Ornithological observations from Reserva Natural Tambito, Cauca, south-west Colombia

Thomas M. Donegan and Liliana M. Dávalos

Cotinga 12 (1999): 48-55

Este artículo describe la avifauna de la Reserva Natural Tambito, una importante reserva con instalaciones para ecoturismo e investigación. Los autores realizaron dos estudios estandarizados en 1997 y 1998, cuyos resultados representan la mayor parte de los datos sobre la avifauna de la reserva: unas 313 especies fueron registradas incluyendo cuatro globalmente amenazadas y nueve casi-amenazadas. Es posible que también existan otras especies con problemas de conservación. También se presentan nuevos registros altitutudinales y de distribución. También rendimos un sentido homenaje a Alvaro Negret—cuya trágica muerte en agosto de 1998 representa una pérdida considerable para la ornitología y la conservación en Colombia. Alvaro proveyó los fondos, tiempo y energía para establecer la Fundación Proselva y la Reserva Natural Tambito, excelente localidad para el estudio y observación de aves en Colombia.

Introduction

This paper seeks to portray the avifauna of an important nature reserve with facilities for ecotourists and researchers, and to pay tribute to Alvaro Negret—whose tragic death in August 1998 was a considerable loss to ornithology and conservation in Colombia. Alvaro provided the funds, time and energy to establish Fundación Proselva and Reserva Natural Tambito.

Reserva Natural Tambito is located 50 km west of Popayán on the Pacific slope of the Cordillera Occidental, in dpto. Cauca, Colombia, at c.02°30'N 77°00'W. It is adjacent to Parque Nacional Natural (PNN) Munchique, and encompasses c.3,000 ha. of very humid premontane forest and very humid lower montane forest^{8,9}, at 1,200–2,400 m.

The northern Andes features the most complex topography in South America that supports an extremely wide variety of ecosystems and high levels of endemism¹⁶. For example, Colourful Puffleg *Eriocnemis mirabilis* has, to date, only been recorded within a few hundred metres of the type locality within PNN Munchique². Tambito is situated within the Chocó Endemic Bird Area¹⁸, widely acknowledged as one of the world's most biologically diverse regions. The Chocó EBA has the highest (number of EBA birds / area) ratio in the world¹⁸, and is known to contain at least 62 restricted-range bird species, the most of any EBA in the Neotropics¹⁸. Munchique and Tambito (site CO53)²⁰ is identified as one of Colombia's most important key areas, known or suspected to contain at least 10 threatened species—more than any other site in Colombia²⁰.

Logistics

The reserve administrator, Luis-Alfonso Ortega (Corporación Regional del Cauca [CRC], Popayán. Tel: 0928 243040. E-mail: bambam_86@yahoo.com), should be contacted in advance of visiting and can advise on transport to and from the reserve. From Popayán to 20 de Julio or Juntas takes 3–8 hours depending on mode of transport, and from there, the reserve centre is a 3–5 hour hike, depending on route taken and physical fitness. The reserve centre, with two cabins, is at 1,450 m. Tambito is a private nature reserve and no official permits are required to visit the area excluding those required for collection purposes.

The INDERENA cabin, in PNN Munchique, is administrated by the Dirección de Parques in Popayán. Accommodation can be arranged, but to work within PNN Munchique, a permit is required, so the park director, Isaac Bedoya, should be contacted in advance. Access is much simpler as the 20 de Julio Sector Cabin is on the El Tambo-20 de Julio road.

	SITE I	SITE 2	SITE 3	SITE 4	SITE 5		
Dates	16-20/8, 26/8	20–25/8	27–30/8	6-10/9	I <i>-</i> -6/9		
Altitude (m)	1,480	1,620	1,850	2,020	2,180		
Co-ordinates	02°30'525N c.76°58'90W	77°00'142W c.02°31'50N	02°30'422N c.77°00'15W (GPS not operable at	77°00' 65W 02°32'0 3N Sites 3–4)	c.02°30'50N 76°59'400W		
Life zone9.10	Very humid subtropical forest		Very humid lower montane forest				
Vegetation profile	Clearing and edge of 1° forest	Mature 2° palm forest	l° forest	l° forest	l° forest and forest border		
Metres of nets	100	64	88	91	112		
Metre/Net/Hrs	4,600	3,250	3,050	2,050	5,850		

1997 and 1998 studies: sites and method

The majority of records from the reserve derive from two standardised surveys of Tambito by the authors in 1997 and 1998. In 1997, a month-long ornithological investigation was conducted using mist-nets and observation, largely following standard procedures. Five mist-netting sites at different elevations were selected on the basis of experience and intuition in order to maximise net captures. Species inventories were compiled for different habitats at 1,470, 1,620, 1,850, 2,020 and 2,180 m. The sites are marked in Figure 1.

