

A review of avifaunal records from Mindo, Pichincha province, north-western Ecuador

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Es provista la primera lista de la avifauna de Mindo en la provincia de Pichincha, en el noroeste de Ecuador; 334 especies han sido positivamente identificadas en las inmediaciones del pueblo. Es focalizada especial atención en las especies endémicas que ocurren en el área, así como en las cinco especies amenazadas (*Haplophaedia lugens*, *Acestrura bombus*, *Grallaria gigantea*, *Lathrotriccus griseipectus* e *Oreothraupis arremonops*), e en las once especies casi amenazadas. Detalles de la extensión de varios importantes hábitats que ocurren en la región de Mindo son presentadas, siendo también resumidas las oportunidades para la observación de aves. Son listados contactos locales, ya que es una lista completa de las especies conocidas para la región.

Introduction

Among Andean countries the ornithological exploration of Ecuador started comparatively late, toward the end of the nineteenth century^{4,8,11,12,13,20}. Between then and the early part of the twentieth century most material was obtained by indigenous collectors⁵. Following this, several North American and European expeditions were mounted, covering much of the country, allowing Chapman⁴ to attempt a thorough synthesis of the Ecuadorian avifauna. Recent interest has been sustained by the work of scientific expeditions and numerous individuals; in consequence Ecuador is now one of the ornithologically better known South American countries^{14,15,25}.

However many areas remain poorly documented or virtually wholly unexplored. Although Mindo was visited by early collectors and is now a well known birding site, the area has never been subject to a systematic ornithological survey. No detailed review of its avifauna has been published. Conservationists working in Mindo lack biological inventories for the area, and during a field trip in December 1991 and January 1992 GMK and TM were asked to supply bird records. An unpublished report was prepared detailing their observations. For the present review a full species inventory has been compiled (see appendix), additional records having been assembled from the literature, unpublished trip reports, and information supplied in response to requests for information in a number of journals. We consider 'Mindo' here to be areas within c. a 1/2 days walk of the village, between 1,250 and 1,650 m. Only species which we consider to have been reliably recorded within this strict altitudinal zone are incorporated; records of species outside their known

elevational range have been subject to close scrutiny and only those for which substantive evidence is available have been included. It should be noted however that we have not personally utilised museum data, primarily due to time constraints and because older specimens are often not sufficiently accurately labelled to allow one to identify specimens which were genuinely taken at the specific site under scrutiny. Thus a specimen of Flammulated Treehunter *Thripadectes flammulatus*, lodged in the Royal Ontario Museum, Toronto, is labelled "Mindo" but appears unlikely (based on the species's known elevational range) to have been collected in the vicinity of the village (D. Beadle pers. comm.). Yellow-eared Parrot *Ognorhynchus icterotis*, has never been seen at Mindo. Its inclusion is perhaps warranted on the basis of reports that a bird discovered on the cagebird market in 1970 had supposedly been taken within the environs of the village⁵. This species is restricted to Colombia and north-west Ecuador, principally at 2,000-3,000 m, but occasionally down to 1,200 m (P. Greenfield in Collar *et al.*⁵). Thus it has been suggested (as Mindo is one of the ornithologically better known areas of Ecuador) that this individual was presumably a straggler (N. Krabbe in Collar *et al.*⁵), if indeed its provenance is correct. We do not accept the validity of its occurrence here.

Records from the Nono-Mindo road, the Tandayapa pass and other surrounding areas (e.g. Río Pitsar, from where there is a record of Blue-whiskered Tanager *Tangara johannae*⁶) are not included in this review. The publication of this list should provide baseline data for the area. It is hoped that this article will stimulate further exploration of the Mindo area, thus augmenting the data presented here.

Geographic position

The village of Mindo (0°02'S 78°48'W) is situated in Pichincha province (north-west Ecuador), 25 km north-west of Quito, on the western slope of Volcán Pichincha. The approximate altitude of the area covered by this review is 1,250–1,650 m. Mindo is in the subtropical zone, considered to lie between 1,000 and 1,200 m to 2,300 and 2,500 m¹⁹.

Climate

Although the rainy season in the north-west Ecuadorian Andes is usually between November and April, Mindo's proximity to the equator leads to almost daily rainfall, principally in the evenings (although some seasonal variance in rainfall remains evident), accompanied by constant humidity, reminiscent of tropical forests. Annual rainfall varies from 800–4,000 mm p.a. (subject to topography) in the higher areas of the tropical Andes⁸.

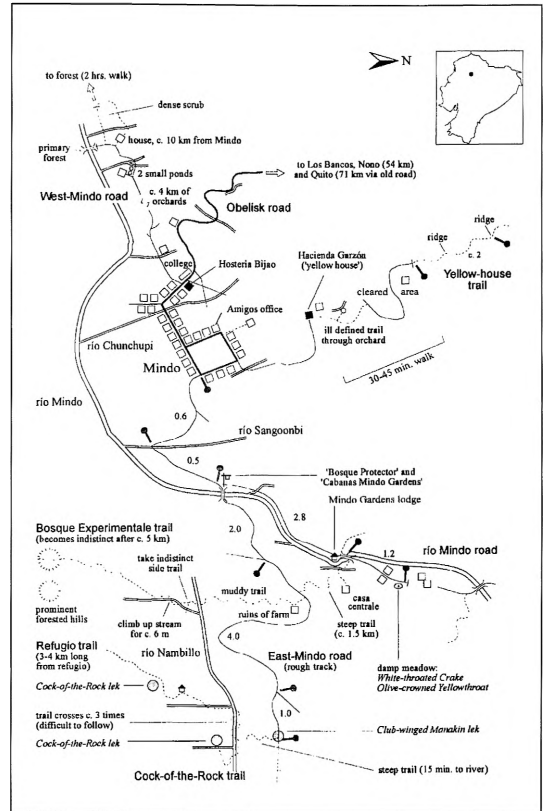
Vegetation

The tall canopied forests around the village possess a dense understorey, particularly in disturbed areas, where bamboo *Guadua* sp. sometimes occurs. Algal growths and mosses are also a feature of the forest. Tree ferns, an essential characteristic of higher-altitude forests are uncommon, and epiphytic plants, of which a great diversity are usually found in the montane zones, are relatively poorly represented.

