

RANGE EXTENSIONS OF BIRDS IN SOUTHEASTERN AMAZONIA

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ABSTRACT.—We report range extensions of *Caprimulgus sericocaudatus*, *Automolus ochrolaemus*, *Dichrozona cincta*, *Poecilatriccus andrei*, *Ramphotrigon fuscicauda*, *Ramphotrigon megacephala*, *Turdus lawrencii*, and *Euphonia chrysopasta* for Pinkaiti and Gorotire, east of the Xingu River, southeastern Pará State, Brazil. The distributional status of the following species in southeastern Amazonia is also discussed: *Nonnula ruficapilla*, *Synallaxis cherriei*, and *Simoxenops ucayalae*. The new records we report suggest that the patchy distribution of some birds in eastern Amazonia, such as species associated with bamboo, can be explained by a complex mosaic of habitats at the eastern and southern fringes of the Amazonian basin. The range extensions we report demonstrate that areas inventoried a long time ago, before an emphasis on vocal identification of species, and assumed to be “well known”, can in fact turn out to be ornithologically undersampled. Received 5 April 1999, accepted 30 Oct. 1999.

RESUMO.—Registramos extensões de distribuição para o sudeste da Amazônia, localidades de Pinkaiti e Gorotire, oeste do rio Xingu, estado do Pará, para as seguintes espécies: *Caprimulgus sericocaudatus*, *Automolus ochrolaemus*, *Dichrozona cincta*, *Poecilatriccus andrei*, *Ramphotrigon fuscicauda*, *Ramphotrigon megacephala*, *Turdus lawrencii* e *Euphonia chrysopasta*. Também discutimos registros para o sudeste da Amazônia das seguintes espécies: *Nonnula ruficapilla*, *Synallaxis cherriei*, e *Simoxenops ucayalae*. A distribuição de habitats na forma de mosaicos no leste e sul da Amazônia pode explicar a distribuição localizada de algumas espécies de aves na região, como espécies associadas à manchas de taboca. Nossas extensões de distribuição demonstram que áreas na Amazônia exploradas há muito tempo, antes do estudo e documentação acústica da avifauna, e consideradas bem conhecidas ornitologicamente, são na realidade ainda sub-amostradas.

The bird fauna of eastern Amazonia have been surveyed since the beginning of the 1900s (Snethlage 1914, Griscom and Greenway 1941, Novaes 1960). Nevertheless, range extensions of many species and even descriptions of new species and subspecies continue to be reported recently for eastern Amazonia (Graves and Zusi 1990, Novaes 1991, Silva et al. 1995) revealing an incomplete knowledge of the regional avifauna. Here we report range extensions and noteworthy records of birds from two sites in southeastern Amazonia located within the Kayapó Indigenous Reserve. These sites, known as Pinkaiti and Gorotire, are between the rivers Xingu and Araguaia/Tocantins, southeastern Pará State, Brazil (Fig. 1). Most of our records represent range extensions into the Xingu River drainage and

several are the first reports from the State of Pará, Brazil.

METHODS AND STUDY AREA

The first site surveyed was Gorotire (07° 43' S, 51° 11' W), on the banks of Fresco River, an eastern tributary of the Xingu River, in the ecological transition zone between evergreen and semideciduous forests and cerrado. For details on the vegetation types found in this site see Oren and Silva (1987). The second site we surveyed, about 150 km northwest of Gorotire, is known locally as Pinkaiti (07° 46' S, 51° 58' W, about 360 m elevation, on the right bank of Riozinho River, a second-order eastern bank tributary of the Xingu River). This area is approximately 20 km upstream on the Riozinho River from the Kayapó village of A'ukre in the northern sector of the Kayapó Indigenous Reserve. From an avifaunal perspective, Pinkaiti comprises three major habitats: the river itself, forest and “viny” bamboo on the river floodplain, which at the study site is about 200 m wide; and terra firme forest. Forest in the area is largely undisturbed, although selective logging in the immediate vicinity of the study site has left numerous canopy light gaps and some patches of extensive brushy growth. Narrow trails provide limited access to all habitats (the dominant habitat, terra firme forest, is transected by several good trails). The terra firme forest at Pinkaiti is classified as open terra firme forest (high structural heterogeneity with small cerrado enclaves), a vegetation type characteristic of the dry-belt arch of transitional forest mosaic of southern Amazonia (Pires and Prance 1985). For a descriptive account on the vegetation of Pinkaiti see Peres and Baider (1997).