Up to 10 mist-nets were deployed at each site, opened at dawn (06h00) and left open until dusk (18h00) or until adverse weather intervened, with the aim of maximising the catch, and hence data. Birds were identified, ringed, aged and sexed. Biometrics were taken, and each plumage-type was photographed. In addition to mist-netting, the surrounding area was intensively but nonsystematically searched for other species of birds. In 1998, mist-netting took place from 24–27 June 1998 at site five, followed by two days of observations throughout the reserve.

Compiling mist-net data, our own observations and additional information from Robert Giles (RG), Alvaro Negret (AN), Paul Salaman (PS), Ville Vepsäläinen (VV), and notes from the 1,000-species birding trip in October 1997 (in which LD participated) a checklist of the reserve has been produced, totalling 313 species (Appendix 1). Further records are found at: http:// www.soft.net.uk/pcl/colombia/tambito.htm⁵.

Red Data birds

 $IUCN\ /\ BirdLife\ International\ categories^{_1}$ are followed below.

Black-and-chestnut Eagle Oroaetus isidori

Status: Near-threatened

Relatively frequently recorded, soaring over forests throughout much of the reserve.

Chestnut Wood-quail Odontophorus hyperythrus Status: Near-threatened

Fairly common throughout the reserve (AN). This species is widely hunted throughout much of its range, making Tambito an important site for its protection.

Toucan Barbet Semnornis ramphastinus Status: Near-threatened

Seen several times and heard regularly at all sites in 1997 and 1998. Nonetheless, as the species is very vocal, a regular encounter rate may refer to a small population. One bird was caught and photographed at site 2 in 1997. As a popular cagebird, effective enforcement of regulations on access routes makes Tambito / Munchique a relatively safe haven for the species.

Bicoloured Antvireo *Dysithamnus occidentalis* Status: Vulnerable

This secretive species is known from a handful of records on the west slope of the Andes, including several around Munchique and other sites in Colombia, with the subspecies *punctetis* known from the east slope of the Andes². Until very recently²², this species was virtually unknown in life². We trapped and photographed four individuals in 1997: an adult female at site 3 on 28 August; and three at site 5-an adult male and adult female together, with a juvenile male caught two hours later on 6 September. AN also observed a female around site 2 in 1998. We therefore consider it uncommon at 1,620–2,180 m at least. D. occidentalis is a species of re-growth areas and natural forest clearings²², which correlates with our results. The bird caught at site three was in a mist-net placed in a primary forest treefall clearing; site two encompasses a large expanse of steep-sloped dense mature secondary palm forest and the birds caught at site five were in typical ridge-top habitat. A call was also noted, different from those recently described²², and presumably the bird's alarm call. The site three bird called *deeee da-da-da-da*, as it was released. One of the site five birds called da-da-da-da-da upon release. This species' taxonomic history is tortuous¹⁴. That the calls we have noted in the western subspecies differ from those known in D. o. punctetis may be significant in our understanding of the relationship between the two forms.

Long-wattled Umbrellabird Cephalopterus penduliger

Status: Vulnerable

AN reports this species as local and uncommon in Tambito, presumably at lower elevations.

Beautiful Jay Cyanolyca pulchra

Status: Near-threatened

This species is fairly common at c.1,400-1,700 m, being observed several times at sites 1 and 2, and especially around the Río Tambito.

Multicoloured Tanager Chlorochrysa nitidissima Status: Vulnerable

Two observed in a mixed flock in the canopy at site 5 in 1997 (TD, LD). The species is also recorded regularly around Río Tambito and along the path from the cabin to 20 de Julio.

Purplish-mantled Tanager Iridosornis

porphyrocephala

Status: Near-threatened

This species is relatively common in the Tambito / Munchique region, especially at higher elevations. Nine were caught in 1997 at sites 3–5, with numerous other sight records at these elevations. One site five individual was re-trapped in 1998.