Threatened and endemic birds

The forests surrounding Mindo hold a number of threatened, near-threatened⁵ and endemic bird species. Endemic is a term used to describe numerous distribution patterns, but refers here to species with known ranges of 50,000 km² or less. This subjective definition was put forward by Terborgh and Winter²⁴ and adopted by BirdLife International as a practical measurement⁹. Endemics tend to be clustered in centres. Such centres in the Andes are typically long and narrow, reflecting ecological niches consistent with altitudinal bands. For overviews of endemism in South American birds and its importance in determining conservation management strategies see Fjeldså & Krabbe⁸, Ridgely & Tudor¹⁹, Williams, Best & Heijnen²⁵ and Bloch *et al.*³.

Mindo falls within the Chocó and Pacific slope Andes (hereafter referred to as the Chocó) Endemic Bird Area (EBA), as defined by BirdLife International in its Biodiversity Project, which identified world centres of avian endemism. A total of 64 endemics occur in the Chocó EBA, 14 of which are shared with five other EBAs²². Our study has real-



The main birding sites around Mindo, Pichincha province, north-west Ecuador (the authors are grateful to Tom Heijnen for allowing use of the map, prepared for the forthcoming *A guide to bird-watching in Ecuador and the Galápagos Islands*).

ised a total of 334 species recorded from Mindo with a further 50–100 species having been reliably recorded 100–200 m above or below the altitudinal limits adopted by this study. Of the total list, 26 are Chocó endemics. Giant Antpitta *Grallaria gigantea* (which is a High Central Andean endemic) is also known from the study area. Four or five threatened and 10 near-threatened species (see below) recorded are designated (*) on the systematic list, while restricted-range (i.e. “endemic”) species are designated (#).

Of the endemics recorded at Mindo, only five are known to occur within other EBAs. Of the total 64 Chocó endemics, 15 are known only from Colombia. Therefore c. 41% of the total Chocó endemics (and 53% of those known from Ecuador) have been recorded at Mindo. These figures exclude two species listed by some authors, but for which

no observer can be traced and three species (Gorgeted Sunangel *Heliangelus strophianus*, Long-wattled Umbrellabird *Cephalopterus penduliger* and Moss-backed Tanager *Bangsia edwardsi*) known to occur just outside the study area. Chocó endemics known to occur at similar altitudes elsewhere in northern Ecuador (but unrecorded from Mindo) are: Rose-faced Parrot *Pionopsitta pulchra* although it has been recorded on the Nono–Mindo road (Krabbe 1984), one was seen in the canopy along the Yellow House trail in 1986 (Paul Coopmans) and in 1994 was found nesting near Mindo (precise location unclear) by N. Krabbe and G. Engblom (*in litt.*), Banded Ground-Cuckoo *Neomorphus radiolosus*, Fulvous-dotted Treerunner *Margarornis stellatus* and Purplish-mantled Tanager *Irisidornis porphyrocephala* which has recently been seen on the first part of the old road above the former obelisk (M. Lysinger *in litt.* to Paul Coopmans). Others occurring at marginally lower altitudes (up to 900–1100 m) are: Plumbeous Forest-falcon *Micrastur plumbeus*, Rufous-crowned Antpitta *Pittasoma rufopileatum*, Ochraceous Attila *Attila torridus*, Golden-chested Tanager *Bangsia rothschildi*, Scarlet-and-white Tanager *Chrysothlypis salmomi* and Yellow-green Bush-tanager *Chlorospingus flavovirens*.

Of those bird species designated as threatened⁵, all five recorded from Mindo are rather enigmatic. Hoary Puffleg *Haplophaedia lugens* is also known only from south-west Colombia and north-west Ecuador. There are a number of recent sight records and older specimens documented for Mindo⁵. This hummingbird of the lower storey forest interior is characteristically difficult to observe. Nonetheless, recent research (principally in Colombia) suggests that despite the species's restricted distribution, it can occur at relatively high densities in suitable habitat, and its apparent scarcity is due, at least in part, to its retiring nature⁵.

Little Woodstar *Acestrura bombus*, a poorly known hummingbird, from west Ecuador (north to Esmeraldas) to central Peru (south to Huánuco) has recently been collected near Mindo. A specimen was taken by J. C. Matheus at 2,030 m, below Hacienda Santa Rosa, along the Lloa–Mindo road in August 1987⁵. The species has been found from sea level to 2,250 m in west Ecuador.

