

Foothill avifauna of the upper Urubamba Valley, dpto. Cusco, Peru

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Se registró un total de 311 especies en dos sitios bajos en las montañas del alto Valle de Urubamba, dpto. Cuzco, Perú. Se documentan primeros registros para la región, nuevas ocurrencias altitudinales y la abundancia relativa y estatus reproductivo de esta avifauna.

The upper Urubamba River is an inter-Andean valley in south-east Peru that originates in the altiplano of dpto. Cusco. From Quillabamba, at c.1,000 m and above, the vegetation is arid and shorter in stature as a result of a rain shadow that arises from moisture catchment by high cordilleras to the east. The effects of the rain shadow are much reduced just north of Quillabamba where the vegetation is much taller and lush. The avifauna of the upper Urubamba remains poorly known despite explorations commencing as early as 1868 in the region^{14,15}. Berlepsch & Stolzmann¹ reported on M. J. Kalinowski's 1896 collections from the upper Urubamba. Chapman's⁴ summary of the Yale University–National Geographic Society's expedition (1915), his and George Cherrie's work

(1916) and that of H. Watkins (1917) provided a solid foundation of our knowledge of this area. Louisiana State University Museum of Natural Science¹⁰ further explored the area with five expeditions in 1974–79, and the birds of Machu Picchu were treated by Walker & Fjeldså¹⁷.

Most of the above field work was concentrated at higher elevations of the upper Urubamba Valley. However, recently, as part of a multi-institutional rapid biological inventory, D. Lane and T. Pequeño provided data for the foothill avifauna in the Zona Reservada Megantoni, in the central Urubamba Valley, dpto. Cusco¹⁶. Herein, we present results from surveys in March–April 2009 of two foothill sites in the upper Urubamba Valley, dpto. Cusco (Fig. 1), by DG & BW, and by teams

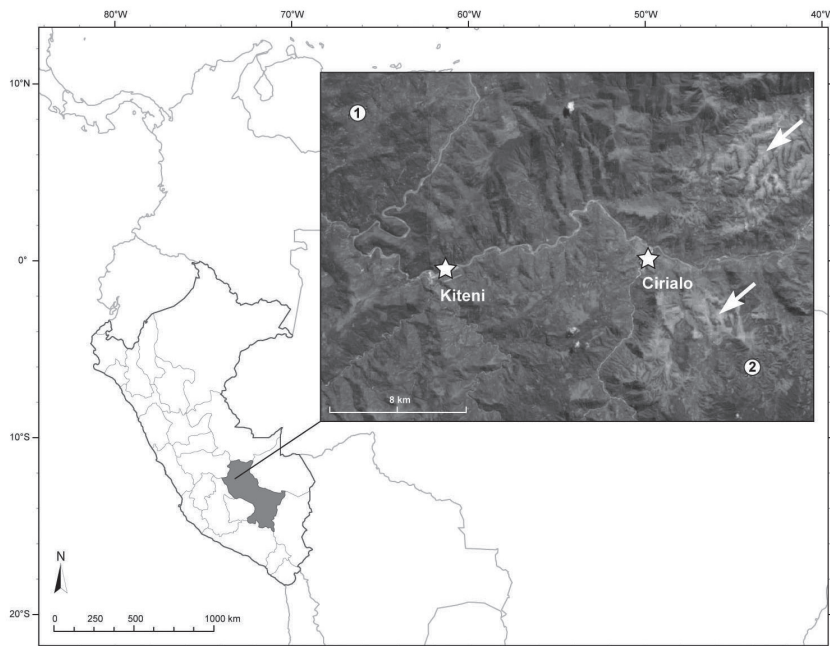


Figure 1. Google Earth image of study area. Dpto. Cusco is highlighted in grey. Two principal camp sites are denoted: 1. Alto Manguriari; 2. Alto Materiato. White arrows indicate presumed human-generated grassland. The rio Urubamba is the principal river in this image.

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Study sites and Methods

The KUNHM / CORBIDI team established two camps near the upper Urubamba River, Distrito Echarate, prov. La Convención. The first was located on the Comunidad Campesina Alto Manguriari, on 3–11 April 2009 (12°33.93'S 73°05.27'W; 1,325 m; elevations covered were c.1,100–1,400 m; Fig. 1). Personnel were MBR, TJD, MC, MDE and KPK. This camp was located beside a narrow, winding dirt road that was sparsely populated. All forest along the road was secondary, but above and below the road there was contiguous, relatively untouched forest. In disturbed areas, along the road and at the edge of clearings in the forest, there were bamboo patches (*Guadua* spp.). Surveys were concentrated in the forest around camp and along the road for several km in each direction, including the forest block at the road's terminus (6–7 road km beyond camp). Mist-nets (12 m in length, positioned at ground level; max. 25 / day during the last few days; opened from first light until late evening, except during heavy rain) were restricted to forest immediately above and below the campsite. Rainfall, ranging in periods of a few minutes to three continuous hours, was recorded every day but two.

The second KUNHM / CORBIDI camp (12°42.01'S 72°52.56'W, 1,700 m; c.30 km south-east of the first camp; Fig. 1) was located on the Comunidad Campesina Alto Materiato, near the terminus of a dirt road and was worked on 12–23 April 2009. Personnel were MBR, TJD, MC, MDE and KPK. On 12 March 2009, DG walked the road from Cirialo up to Tucantinas (above San Antonio and just east of the KUNHM / CORBIDI camp), and because of heavy rains he returned to Cirialo on 13 March. DG & BW revisited the area on 30 March–2 April 2009 and camped at two sites (12°42.75'S 72°55.17'W, 1,700 m; 12°40.07'S 72° 54.22'W, 1,325 m). Only birds that they encountered above c.1,000 m are included in the Appendix.