Tanager-Finch Oreothraupis arremonops Status: Vulnerable

This Pacific slope endemic is known from a handful of localities in Colombia and Ecuador, but is absent from numerous apparently suitable areas². Several were observed on 3–4 September 1997, including three foraging together beneath a mist-net at site five, with further observations at this site in 1998 and in October 1997 (LD). It is frequently seen in the immediate vicinity of Munchique¹², and is certainly not uncommon, especially around the 20 de Julio Sector MMA Cabin, but it does appear to be very localised².

Other Near-threatened species recorded in Tambito by AN (but not the authors) are Fasciated Tigerheron *Tigrisoma fasciatum*, Semi-collared Hawk *Accipter collaris*, Semiplumbeous Hawk *Leucopternis semiplumbea* and Solitary Eagle *Harpyhaliaetus solitarius*.

Plumbeous Forest-falcon Micrastur plumbeus, Golden-plumed Parakeet Leptosittaca branickii, Banded Ground-cuckoo Neomorphus radiolosus, Yellow-eared Parrot Ognorhynchus icterotis and Hooded Antpitta Grallaricula cucullata are threatened species considered in range for this key area²⁰, while Cauca Guan Penelope perspicax and White-chested Swift Cypseloides lemosi were considered possibly in range². Despite several specific searches, Colourful Puffleg Eriocnemis mirabilis has not been recorded in Tambito. E. mirabilis is known from elevations generally higher $(2,195-2,440 \text{ m})^2$ than those studied, so may be present in the highest elevations of the reserve. Ognorhynchus icterotis is now considered extinct in the region¹⁷ while records of *Micrastur plumbeus* and Grallaricula cucullata at Tambito are considered by the observers (AN and PS respectively) to be insufficiently documented. Nonetheless, coverage (both spatially and altitudinally) of the Tambito / Munchique Key Area has not been exhaustive, thus negative evidence of these species is inconclusive.

Fourteen other non-threatened restricted-range species have been recorded in the reserve. With at least four threatened species and nine nearthreatened species also present, a total of at least 27 species of high conservation concern highlights the importance of Tambito. Almost all EBA birds are from the Chocó EBA (041), with only *Odontophorus hyperythrus* noted as exclusively from outside the Chocó EBA (Colombian Inter-Andean Slopes EBA¹⁸).

Key areas of the reserve for threatened and endemic species

Birds around Tambito cabin

A small clearing around the reserve centre, at 1,400 m, attracts a number of ubiquitous species, including up to 13 hummingbird species, with Violet-tailed Sylph *Aglaiocercus coelestis* particularly common here.

The path from the cabin to site two

The forest around site 2 was cleared several years ago. However, steep-sided slopes have inhibited natural forest from re-establishing itself, and the vegetation principally consists of densely packed palm trees rising to 3 m. By far the most abundant species here is the Pacific endemic, Empress Brilliant *Heliodoxa imperatrix*, with 31 mist-net captures in 1997. Although present throughout the reserve (see elevation table below), this species is particularly common here. Uniform Treehunter *Thripadectes ignobilis* is one of at least five furnariids present in the palm forest, and among four woodcreeper species, Tyrannine Woodcreeper *Dendrocincla tyrannina* is also fairly common.

The path from the cabin to site three

Following the path beside the Río Tambito can produce perhaps the best birding in the reserve. Carefully scrutinising mixed tanager flocks in the canopy can reveal upward of 20 different species, including Glistening-green Tanager Chlorochrysa phoenicotis, Multicoloured Tanager C. nitidissima and Dusky-bellied Bush-tanager Chlorospingus semifuscus. In the lower and mid-storeys, the diagnostic calls of Golden-headed Quetzal Pharomachrus auriceps, Club-winged Manakin Machaeropterus deliciosus, Beautiful Jay Cyanolyca pulchra and Crested Ant-tanager Habia cristata are frequently heard. Watching the canopy across the river from one of the small clearings can yield frugivores such as Toucan Barbet and Andean Cockof-the-Rock Rupicola peruviana. Black-andchestnut Eagle can sometimes be seen soaring from one of the clearings. As the path ascends to 1,800 m and site 3, Purplish-mantled Tanager Iridosornis porphyrocephala becomes more frequent.