Grallaria gigantea is restricted to Colombia and Ecuador. Three forms are known; *lehmanni* in Colombia, with *hylodroma* and *gigantea* occurring on the western and eastern slopes of the Ecuadorian Andes. A specimen (in the British Museum of Natural History, Tring) taken at 1200 m in February 1939 was, until recently, the only

record from Mindo⁵. However a sight record was made along the Yellow House trail in September 1985 (N. Lindsey pers. comm.) and subsequently in early November 1991 Paul Greenfield tape-recorded what he believed to be this species near Tandayapa, with more recordings from the same locality being made in January 1994. Further confirmation of the species's presence came in December 1993 and February 1994, when J.C. Matheus observed *G. gigantea* 3.1 km south-east of the village, in the narrow Río Mindo plain¹⁷ and later in 1994, with at least one additional sight record (by G. Finch *in litt.*) and a singing bird heard by G. Engblom (*in litt.*). One was mist-netted on several occasions in the Mindo area in 1995 (J. Hornbuckle *in litt.*) and the species has recently been video-taped in the Tandayapa area at Bellavista lodge (C. Collins). In July or August 1996 at least one was regularly encountered around a clearing approximately 10 km along the Yellow House trail (A. Lewis pers. comm. to Rob Williams). An additional ten localities (based on a total of 19 specimens) are known from Pichincha province. Most significantly four birds were taken on three separate occasions between 1936 and 1958 at Cerro Castillo, an untraced locality, but considered to be near Mindo⁵.

Grey-breasted Flycatcher *Lathrotriccus griseipectus* is generally uncommon or rare in a variety of forest types, from sea level to 1,750 m, on the Pacific slope of the Andes, from Esmeraldas province, Ecuador to northern Peru. There is one record from Mindo: a specimen (in BMNH, Tring) collected in January 1914⁵, although Bob Ridgely (*in litt.* to Rob Williams) and Paul Coopmans speculate that the specimen may have been taken at a lower elevation. There is one other published record from Pichincha province, several recent sight records from Tinalandia (Pichincha) by Paul Coopmans and a single record from Esmeraldas.

Known only from the western Andes of Colombia and north-west Ecuador, the Tanager Finch *Oreothraupis arremonops* has been collected from Mindo at 1,260m^{9,10} and at 1,200 m in March 1939 (specimen in BMNH, Tring)⁵. Additional records nearby are from the untraced Cerro Castillo²³ and from above Tandayapa, where there was a sight record in July 1987⁵. This species is reclusive, shy, and consequently difficult to observe. In addition its soft call is easily overlooked¹⁹. Whilst undeniably rare and localised, its apparent tendency to occur at low densities in north-west Ecuador may partly be explained by its unobtrusive nature.

In addition, the following species, categorised as near-threatened⁵, have been recorded at Mindo:

Fasciated Tiger-heron *Tigrisoma fasciatum*, Black-and-white Hawk-eagle *Spizastur melanoleucus*, Black-and-chestnut Eagle *Oroaetus isidori*, Baudó Guan *Penelope ortonii*, Dark-backed Wood-quail *Odontophorus melano-notus*, Toucan Barbet *Semnornis ramphastinus*, Pale-mandibled Aracari *Pteroglossus erythro-pygus*, Plate-billed Mountain-toucan *Andigena laminirostris*, Scaled Fruiteater *Ampeloides tschudii* and Beautiful Jay *Cyanolyca pulchra*.

Significant range extensions

Species ranges in the Neotropics are still subject to constant revision. Mindo, being only approximately 120 km from the Colombian border, has thrown up some interesting range extensions.

Nariño Tapaculo *Scytalopus vicini*, a species previously known only from two localities in south-west Colombia, was found near Mindo in April 1989 by PC. Subsequently ten specimens were collected there¹⁶, suggesting that the species is not uncommon.

In early March 1990, 6.5 km south-east of the village, Colin Bushell (*in litt.*) and Bret Whitney *et al.* taped in (using a tape of Cinnamon Screech-owl *O. petersoni*) and spotlighted a uniform cinnamon-buff owl which they identified, primarily on range (Rufescent Screech-owl *O. ingens*, the only close congener in range at this locality, has a quite different vocalisation) as *O. colombianus*. The observers noted the brown irides, but were unable to comment on the bird's overall size, tail length or the extent of tarsi feathering. One previous record from Ecuador has been published⁷: a specimen (male) collected from Nanegal, Pichincha province (lodged in Museum of Natural History, Paris). Prior to the 1990 sighting the species had been discovered on the Garzon property and along the entrance road by Paul Greenfield and others, and has been observed in the same areas until the present. A single bird of this species was tape-recorded and collected (MECN) at the relatively nearby locality of Maquipunca on 31 March 1993 (N. Krabbe and Paul Coopmans). The taxonomic status of this form remains unclear; Sibley & Monroe²¹ prefer to regard *O. colombianus* as a subspecies of *O. ingens*.

Birdwatching opportunities

Access is either via the relatively new Quito–Calacali–Los Bancos road, or the old Nono–Tandayapa road. These join less than a kilometre from the side road which leads to Mindo (signposted Carmelo de Mindo Lodge). This road, which has recently been widened largely follows the old road bed with some sections, especially