Except for a few tongues of primary forest on steep slopes, the forest near the KUNHM / CORBIDI Alto Materiato camp was secondary and much of the area from c.1,250 m up to the camp and Tucantinas had been completely cleared and comprised pasture with lush grasses (presumably introduced) up to 1 m tall. Extensively cleared areas, especially above the village of San Antonio, were covered with a dense fern and thorn-dominated herbaceous growth c.1 m in height. Cattle were present in small numbers, with none seen in large tracts of grassland. We presume cattle may be moved to these areas during the dry season. The ridge above camp (c.1,900 m) was contiguous

with largely undisturbed forest in all directions to the south. In addition to working the scrub and forest at our campsite, we drove down the road to c.1,000 m (12°39.06'S 72°55.36'W) above the small town of Cirialo. At 1,000–1,250 m our surveys were restricted to the road because of the extremely steep slopes. Use of mist-nets (eventually 25 / day) was restricted to the scrub and forest near camp. Although rain was recorded on all but the final three days, precipitation was far more extensive on higher ridges to the east and in the Cordillera Vilcabamba to the west. Thus, the area we worked appeared to be in a rain shadow, which may have been accentuated by forest clearance. Large tracts of pasture were also observed on slopes on the other side of the Urubamba River, north-east of our Alto Materiato camp (Fig. 1).

Specimens are deposited at KUNHM and CORBIDI. MBR's sound-recordings ($n=184$) are deposited at the Macaulay Library of Natural Sounds (MLNS), Cornell Lab of Ornithology, Ithaca, NY, and DG's are deposited at www.xeno-canto.org/america. Taxonomy and nomenclature follow the South American Checklist Committee¹¹ as of 1 September 2010.

Results

A total of 311 species was recorded at these two foothill sites (Appendix), with several new records for the upper Urubamba Valley and dpto. Cusco (see Species accounts). Relative abundance designations in the Appendix are positively correlated with the degree of singing for the majority of species, especially passerines.

For Peru, we obtained new upper-elevation records for the following taxa^{13,18}: Ocellated Poorwill *Nyctiphrynus ocellatus*, 1,700 m; Striolated Puffbird *Nystalus striolatus*, 1,350 m; Bar-breasted Piculet *Picumnus aurifrons*, 1,325 m; White-throated Woodpecker *Piculus leucolaemus*, 1,325 m; Cinnamon-throated Woodcreeper *Dendrexetastes rufigula*, 1,325 m; Cabanis's Spinetail *Synallaxis cabanisi*, 1,700 m; Peruvian Recurvebill *Simoxenops ucayalae*, 1,325 m; Barred Antshrike *Thamnophilus doliatus*, 1,700 m; Bluish-slate Antshrike *Thamnomanes schistogynus*, 1,800 m; White-lored Tyrannulet *Ornithion inerme*, 1,250 m; Yellow-browed Tody-Flycatcher *Todirostrum chrysocrotophum*, 1,250 m; Olivaceous Flatbill *Rhynchocyclus olivaceus*, 1,350 m; Large-headed Flatbill *Ramphotrigon megacephalum*, 1,400 m; Green-backed Becard *Pachyramphus viridis*, 1,700 m; Thrush-like Schiffornis *Schiffornis turdina*, 1,800 m; and Guira Tanager *Hemithraupis guira*, 1,650 m.

Both boreal and austral migrants were present for the duration of our field work (Appendix). Even on our last field day, 23 April, five Western Wood Pewee *Contopus sordidulus* and one Alder Flycatcher *Empidonax alnorum* were still present.

Species accounts

White-tailed Hawk *Buteo albicaudatus*

In the extensive pasture area at c.1,250–1,700 m in the Materiato area, individuals were observed dropping to the ground for presumed prey and soaring over grass-covered ridges. The maximum number of individuals observed included two pale-morph adults and an apparent subadult, in presumed Basic I plumage²⁰. Adults were distinguished from the similarly plumaged Variable Hawk *B. polyosoma* by having rufous on the dorsal surface confined to the wing-coverts and no rufous on the back. The dark-plumaged subadult in close proximity to the two adults was identified by shape and size, and the presence of a white patch on the centre of the upper chest. Previously, the species was known only from the Pampas del Heath in extreme south-east Peru¹³. The conversion of forest to pasture undoubtedly has led to its expansion in Peru, and observers may have been overlooking the species given its similar appearance to *B. polyosoma*. Recently, *B. albicaudatus* has been documented as far north as Satipo, dpto. Junín, where a pale-morph adult was photographed on 29–31 August 2008 (G. Seeholzer & M. Harvey pers. comm.), and there have been subsequent sight records in the Jaen area (BW pers. obs.).

Ocellated Crane *Micropygia schomburgkii*

Heard at all periods of the day in the grass-dominated landscape at c.1,250–1,500 m in March–April. Prior to these records, this often easily overlooked rail was known from singles trapped and photographed at Winay-Wayna ruins (13°11.09'S 72°32.30'W), dpto. Cusco, Pantiacolla Lodge (12°39.35'S 71°13.87'W), dpto. Madre de Dios¹⁷, and the Pampas del Heath, in the extreme south-east of the country¹³. Given the few records, it is unclear if this rail is a permanent resident and / or an austral migrant.

Andean *Nyctibius maculosus* and Long-tailed

Potoos *N. aethereus*

Surprisingly, we recorded both species calling on the same date at our Manguriari camp (MLNS 147392, 147383). Andean was heard on several evenings, whereas Long-tailed was recorded only once pre-dawn; neither species was seen. These are the lowest and highest elevations, respectively, recorded for these two species and may represent the first time they have been recorded syntopically¹³.

Blue-fronted Lancebill *Doryfera johannae*

One mist-netted at Manguriari (CORB-AV-2010-1144) provides the southernmost record in Peru. Although indicated to occur south only to dpto. Junín¹³, there now exist several unpublished sight

records by experienced observers in recent years at Hacienda Amazonia Lodge, nearby Pantiacolla Lodge, Manu National Park, and along the lower Manu Road at Quita Calzones, dpto. Madre de Dios (H. Lloyd pers. comm.).

Brown Violetear *Colibri delphinae*, Peruvian Piedtail *Phlogophilus harterti* and Black-throated Brilliant *Heliodoxa schreibersii*

Our Manguriari records fill in distribution gaps for these hummingbirds¹³. The only records of the *Colibri* and *Heliodoxa* were of single, mist-netted birds, whereas two *Phlogophilus* were mist-netted and another was observed. Peruvian Piedtail is considered Near Threatened as a result of its limited distribution³.