Around the MMA cabin

The avifauna at site 5 is markedly different from that of lower elevations including 15 species of tanager, most different to those around the Río Tambito. Twenty-two hummingbird species have been recorded here, including Purple-bibbed Whitetip Urosticte benjamini, Empress Brilliant, Brown Inca Coeligena wilsoni, Velvet-purple Coronet Boissonneaua jardini and Violet-tailed Sylph. Star-chested Treerunner Margarornis stellatus is relatively common in secondary growth along the road and Black Solitaire *Entomodestes* coracinus can also be seen. As mentioned, this is also an important site for Tanager-finch and Bicoloured Antvireo.

Range extensions

Swallow-tailed Nightjar Uropsalis segmentata Two were trapped and photographed at site 5 in 1997; one was re-trapped in 1998. The species is regularly observed from the path north of the MMA cabin at dusk. It is principally regarded as a central and eastern Andes species^{6,8}. Nevertheless, AN recorded it at the La Romelia MMA cabin and there is a record from the Pacific slope of the west Andes in Nariño¹⁵, as well as a specimen in Universidad Nacional, Bogotá from 'Municipio El Tambo' and recent records from the western slope of the Andes in Ecuador²¹.

Fawn-breasted Brilliant Heliodoxa rubinoides

There appear to be no Colombian records of this species south of Valle, although there are west Andes records in Ecuador⁸. Records are presented in the altitude table below.

Green-crowned Brilliant Heliodoxa jacula

Given the presence of a presumed hybrid *Heliodoxa jacula* x *H. rubinoides*⁵, *H. jacula jamiesoni* is considered to be in range. Previous west Andes records come from Nariño (*H. j. jamiesoni*) and Antioquia (*H. j. jacula*)⁸.

Black-tailed Flycatcher *Myiobius atricaudus* There are sightings of this species in Valle and Nariño^{8,14}, but none has been reported in Cauca. Our records are presented in the altitude table

Table 1. Altitude extensions recorded from Reserva Natural Tambito.

below. One Tawny-breasted Flycatcher Myiobius villosus was trapped in 1997.

Pale-eyed Thrush Platycichla leucops

A female and male of this sparsely distributed species were trapped and photographed at sites two and three in 1997. Previous west Andes records are from Valle, Nariño and north Ecuador^{8,14}.

Altitude extensions

Quoted elevations, in the final column of Table 1 (below), are the maximum or minimum limits found in a limited literature search^{6,8,13,14,19}. Numbers refer to individuals caught in mist-nets. An x refers to sight records. Dark shading indicates where our records match previously described ranges, those in the text indicating range beyond the gradient studied. Pale shading indicates an unusual observation based on the literature consulted.

Exceptional altitudinal migration may have taken place in 1997, due to the El Niño Southern Oscillation phenomenon ongoing during this period. Indeed, some of the more surprising records were not repeated in 1998 (e.g. Urosticte benjamini, Eutoxeres aquila, Tiaris obscura), although the presence of Entomodestes coracinus in 1998 is perplexing, and perhaps due to seasonal altitudinal or local movements previously noted in the species⁷. Records of Coeligena wilsoni and Aglaiocercus coelestis are especially noteworthy where, in some circumstances, one might have expected C. coeligena or A. kingi on the basis of altitude alone.

Future conservation in Tambito

Pressure for infrastructure and economic development in regions surrounding Munchique has been increasing as the population of neighbouring

Species	Site ,480 m	Site 2 1,620 m	Site 3 1,860 m	Site 4 2.020 m	Site 5 2,180m		Previous Range
	1,400 111	1,020 111	1,000 m	2,020 m	1997	1998	
Band-rumped Swift Chaetura spinicauda	×	×	×	x			to 1,500 m (1,000 m ¹⁹)
Purple-bibbed Whitetip Urosticte benjamini	1	1	1	1	1	1	to 1,500 m
Little Hermit Phaethornis longuemareus	1			1	1	/	to 1,200m
White-tipped Sicklebill Eutoxeres aquila	7	2	1	1	2	/	to 1,400 m, 2,100 m in Magdalena valley
Fawn-breasted Brilliant Heliodoxa rubinoides	1	9	1	1	1	/	from 1,700 m
Empress Brilliant Heliodoxa imperatrix	2	31	1	1	3	x	to 1,800 m
Brown Inca Coeligena wilsoni	2	3	2	×	4	4	to 1,900 m (1,500 m ¹⁹)
Violet-tailed Sylph Aglaiocercus coelestis	16	6	I	3	13	10	to 2,100 m
Black Solitaire Entomodestes coracinus	1	1	1	1	1	5	to 1,900 m
Pacific Tuftedcheek Pseudocolaptes johnsoni	1	1	1	1	I	1	to 2,000 m
Club-winged Manakin Machaeropterus deliciosus	2	3	/	1	1	1	to 1,900 m; most below 1,500 m
Black-tailed Flycatcher Myiobius atricaudus	1	2	/	1	1	1	to 1,400 m
Buff-rumped Warbler Basileuterus basilicus	I.	1	1	1	1	1	to 1,000 m
Variable Seedeater Sporophila americana	2	1	1	1	/	1	to 1,200 m
Dull-coloured Grassquit Tiaris obscura	2	I	1	1	2	1	To 1,600 m; rarely to 2,000 m