higher up, having been shortcut, passes through secondary forest, good for a wide variety of species. Scarcer and more interesting species possible here include: *O. isidori*, Wattled Guan *Aburria aburri* (seasonal), Scarlet-backed Woodpecker *Veniliornis callonotus* (a dry scrub species, which due to continued deforestation is apparently spreading into new areas in north-western Ecuador, including Mindo), Brown Violetear *Colibri delphinae*, Velvet-purple Coronet *Boissonneaua jardini*, *Scytalopus vicini*, Club-winged Manakin *Machaeropterus deliciosus*, Yellow-collared Chlorophonia *Chlorophonia flavirostris* (although this species is markedly seasonal Paul Greenfield *in litt.* to Rob Williams), the near endemic but widespread in the western half of the country Ecuadorian Thrush *Turdus maculirostris*, Dusky-bellied Bush-tanager *Chlorospingus semifuscus* and *Cyanolyca pulchra*. Large flocks of tanagers are frequently encountered (and on higher sections of the Tandayapa road may include several species of mountain-tanagers), with Rufous-throated *Tangara rufigula*, Glistening-green *Chlorochrysa phoenicotis* and White-winged Tanagers *Piranga leucoptera* among common species like Golden *Tangara arthus* and Golden-naped Tanagers *T. ruficervix*. Interesting inhabitants of the lower storey include Rufous-breasted Antthrush *Formicarius rufipectus* and White-throated Spadebill *Platyrinchus mystaceus*. Furnariids and woodcreepers abound, while hummingbirds such as the ubiquitous Booted Racket-tail *Ocreatus underwoodii* are a regular feature. Stygian Owl *Asio stygius* has been heard high above the intersection of the Mindo–Los Blancos–Quito roads (P. A. Scharf *in litt.*), while Ochre-breasted Antpitta *Grallaria flavirostris* has been sighted on several occasions and mist-netted along the road to the village.

To the west of the village (from the main square), and beyond the Garzon family farm, is the Yellow House trail. A small charge is levied for using the trail, payable only once at the house, where a logbook is also kept. Visitors can also stay with Señora Garzon for a small fee (c. \$10 for full board and lodging). The trail initially skirts secondary forest, before entering it, traversing several steep ridges as it winds towards the main, obelisk road. Species regularly recorded along this trail include Andean Cock-of-the-Rock *Rupicola peruviana* (of the race *sanguinolenta*), which lek in this part of the forest, Barred Parakeet *Bolborhynchus lineola* (which is sporadically common throughout the Mindo area, although it appears to be highly nomadic and more frequent at higher elevations),

Rusty-winged *Premnornis guttuligera* and Spotted Barbtails *Premnoplex brunnescens*. Several hundred metres beyond the Garzon house an obscure service trail cuts down into a narrow gully, where a forest stream is a good place to look for "skulkers" such as Esmeraldas Antbird *Myrmeciza nigricauda* and Pale-vented Thrush *Turdus obsoletus*.

The Río Mindo is home to a number of species including *Tigrisoma fasciatum* and Sunbittern *Eurypyga helias*, both of which can usually be found in the area around the second wooden bridge west of the village. Other typical riverine species such as Torrent Duck *Merganetta armata*, Torrent Tyrannulet *Serpophaga cinerea* and White-capped Dipper *Cinclus leucocephalus* are more easily located, anywhere along the river. The surrounding forested slopes also provide worthwhile birding. Species such as Red-billed *Pionus sordidus* and Bronze-winged Parrots *P. chalcopterus* and Golden-headed Quetzal *Pharomachus auriceps* are common. Broad-billed *Electron platyrhynchum* and Rufous Motmots *Baryphthengus ruficapillus* are also regular in this area.

North of the village a long ridge cloaked in primary forest harbours a number of species less tolerant of habitat disturbance. Two trails lead into this forest; the Amigos and the Bosque Experimental trails. The Amigos trail is administered by the Amigos de la Naturaleza de Mindo who have an office in the village. For a small fee they will organise local guides to take people to visit this area. The trail is difficult to follow without such local knowledge, as it starts in a farmed valley, and repeatedly crosses a river, before following a streambed up into the forest. An overnight stay in the forest *refugio* is advisable as it takes five or six hours to walk here from the village, although one can elect to drive part of the way. This trail is an excellent area in which to get to grips with species such as *Andigena laminirostris* and Russet-backed Oropendola *Psarocolius angustifrons*. Other possibilities, uncommon elsewhere in the Mindo area, include Tawny-throated Leaf-tosser *Sclerurus mexicanus*, Golden-winged Manakin *Masius chrysopterus*, Andean *Myadestes ralloides* and the rarely seen Black Solitaires *Entomodestes coracinus*. The Bosque Experimental trail is administered by the Fundación Pacaso Pacaso and is difficult to find (Cesar at the Hosteria Bijao can usually contact members of the Fundación in order to arrange access). There may be a small charge. Although no *refugio* has yet been built in this forest the trail can be covered effectively in a day's journey from the village. Species recorded from this recently cut and little explored

trail include *Odontophorus melanonotus*, Collared Trogon *Trogon collaris*, Plain-backed Antpitta *Grallaria haplonota* and *Grallaricula flavirostris* (the latter being of the race *mindoensis*, which is endemic to Pichincha province) and Thrush-like Schiffornis *Schiffornis turdinus*. However in late 1993 the trail was apparently heavily overgrown and impossible to follow. These trails are situated on the same ridge and most of the species mentioned have been recorded from both.

The road leading to these trails from the village is passable in a 4-wheel drive vehicle, but it is preferable to walk as this area also provides good birding; *P. ortoni*, Lyre-tailed Nightjar *Uropsalis lyra*, Crested Quetzal *Pharomachus antisianus* and *Pteroglossus erythropygius* have all been recorded. The area in the immediate vicinity of the old Narvaez farm (which has now burnt down) is particularly good for *Semnornis ramphastinus*, known locally as "yumbo". This species is not uncommon around Mindo, even being seen in seriously degraded habitats such as cane plantations and roadside vegetation. A new, large hotel recently (late 1993) opened along this road called the Mindo Gardens (cost c.\$50 a night) but was apparently closed in early 1996. (A new lodge, just east of the village, with good forest within close proximity has recently opened; ask for El Carmelo de Mindo).

