Birds of Pacaya-Samiria National Reserve with a new population (*Myrmotherula longicauda*) and new record for Peru (*Hylophilus semicinereus*)

by Alfredo J. Begazo & Thomas H. Valqui

Received 6 May 1997

The Peruvian Amazon encompasses a variety of forest ecosystems. A relatively small but significant part of these ecosystems is the flooded forest. This unique formation has a variety of endemic plants and animals (Ayres 1993). In addition, the flooded forest represents an important component for the life cycle of fish and a source of food for local inhabitants (Padoch 1988). However, this ecosystem is among the most vulnerable in Amazonia because of its accessibility for resource extraction by water transport.

The Pacaya-Samiria National Reserve (PSNR) covers approximately 2,080,000 ha, being the largest protected area in the Amazon basin. The overall topography is dominated by a flat terrain subject to inundation to varying extents, except for a small area in the southwestern part of the reserve. Its strategic location between two major rivers and the predominantly flat terrain result in a peculiar mosaic of forest formations. As much as 51% of the total area is composed of flooded forest, 34% constitutes seasonally flooded forest, and 1% lakes and rivers; 13% of the forest is high enough to escape inundation (Malleux 1975). Seasonally flooded forest and high forest show a similar floristic composition (Encarnación 1985), whereas forest with permanent or near-permanent water shows remarkable differences in floristic composition and structure.

As the reserve's strategic location results in a great variety of forest formations, its position also entails being surrounded by a particularly high density of people. The second largest human concentration in the state of Loreto (after the city of Iquitos) is found along large rivers. Such rivers, for the most part, run across prime agricultural land, the result of seasonal sedimentation along their banks that make them particularly attractive to human settlement. In addition, large rivers represent the only means of transport for people and local products. Consequently, PSNR is subject to pressure from extractive activities of local inhabitants settled on the periphery. These extractive activities selectively affect animal species of large size which, despite being under hunting pressure, maintain relatively healthy populations within the reserve as opposed to extremely low densities or near local extinction in the surrounding unprotected areas (Begazo & Bodmer in press). Large cracids, psittacids, herons, ducks and tinamous are the groups most heavily hunted within the reserve.

The present manuscript is the result of 6 months of field work between 1992 and 1996. Extensive mist-netting and tape-recording