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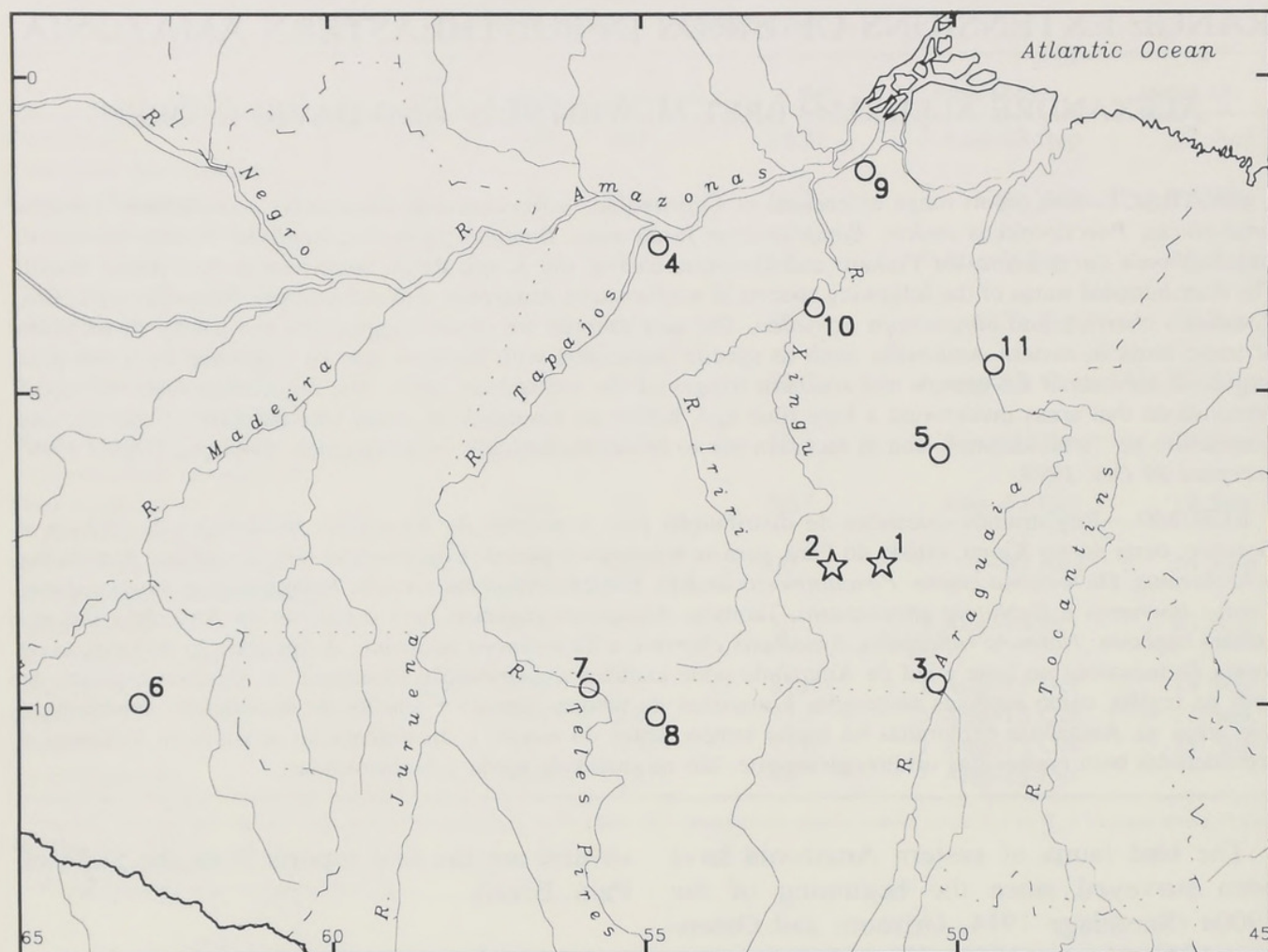