Little seems to be known of the area to the east of the village, although a road follows the Río Mindo in this direction for c.10 km. Beyond this a dirt track, which initially skirts the forest margins, eventually continues into primary or old secondary forest. It is unclear how far this track penetrates the forest interior. The following species were recorded during an afternoon (on foot from the village) in this area in January 1992; Grey-rumped *Chaetura cinereiventris* and Band-rumped Swifts *C. spinicauda*, Plain-brown Woodcreeper *Dendrocincla fuliginosa*, Streaked Xenops *Xenops rutilans*, White-bearded Manakin *Manacus manacus*, *Chlorochrysa phoenicotis* and Blue Seedeater *Amaurospiza concolor* (GMK, TM).

Reasonably large patches of forest remain north, west and east of the village. Little or nothing is known of the bird communities on these slopes, primarily due to a lack of obvious access trails.

Conservation

Forest clearance has occurred around the village, on the valley floors of the two main rivers and along the primary roads and tracks. Slash-and-burn agriculture is important to the local economy, but excessive clearance will damage the

watershed, the village being almost wholly surrounded by higher ground. Most forest clearance is to the south and east of Mindo, adjacent to the main road. A new road was recently completed from Quito to San Miguel de los Blancos. One area of forest is a listed Bosque Protector and a management plan has been completed for this area, now known as the Mindo Nambillo Bosque Protector (C. Teixeira *in litt.* to TM). However in legal terms, this designation is of decidedly limited practical conservation value, as enforcement measures are rarely applied. At the time of writing access to certain areas of forest around Mindo is becoming more difficult, as several different landowners are laying claim to the same area of land. Ownership rights and the issue of trespassing have become significant issues among certain sections of the local community.

Contacts

Amigos de la Naturaleza de Mindo (Corporación Ecológica), Casillo de Correo 17-03-1673, Quito (tel.455.344).

Fundación Pacaso & Pacaso (Para el Desarrollo de Mindo), Av. Amazonas 1671 y Orellana edif., Torre Alaba of. 505, Quito (tel.554.105).

Vinicio Perez, Secoya 140 y Balzapamba, Sector El Pintado, Quito (Vinicio is compiling a book about the birds of Mindo in order to promote local conservation and ecotourism – see Bulletin Board this issue).

Mindo Gardens, c/o Mr & Mrs Burnstad, P.O. Box 318, Redwood Valley, CA 95470, U.S.A.

Several of the major bird tour companies (in both the USA and UK) include Mindo in their itineraries.

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Appendix. List of birds recorded at Mindo

PHALACROCORACIDAE

Neotropic Cormorant *Phalacrocorax olivaceus*

ARDEIDAE

Great Egret *Casmerodius albus*

Snowy Egret *Egretta thula*

Striated Heron *Butorides striatus*

Cattle Egret *Bubulcus ibis*

(*)Fasciated Tiger-heron *Tigrisoma fasciatum*

ANATIDAE

Torrent Duck *Merganetta armata*

CATHARTIDAE

Black Vulture *Coragyps atratus*

Turkey Vulture *Cathartes aura*

ACCIPITRIDAE

American Swallow-tailed Kite *Elaenoides forficatus*

Grey-headed Kite *Leptodon cayanensis*

Hook-billed Kite *Chondrohierax uncinatus*

Double-toothed Kite *Harpagus bidentatus*

Bicolored Hawk *Accipiter bicolor*

Broad-winged Hawk *Buteo platypterus*

Roadside Hawk *Buteo magnirostris*

White-rumped Hawk *Buteo leucorrhous*

Barred Hawk *Leucopternis princeps*

(*)Black-and-white Hawk-eagle *Spizastur melanoleucus*

Black Hawk-eagle *Spizastur tyrannus*

(*)Black-and-chestnut Eagle *Oroaetus isidori*

FALCONIDAE

Barred Forest-falcon *Micrastur ruficollis*

Collared Forest-falcon *Micrastur semitorquatus*

Bat Falcon *Falco rufigularis*

American Kestrel *Falco sparverius*

CRACIDAE

Crested Guan *Penelope purpurascens*

(#)Baudó Guan *Penelope ortoni*

Wattled Guan *Aburria aburri*

Sickle-winged Guan *Chamaepetes goudotii*

ODONTOPHORIDAE

(*)(#)Dark-backed Wood-quail *Odontophorus melanonotus*

Rufous-fronted Wood-quail *Odontophorus erythrops**

RALLIDAE

White-throated Crake *Laterallus albigularis*

EURYPYGIDAE

Sunbittern *Eurypyga helias*

SCOLOPACIDAE

Spotted Sandpiper *Actitis macularia*

COLUMBIDAE

Band-tailed Pigeon *Columba fasciata*

Ruddy Pigeon *Columba subvinacea*

Plumbeous Pigeon *Columba plumbea*

White-tipped Dove *Leptotila verreauxi*

White-throated Quail-dove *Geotrygon frenata*

PSITTACIDAE

Maroon-tailed Parakeet *Pyrrhura melanura*

Barred Parakeet *Bolborhynchus lineola*

Red-billed Parrot *Pionus sordidus*

Speckle-faced Parrot *Pionus tumultuosus*

Bronze-winged Parrot *Pionus chalcopterus*

Scaly-naped Parrot *Amazona mercenaria*

Red-lored Parrot *Amazona autumnalis*

CUCULIDAE

Dark-billed Cuckoo	<i>Coccyzus melacoryphus</i>
Grey-capped Cuckoo	<i>Coccyzus lansbergi</i>
Squirrel Cuckoo	<i>Piaya cayana</i>
Little Cuckoo	<i>Piaya minuta</i>
Smooth-billed Ani	<i>Crotophaga ani</i>
Striped Cuckoo	<i>Tapera naevia</i>