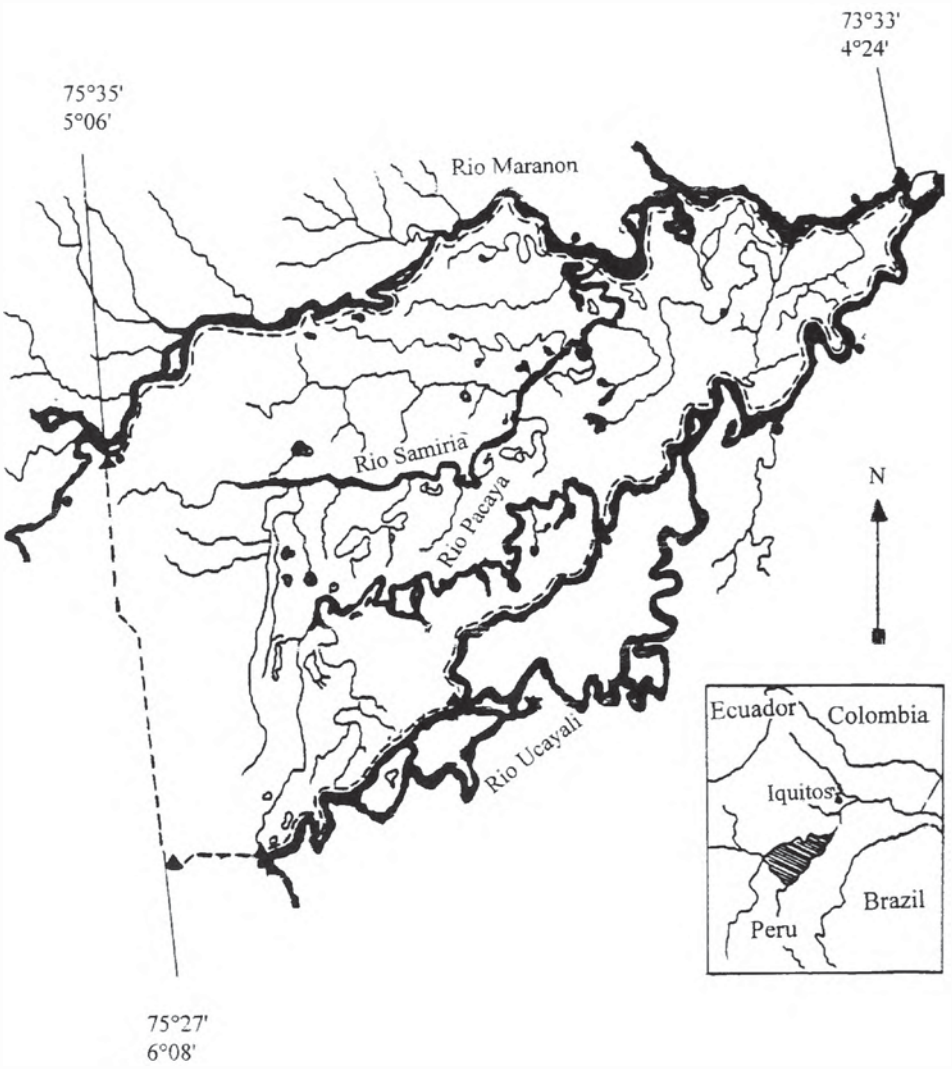

Figure 1. The Pacaya-Samiria National Reserve.

were carried out by the authors throughout the reserve at a total of 35 surveying stations, of which 14 were situated along the Yanayacu river, 6 on the Pacaya river, 13 along the Samiria river, 5 along a transect between the Marañon river and Yanayacu river, and 6 along the Marañon river including river islands (Fig. 1). At each surveying station, mist-nets were placed along freshly cut trails, and observations and tape-recordings were made in the vicinity of the mist-net lines and along previously existing trails. Transects were located randomly in a vertical fashion along the rivers within the reserve and had a varying length. Transects had a double purpose; in some cases they were used for general recording of vertebrates and plants, and in others for censusing game animals. Transects of the first kind measured 1 or

2 km from the river towards the interior of the forest; censusing transects measured 4 to 5 km. Altogether, an estimated 400 km were covered in surveys within the forest and along rivers throughout the reserve.

We follow the sequence and taxonomy suggested by Parker *et al.* (1996). In addition to our own records, we have drawn on data from previous ornithological surveys conducted within the limits of the reserve. We do not include all records from other lists. Species not observed by us were included only in cases where we obtained confirmatory evidence of their presence in the reserve, e.g. from personal communication with the author or authors of such works or from local inhabitants. A complete, annotated list of all species recorded in the reserve can be obtained from the authors on request.

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ZIGZAG HERON *Zebrilus undulatus*

This elusive heron was recorded on three separate occasions. THV observed an individual under overhanging vegetation at the edge of slow-flowing black waters of the Pacaya river. AJB observed the species on two occasions in a slow-flowing shallow stream in the interior of the forest. The habitat agrees with that described by Davis *et al.* (1980). The birds observed by AJB were at the same place and could have been the same individual. On a separate occasion, AJB tape-recorded two individuals calling at dawn from a small body of water nearly covered by surrounding tangled vegetation at 4°24′S, 73°06′W, just outside the limits of the reserve. The birds called for about half an hour only, between 5.00 and 5.30 a.m. Given the abundance of water and the swampy nature of the predominant habitats in Pacaya-Samiria, the species should be favoured with abundant habitat. With its cryptic coloration and shy behaviour it is very easily overlooked.