Versicoloured Barbet *Eubucco versicolor*

This species was not localising at either locality. Of the four adult males collected at Materiato, all exhibited the narrow blue breast-band more typical of the southern nominate form. However, one (KUNHM 113512) has an admixture of yellow / blue on the malar stripe that is intermediate between central Peruvian *E. v. glaucogularis* and the nominate subspecies. Males with mixed characters have been noted at Santa Ana (a few km south-west of Quillabamba), just east of Materiato¹ and the Ayacucho / Cusco border¹³.

Ashy Antwren *Myrmotherula grisea*

An adult male in non-breeding condition (testes 1 × 1 mm) mist-netted at Manguriari on 6 April 2009 (CORB-AV-2010-1145) represents the first specimen for dpto. Cusco, Peru¹³. The first record for the department was a male mist-netted and photographed on the east slope near La Convención in the Cordillera Vilcabamba, at 1,630 m, on 18 November 2007 (J. Ugarte Núñez pers. comm.). These two records extend the species' range c.500 km north-west of the northernmost locality on the Peru / Bolivian border⁶. Although listed as Vulnerable by the IUCN based solely on criterion C2a², Herzog *et al.*⁶ demonstrated that it does not meet that requirement, and our range extension further supports their conclusion.

Sooty-headed Tyrannulet *Phyllomyias griseiceps*

Two of this poorly known foothill species were recorded, one of them collected (CORB-AV-2010-1142), at Manguriari (MBR recordings; MLNS 147418, 147501). Additionally, a sound-recording (XC31082) was made by DG of an unseen individual at 1,100 m above Cirialo on 3 March 2009. Vocal material is very similar to the recently described Yungus Tyrannulet *P. weedeni*⁵. Surprisingly, no comparative material of *P. griseiceps* was included in the analysis and formal description of *P. weedeni*⁵. Such comparison would provide important evidence

about the status of *P. weedeni* and its relationship to the *P. griseiceps* complex.

Yellow-olive Flycatcher *Tolmomyias sulphurescens*

A single immature mist-netted at Materiato represents the first specimen for dpto. Cusco (KUNHM 113557); it appears to represent the central Peruvian subspecies *T. s. peruvianus*. Recent sight records and sound-recordings are available from Aguas Calientes (upstream on the río Urubamba; various observers) and, in 2009, D. Lane obtained photographs and sound-recordings from San Pedro (on the Manu Road) that have extended this taxon's distribution well south of where it was mapped in Schulenberg *et al.*¹³.

Bran-coloured Flycatcher *Myiophobus fasciatus*

At least a dozen were heard and sound-recorded at dawn in bushes in the fern-dominated herbaceous growth along c.2 road km at our Materiato camp (MLNS 147426, 147479, 147500; XC32112). Although testes were moderately enlarged in two April males (4 × 2 mm, KUMNH 113561; 6.0 × 3.5 mm, CORB-AV-2010-102), we presume this was a reflection that it was the end of the breeding season. Apparently, this represents the first breeding evidence of the eastern Peruvian form, *M. f. saturatus*, in the country as Schulenberg *et al.*¹³ state that it 'may breed locally, especially near Andes.'

Rufous-tailed Tyrant *Knipolegus poecilurus*

MBR observed and sound-recorded vocalisations of displaying males at dawn in the fern- / thorn-dominated herbaceous growth at Materiato. Single males leapt vertically (c.<1 m) from a small, leafless bush as they gave a difficult to detect, thin, insect-like note along with a mechanical sound (MLNS 148314). We presume the latter is generated by the emarginated outer primaries. Although this display has been noted in Peru¹³, apparently it has not been described for other populations of *K. poecilurus* across its broad range¹².

Shrike-like Cotinga *Laniisoma elegans*

Two adult males in non-breeding condition (KUNHM 113625, CORB-AV-2010-1138) were mist-netted in primary forest at Manguriari at c.1,400 m. Apparently, these represent the first records between the Apurímac¹⁹ and the Cosñipata Valley, dpto. Cusco¹⁸.

Green-backed Becard *Pachyramphus viridis*

Several pairs were observed attending completed, bulky, globular nests on isolated trees in clearings at both sites (specimens and sound-recordings). The nearest known location is Hacienda Amazonia Lodge, dpto. Madre de Dios (12°52'S 71°23'W), where

a pair was photographed and sound-recorded¹⁸. Our records fill a gap in the species' known distribution from dpto. Junín to eastern dpto. Cusco¹³.

Purplish Jay *Cyanocorax cyanomelas*

DG observed and sound-recorded this species up to 1,000 m above Cirialo (XC31234). These are the first records outside the Madre de Dios drainage in Peru, where it is mostly restricted to the floodplain up to 1,000 m¹³.

Slaty Thrush *Turdus nigriceps*

The two mist-netted individuals, 17 and 20 April (male, KUNHM 113574; female, CORB-AV-2010-1139), represent some of the earliest records of this austral and trans-Andean migrant along the east Andean slope of Peru¹³. The only earlier record is of a bird taken on 13 February 1975, at Conchapan Mountain, Yurinaqui Alto, dpto. Junín, by P. Hocking & G. Lopez (Field Museum of Natural History 299306). Indicative of migrants, both individuals we collected had moderate to heavy fat and small gonads.

Vermilion Tanager *Calochaetes coccineus*

A non-breeding male and female collected (KUNHM 113603, CORB-AV-2010-1140) in primary forest at Materiato represent the first specimens for dpto. Cusco, although D. Lane & T. Pequeño observed the species in the middle Urubamba at Zona Reservada Megantoni¹⁶. This apparently represents the southernmost record for the species¹³.

Blue-winged Mountain Tanager *Anisognathus somptuosus*

Fairly common in scrubby, secondary forest at Materiato. Birds were not vocalising and were seen in monospecific groups of 2–4 individuals. All specimens were in non-breeding condition and had the olive-green rumps of the nominate subspecies. This extends the range of this subspecies further up the Urubamba, as it was recorded in the middle Urubamba at Zona Reservada Megantoni¹⁶.

Scarlet-rumped Cacique *Cacicus uropygialis*

Two non-breeding females (KUNHM 113609, CORB-AV-2010-1141) taken in primary forest at Materiato represent the southernmost records; the species is known just to the north from the east side of the Apurímac Valley in the Cordillera Vilcabamba^{13,19}.