51

towns grows. Past and current proposals include hydroelectric power plants and a road network from Popayán to the Pacific coast, cutting through pristine forest adjacent to PNN Munchique³. Although governmental and NGO environment agencies have strongly opposed these proposals, such issues remain high on the agenda of regional politics. Resulting habitat fragmentation would have disastrous consequences to the region's fragile ecosystem³.

The survival of these forests and adjacent areas depends upon effective management to continue. Previously, this has been assured by the respect of local communities for the integrity of the reserve. It is hoped that the new administration and local community will be able to continue to protect these forests.

Concluding remarks

Tambito is an excellent reserve for birders and researchers alike. As well as containing a wealth of bird species, Tambito is rapidly becoming one of Colombia's premier research stations. Proyecto HERB is currently producing a field-calibrated biodiversity map of the reserve using computer modelling-an unprecedented study in the Neotropics¹¹—, and a further expedition is planned to the area in 1999⁴ which should produce many additional interesting findings. Due to the exceptional biological richness of the Chocó, and the ever-mounting threats to it, international conservation literature draws specific attention to Tambito and Munchique: 'with such widespread deforesting, the value of these areas cannot be overstated as critically important sites for conservation'18.

Acknowledgements

Many thanks to Dan Davison, Rosso Dulcey, Alex Cortés, Andrew Jarvis, Gustavo Lacera, Dr Mark Mulligan, Quintin Lame and family, Graham Robottom, Ville Vepsäläinen and David Wege for their various assistance. Special thanks to Paul Salaman for his help at all stages of the 1998 and 1999 projects. Grants from the J. W. Bennet Award, the G. R. N. Minchin Award and the Donald Robertson Award assisted our research in 1997 and 1998. Finally we extend our gratitude to the late Alvaro Negret for organising transport to the reserve, the support of Fundación Proselva and permitting our work in Tambito.

References

- Collar, N. J., Crosby, M. J. & Stattersfield, A. J. (1994) Birds to Watch 2: the world list of threatened birds. Cambridge, UK: BirdLife International (Conservation Series 4).
- Collar, N. J., Gonzaga, L. P., Krabbe, N., Madroño Nieto, A., Naranjo, L. G., Parker, T. A. & Wege,

D. C. (1992) Threatened birds of the Americas: the ICBP/IUCN Red Data Book. Cambridge, UK: International Council for Bird Preservation.

- 3. Conservation International (1998) Proyecto Corredor de Conservacion de la Biodiversidad del Chocó Biogeografico. URL: http:// www.conservation.org/science/cptc/capbuild/ unesco/s_amer/naya/default.htm
- Dávalos, L. M., Jarvis, A., Davison, D. & Weksler, M. (1998) Uribe Trail Expedition Cauca, Colombia: biological diversity survey of a lowland site in the Colombian Chocó. http:// research.amnh.org/mammalogy/davalos/ uribe.html
- Donegan, T. M. & Dávalos, L. M. (1998) An ornithological expedition to Tambito Nature Reserve, Cauca, Colombia, Aug-Sept 1997. URL: http://www.soft.net.uk/pcl/colombia/ tambito.htm
- 6. Fjeldså, J. & Krabbe, N. (1990) *Birds of the High Andes*. Copenhagen: Zool. Museum, University of Copenhagen & Svendborg: Apollo Books.
- Hilty, S. L. (1977) Chlorospingus flavovirens rediscovered, with notes on other Pacific Colombian and Cauca Valley birds. Auk 94: 44– 49.
- 8. Hilty, S. L. & Brown, W. L. (1986) A guide to the birds of Colombia. Princeton, NJ: Princeton University Press.
- 9. Holdridge, L. R. (1967) *Life zone ecology*. San José, Costa Rica: Tropical Science Center.
- Mazar Barnett, J., Kirwan, G. M. & Tobias, J. (1997). Neotropical Notebook. *Cotinga* 9: 84– 92
- 11. Mulligan, M. (1998) The Project HERB (Hydrology Ecology and Regional Biodiversity of Colombian Montane Forest) Webpage. URL: http://www.kcl.ac.uk/kis/schools/hums/geog/ herb.htm
- Negret, A. J. (1991) Reportes recientes en el Parque Nacional Munchique de aves consideradas raras o amenazadas de extinción. *Noved. Colombianas* (nueva epoca) 3: 39–45.
- Ridgely, R. S. & Tudor, G. (1989) The birds of South America, 1. Austin: University of Texas Press.
- Ridgely, R. S. & Tudor, G. (1994) The birds of South America, 2. Austin: University of Texas Press.
- Salaman, P. G. W. (ed.) (1994) Surveys and conservation of biodiversity in the Chocó, south-west Colombia. Cambridge, UK: BirdLife International (Study Report 61).
- 16. Salaman, P. G. W. & Donegan, T. M. (eds.) (1998) Colombia '98 expedition to Serranía de los Churumbelos: preliminary report. URL: http:// /www.soft.net.uk/pcl/colombia/ or http:// www.proaxis.com/~salaman/colombia98.html