SLENDER-BILLED KITE *Rostrhamus hamatus*

We frequently saw this species, mostly birds soaring at various altitudes. The typical silhouette consists of broad wings with the short tail well spread, giving the impression of a continuation of the secondary wing feathers. One individual was observed incubating eggs for three consecutive days between 6 and 9 July. The nest was placed on a horizontal limb of an isolated tree (*Pseudobombax munguuba*) at about 18 m from the ground.

WATTLED CURASSOW *Crax globulosa*

This species has not been reported in Peru in the last 35 years. It was known to inhabit riparian vegetation and river islands, which happen to be the areas where the fastest human growth has taken place. Interviews with local people on the banks of the Marañon suggested that the species still exists on the north bank. Two birds were shot in August 1996 by a local hunter near the village of Nueva Esperanza (4°51′S, 75°06′W). In addition, two birds kept in captivity were

photographed and their vocalisations tape-recorded. Thorough field work is needed to determine the status of this species in Peru.

RAZOR-BILLED CURASSOW *Crax mitu*

This large game bird has been extirpated from most areas surrounding human settlements, but in PSNR there are still healthy populations (Begazo 1995). A total of 11 birds were observed in the census transects. Razor-billed Curassows seemed to be associated with forest with damp soil, especially along stream edges, where they scratch the ground in search of food. Analysis of the stomach contents of a bird shot by a local hunter showed a variety of vegetable matter including seeds and tender shoots, as well as small snails. The generalist diet of this terrestrial species (Delacour & Amadon 1973) may help explain its preference for moist soil.

SPIX'S GUAN *Penelope jaquacu*

Like the above species, Spix's Guan is much sought after by hunters. Within the reserve it is subject to sporadic hunting pressure; near human settlements on the periphery it is virtually extinct. Although Amadon & Delacour (1973) suggest that this species makes little use of the forest floor, 68% of the birds sighted (n=23) were flushed from the ground. Information obtained from local people suggests that the species breeds during the months December–March. Stomach contents of two birds contained seeds of the Huasai palm *Euterpe precatoria*.

COMMON PIPING GUAN *Pipile pipile*

Like other large Cracids, this species suffers from human persecution. Preliminary studies in three human settlements show that this is the species shot in the largest numbers. Although little is known about its natural history and movements, we suspect that the seemingly high encounter rate with hunters is due to the fact that the species is highly frugivorous and must keep moving in search of patchily distributing fruiting trees. In contrast, the lower encounter rate with territorial species such as *Crax mitu* may be explained by the fact that the latter, once hunted, take a long time to replace empty territories. A total of 21 Common Piping Guans were observed along water courses and in line transects.

PALE-WINGED TRUMPETER *Psophia leucoptera*

Groups of 3 to 11 individuals were registered on 9 occasions during the census line transects, in forest subject to seasonal flooding. The species is still common in the reserve and, to judge from their tame behaviour, they are not being hunted. On 23 February, in a location outside the limits of the reserve, a group of 6 adult trumpeters was accompanied by two young of about three weeks old and at least one juvenile, suggesting that the dominant breeding pairs may make consecutive breeding attempts in one season.

BAND-TAILED NIGHTHAWK *Nyctiprogne leucopyga*

On 8 June 1995 THV tape-recorded this species at an oxbow lake with abundant grass along the edges (5°09'S, 75°06'W). Later, the

recording was compared with one of the same species from Brazil (Hardy *et al.* 1986). The species is known from the Guianas, Venezuela, the extreme east Colombia, and Brazil from Rio Negro and Madeira (Meyer de Schauensee 1970). It has also been reported from the Javari River, on the border of Peru and Brazil, about 150 km from our study site (Hilty & Brown 1986).

RUFOUS-NECKED PUFFBIRD *Malacoptila rufa*

A total of 5 individuals of this little known species were seen by both authors separately. Three birds were seen near Santa Elena check point (5°14′S, 74°50′W) and one each at surveying stations on the Samiria and Yanayacu rivers (5°13′S, 74°13′W; 5°01′S, 74°13′W). Birds observed at Santa Elena were flushed from perches about 50 cm from the ground. After flushing, they perched at about 3 m above the ground uttering a continuous high-pitched but mellow *piiiiu*. One of the birds flew back to a perch near the ground to resume foraging. It spent long periods (2–11 minutes) watching its surroundings before changing perch or performing a sally in typical *Malacoptila* fashion. Once it made a sally to take an insect from the ground.