STRIGIDAE

(#)Colombian Screech-owl	<i>Otus colombianus</i>
Andean Pygmy-owl	<i>Glauclidium jardinii</i>
Mottled Owl	<i>Ciccaba virgata</i>
Burrowing Owl	<i>Speotyto cunicularia</i>

STEATORNITHIDAE

Oilbird	<i>Steatornis caripensis</i>
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NYCTIBIIDAE

Common Potoo	<i>Nyctibius griseus</i>
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CAPRIMULGIDAE

Rufous-bellied Nighthawk	<i>Lurocalis rufiventris</i>
Pauraque	<i>Nyctidromus albicollis</i>
Band-winged Nightjar	<i>Caprimulgus longirostris</i>
Lyre-tailed Nightjar	<i>Uropsalis lyra</i>

APODIDAE

White-collared Swift	<i>Streptoprocne zonaris</i>
Chestnut-collared Swift	<i>Cypseloides rutilus</i>
Chimney Swift	<i>Chaetura pelagica</i> ^b
Grey-rumped Swift	<i>Chaetura cinereiventris</i>
Band-rumped Swift	<i>Chaetura spinicauda</i>
White-tipped Swift	<i>Aeronautus montivagus</i>
Lesser Swallow-tailed Swift	<i>Panyptila cayennensis</i>

TROCHILIDAE

Green-fronted Lancebill	<i>Doryfera ludoviciae</i>
White-whiskered Hermit	<i>Phaethornis yaruqui</i>
Tawny-bellied Hermit	<i>Phaethornis symmatophorus</i>
Long-tailed Hermit	<i>Phaethornis superciliosus</i>
Little Hermit	<i>Phaethornis longuemareus</i>
White-necked Jacobin	<i>Florisuga mellivora</i>
Brown Violetear	<i>Colibri delphinae</i>
Green Violetear	<i>Colibri thalassinus</i>
Sparkling Violetear	<i>Colibri coruscans</i>
Green Thorntail	<i>Popelairia conversii</i>
Blue-tailed Emerald	<i>Chlorostilbon mellisugus</i>
Green-crowned Woodnymph	<i>Thalurania fannyi</i>
Andean Emerald	<i>Amazilia franciae</i>
Rufous-tailed Hummingbird	<i>Amazilia tzacatl</i>
Speckled Hummingbird	<i>Adelomyia melanogenys</i>
(#)Purple-bibbed Whitetip	<i>Urostroke benjamini</i>
Fawn-breasted Brilliant	<i>Heliodoxa rubinoides</i>
(#)Empress Brilliant	<i>Heliodoxa imperatrix</i>
White-tailed Hillstar	<i>Urochroa bougeri</i>
(#)Brown Inca	<i>Coeligena wilsoni</i>
Buff-tailed Coronet	<i>Boissonneaua flavescens</i>
(#)Velvet-purple Coronet	<i>Boissonneaua jardini</i>
(*) (#)Hoary Puffleg	<i>Haplophoedea lugens</i>
Booted Racket-tail	<i>Ocreatus underwoodii melanantherus</i>
Long-tailed Sylph	<i>Agelaiocercus kingi</i>
(#)Violet-tailed Sylph	<i>Agelaiocercus coelestis</i>
Wedge-billed Hummingbird	<i>Schistes geoffroyi</i>
Purple-crowned Fairy	<i>Heliotryx barroti</i>
Long-billed Starthroat	<i>Heliomaster longirostris</i>
Purple-throated Woodstar	<i>Calliphlox mitchellii</i>
White-bellied Woodstar	<i>Acestrura mulsant</i>
(*) Little Woodstar	<i>Acestrura bombus</i>

TROGONIDAE

Crested Quetzal	<i>Pharomachrus antisianus</i>
Golden-headed Quetzal	<i>Pharomachrus auriceps</i>
Collared Trogon	<i>Trogon collaris</i>
Masked Trogon	<i>Trogon personatus</i>

ALCEDINIDAE

Ringed Kingfisher	<i>Ceryle torquata</i>
Green Kingfisher	<i>Chloroceryle americana</i>

MOMOTIDAE

Broad-billed Motmot	<i>Electron platyrhynchum</i>
Rufous Motmot	<i>Baryphthengus ruficapillus</i>

BUCCONIDAE

Barred Puffbird	<i>Nystalus radiatus</i>
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CAPITONIDAE

(#)Orange-fronted Barbet	<i>Capito squamatus</i>
Red-headed Barbet	<i>Eubucco bourcierii</i>
(*) (#)Toucan Barbet	<i>Semnormis ramphastinus</i>

RAMPHASTIDAE

Crimson-rumped Toucanet	<i>Aulacorhynchus haematopygus</i>
(*) (#)Pale-mandibled Aracari	<i>Pteroglossus erythrogygius</i>
(*) (#)Plate-billed Mountain-toucan	<i>Andigena laminirostris</i>
(#)Chocó Toucan	<i>Ramphastos brevis</i>
Chestnut-mandibled Toucan	<i>Ramphastos swainsonii</i>

PICIDAE

Golden-olive Woodpecker	<i>Piculus rubiginosus</i>
Crimson-mantled Woodpecker	<i>Piculus rivolii</i>
Lineated Woodpecker	<i>Dryocopus lineatus</i>
Smoky-brown Woodpecker	<i>Veniliornis fumigatus</i>
Scarlet-backed Woodpecker	<i>Veniliornis colonatus</i>
Guayaquil Woodpecker	<i>Campephilus guayaquilensis</i>
Powerful Woodpecker	<i>Campephilus pollens</i>