Cotinga 12 Ornithological observations from Reserva Natural Tambito, south-west Colombia

- Salaman, P. G. W., López-Lanús, B. & Krabbe, N. (1998) Yellow-eared Parrot conservation home page: Proyecto Ognorhynchus. URL: http://www.proaxis.com/~salaman/Parrot.html
- Stattersfield, A. J., Crosby, M. J., Long, A. J. & Wege, D. C. (1997) Endemic Bird Areas of the world: priorities for biodiversity conservation. Cambridge, UK: BirdLife International (Conservation Series 8).
- Stotz, D. F., Fitzpatrick, J. W., Parker, T. A. & Moskovits, D., K. (1996) Neotropical birds: ecology and conservation. Chicago: University of Chicago Press.
- Wege, D. C. & Long, A. J. (1995) Key Areas for threatened birds in the Neotropics. Cambridge, UK: BirdLife International (Conservation Series No. 5).
- Welford, M. R. (1999) New record of Swallowtailed Nightjar Uropsalis segmentata for Pichincha province and the west slope of the Andes in Ecuador. Cotinga 10: 41-42.
- Whitney, B. M. (1992) Observations on the systematics, behaviour and vocalisations of *"Thamnomanes" occidentalis* (Formicariidae). *Auk* 109: 302–308.

Thomas M. Donegan

Christ's College, Cambridge, CB2 3BU, UK. E-mail: tmd23@cam.ac.uk. Or: 33 Blenheim Road, Caversham, Reading, RG4 7RT. Email: thomas@pcl.softnet.co.uk.

Liliana M. Dávalos

Graduate Fellow in Ecology and Evolutionary Biology, Center for Environmental Research and Conservation, Columbia University Mail Code 5557, 1200 Amsterdam Avenue, New York, New York 10027, USA. E-mail: lmd50@columbia.edu.

A Checklist of the Birds of Tambito

Bold Type refers to EBA birds (EBA). Species in square brackets are Vulnerable (VU) or Near-threatened (N-T).

TINAMIDAE: Tinamous (2 species) Highland Tinamou Nothocercus bonapartei Little Tinamou Crypturellus soui

ARDEIDAE: Herons, Egrets, Bitterns (2) Cattle Egret Bubulcus ibis Fasciated Tiger-heron Tigrisoma fasciatum (N-T)

ANATIDAE: Ducks, Geese (1) Torrent Duck Merganetta armata

ACCIPITRIDAE: Hawks, Eagles, Kites (13) American Swallow-tailed Hawk Elanoides forficatus Double-toothed Kite Harpagus bidentatus Plumbeous Kite Ictinia plumbea Sharp-shinned Hawk Accipiter striatus [Semicollared Hawk Accipiter collaris (N-T)] Barred Hawk Leucopternis princeps [Semiplumbeous Hawk Leucopternis semiplumbea (N-T)] [Solitary Eagle Harpyhaliaetus solitarius (N-T)] Roadside Hawk Buteo magnirostris Broad-winged Hawk Buteo platypterus Short-tailed Hawk Buteo brachyurus White-throated Hawk Buteo albigula [Black-and-chestnut Eagle Oroaetus isidori (N-T)]