STRIPE-CHESTED ANTWREN *Myrmotherula longicauda*

This report represents a new and disjunct population of this species found along the foothills of the Andes between 600–1,200 m (Parker *et al.* 1996). This species is fairly common at 4°56′S, 75°05′W, in an area of short vegetation (5–6 m) in which one or two plant species are predominant. Such a plant community is found in permanently flooded country with stagnant bodies of black water. It was also seen regularly accompanying flocks composed of *Myrmotherula brachyura*, *M. minitriesii* and occasionally *M. surinamensis*, which occur in a similar habitat along lake or river edges with flowing water. Other members of such flocks were *Thamnophilus amazonicus*, *Sakesphorus canadensis* and *Hylophilus semicinereus*. A manuscript on the taxonomic status and ecology of this population is in preparation by the same authors.

ASH-BREASTED ANTBIRD *Myrmoborus lugubris*

Pairs of this species are fairly common on river islands along the Marañon river. The habitat agrees with that given for the species by Ridgely & Tudor (1994); our records represent a range extension to the locality of Maipuco on the Marañon (4°49′S, 75°07′W).

BLACK-TAILED ANTBIRD *Myrmoborus melanurus*

This very local antbird was found on two occasions within the reserve. THV found it on the margin of lake Pastococha (5°10′S, 75°05′W), and AJB at Quebrada Chiric (4°56′S, 75°05′W), a small affluent of the Yanayacu river. As suggested by Ridgely & Tudor (1996), the species may have been overlooked. During extensive work along Quebrada Chiric AJB did not hear or see it during high water in early May, but in the following year during the driest month, late July, had several encounters with pairs and individuals of this species. Since *M. melanurus* seems to be associated with damp soil found at water

edges, fluctuations in water levels may force birds to the interior of the forest where they are less likely to be seen by people who for the most part travel by water. As the species was only known to occur east of the Ucayali river, these records represent a significant range extension.

ASH-THROATED GNATEATER *Conopophaga peruviana*

The first recorded nest of this species was found on 30 July. While a trail was being cut in mature primary forest (5°02′S, 74°59′W), a bird was flushed from a nest 84 cm above the ground in a sapling with spreading branches. Careful inspection showed that the cup-shaped nest was placed in an already existing accumulation of dead leaves. The inner lining was of fibres, and dead leaves were carefully tucked around the exterior of the cup. When found, the nest contained two pearly white eggs with brown spots, denser at the wide end. The nest was kept under observation for 7 days, the male being found on it in the mornings and the female in the late afternoon. While incubating, they adopted a peculiar cryptic position with the head lowered, so that the cap and scapular feathers looked like a dead leaf with the bill as the petiole.

GRAY ELAENIA *Myiopagis caniceps*

A species that is probably often overlooked, as it forages high up in the forest canopy (Ridgely & Tudor 1994). We found it to be fairly common (heard or seen daily in small numbers). It frequently follows mixed-species canopy flocks where it constantly utters a characteristic call: *tuii tuii tuiiii*, sometimes followed by high-pitched trill (recordings at LNS). Birds perched somewhat horizontally on branches; two were observed regularly to flap the left wing before sally-gleaning insects from leaves.

YELLOW TYRANNULET *Capsiempis flaveola*

This distinctive tyrannulet was found in the same place (4°56′S, 75°05′W) in 1995 and 1996. The habitat is the same as that described for the Stripe-chested Antwren. Existing information on its geographical distribution shows only scattered records in southern and western Amazonia (Ridgely & Tudor 1994). AJB made tape-recordings of the typical and sometimes persistent contact vocalisations of foraging pairs as well as the trill given by individual birds. On 12–15 July 1996 a pair was observed repeatedly visiting what appeared to be an unfinished nest placed about 3.5 m from the ground in a tall shrub, in a man-made opening about 5 m from forest edge.