Discussion

Our surveys help elucidate the status and distribution of the poorly known foothill avifauna of this region. We underscore that our inventories were conducted at the end of the rainy season, when most species were finishing their breeding seasons (fledged young were observed of a number

of species; see gonad data in species accounts) and vocalisations had ceased or were very infrequent for most species. There were of course exceptions; e.g., several antbird species at Manguriari and Tropical Parula *Parula pitiayumi* at both camps persistently vocalised during the April surveys. Nonetheless, our inventories for both localities should be considered preliminary and undoubtedly many more species would be recorded if longer surveys were conducted during the height of the vocal period, presumably September–November (pers. obs.).

We recorded six species that are included in BirdLife International's Peruvian East Andean foothills Endemic Bird Area (053³), with one, Black Tinamou *Tinamus osgoodi*, ranked as Vulnerable, and another, *Phlogophilus harterti*, considered Near Threatened. Both species appear to require relatively intact forest. The remaining four species are ranked as Least Concern. Cerulean-capped Manakin *Lepidothrix coeruleocapilla*, Yungas Manakin *Chiroxiphia boliviana* and Bolivian Tyrannulet *Zimmerius bolivianus* were common to fairly common in disturbed forest, whereas Creamy-bellied Antwren *Herpsilochmus motacilloides* was seen in the canopy and subcanopy of forest edge and ridge-top forest. Another species that is not restricted to this EBA but is considered Vulnerable, is Blue-headed Macaw *Primolius couloni*; a few pairs were recorded at both our sites.

Patches of *Guadua* bamboo were fairly common along the road and forest edge at Manguriari, which is near the upper elevation of this habitat¹⁶. Although the specialised bamboo avifauna^{7,9} at Manguriari is clearly a subset of species that occupies this habitat at lower elevations, because of the low level of vocalisations during our inventory coupled with our effort being concentrated above 1,100 m, we hesitate to speculate on whether our list is complete for Manguriari: Yellow-billed Nunbird *Monasa flavirostris*, Cabanis's Spinetail *Synallaxis cabanisi*, Peruvian Recurvebill *Simoxenops ucayalae*, Crested Foliage-gleaner *Anabazenops dorsalis*, Ornate Antwren *Epinecrophylla ornata*, Dot-winged Antwren *Microrhopias quixensis*, Peruvian Warbling Antbird *Hypocnemis subflava* and Large-headed Flatbill *Ramphotrigon megacephalum*. We failed to record the following bamboo specialists that Lane & Pequeño¹⁶ found in the middle Urubamba River at Kapiromashi (c.760–1,000 m): Rufous-breasted Piculet *Picumnus rufiventris*, Bamboo Antshrike *Cymbilaimus sanctaemariae*, Striated Antbird *Drymophila devillei*, Manu Antbird *Cercomacra manu*, White-lined Antbird *Percnostola lophotes*, Yellow Tyrannulet *Capsiempis flaveola*, White-faced Tody-Tyrant *Poecilatriccus albifacies*, Flammulated Tody-Tyrant *Hemitriccus flammulatus* and Dusky-tailed Flatbill *Ramphotrigon fuscicauda*.

Anthropogenic impact was significant at both localities, albeit with much less at Manguriari. We suspect that the extensive conversion of forest to pasture in the San Antonio region, from above Cirialo to Alto Materiato, has had dramatic effects on species composition and the relative abundance of many species. Aside from the loss of many forest species over a sizeable area (Fig. 1), several species that were presumably either non-existent (e.g. White-tailed Hawk *Buteo albicaudatus* and Ocellated Crake *Micropygia schomburgkii*) or very locally distributed (e.g. Cinereous-breasted Spinetail *Synallaxis hypospodia* and Rusty-backed Antwren *Formicivora rufa*) prior to habitat conversion were regularly encountered during our surveys. The short-stature xeric vegetation influenced by the rain shadow above Quillabamba may have been the source for several of these species that are now found in the Cirialo / Alto Materiato area. In grassland with scattered bushes, non-vocalising Black-faced Tanager *Schistochlamys melanopsis* (adults and immatures seen together) and displaying Blue-black Grassquit *Volatinia jacarina* were the most abundant species. In the fern- / thorn-dominated herbaceous cover with scattered bushes, Azara's Spinetail *Synallaxis azarae*, Bran-coloured Flycatcher *Myiophobus fasciatus*, Rufous-tailed Tyrant *Knipolegus poecilurus* and Dull-coloured Grassquit *Tiartia obscurus* were the most abundant species.

The presence of cracids, *Primolius couloni*, Red-throated Caracara *Ibycter americanus*, Red Howler Monkey *Alouatta seniculus*, agoutis *Dasyprocta* spp., squirrels *Sciurus* spp., and Giant Armadillo *Prionodontes maximus* was indicative of the quality of the forest and the low hunting pressure at Manguriari. In contrast, mammals appeared scarcer at Alto Materiato, probably due to a combination of factors: more impacted forest, higher hunting pressure (we were informed of a number of terrestrial mammal traps near our campsite) and the higher elevation. Nonetheless, the abundance of tinamous and cracids appeared to indicate only moderate hunting pressure on the avifauna at Materiato.

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Appendix. List of bird species recorded at two study sites in the foothills of the upper Urubamba Valley, dpto. Cusco, Peru, in March–April 2009. Relative abundance criteria: C = common (>20 individuals / day); F = fairly common (5–20 individuals / day); U = uncommon, present in small numbers (<5 individuals / day); R = rare; only occasionally encountered and in small numbers; X = single record. Documentation evidence: # = specimen; v = voice recorded; no symbol = sight and / or heard only, i.e., no concrete evidence