FALCONIDAE: Falcons, Caracaras (3) American Kestrel Falco sparverius Crested Caracara Polyborus plancus Barred Forest-falcon Microstur ruficollis

CRACIDAE: Chachalacas, Guans, Curassows (1) Sickle-winged Guan Chamaepetes goudotii

SCOLOCAPIDAE: Sandpipers etc (1) Baird's Sandpiper Calidris bairdii

PHASIANIDAE: Wood-quails, Bobwhites (1) Chestnut Wood-quail Odontophorus hyperythrus (N-T)

COLUMBIDAE: Pigeons. Doves (5) Band-tailed Pigeon Columba fasciata Ruddy Pigeon Columba subvinacea Plumbeous Pigeon Columba plumbea Ruddy Quail-dove Geotrygon montana White-throated Quail-dove Geotrygon frenata

PSITTACIDAE: Parrots (2) Barred Parakeet Bolboryhnchus lineola Scarlet-fronted Parakeet Aratinga wagleri

CUCULIDAE: Cuckoos (4) Squirrel Cuckoo Piaya cayana Black-billed Cuckoo Coccyzus erythropthalmus Yellow-billed Cuckoo Coccyzus americanus Smooth-billed Ani Crotophaga ani

STRIGIDAE: Typical Owls (5) Rufescent Screech-owl Otus ingens Andean Pygmy-owl Glaucidium jardini Black-and-white Owl Giccaba nigrolineata Rufous-banded Owl Ciccaba albitarsus Mottled Owl Ciccaba virgata

STEATORNITHIDAE: Oilbirds (I) Oilbird Steatornis caripensis

NYCTIBIIDAE: Potoos (1) Common Potoo *Nyctibius griseus*

CAPRIMULGIDAE: Nighthawks, Nightjars (3) Common Nighthawk Chordeiles minor Pauraque Nyctidromus albicollis Swallow-tailed Nightjar Uropsalis segmentata

APODIDAE: Swifts (3) White-collared Swift Streptoprocne zonaris Chestnut-collared Swift Cypseloides rutilus Band-rumped Swift Chaetura spinicauda

TROCHILIDAE: Hummingbirds (35) Tawny-bellied Hermit Phaethornis syrmatophorus Little Hermit Phaethornis longuemareus White-tipped Sicklebill Eutoxeres aquila Green-fronted Lancebill Doryfera ludovicae Brown Violetear Colibri delphinae Sparkling Violetear Colibri coruscans Green Violetear Colibri thalassinus Blue-tailed Emerald Chlorostilbon mellisugus Green-crowned Woodnymph Thalurania (colombica) fannyi Andean Emerald Amazilia franciae Steely-vented Hummingbird Amazilia saucerrottei Rufous-tailed Hummingbird Amazilia tzacatl Speckled Hummingbird Adelomyia melanogenys Purple-bibbed Whitetip Urosticte benjamini (EBA) Fawn-breasted Brilliant Heliodoxa rubinoides 'Excellent Brilliant' Heliodoxa sp. hybrid Empress Brilliant Heliodoxa imperatrix (EBA) White-tailed Hillstar Urochoa bougueri Bronzy Inca Coeligena coeligena Brown Inca Coeligena wilsoni (EBA) Collared Inca Coeligena torquata

Cotinga 12 Ornithological observations from Reserva Natural Tambito, south-west Colombia

Sword-billed Hummingbird Ensifera ensifera Buff-tailed Coronet Boissonneaua flavescens Velvet-purple Coronet Boissonneaua jardini (EBA) Tourmaline Sunangel Heliangelus exortis Golden-breasted Puffleg Eriocnemis mosquera Emerald-bellied Puffleg Eriocnemis alinae Greenish Puffleg Haplophaedia aureliae Booted Racket-tail Ocreatus underwoodii Viridian Metaltail Metallura wiliami Tyrian Metaltail Metallura tyrianthina Violet-tailed Sylph Aglaiocercus coelestis (EBA) Long-tilled Sylph Aglaiocercus kingi Wedge-billed Hummingbird Schistes geoffroyi Purple-throated Woodstar Calliphlox mitchellii

TROGONIDAE: Trogons, Quetzals (4) Crested Quetzal Pharomachrus antisianus Golden-headed Quetzal Pharomachrus auriceps Masked Trogon Trogon personatus Collared Trogon Trogon collaris