JOHANNES'S TODY-TYRANT *Hemitriccus iohannis*

A single individual was heard and seen within the limits of the reserve at 5°00′S, 74°58′W. The bird was foraging at about 7 m in viny but light vegetation. The same species was tape-recorded outside the limits of the reserve along the Tahuayo river, an affluent of the Amazon at 4°20′S, 71°52′W. This species seems to be rare in areas outside its known geographical range. Jose Alvarez (pers. comm.) reports the species for Rio Tigre, near the village of Intuto (specimen collected).

These records may suggest a continuous but rare occurrence of the species in the area between the main geographical distribution and the population of southeastern Colombia (Ridgely & Tudor 1994).

THREE-STRIPED FLYCATCHER *Conopias trivirgata*

Between 21 and 29 June 1995, a group of 5 individuals appeared near our house at Nueva Esperanza (4°51'S, 75°06'W), on the south bank of the Marañon river. They were identified as *C. trivirgata* on the basis of their small size, and the dark wings in contrast to the colour of their backs. The group was vocally so conspicuous that we doubt that the birds were there for the previous month that we had been at the site. A peculiar behaviour consisted of frequent chases among themselves, accompanied by loud and persistent calls both from the birds involved in the chase and from other members of the group. After 9 days of continuous observation, the group was never seen again. While the birds were around, they foraged in old second growth of *varzea* forest and frequently flew across agricultural land to reach isolated trees. This observation, and the wide scatter of isolated records of the species in Amazonia (Ridgely & Tudor 1994), may suggest some type of nomadism or even migration.

TROPICAL GNATCATCHER *Polioptila plumbea*

This widespread but uncommon gnatcatcher was seen following canopy mixed-species flocks. The purpose of mentioning this species on this account is to highlight the remarkable differences in vocalisations between birds in this locality and those of the upper Marañon river valley (Hacienda Limon) and west side of the Andes in the Department of Piura (pers. obs.). This supports Ridgely & Tudor's (1989) suggestion that two species may be involved. Recordings of these vocalisations are deposited at Cornell LNS.

GRAY-CHESTED GREENLET *Hylophilus semicinereus*

The Gray-chested Greenlet's hitherto known geographical distribution includes southern Venezuela, French Guiana (Ridgely & Tudor 1989), and extreme northwest Bolivia (Parker *et al.* 1996). We found it to be common but localised in the Pacaya-Samiria reserve. Birds were found in forest edge and in short plant communities growing in permanently flooded areas. Our evidence consists of extensive tape-recordings and a male collected and deposited in the bird division of Peru's Museo Nacional de Historia Natural Javier Prado. This is the first record of the species for Peru.

Acknowledgements

The authors want to thank the Biodiversity support Program, The Chicago Zoologica Society and the Centro de Datos para la Conservation de la Naturaleza for the financial and logistic support provided. We also thank Dr Richard Bodmer for his support during part of the field work at the Pacaya-Samiria National Reserve.