| | | Species | Manguriari | Materiato |
|-----------------------|-------------------------------|----------------------------------|--------------------------|-----------|
| TINAMIDAE | Grey Tinamou | <i>Tinamus tao</i> | X, D34# | |
| | Black Tinamou | <i>Tinamus osgoodi</i> | | X, v |
| | Little Tinamou | <i>Crypturellus soui</i> | U | X, v |
| | Brown Tinamou | <i>Crypturellus obsoletus</i> | | U, # |
| | Small-billed Tinamou | <i>Crypturellus parvirostris</i> | | U |
| CRACIDAE | Wattled Guan | <i>Aburria aburri</i> | R, v | R |
| | Speckled Chachalaca | <i>Ortalis guttata</i> | U, v | C, # |
| ODONTOPHORIDAE | Rufous-breasted Wood Quail | <i>Odontophorus speciosus</i> | | F, # |
| | wood quail sp. | <i>Odontophorus</i> sp. | X | |
| CATHARTIDAE | Turkey Vulture | <i>Cathartes aura</i> | | U |
| | Greater Yellow-headed Vulture | <i>Cathartes melambrotus</i> | X | |
| | Black Vulture | <i>Coragyps atratus</i> | X | X |
| | King Vulture | <i>Sarcoramphus papa</i> | X | |
| ACCIPITRIDAE | Swallow-tailed Kite | <i>Elanoides forficatus</i> | R | |
| | Sharp-shinned Hawk | <i>Accipiter striatus</i> | | R |
| | Cinereous Harrier | <i>Circus cinereus</i> | | X |
| | Roadside Hawk | <i>Buteo magnirostris</i> | U, v | F, # |
| | White-tailed Hawk | <i>Buteo albicaudatus</i> | | R |
| | Barred Forest Falcon | <i>Micrastur ruficollis</i> | U, # | |
| | Red-throated Caracara | <i>Ibycter americanus</i> | R, v | |
| RALLIDAE | Bat Falcon | <i>Falco rufigularis</i> | | X |
| | Ocellated Crane | <i>Micropygia schomburgkii</i> | | F, v |
| | Rufous-necked Wood Rail | <i>Aramides cajanea</i> | X | |
| | Russet-crowned Crane | <i>Anuroilmnas viridis</i> | | F, v |
| | Rufous-sided Crane | <i>Laterallus melanophaius</i> | | U |
| COLUMBIDAE | Grey-breasted Crane | <i>Laterallus exilis</i> | | X, v |
| | Plain-breasted Ground Dove | <i>Columbina minuta</i> | | F, v |
| | Ruddy Ground Dove | <i>Columbina talpacoti</i> | | X |
| | Blue Ground Dove | <i>Claravis pretiosa</i> | X | |
| | Band-tailed Pigeon | <i>Patagioenas fasciata</i> | | R |
| | Plumbeous Pigeon | <i>Patagioenas plumbea</i> | U | U, v |
| | White-tipped Dove | <i>Leptotila verreauxi</i> | C, v | C |
| | Grey-fronted Dove | <i>Leptotila rufaxilla</i> | X, # | |
| | White-throated Quail-Dove | <i>Geotrygon frenata</i> | X | |
| | PSITTACIDAE | Blue-headed Macaw | <i>Primolius couloni</i> | R, v |
| White-eyed Parakeet | | <i>Aratinga leucophthalma</i> | X | |
| Rose-fronted Parakeet | | <i>Pyrrhura roseifrons</i> | U | |
| Blue-headed Parrot | | <i>Pionus menstruus</i> | U, # | U |
| Scaly-naped Parrot | | <i>Amazona mercenaria</i> | | R, v |
| Mealy Parrot | | <i>Amazona farinosa</i> | X, v | |
| CUCULIDAE | Squirrel Cuckoo | <i>Piaya cayana</i> | U, # | U, # |
| | Yellow-billed Cuckoo | <i>Coccyzus americanus</i> | R | |
| | Black-billed Cuckoo | <i>Coccyzus erythrophthalmus</i> | R, # | |
| | Smooth-billed Ani | <i>Crotophaga ani</i> | | U |
| STRIGIDAE | Tropical Screech Owl | <i>Megascops choliba</i> | | U, # |
| | Rufescent Screech Owl | <i>Megascops ingens</i> | | X, v |
| | Band-bellied Owl | <i>Pulsatrix melanota</i> | U, # | X |
| | Black-banded Owl | <i>Ciccaba huhula</i> | X | |
| | Long-tailed Potoo | <i>Nyctibius aethereus</i> | X, v | |

