itatingui and Arataca, and Serra Bonita, above Camacan (Camacã). It has also been found in the southern and northern Chapada Diamantina (to c.15 km north of Lençóis), an isolated, partially forested upland in interior Bahia¹⁵. Records span the elevational range 500–1,000 m (BMW and JFP, but see also Goerck 2000⁶).

In addition to a detailed morphological description, Pacheco & Gonzaga¹³ analysed vocalisations and relationships of the Bahia Spinetail with both Rufous-capped Spinetail *S. ruficapilla* and Pinto's Spinetail *S. infuscata*, as well as commenting on biogeography, habitat and behaviour. These authors considered it 'common in bamboo thickets', but not restricted to such areas. The species' restricted range and the immediate threats to its remaining habitats in Bahia has led to it being considered globally threatened³.

Here we report the discovery of a new population of Bahia Spinetail, which extends its range to north-east Minas Gerais, and provide additional observations of it and other rare or threatened birds found in the same area.

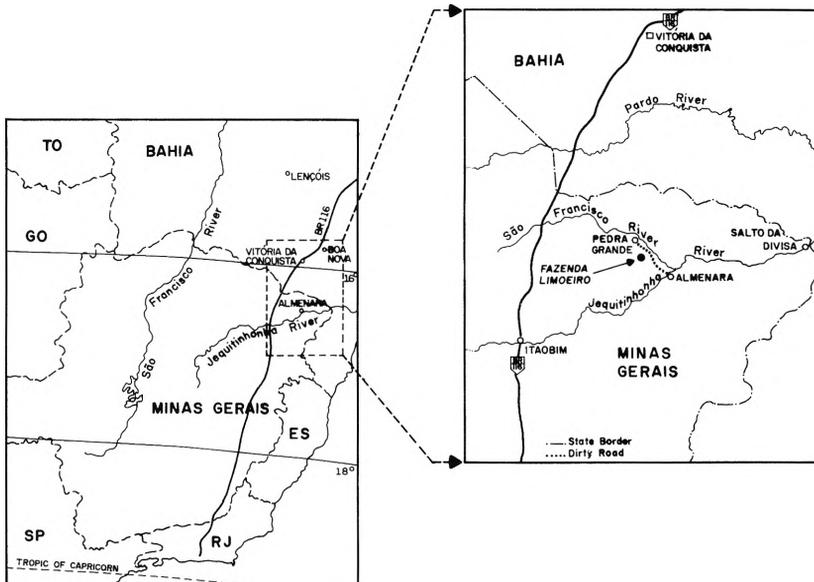


Figure 1. Range of Bahia Spinetail *Synallaxis cinerea* including the new locality in north-east Minas Gerais, at Fazenda Limoeiro, Almenara.



Figure 2. Bamboo and andrê-quicé stand at Mamoneira, habitat of Bahia Spinetail *Synallaxis cinerea* (Rômulo Ribon)



Figure 3. Bahia Spinetail *Synallaxis cinerea* (specimen MZ-UFV 1391) (Rômulo Ribon)

Methods

As a part of a well-targeted programme¹⁶, initiated in 1999 by the Instituto Estadual de Florestas de Minas Gerais (IEF), to locate potential protected areas in the ornithologically poorly known middle Jequitinhonha River valley in north-east Minas Gerais, RR participated in a short bird survey around Jequitinhonha and Almenara. Other biologists concurrently conducted mammal and herpetological surveys.

Field work was undertaken at Fazenda Limoeiro, Almenara, on 20–22 February 2001. This property is on the right bank of the rio São Francisco (a small affluent of the left bank of the rio Jequitinhonha), 23 km from Almenara (Fig. 1). Surveys were made of one of the few primary montane Atlantic Forest remnants (at least 800 ha) in the region, and also in pastures and an orchard.

The principal forest fragment, known to locals as Mamoneira (16°03'S 40°51'W; c.800 m) is within a deep valley, though a small part lies on a narrow tableland, which is crossed by the dirt road linking Almenara and Pedra Azul. Vegetation at Mamoneira is typically pristine Floresta Estacional Semidecidual Montana²³, with scattered large bamboo *Merostachys* sp. (?) patches throughout. Surrounding it are secondary forests and pastures belonging to Fazenda Limoeiro, and a small coffee plantation and pastures on neighbouring properties. Cattle ranging into the forest have damaged the undergrowth in some areas, even in dense bamboo stands.