DENDROCOLAPTIDAE

Tyrannine Woodcreeper	<i>Dendrocincla tyrannina</i>
Plain-brown Woodcreeper	<i>Dendrocincla fuliginosa</i>
Wedge-billed Woodcreeper	<i>Glyphorhynchus spirurus</i>
Strong-billed Woodcreeper	<i>Xiphocolaptes promeropirhynchus</i>
Spotted Woodcreeper	<i>Xiphorhynchus erythrogygius</i>
Streak-headed Woodcreeper	<i>Lepidocolaptes souleyetii</i>
Montane Woodcreeper	<i>Lepidocolaptes affinis</i>
Brown-billed Scythebill	<i>Campylorhamphus pusillus</i>

FURNARIIDAE

Pacific Hornero	<i>Furnarius cinnamomeus</i>
Slaty Spinetail	<i>Synallaxis brachyura</i>
Red-faced Spinetail	<i>Cranioleuca erythroptis</i>
Line-cheeked Spinetail	<i>Cranioleuca antisianensis</i>
Rusty-winged Barbtail	<i>Premnormis guttuligera</i>
Spotted Barbtail	<i>Premnoplex brunnescens</i>
Pacific Tuftedcheek	<i>Pseudocolaptes johnsoni</i>
Streaked Tuftedcheek	<i>Pseudocolaptes boissonneautii</i>
Lineated Foliage-gleaner	<i>Syndactyla subalaris</i>
Spectacled Foliage-gleaner	<i>Anabacerthia variegaticeps</i>
Buff-fronted Foliage-gleaner	<i>Philydor rufus</i>
Ruddy Foliage-gleaner	<i>Automolus rubiginosus</i>
Buff-throated Foliage-gleaner	<i>Automolus ochrolaemus</i>
Striped Treehunter	<i>Thripadectes holostictus</i>
Streak-capped Treehunter	<i>Thripadectes virgaticeps</i>
(#)Uniform Treehunter	<i>Thripadectes ignobilis</i>
Streaked Xenops	<i>Xenops rutilans</i>
Tawny-throated Leaf-tosser	<i>Sclerurus mexicanus</i>

FORMICARIIDAE

Great Antshrike	<i>Taraba major</i>
Uniform Antshrike	<i>Thamnophilus unicolor</i>
Russet Antshrike	<i>Thamnistes anabatinus</i>
Pacific Streaked-antwren	<i>Myrmotherula surinamensis</i>
Pain Antwren	<i>Dysthannus mentalis</i>
Slaty Antwren	<i>Myrmotherula schisticolor</i>
Long-tailed Antbird	<i>Drymophila caudata</i>
Rufous-rumped Antwren	<i>Tereneura callinota</i>
Dusky Antbird	<i>Cercomacra tyrannina</i>
Esmeraldas Antbird	<i>Myrmeciza nipicauda</i>
Immaculate Antbird	<i>Myrmeciza immaculata</i>
Black-headed Antthrush	<i>Formicarius nigricapillus</i>
Rufous-breasted Antthrush	<i>Formicarius rufipectus</i>
(*) (#) Giant Antpitta	<i>Grallaria gigantea</i>
Scaled Antpitta	<i>Grallaria guatemalensis</i>
Plain-backed Antpitta	<i>Grallaria haplonota</i>
Ochre-breasted Antpitta	<i>Grallaricula flavirostris</i>

RHINOCRYPTIDAE

Nariño Tapaculo	<i>Scytalopus vicini</i>
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COTINGIDAE

Green-and-black Fruiteater	<i>Pipreola riefferii</i>
(#) Orange-breasted Fruiteater	<i>Pipreola jucundi</i>
(*) Scaled Fruiteater	<i>Ampelioides tschudii</i>
Olivaceous Piha	<i>Lipaugus cryptolophus</i>
Barred Becard	<i>Pachyramphus versicolor</i>
Cinnamon Becard	<i>Pachyramphus cinnamomeus</i>
White-winged Becard	<i>Pachyramphus polychopterus</i>
Black-and-white Becard	<i>Pachyramphus albogriseus</i>
One-coloured Becard	<i>Platypsaris homochrous</i>
Masked Tityra	<i>Tityra semifasciata</i>

RUPICOLIDAE

Andean Cock-of-the-Rock	<i>Rupicola peruviana</i> (<i>sanguinolenta</i>)
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PIPRIDAE

Golden-winged Manakin	<i>Masius chrysopterus</i>
White-bearded Manakin	<i>Manacus manacus</i>
(#) Club-winged Manakin	<i>Alcotopterus deliciosus</i>
Thrush-like Schiffornis	<i>Schiffornis turdinus</i>