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| | Andean Potoo | <i>Nyctibius maculosus</i> | X, v | |
| CAPRIMULGIDAE | Ocellated Poorwill | <i>Nyctiphrynus ocellatus</i> | X, # | F, v |
| | Scissor-tailed Nightjar | <i>Hydropsalis torquata</i> | | F, # |
| APODIDAE | Chestnut-collared Swift | <i>Streptoprocne rutila</i> | U, v | X |
| | White-collared Swift | <i>Streptoprocne zonaris</i> | X | X |
| TROCHILIDAE | Buff-tailed Sicklebill | <i>Eutoxeres condensani</i> | U, # | U, # |
| | White-browed Hermit | <i>Phaethornis stuarti</i> | X | |
| | Green Hermit | <i>Phaethornis guy</i> | U, # | U, # |
| | Blue-fronted Lancebill | <i>Doryfera johannae</i> | X, # | |
| | Wedge-billed Hummingbird | <i>Schistes geoffroyi</i> | | X, # |
| | Brown Violetear | <i>Colibri delphinae</i> | | X, # |
| | Green Violetear | <i>Colibri thalassinus</i> | | X |
| | Black-eared Fairy | <i>Heliothrix auritus</i> | R | |
| | Peruvian Piedtail | <i>Phlogophilus harterti</i> | R, # | X |
| | Speckled Hummingbird | <i>Adelomyia melanogenys</i> | | F, # |
| | Bronzy Inca | <i>Coeligena coeligena</i> | | F, # |
| | Chestnut-breasted Coronet | <i>Boissonneaua matthewsii</i> | | X |
| | Booted Racket-tail | <i>Ocreatus underwoodii</i> | | U, # |
| | Black-throated Brilliant | <i>Heliodoxa schreibersii</i> | X, # | |
| | Violet-fronted Brilliant | <i>Heliodoxa leadbeateri</i> | X, # | R, # |
| | White-bellied Woodstar | <i>Chaetocercus mulsant</i> | | X |
| | Blue-tailed Emerald | <i>Chlorostilbon mellisugus</i> | | C, # |
| | Violet-headed Hummingbird | <i>Klais guimeti</i> | X | |
| | Swallow-tailed Hummingbird | <i>Eupetomena macroura</i> | | F, # |
| | Fork-tailed Woodnymph | <i>Thalurania furcata</i> | U, # | R, # |
| | Green-and-white Hummingbird | <i>Amazilia viridicauda</i> | | R, # |
| | Golden-tailed Sapphire | <i>Chrysaronia oenone</i> | X | X, # |
| TROGONIDAE | Blue-crowned Trogon | <i>Trogon curucui</i> | U, v | X |
| | Collared Trogon | <i>Trogon collaris</i> | U, v | |
| | Masked Trogon | <i>Trogon personatus</i> | | R, # |
| MOMOTIDAE | Andean Motmot | <i>Momotus aequatorialis</i> | | R, # |
| GALBULIDAE | Bluish-fronted Jacamar | <i>Galbula cyanescens</i> | U, # | |
| BUCCONIDAE | Striolated Puffbird | <i>Nystalus striolatus</i> | U, # | |
| | White-eared Puffbird | <i>Nystalus chacuru</i> | | X |
| | Black-streaked Puffbird | <i>Malacoptila fulvogularis</i> | | F, # |
| | Yellow-billed Nunbird | <i>Monasa flavirostris</i> | X, # | |
| CAPITONIDAE | Gilded Barbet | <i>Capito auratus</i> | U, # | U, # |
| | Versicoloured Barbet | <i>Eubucco versicolor</i> | | U, # |
| RAMPHASTIDAE | White-throated Toucan | <i>Ramphastos tucanus</i> | R | R |
| | Emerald Toucanet | <i>Aulacorhynchus prasinus</i> | U | |
| | Chestnut-tipped Toucanet | <i>Aulacorhynchus derbianus</i> | U, # | R, # |
| | aracari sp. | <i>Pteroglossus</i> sp. | X | |
| PICIDAE | Bar-breasted Piculet | <i>Picumnus aurifrons</i> | U, # | X |
| | Ocellated Piculet | <i>Picumnus dorbignyanus</i> | | U, # |
| | Yellow-tufted Woodpecker | <i>Melanerpes cruentatus</i> | U | F, # |
| | Yellow-vented Woodpecker | <i>Veniliornis dignus</i> | | X, # |
| | Red-stained Woodpecker | <i>Veniliornis affinis</i> | U, # | X |
| | White-throated Woodpecker | <i>Piculus leucolaemus</i> | U, # | |
| | Golden-olive Woodpecker | <i>Colaptes rubiginosus</i> | U | U, # |
| | Lineated Woodpecker | <i>Dryocopus lineatus</i> | U, v | U, v |
| | Crimson-bellied Woodpecker | <i>Campephilus haemotogaster</i> | X, # | X |
| | Crimson-crested Woodpecker | <i>Campephilus melanoleucos</i> | U, # | |
| FURNARIIDAE | Tawny-throated Leaf-tosser | <i>Sclerurus mexicanus</i> | X, # | |
| | Grey-throated Leaf-tosser | <i>Sclerurus abigularis</i> | U, # | |

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| | Azara's Spinetail | | F, # |
| | Dark-breasted Spinetail | | X, v |
| | Cinereous-breasted Spinetail | | U, # |
| | Cabanis's Spinetail | U, # | U, # |
| | Plain-crowned Spinetail | R, v | |
| | Ash-browed Spinetail | U, v | R, v |
| | Spotted Barbtail | | R, # |
| | Montane Foliage-gleaner | | R, # |
| | Lineated Foliage-gleaner | | X, # |
| | Buff-browed Foliage-gleaner | | F, # |
| | Peruvian Recurvebill | U, # | |
| | Chestnut-winged Foliage-gleaner | U, # | |
| | Dusky-cheeked Foliage-gleaner | R, # | |
| | Buff-throated Foliage-gleaner | U, # | R, v |
| | Plain Xenops | U, # | |
| | Streaked Xenops | R | C, # |
| | Plain-brown Woodcreeper | X, # | |
| | Olivaceous Woodcreeper | U, # | U, # |
| | Wedge-billed Woodcreeper | U | |
| | Cinnamon-throated Woodcreeper | R, # | |
| | Strong-billed Woodcreeper | R, v | |
| | Ocellated Woodcreeper | U, # | |
| | Olive-backed Woodcreeper | | U, # |
| | Montane Woodcreeper | | X |
| | Red-billed Scythebill | Campylorhynchus trochilirostris | U, # |
| THAMNOPHILIDAE | Barred Antshrike | Thamnophilus doliatus | U, v |
| | Chestnut-backed Antshrike | Thamnophilus palliatus | X |
| | Plain-winged Antshrike | Thamnophilus schistaceus | U, v |
| | Variable Antshrike | Thamnophilus caerulescens | X |
| | Plain Antvireo | Dysithamnus mentalis | U, # |
| | Bluish-slate Antshrike | Thamnomanes schistogynus | U, # |
| | Foothill Antwren | Epinecrophylla spodiota | R, # |
| | Ornate Antwren | Epinecrophylla ornata | R, # |
| | White-flanked Antwren | Myrmotherula axillaris | |
| | Ashy Antwren | Myrmotherula grisea | X, # |
| | Creamy-bellied Antwren | Herpsilochmus motacilloides | |
| | Yellow-breasted Antwren | Herpsilochmus axillaris | U, # |
| | Dot-winged Antwren | Microrhopias quixensis | U |
| | Rusty-backed Antwren | Formicivora rufa | |
| | Peruvian Warbling Antbird | Hypocnemis subflava | C, # |
| | Blackish Antbird | Cercomacra nigrescens notata | |
| | White-backed Fire-eye | Pyriglena leuconota | R, # |
| | White-browed Antbird | Myrmoborus leucophrys | C, # |
| | Chestnut-tailed Antbird | Myrmeciza hemimelaena | C, # |
| | Hairy-crested Antbird | Rhegmatorhina melanosticta | X, # |
| FORMICARIIDAE | Black-faced Antthrush | Formicarius analis | F, # |
| | Short-tailed Antthrush | Chamaeza campanisona | R, # |
| GRALLARIIDAE | Scaled Antpitta | Grallaria quaitimalensis sororia | U, v |
| CONOPOPHAGIDAE | Chestnut-crowned Gnatcatcher | Conopophaga castaneiceps | X, # |
| RHINOCRYPTIDAE | White-crowned Tapaculo | Scytalopus atratus | |
| TYRANNIDAE | Sooty-headed Tyrannulet | Phyllomyias griseiceps | U, # |
| | Forest Elaenia | Myiopagis gaimardii | F, v |
| | Yellow-bellied Elaenia | Elaenia flavogaster | |
| | White-crested Elaenia | Elaenia albiceps | U, # |