Observations were made using binoculars and a Sony TCM-5000 cassette recorder with ME66 Sennheiser microphone. Copies of recordings (cassettes RR 124 and RR 125) are/or will be housed in RR's private archive and in Arquivo Sonoro Prof. Elias Pacheco Coelho (ASEC), at the Universidade Federal do Rio de Janeiro. Playback experiments with recordings of Bahia Spinetail from the type-



Figure 4. Section of the Almenara–Pedra Azul road, within Fazenda Limoeiro, bordered by forest with bamboo understorey, where Bahia Spinetail *Synallaxis cinerea* and Rio de Janeiro Antbird *Cercomacra brasiliana* occur (Rômulo Ribon)

locality were also performed. Additionally, some specimens were collected (IBAMA collecting permit 038/2000) and deposited at Museu de Zoologia João Moojen de Oliveira, Universidade Federal de Viçosa (MZ-UFV), Minas Gerais. Stomachs and carcasses are catalogued under the same specimen numbers as voucher skins. Abbreviations for the method of register of some species quoted in the text are C (collected), H (heard), S (sight record), P (photographed) and T (tape-recorded).

Results

On 21 March 2001, shortly after playing back the song of Bahia Spinetail, from Boa Nova, Bahia, two (probably a pair) sang in response, approaching together, 2.5 m above ground within a dense bamboo tangle mixed with a grass known locally as andrê-quicé (Fig. 2). Both had similar voices, identical to those used to attract them. One, a male, was col-

lected (MZ-UFV 1390); it had small testes (1 x 1 mm), total length was 15 cm, the skull was fully pneumatized and it had dark brown irides, bill dark grey with an earth-coloured base, tarsus dark grey and was moulting some body feathers, rectrices and remiges. Its stomach contained unidentified insects. The other bird moved c.20 m away, but continued to vocalise for more than 30 minutes from vine and thin bamboo tangles around a tree trunk. Following additional playback, a second pair sang c.30 m away. In early morning the next day, within a different part of the same bamboo patch (c.250 m away), where cattle had degraded the understorey, RR obtained response to playback from another individual. It remained c.2 m up in the undergrowth and thus escaped capture in a mist-net.

That afternoon (22 March 2001), in pristine forest understorey with bamboo along the dirt road crossing the level section of forest, one individual gave a *tchrrrrrrrr* remarkably similar to that given by Rufous-capped Spinetail, a closely related species of the Atlantic Forest. It approached to playback of its own voice, c.0.5 m above ground. Some minutes later it crossed the road, returning when the song from Boa Nova was played. This individual approached 2.5–3.0 m above the forest floor and was mist-netted, photographed and collected (male?, MZ-UFV 1391; total length 15.2 cm, skull not pneumatized, brown irides, bill dark grey with pearl-coloured base, tarsus dark grey and contour feathers, rectrices and remiges in moult; the stomach held unidentified insects) (Fig. 3). Bahia Spinetail appeared common on both sides of this road, within the bamboo understorey, with at least 3–5 pairs estimated on a c.300 m transect (Fabiano Rodrigues de Melo [FRM], pers. comm.).

Other species also tape-recorded/or observed in the lower parts of the same bamboo patch where the first Bahia Spinetail was recorded included Tufted Antshrike *Mackenziaena severa* (H,T), the near-threatened Rio de Janeiro *Cercomacra brasiliensis* (H,S,T), Ferruginous *Drymophila ferruginea* (C—MZUFV 1394; sex unknown R,S,T) and Ochre-rumped Antbirds *D. ochropyga* (C,H,S,T), Yellow Tyrannulet *Capsiempis flaveola* (S,T) and Ochre-faced Tody-flycatcher *Todirostrum plumbeiceps* (S,T).

In addition, two other globally threatened bird species^{3,4} were detected: Three-toed Jacamar *Jacamaralcyon tridactyla* and Cinnamon-vented Piha *Lipaugus lanioides*, both protected under Brazilian² and Minas Gerais state law⁸. Three-toed Jacamar is classified as Endangered^{3,4}. On the first day, four were located within a dense vine tangle in the canopies of tall trees in the forest interior. The partial song of one, observed in a 25 m-high tree, was tape-recorded. At least one other was tape-recorded on 22 March, in the canopy of the same

bamboo patch where Bahia Spinetail was first located. Cinnamon-vented Piha, a globally Vulnerable montane Atlantic Forest endemic, whose populations are only partially protected^{3,4}, was recorded only by its song, in tall forest within the same bamboo patch (one, perhaps the same, was also heard by FRM). Three-toed Jacamar and Cinnamon-vented Piha are considered vulnerable under Minas Gerais law^{8,11,20}.