FIG. 1. Localities in the Brazilian Amazon with coordinates cited in the text. Stars denote localities visited by the authors, whereas circles depict those localities cited in the literature or available from material deposited at the ornithological collection of the Museu Paraense Emílio Goeldi, Belém, Pará, Brazil. 1 = Gorotire, PA; 2 = Pinkaiti, PA; 3 = Santana do Araguaia, PA; 4 = Santarém, PA; 5 = Serra dos Carajás, PA; 6 = Fazenda Rancho Grande, Ariquemes, RO; 7 = Alta Floresta, MT; 8 = Peixoto de Azevedo, MT; 9 = Caxiuanã National Forest, PA; 10 = Altamira, PA; 11 = Jacundá, PA.

Field work at Gorotire was carried out by D.C.O. from 6–27 September 1983 and from 16 May to 6 June 1985. Specimens were collected with shotgun and mist-nets, and deposited in the bird collection of the Museu Paraense Emílio Goeldi, Belém, Pará, Brazil (hereafter MPEG). Pinkaiti has been an active research site of Conservation International, Washington, D.C. for several years, and most of A.A.'s and B.M.W.'s observations were made within a few kilometers of this base camp. Field work, mostly on foot, by A.A. and B.M.W. was carried out during three periods: 22–26 September 1994, 22–27 September 1995 (B.M.W.), and 5 September–3 October 1996 (A.A.). A small sample (36 specimens) of selected taxa was collected with a shotgun and 12 m mist-nets by B.M.W. and D. Pimentel Neto of the MPEG during 1995. These specimens are deposited in the museum. Tape recordings by A.A. are deposited at Arquivo Sonoro Neotropical (ASN, Campinas, Brazil) and Library of Natural Sounds, Cornell Laboratory of Ornithology (LNS), Ithaca, New York. B.M.W.'s tape recordings are or will

be deposited at Arquivo Sonoro Elias P. Coelho (ASEC, UFRJ, Rio de Janeiro, Brazil) and LNS. Field observations and specimens collection at the study sites were supplemented with study of specimens from different localities throughout southeastern Amazonia deposited at the MPEG.

For passerine birds, we followed the nomenclature and English names adopted by Ridgely and Tudor (1989, 1994). Meyer de Schauensee (1982) was the source of non-passerine Latin and English names. Localities with coordinates mentioned in the text are depicted in Fig. 1.

SPECIES ACCOUNTS

Silky-tailed Nightjar, *Caprimulgus serico-caudatus*.—This poorly known caprimulgid was observed and tape recorded in terra firma forest at Pinkaiti during all three visits. Individuals sang from perches within 1.5 m of the

ground (but not on the ground) along trails and in small understory openings. Foraging moves shortly after dark were rapid upward sallies of 2–3 m from the same low perches as used for singing. Several birds responded aggressively to tape recorded playback in September. Only one other record of this nightjar is available for eastern Amazonia, a specimen from Santarém, Pará (02° 26' S, 54° 42' W; Griscom and Greenway 1941), situated on the right bank of the Tapajós River near its mouth. Our records extend the range of this nightjar about 480 km southeastward, indicating a large distributional range in the lower Amazonian basin. Other Amazonian records are clustered in eastern Peru: Pucallpa and Yarinacocha (Loreto Department; Dickerman 1974), Manu National Park (J. Arvin, pers. comm.), Tambopata (Mcquenn, pers. comm.), northern Bolivia: Río Heath (Parker et al. 1991), and Tuichi River in Madidi National Park, La Paz Department (B.M.W., pers. obs.). Tape recordings of birds from Pinkaiti and widely disjunct eastern Peru and northern Bolivia sound quite similar (B.M.W., pers. obs.), but have not been examined in detail.