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| Small-billed Elaenia | <i>Elaenia parvirostris</i> | | X, # |
| elaenia sp. | <i>Elaenia cristata / chiriquensis</i> | | U |
| White-lored Tyrannulet | <i>Ornithion inerne</i> | R, v | F, v |
| Torrent Tyrannulet | <i>Serpophaga cinerea</i> | | R |
| Ringed Antpipit | <i>Corythopis torquata</i> | R, # | |
| Bolivian Tyrannulet | <i>Zimmerius bolivianus</i> | X, # | F, # |
| Marble-faced Bristle Tyrant | <i>Phylloscartes ophthalmicus</i> | | R |
| Spectacled Bristle Tyrant | <i>Phylloscartes orbitalis</i> | X, photo | |
| Mottle-cheeked Tyrannulet | <i>Phylloscartes ventralis</i> | | F, # |
| Cinnamon-faced Tyrannulet | <i>Phylloscartes parkeri</i> | F, # | |
| Streak-necked Flycatcher | <i>Mionectes striaticollis</i> | U, # | F, # |
| Olive-striped Flycatcher | <i>Mionectes olivaceus</i> | U, # | |
| Sepia-capped Flycatcher | <i>Leptopogon amaurocephalus</i> | U, # | U |
| Slaty-capped Flycatcher | <i>Leptopogon supercilialis</i> | U, # | U, # |
| Ornate Flycatcher | <i>Myiotriccus ornatus</i> | U, # | |
| Short-tailed Pygmy Tyrant | <i>Myiornis ecaudatus</i> | U | X |
| Scale-crested Pygmy Tyrant | <i>Lophotriccus pileatus</i> | F, # | F, # |
| Stripe-necked Tody-Tyrant | <i>Hemitriccus striaticollis</i> | | F, # |
| Common Tody-Flycatcher | <i>Todirostrum cinereum</i> | U | F, v |
| Yellow-browed Tody-Flycatcher | <i>Todirostrum chrysocrotaphum</i> | R, v | R |
| Olivaceous Flatbill | <i>Rhynchocyclus olivaceus</i> | R, # | |
| Fulvous-breasted Flatbill | <i>Rhynchocyclus fulvipectus</i> | | X, # |
| Yellow-olive Flycatcher | <i>Tolmomyias sulphureus</i> | F, # | U |
| Yellow-breasted Flycatcher | <i>Tolmomyias flaviventris</i> | F, v | C, v |
| White-throated Spadebill | <i>Platyrinchus mystaceus</i> | F, # | X, # |
| Unadorned Flycatcher | <i>Myiophobus inornatus</i> | X | X |
| Bran-coloured Flycatcher | <i>Myiophobus fasciatus</i> | | F, # |
| Tawny-breasted Flycatcher | <i>Myiobius villosus</i> | | X, # |
| Cinnamon Flycatcher | <i>Pyrrhomyias cinnamomeus</i> | U | U, # |
| Cliff Flycatcher | <i>Hirundinea ferruginea</i> | | U, # |
| Euler's Flycatcher | <i>Lathrotriccus euleri</i> | F, # | R, # |
| Alder Flycatcher | <i>Empidonax alnorum</i> | R, v | R, v |
| Olive-sided Flycatcher | <i>Contopus cooperi</i> | R | X |
| Western Wood Pewee | <i>Contopus sordidulus</i> | U | F |
| Olive Flycatcher | <i>Mitrephanes olivaceus</i> | | X |
| Rufous-tailed Tyrant | <i>Knipolegus poecilurus</i> | | U, # |
| Social Flycatcher | <i>Myiozetetes similis</i> | C, v | F |
| Lemon-browed Flycatcher | <i>Conopias cinchoneti</i> | X, v | R, # |
| Golden-crowned Flycatcher | <i>Myiodynastes chrysocephalus</i> | R, # | X |
| Streaked Flycatcher | <i>Myiodynastes maculatus</i> | F, v | U, # |
| Tropical Kingbird | <i>Tyrannus melancholicus</i> | R | F, # |
| Rufous Casiornis | <i>Casiornis rufus</i> | | X |
| Dusky-capped Flycatcher | <i>Myiarchus tuberculifer</i> | | R, # |
| Short-crested Flycatcher | <i>Myiarchus ferox</i> | R | |
| Pale-edged Flycatcher | <i>Myiarchus cephalotes</i> | | F, # |
| Large-headed Flatbill | <i>Ramphotrigon megacephalum</i> | R, # | |
| Bright-rumped Attila | <i>Attila spadiceus</i> | | R, v |
| COTINGIDAE | Masked Fruiteater | | R, v |
| | Andean Cock-of-the-Rock | R | R |
| | Amazonian Umbrellabird | U | R |
| PIPRIDAE | Cerulean-capped Manakin | C, # | X, # |
| | Fiery-capped Manakin | | C |
| | Yungas Manakin | C, # | |
| | Jet Manakin | | R, # |