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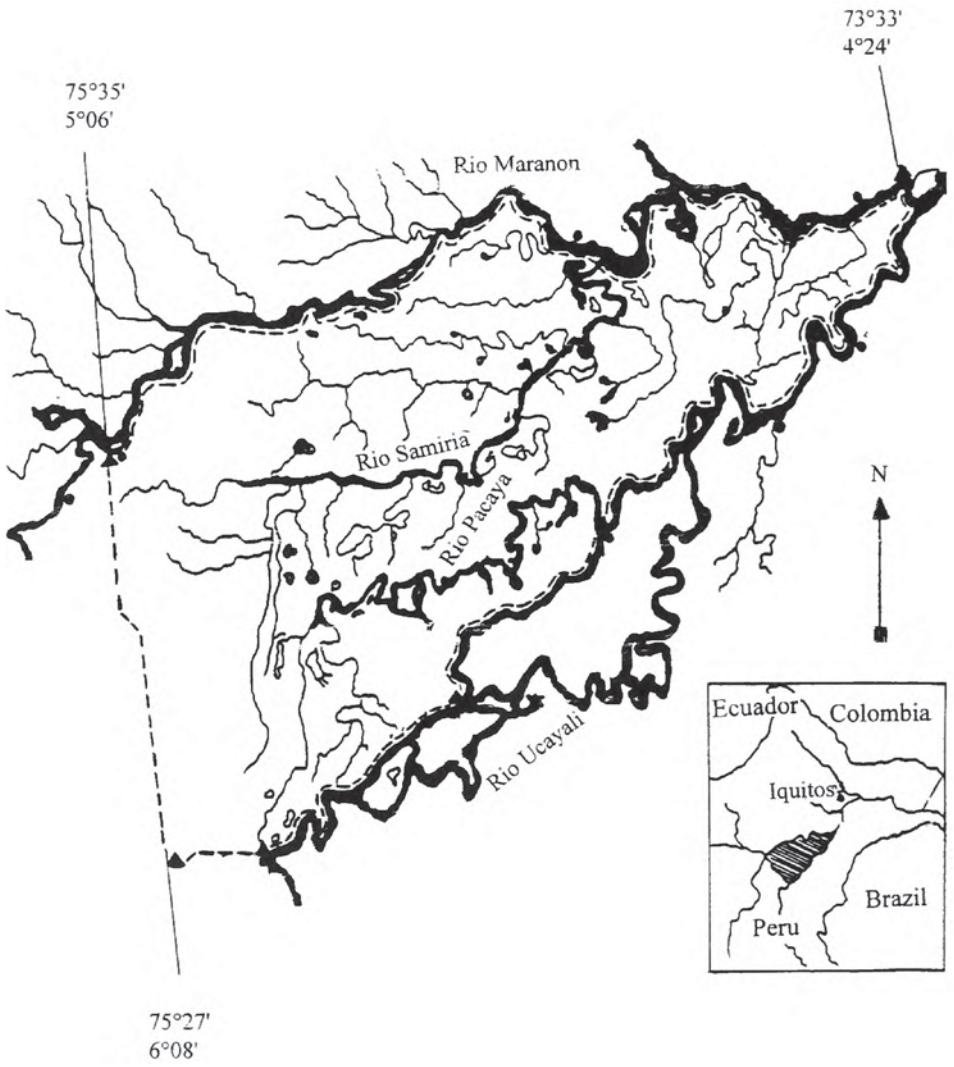

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BLACK-TAILED ANTBIRD *Myrmoborus melanurus*

This very local antbird was found on two occasions within the reserve. THV found it on the margin of lake Pastococha (5°10'S, 75°05'W), and AJB at Quebrada Chiric (4°56'S, 75°05'W), a small affluent of the Yanayacu river. As suggested by Ridgely & Tudor (1996), the species may have been overlooked. During extensive work along Quebrada Chiric AJB did not hear or see it during high water in early May, but in the following year during the driest month, late July, had several encounters with pairs and individuals of this species. Since *M. melanurus* seems to be associated with damp soil found at water

edges, fluctuations in water levels may force birds to the interior of the forest where they are less likely to be seen by people who for the most part travel by water. As the species was only known to occur east of the Ucayali river, these records represent a significant range extension.

ASH-THROATED GNATEATER *Conopophaga peruviana*

The first recorded nest of this species was found on 30 July. While a trail was being cut in mature primary forest (5°02'S, 74°59'W), a bird was flushed from a nest 84 cm above the ground in a sapling with spreading branches. Careful inspection showed that the cup-shaped nest was placed in an already existing accumulation of dead leaves. The inner lining was of fibres, and dead leaves were carefully tucked around the exterior of the cup. When found, the nest contained two pearly white eggs with brown spots, denser at the wide end. The nest was kept under observation for 7 days, the male being found on it in the mornings and the female in the late afternoon. While incubating, they adopted a peculiar cryptic position with the head lowered, so that the cap and scapular feathers looked like a dead leaf with the bill as the petiole.