Rufous-capped Nunlet, Nonnula ruficapilla.—Novaes (1991) first reported this species east of the Xingu River, at Jacundá (4° 35' S, 49° 34' W; eastern bank of the Tocantins River), Pará and assigned it to a new subspecies (*N. r. inundata*). Additional specimens assignable to *N. r. inundata* were collected (June and August 1992) by D.C.O. and D. Pimentel Neto farther south at Santana do Araguaia (9° 50' S, 50° 15' W; MPEG 48564–48566; two males, one female, all adults not actively reproductive when collected). This species seems to be uncommon at Pinkaiti, although it was noted during all three surveys (tape-recorded by B.M.W.). It inhabits both terra firme and river-edge forest, in or near dense subcanopy vine tangles, especially around treefalls and other light gaps. It has been found in a similar habitat along the Parauapebas River at the foot of the Serra dos Carajás (6° 00' S, 51° 20' W; B.M.W., pers. obs.) and at Fazenda Rancho Grande, near Ariquemes (9° 56' S, 63° 04' W), Rondônia (Zimmer et al. 1997). In the Alta Floresta region of northern Mato Grosso (9° 41' S, 55° 54' W), *N. ruficapilla* has been found in bamboo thickets and in vine-rich terra firme forest without bamboo

(Zimmer et al. 1997). Novaes and Lima (1990) provided no data on habitat utilization for *N. ruficapilla* in the lower Rio Peixoto de Azevedo region (10° 10' S, 54° 50' W), about 390 km southwest of Pinkaiti. Although it may be closely associated with bamboo locally, in northern Amazonian Peru south of the Marañón River, *N. ruficapilla* inhabits seasonally flooded and lake-edge forest with no bamboo present (B.M.W., pers. obs.).

Chestnut-throated Spinetail, Synallaxis cherriei.—The Chestnut-throated Spinetail was a common bird at forest edges and around tangled treefalls in terra firme forest at Pinkaiti. We observed the species in the same types of habitats described by Oren and Silva (1987) in eastern Amazonia, near Gorotire. Zimmer and co-authors (1997) reported that *S. cherriei* was restricted to stands of bamboo in the Alta Floresta region and that the presumably closely related Ruddy Spinetail (*S. rutilans*) inhabited dense tangles in forest interior light-gaps. Both species are sympatric at Serra dos Carajás (6° 00' S, 51° 20' W), where they are uncommon around dense treefalls and other tangled vegetation, neither appearing to be restricted to bamboo (B.M.W., pers. obs.).

Peruvian Recurvebill, Simoxenops ucayalae.—This species was first reported for two locations of southeastern Amazonia by Sick (1997): Serra dos Carajás and Gorotire. These records are incorrectly based on Oren and Silva (1987), who dealt exclusively with the distribution of *Synallaxis cherriei* and not *Simoxenops ucayalae*. There are no known field records or specimens of *S. ucayalae* for Gorotire (Novaes 1960). Sick's (1997) citation is based on an adult male collected on 19 May 1986 at Pojuca, in the Serra dos Carajás area (6° 00' S, 51° 20' W) deposited at MPEG (38156; mass 50 g; gonads 5 × 3 mm) and reported to him by D.C.O.

The Peruvian Recurvebill has also been reported for Altamira in the lower Xingu River (3° 39' S, 52° 22' W; Graves and Zusi 1990), about 250 km northwest of Serra dos Carajás, and Alta Floresta (9° 41' S, 55° 54' W; Zimmer et al. 1997). Another eastern Amazonian specimen, from Santarém (MPEG 32018), is thought to be mislabeled (Novaes 1978). Novaes (1978) considered that this specimen probably came from Acre state instead of San-

tarém because up to that date, the only records available for this species in Amazonia were from southeastern Peru (upper Río Ucayali and Madre de Dios; Meyer de Schauensee 1982), close to the border with the Brazilian state of Acre. The well documented records of Serra dos Carajás and Altamira prove unequivocally that *S. ucayalae* occurs, at least locally, in eastern Amazonia. Thus, it is possible that the record of *S. ucayalae* for Santarém (roughly 230 km west of Altamira) is correct.