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| | White-crowned Manakin | <i>Pipra pipra</i> | R, # |
| | Round-tailed Manakin | <i>Pipra chloromeros</i> | R, # |
| TITYRIDAE | Masked Tityra | <i>Tityra semifasciata</i> | R, v |
| | Thrush-like Schiffornis | <i>Schiffornis turdina</i> | U, # |
| | Shrike-like Cotinga | <i>Laniisoma elegans</i> | R, # |
| | Green-backed Becard | <i>Pachyrhamphus viridis</i> | U, v |
| | Barred Becard | <i>Pachyrhamphus versicolor</i> | X |
| | White-winged Becard | <i>Pachyrhamphus polychopterus</i> | F, v |
| INCERTAE SEDIS | Wing-barred Piprites | <i>Piprites chloris</i> | F, v |
| VIREONIDAE | Rufous-browed Peppershrike | <i>Cycharhis gujanensis</i> | C, # |
| | Brown-capped Vireo | <i>Vireo leucophrys</i> | U, # |
| | Red-eyed Vireo | <i>Vireo olivaceus olivaceus</i> and <i>V. o. chivi</i> | C |
| | Dusky-capped Greenlet | <i>Hylophilus hypoxanthus</i> | U, v |
| | Olivaceous Greenlet | <i>Hylophilus ochraceiceps</i> | U, # |
| CORVIDAE | Violaceous Jay | <i>Cyanocorax violaceus</i> | U, v |
| | Purplish Jay | <i>Cyanocorax cyanomelas</i> | U, v |
| | Green Jay | <i>Cyanocorax yncas</i> | U, # |
| HIRUNDINIDAE | Blue-and-white Swallow | <i>Pygochelidon cyanoleuca cyanoleuca</i> | C, # |
| | White-thighed Swallow | <i>Atticora tibialis</i> | C |
| | Southern Rough-winged Swallow | <i>Stelgidopteryx ruficollis</i> | C, # |
| TROGLODYTIDAE | Scaly-breasted Wren | <i>Microcerculus marginatus</i> | F, # |
| | House Wren | <i>Troglodytes aedon</i> | C, v |
| | Thrush-like Wren | <i>Campylorhynchus turdinus</i> | R |
| | Moustached Wren | <i>Pheugopedius genibarbis</i> | C, v |
| | Grey-breasted Wood Wren | <i>Henicorhina leucophrys</i> | R |
| | Chestnut-breasted Wren | <i>Cyphorhinus thoracicus</i> | U, # |
| TURDIDAE | Andean Solitaire | <i>Myadestes ralloides</i> | X, # |
| | Spotted Nightingale-Thrush | <i>Catharus dryas</i> | U, # |
| | Swainson's Thrush | <i>Catharus ustulatus</i> | X |
| | White-eared Solitaire | <i>Entomodestes leucotis</i> | X, # |
| | Slaty Thrush | <i>Turdus nigriceps</i> | R, # |
| | Glossy-black Thrush | <i>Turdus serranus</i> | X |
| THRAUPIDAE | Black-faced Tanager | <i>Schistochlamys melanopsis</i> | C, # |
| | Magpie Tanager | <i>Cissopis leveriana</i> | U |
| | Oleaginous Hemispingus | <i>Hemispingus frontalis</i> | R, # |
| | Black-goggled Tanager | <i>Trichothraupis melanops</i> | X |
| | Yellow-crested Tanager | <i>Tachyphonus rufiventer</i> | U, # |
| | White-lined Tanager | <i>Tachyphonus rufus</i> | R |
| | Silver-beaked Tanager | <i>Ramphocelus carbo</i> | X |
| | Blue-grey Tanager | <i>Thraupis episcopus</i> | C, # |
| | Palm Tanager | <i>Thraupis palmarum</i> | R |
| | Vermilion Tanager | <i>Calochaetes coccineus</i> | R |
| | Blue-winged Mountain Tanager | <i>Anisognathus somptuosus somptuosus</i> | R, # |
| | Yellow-throated Tanager | <i>Iridosornis analis</i> | F, # |
| | Fawn-breasted Tanager | <i>Pipraeidea melanonota</i> | U, # |
| | Golden-naped Tanager | <i>Tangara ruficervix</i> | X |
| | Silver-backed Tanager | <i>Tangara viridicollis</i> | X |
| | Blue-necked Tanager | <i>Tangara cyanicollis</i> | F, # |
| | Yellow-bellied Tanager | <i>Tangara xanthogastra</i> | U, # |
| | Spotted Tanager | <i>Tangara punctata</i> | X |
| | Beryl-spangled Tanager | <i>Tangara nigroviridis</i> | F, # |
| | Blue-browed Tanager | <i>Tangara cyanotis</i> | U |
| | Paradise Tanager | <i>Tangara chilensis</i> | X |
| | Bay-headed Tanager | <i>Tangara gyrola</i> | C, # |
| | | | F, # |
| | | | R, # |

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| | Saffron-crowned Tanager | | X |
| | Flame-faced Tanager | X | |
| | Green-and-gold Tanager | C, # | |
| | Golden Tanager | X | X |
| | Swallow Tanager | R | U, # |
| | Black-faced Dacnis | U, # | |
| | Blue Dacnis | F | C, # |
| | Purple Honeycreeper | X | R |
| | Green Honeycreeper | F | R |
| | Golden-collared Honeycreeper | | X |
| | Guira Tanager | U | X, v |
| | Capped Conebill | | X |
| | Deep-blue Flowerpiercer | | R, # |
| | Masked Flowerpiercer | | X, # |
| INCERTAE SEDIS | Bananaquit | C, v | U |
| | Dull-coloured Grassquit | | C, v |
| | Slate-coloured Grosbeak | U, # | |
| | Buff-throated Saltator | U | C, v |
| EMBERIZIDAE | Yellow-browed Sparrow | U | F, # |
| | Blue-black Grassquit | | C, # |
| | Black-and-white Seedeater | | X |
| | Yellow-bellied Seedeater | | U, v |
| | Chestnut-bellied Seed Finch | | U, v |
| | Chestnut-capped Brush Finch | | U, # |
| | Red-crested Finch | | C, # |
| | Common Bush Tanager | | X |
| | Yellow-throated Bush Tanager | X, # | |
| CARDINALIDAE | Hepatic Tanager | R, v | U |
| | Blue-black Grosbeak | R, # | |
| PARULIDAE | Tropical Parula | C, v | C, # |
| | Cerulean Warbler | | X |
| | Masked Yellowthroat | | R, # |
| | Canada Warbler | U, # | |
| | Slate-throated Redstart | F, v | U, # |
| | Golden-bellied Warbler | C, # | X |
| | Russet-crowned Warbler | | U, # |
| | Three-banded Warbler | U | U, # |
| | Buff-rumped Warbler | C, # | |
| ICTERIDAE | Russet-backed Oropendula | C, # | C, # |
| | Crested Oropendula | U | |
| | Scarlet-rumped Cacique | | U, # |
| | Epaulet Oriole | U, # | |
| FRINGILLIDAE | Hooded Siskin | | U |
| | Thick-billed Euphonia | | X |
| | Orange-bellied Euphonia | F, # | F, # |
| | Blue-naped Chlorophonia | U, # | U, # |