GRAY ELAENIA *Myiopagis caniceps*

A species that is probably often overlooked, as it forages high up in the forest canopy (Ridgely & Tudor 1994). We found it to be fairly common (heard or seen daily in small numbers). It frequently follows mixed-species canopy flocks where it constantly utters a characteristic call: *tuii tuii tuiiii*, sometimes followed by high-pitched trill (recordings at LNS). Birds perched somewhat horizontally on branches; two were observed regularly to flap the left wing before sally-gleaning insects from leaves.

YELLOW TYRANNULET *Capsiempis flaveola*

This distinctive tyrannulet was found in the same place (4°56'S, 75°05'W) in 1995 and 1996. The habitat is the same as that described for the Stripe-chested Antwren. Existing information on its geographical distribution shows only scattered records in southern and western Amazonia (Ridgely & Tudor 1994). AJB made tape-recordings of the typical and sometimes persistent contact vocalisations of foraging pairs as well as the trill given by individual birds. On 12–15 July 1996 a pair was observed repeatedly visiting what appeared to be an unfinished nest placed about 3.5 m from the ground in a tall shrub, in a man-made opening about 5 m from forest edge.

JOHANNES'S TODY-TYRANT *Hemitriccus iohannis*

A single individual was heard and seen within the limits of the reserve at 5°00'S, 74°58'W. The bird was foraging at about 7 m in viny but light vegetation. The same species was tape-recorded outside the limits of the reserve along the Tahuayo river, an affluent of the Amazon at 4°20'S, 71°52'W. This species seems to be rare in areas outside its known geographical range. José Alvarez (pers. comm.) reports the species for Rio Tigre, near the village of Intuto (specimen collected).

These records may suggest a continuous but rare occurrence of the species in the area between the main geographical distribution and the population of southeastern Colombia (Ridgely & Tudor 1994).

THREE-STRIPED FLYCATCHER *Conopias trivirgata*

Between 21 and 29 June 1995, a group of 5 individuals appeared near our house at Nueva Esperanza (4°51'S, 75°06'W), on the south bank of the Marañon river. They were identified as *C. trivirgata* on the basis of their small size, and the dark wings in contrast to the colour of their backs. The group was vocally so conspicuous that we doubt that the birds were there for the previous month that we had been at the site. A peculiar behaviour consisted of frequent chases among themselves, accompanied by loud and persistent calls both from the birds involved in the chase and from other members of the group. After 9 days of continuous observation, the group was never seen again. While the birds were around, they foraged in old second growth of *v rzea* forest and frequently flew across agricultural land to reach isolated trees. This observation, and the wide scatter of isolated records of the species in Amazonia (Ridgely & Tudor 1994), may suggest some type of nomadism or even migration.

TROPICAL GNATCATCHER *Polioptila plumbea*

This widespread but uncommon gnatcatcher was seen following canopy mixed-species flocks. The purpose of mentioning this species on this account is to highlight the remarkable differences in vocalisations between birds in this locality and those of the upper Marañon river valley (Hacienda Limon) and west side of the Andes in the Department of Piura (pers. obs.). This supports Ridgely & Tudor's (1989) suggestion that two species may be involved. Recordings of these vocalisations are deposited at Cornell LNS.

GRAY-CHESTED GREENLET *Hylophilus semicinereus*

The Gray-chested Greenlets hitherto known geographical distribution includes southern Venezuela, French Guiana (Ridgely & Tudor 1989), and extreme northwest Bolivia (Parker *et al.* 1996). We found it to be common but localised in the Pacaya–Samiria reserve. Birds were found in forest edge and in short plant communities growing in permanently flooded areas. Our evidence consists of extensive tape-recordings and a male collected and deposited in the bird division of Peru's Museo Nacional de Historia Natural Javier Prado. This is the first record of the species for Peru.

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