Buff-throated Foliage-gleaner, Automolus ochrolaemus.—This is the first published report of this species for the Xingu River drainage. Three specimens assignable to the subspecies *auricularis* were collected in 1985 near Gorotire by D.C.O. and D. Pimentel Neto (MPEG 37074–37076). A.A. tape recorded and B.M.W. observed pairs of this foliage-gleaner as they accompanied mixed-species flocks in the understory of terra firme forest in Pinkaiti. Three more recent specimens from the Xingu River drainage (MPEG 48717–48719) were collected in 1992 at Santana do Araguaia, about 250 km southeast of Pinkaiti.

This species is distributed widely, from Central America to Amazonia on both sides of the Solimões-Amazonas rivers (Meyer de Schauensee 1982, Ridgely and Tudor 1994). South of the Solimões-Amazonas rivers, the easternmost population reported previously (*A. o. auricularis*) inhabits the lower Peixoto de Azevedo River region (10° 10' S, 54° 50' W) in northern Mato Grosso (Novaes and Lima 1990), about 390 km southwest of Pinkaiti. This foliage-gleaner was classified as uncommon to fairly common around Alta Floresta, near the head of the Tapajós drainage (Zimmer et al. 1997).

Despite fairly extensive coverage, *A. ochrolaemus* has not been recorded in the Serra dos Carajás area (Pacheco and Fonseca, unpubl. data; M. Cohn-Haft, pers. comm.). Our field observations and the habitat information recorded on labels of the three specimens collected in Santana do Araguaia, suggest that this species may be linked to riverine habitats in eastern Amazonia.

Banded Antbird, Dichrozona cincta.—Our only record was of a single individual tape recorded and observed in lightly disturbed terra firme forest at Pinkaiti on 24 September

1994. B.M.W. also tape recorded and observed this species at the Ferreira Penna Scientific Station of the MPEG in the Caxiuanã National Forest (1° 24' S, 51° 27' W) on 30 May 1997, where specimens were collected by Silva (1998). These appear to be the only records east of the Xingú River (Griscom and Greenway 1941, Sick 1997). Among sites across southeastern Amazonia, Alta Floresta seems to have been inventoried most thoroughly and the apparent absence of *D. cincta* in this area may be real (Zimmer et al. 1997).

Black-chested Tyrant, Poecilotriccus andrei.—A rare and patchily distributed bird in Amazonia (see summary in Sick 1997), with most records coming from the eastern part of the basin, which seems to be the species' stronghold (Novaes 1978, Sick 1997). A.A. saw one female at Pinkaiti, identified by its distinct blackish crest and wide yellowish band across primaries, secondaries, and tertiaries. The bird was perched quietly for 30 s about 1.5 m above ground in a large forest gap dominated by vine-tangles. This is the southernmost record so far reported for this species. *Poecilotriccus andrei* has been also collected at Serra dos Carajás (MPEG 37287; no mass or gonad information), about 200 km northeast of Pinkaiti.

Large-headed Flatbill, Ramphotrigon megacephala.—On 27 May 1985, a female was collected by D.C.O. and M. S. Brígida in Gorotire (MPEG 37170; mass 12.5 g; small gonads). The bird was found in a bamboo patch surrounded by secondary forest. This represents the first published record of *R. megacephala* for eastern Amazonia and Pará State. Like *R. fuscicauda*, the nearest locality where *R. megacephala* has been reported previously is Alta Floresta in northern Mato Grosso State (9° 41' S, 55° 54' W; Aleixo 1997), 490 km southwest of Gorotire.

Dusky-tailed Flatbill, Ramphotrigon fuscicauda.—This species was tape recorded in 1995 and 1996 at Pinkaiti (B.M.W. and A.A.), providing the first documented records for Pará and the Xingu River drainage. The nearest locality where this flatbill had been reported previously is Alta Floresta, about 450 km southwest of Pinkaiti, where it was considered a bamboo specialist (Zimmer et al. 1997). The Dusky-tailed Flatbill is an uncommon bird at Pinkaiti, inhabiting dense places

in the upper understory (generally 2–6 m above ground) of terra firme and floodplain forest, often near trail edges or other light gaps. Over most of its wide but patchy distribution, *R. fuscicauda* is found in but not restricted to bamboo (Parker et al. 1997, Kratter 1997).