TYRANNIDAE

Black Phoebe	<i>Sayornis nigricans</i>
Tropical Kingbird	<i>Tyrannus melancholicus</i>
Piratic Flycatcher	<i>Legatus leucophaeus</i>
Boat-billed Flycatcher	<i>Megarynchus pitangua</i>
Golden-crowned Flycatcher	<i>Myiodynastes chrysocephalus</i>
Rusty-margined Flycatcher	<i>Myiozetetes cayanensis</i>
Social Flycatcher	<i>Myiozetetes similis</i>
Grey-capped Flycatcher	<i>Myiozetetes granadensis</i>
Bright-rumped Attila	<i>Attila spadiceus</i>
Dusky-capped Flycatcher	<i>Myiarchus tuberculifer</i>
Western Wood-Pewee	<i>Contopus sordidulus</i>
Smoke-coloured Pewee	<i>Contopus fumigatus</i>
Acadian Flycatcher	<i>Empidonax virescens</i>
(*) Grey-breasted Flycatcher	<i>Lathrotriccus griseipectus</i>
Tawny-breasted Flycatcher	<i>Myiobius villosus</i>
Ornate Flycatcher	<i>Myiobius ornatus</i>
Cinnamon Flycatcher	<i>Pyrrhomyias cinnamomea</i>
Orange-crested Flycatcher	<i>Myiophobus phoenicomitra</i>
Fluorescent Flycatcher	<i>Myiophobus flavicans</i>
Handsome Flycatcher	<i>Myiophobus pulcher</i>
Bran-coloured Flycatcher	<i>Myiophobus fasciatus</i>
White-throated Spadebill	<i>Platyrinchus mystaceus</i>
Fulvous-breasted Flatbill	<i>Rhynchocyclus fulvipectus</i>
Common Tody-flycatcher	<i>Todirostrum cinereum</i>
Scale-crested Pygmy-tyrant	<i>Lophotriccus pileatus</i>

Bronze-olive Pygmy-tyrant	<i>Pseudotriccus pelzelni</i>
Marble-faced Bristle-tyrant	<i>Pogonotriccus ophthalmicus</i>
Yellow Tyrannulet	<i>Capsiempis flaveola</i>
Torrent Tyrannulet	<i>Serpophaga cinerea</i>
White-tailed Tyrannulet	<i>Mecocerculus poeiclocercus</i>
Rufous-winged Tyrannulet	<i>Mecocerculus calopterus</i>
White-crested Elaenia	<i>Elaenia albiceps</i>
Lesser Elaenia	<i>Elaenia chiriquensis</i>
Sierran Elaenia	<i>Elaenia pallatangae</i>
Southern Beardless-Tyrannulet	<i>Camptostoma obsoletum</i>
Tawny-rumped Tyrannulet	<i>Phyllomyias uropygialis</i>
Sooty-headed Tyrannulet	<i>Phyllomyias griseiceps</i>
Ashy-headed Tyrannulet	<i>Phyllomyias cinereiceps</i>
Golden-faced Tyrannulet	<i>Tyranniseus viridiflavus</i>
Slaty-capped Flycatcher	<i>Leptopogon superciliaris</i>
Streak-necked Flycatcher	<i>Mionectes striaticollis</i>
Olive-striped Flycatcher	<i>Mionectes olivaceus</i>

HIRUNDINIDAE

Blue-and-white Swallow	<i>Notiochelidon cyanoleuca</i>
Southern Rough-winged Swallow	<i>Stelgidopteryx ruficollis</i>
Barn Swallow	<i>Hirundo rustica</i>

CORVIDAE

(*) (#) Beautiful Jay	<i>Cyanolyca pulchra</i>
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CINCLIDAE

White-capped Dipper	<i>Cinclus leucocephalus</i>
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TROGLODYTIDAE

Sepia-brown Wren	<i>Cinnycerthia peruana</i>
Bay Wren	<i>Thryothorus nigricapillus</i>
House Wren	<i>Troglodytes aedon</i>
Mountain Wren	<i>Troglodytes solstitialis</i>
Whiskered Wren	<i>Thryothorus mystacalis</i>
Grey-breasted Wood-wren	<i>Henicorhina leucophrys</i>
Southern Nightingale-wren	<i>Microcerculus marginatus</i>

SYLVIIDAE

Tawny-faced Gnatwren	<i>Microbatas cineiventris</i>
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TURDIDAE

Andean Solitaire	<i>Myadestes ralloides</i>
(#) Black Solitaire	<i>Entomodestes coracinus</i>
Slaty-backed Nightingale-Thrush	<i>Catharus fuscater</i>
Swainson's Thrush	<i>Catharus ustulatus</i>
Pale-eyed Thrush	<i>Platycichla leucops</i>
Glossy-black Thrush	<i>Turdus serranus</i>
Pale-vented Thrush	<i>Turdus obsoletus</i>
Ecuadorian Thrush	<i>Turdus maculirostris</i>

VIREONIDAE

Black-billed Peppershrike	<i>Cyclarhis nigrirostris</i>
Red-eyed Vireo	<i>Vireo olivaceus</i>
Brown-capped Vireo	<i>Vireo leucophrys</i>
Lesser Greenlet	<i>Hylophilus decurtatus</i>

ICTERIDAE

Shiny Cowbird	<i>Molothrus bonariensis</i>
Giant Cowbird	<i>Scaphidura oryzivora</i>
Russet-backed Oropendola	<i>Psarocolius angustifrons</i> (<i>atrocaneus</i>)
Scarlet-rumped Caciue	<i>Cacicus uropygialis</i>

PARULIDAE

Black-and-white Warbler	<i>Mniotilta varia</i>
Tennessee Warbler	<i>Vermivora peregrina</i>
Tropical Parula	<i>Parula pitaiyumi</i>
Cerulean Warbler	<i>Dendroica cerulea</i> ^{ad}
Blackburnian Warbler	<i>Dendroica fusca</i>
Masked Yellowthroat	<i>Geothlypis aequinoctialis</i>



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1 Forest above Mindo (Michael Køie Poulsen)

2 Common Potoo *Nyctibius griseus* (Robert S. R. Williams)

3 Spotted Barbtail *Premnoplex brunescens* (Robert S. R. Williams)

4 Southern Nightingale-Wren *Microcerulus marginatus* (Robert S. R. Williams)

5 Golden-winged Manakin *Masius chrysopterus* (Robert S. R. Williams)

6 Violet-tailed Sylph *Agelaiocercus coelestis* (Robert S. R. Williams)