Four globally near-threatened species^{3,4} were also found: eight Blue-winged Macaws *Primolius maracana* were seen and heard, flying over the forest. A pair of Spot-breasted Vireo *Dysithamnus stictothorax* was seen and tape-recorded within a mixed-species flock comprising White-eyed Foliage-gleaner *Automolus leucophthalmus*, Plain Antvireo *Dysithamnus mentalis*, Yellow-olive *Tolmomyias sulphurescens* and Sepia-capped Flycatchers *Leptopogon amaurocephalus*, *Sirystes Sirystes sibilator*, White-throated Spadebill *Platyrinchus mystaceus* and Grey-headed Tody-flycatcher *Todirostrum poliocephalum*. A male Ochre-rumped Antbird was photographed and collected (MZ-UFV 1393); it had small testes (1 x 1 mm) and was moulting its remiges and contour feathers. A pair of Rio de Janeiro Antbird was seen and tape-recorded, and at least three others heard and/or tape-recorded. A group of Spot-winged Wood-quail *Odontophorus capueira*, a species also considered vulnerable at state level^{8,17}, was located by voice within the deep, forested valley. Yellow-fronted Woodpecker *Melanerpes flavifrons* (S,T), which was also recorded, is probably threatened in Minas Gerais.

According to the landowners, Solitary Tinamou *Tinamus solitarius*, another globally near-threatened⁴ species protected by Brazilian law², also occurs. Populations of this species have been decimated almost throughout Minas Gerais, where it is currently considered critically endangered^{1,8}. Playback of the song and calls of Narrow-billed Antwren *Formicivora itheringi* at forest borders and in second-growth elicited no response. The same was true for Slender Antbird *Rhopornis ardesiaca*, which was searched for around scattered bromeliads with vine tangles in the forest interior.

Conservation

The occurrence of Bahia Spinetail in Minas Gerais extends its distribution c.230 km south-west from Boa Nova, which had been the southernmost known point of its distribution. Nonetheless, its world range remains small, restricted to EBAs 073 and 076^{3,13,15,21}, and it is found only on forested uplands between c.500 and 1,000 m, which are of very limited extent. Bahia Spinetail joins Narrow-billed Antwren and Slender Antbird as EBA 072 and 073 endemics that are known to occur in Minas Gerais^{3,16,18,19}. Additionally, this constitutes the first state record of the species^{9,14}.



Despite the lack of response to playback of Narrow-billed Antwren, it feasibly occurs at Fazenda Limoeiro, as it is known from Almenara^{5,10} (G. T. Mattos pers. comm.) and because of the presence of some mata-de-cipó patches, its preferred habitat. However, the presence of Slender Antbird appears unlikely as Fazenda Limoeiro lacks large stands of terrestrial bromeliads, an important feature of its habitat^{5,16,18,19,22,27}.

The record of Cinnamon-vented Piha fills a considerable gap in the species' distribution^{5,20,21}. Prior to its discovery in the humid forest remnants at Boa Nova⁴, the northernmost confirmed locality had been Sooretama Biological Reserve, Espírito Santo⁵. Three-toed Jacamar was previously known in north-east Minas Gerais from two males collected by G. T. Mattos in Divisópolis township^{5,11}.

Records at Fazenda Limoeiro of Bahia Spinetail and other species threatened at global, national and state levels qualify it as a new Key Area for threatened birds²⁴ and heighten concern for the immediate protection of this important area of Atlantic Forest. Importantly, the Minas Gerais government appears more interested in protecting such taxa and the state's biodiversity, than does the government of Bahia^{7,13,15,25}. The situation is especially urgent because, according to Valvidio Lopes dos Santos, the property owner, the Brazilian Agency for Colonisation and Agrarian Reform (INCRA) is currently attempting to appropriate 700 ha (including most of Mamoneira) of the 1,400 ha at Fazenda Limoeiro. This is a very real and imminent threat, as INCRA settlements are contributing to the clearance of other undisturbed Atlantic Forest remnants in the middle Jequitinhonha valley, including some of the few remaining examples in Minas Gerais of pristine transition between Atlantic Forest and cerrado. If the destruction of the forest at Fazenda Limoeiro is permitted, it would be a significant blow to conservation of the Atlantic Forest, which has been considered one of the world's biodiversity hotspots¹².

In an effort to reverse this process, the owner of Fazenda Limoeiro is seeking to declare the forest as a Private Natural Heritage Reserve (RPPN), in order to protect this well-preserved tract of Atlantic Forest. That it remains now is due to his conscious efforts to preserve it. His initiative to forestall INCRA must be supported, or a vitally important area for conservation could be lost should unwitting settlers colonise it.

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