Lawrence's Thrush, Turdus lawrencii.—This forest thrush was tape recorded and collected at Pinkaiti (MPEG 52326) by B.M.W. on 25 September 1995, providing the first report for Pará and the Xingu River drainage. Another individual was heard singing nearby. The nearest locality where this bird had been ereported was in the lower Peixoto de Azevedo River region (10° 10' S, 54° 50' W), upper Tapajós River drainage, in northern Mato Grosso (Novaes and Lima 1990). It was considered uncommon at nearby Alta Floresta region (Zimmer et al. 1997).

White-lored Euphonia, Euphonia chrysopasta.—An individual tape recorded and briefly seen by A.A. at Pinkaiti on 25 September 1996 is the only record of this species from the Xingu River drainage. The only records from farther east are from the plateau region of Serra dos Carajás (B.M.W. and R. Webster, pers. obs.), 200 km northeast of Pinkaiti. The nearest documented record for this euphonia comes from the lower Peixoto de Azevedo River region (10° 10' S, 54° 50' W), upper Tapajós River drainage, where one specimen was collected (Novaes and Lima 1990).

DISCUSSION

The range extensions we report and those reported elsewhere for eastern Amazonia (Oren and Silva 1987, Graves and Zusi 1990, Novaes 1991) reveal an incomplete knowledge of bird distributions in this region, despite previous work by earlier authors (Snethlage 1914, Griscom and Greenway 1941, Novaes 1960). Many of the range extensions are for species of more widespread distribution in western Amazonia, such as *Caprimulgus sericocaudatus*, *Simoxenops ucayalae*, *Dichrozona cincta*, *Ramphotricon fuscicauda*, *R. megacephala*, *Turdus lawrencii*, and *Euphonia chrysopasta*.

Most of Amazonia on the Brazilian Shield is comprised of seasonally semideciduous and evergreen forests, dominated by *Orbignyia* palms and lianas (RADAMBRASIL satellite

imagery data in Prance and Brown 1987). This region includes a highly complex mosaic of biotopes, including scattered enclaves, some extensive, of cerrado, bamboo, campinas, and gallery forest. This mosaic is characteristic of the broadly defined Transition forest (sensu Prance and Brown 1987) at the southern periphery of Amazonia.

The patchy distribution of the different habitats comprising Transition forest in eastern Amazonia may account for the localized occurrence of some species. Species like *Simoxenops ucayalae*, *Ramphotricon fuscicauda*, and *R. megacephala* are reported to be highly associated with *Guadua* spp. bamboo patches in western Amazonia (Kratter 1997, Parker et al. 1997). In southwestern Amazonia, bamboo dominated forests cover an extensive and rather continuous area of approximately 180,000 km², about evenly divided between Brazil and Peru (Nelson 1994). In contrast, patches of bamboo are less numerous and more locally distributed in southeastern Amazonia in general (RADAMBRASIL satellite imagery data in Prance and Brown 1987). This may explain why bamboo associated species have a patchier distribution in eastern than western Amazonia.

Our records of “obligate” and “near-obligate” bamboo specialist birds (sensu Kratter 1997), such as *Nonnula ruficapilla* and *Ramphotricon fuscicauda*, in vegetation other than *Guadua* spp. bamboo patches, also demonstrate that the degree of association with *Guadua* bamboo can vary geographically in Amazonia. Indeed, Kratter (1997) acknowledged that most bamboo specialist birds probably select a particular type of vegetation structure (dense habitats with low canopy cover) rather than a particular floristic component. In areas where *Guadua* stands are rare, such as in southeastern Amazonia, alternative habitats to *Guadua* bamboo can be even more important than in other parts of Amazonia.

The geographic patchiness of habitats within a broad, complex mosaic of biotopes and general ornithological undersampling, account for many range extensions we observed of patchily distributed species in eastern Amazonia. Areas inventoried before an emphasis on vocal identification of species can turn out to be ornithologically undersampled. Continuous field work, combining extensive tape re-

cording with modern collecting (including gathering samples for genetic studies) is needed to obtain a more accurate picture of Amazonian biogeography, and to allow generalizations and modeling.

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