ALCEDINIDAE: Kingfishers (2) Pygmy Kingfisher Chloroceryle aenea Ringed Kingfisher Ceryle torquata

MOTMOTIDAE: Motmots (1) Blue-crowned Motmot Momotus momata

BUCCONIDAE: Puffbirds (2) Moustached Puffbird Malacoptila mystacalis White-whiskered Puffbird Malacoptila panamensis

CAPITONIDAE: Barbets (2) Red-headed Barbet Eubucco bourcierii **Toucan Barbet** Semnornis ramphastinus (N-T)

RAMPHASTIDAE: Toucans, Aracaris (3) Emerald Toucanet Aulacorhynchus prasianus Crimson-rumped Toucanet Aulacorhynchus haematopygus Black-billed Mountain-Toucan Andigena nigrirostris

PICIDAE: Woodpeckers, Piculets (8) Grayish Piculet Picumnus granodensis Crimson-mantled Woodpecker Piculus rivolii White-throated Woodpecker Piculus leucolaemus Golden-olive Woodpecker Piculus rubiginosus Acorn Woodpecker Melanerpes formicivorus Yellow-vented Woodpecker Veniliornis dignus Crimson-crested Woodpecker Campephilus melanoleucos Powerful Woodpecker Campephilus pollens

DENDROCOLAPTIDAE: Woodcreepers (7) Tyrannine Woodcreeper Dendrocincla tyrannina Plain-brown Woodcreeper Dendrocincla fuliginosa Wedge-billed Woodcreeper Glyhorhynchus spirurus Black-banded Woodcreeper Dendrocolaptes picumnus Spotted Woodcreeper Xiphorhynchus erythropygius Olive-backed Woodcreeper Xiphorhynchus triangularis Brown-billed Scythebill Campylorhampus pusillus

FURNARIIDAE: Spinetails, Foliage-gleaners, etc. (15) Azara's Spinetail Synallaxis azarae Rufous Spinetail Synallaxis unirufa Red-faced Spinetail Cranioleuca erythrops Pearled Treerunner Margarornis squamiger Star-chested Treerunner Margarornis stellatus (EBA) Rusty-winged Barbtail Premnornis guttuligera Spotted Barbtail Premnoplex brunnescens Pacific Tuftedcheek Pseudocolaptes (lawrencii) johnsoni Striped Woodhaunter Hyloctistes subulatus Linneated Foliage-gleaner Syndactyla subalaris Montane Foliage-gleaner Anabacerthia striaticollis Slaty-winged Foliage-gleaner Philydor fuscipennis Streak-capped Treehunter Thripadectes virgaticeps Uniform Treehunter Thripadectes ignobilis (EBA) Tawny-throated Leaftosser Sclerurus mexicanus

THAMNOPHILIDAE: Typical antbirds (5) Uniform Antshrike Thamnophilus unicolor **Bicolored Antvireo** Dysithamnus occidentalis (VU) Plain Antvireo Dysithamnus mentalis Slaty Antwren Myrmotherula schisticolor Rufous-rumped Antwren Terenura callinota

FORMICARIIDAE: Ground Antbirds (4) Barred Antthrush Chamaeza mollissima Chestnut-crowned Antpitta Grallaria ruficapilla Yellow-breasted Antpitta Grallaria flavotincta (EBA) Ochre-breasted Antpitta Grallariaula flavirostris

CONOPOPHAGIDAE: Gnateaters (1) Chestnut-crowned Gnateater Conopophaga castaneiceps

RHINOCRYPTIDAE: Tapaculos (2) Rufous-vented Tapaculo Scytalopus (f.) femoralis Unicoloured Tapaculo Scytalopus unicolor

TYRANNIDAE: Flycatchers (42) Golden-faced Tyrannulet Zimmerius (viridiflavus) chrysops Southern Beardless-tyrannulet Camptostoma obsoletum Plumbeous-crowned Tyrannulet Phyllomyias plumbeiceps Yellow-bellied Elaenia Elgenia flavogaster Sierran Elaenia Elaenia pallatangae Mountain Elaenia Elaenia franzii White-banded Tyrannulet Mecocerculus stictopterus Torrent Tyrannulet Serpophaga cinerea Streak-necked Flycatcher Mionectes striaticollis Olive-striped Flycatcher Mionectes olivaceus Slaty-capped Flycatcher Leptopogon superciliaris Marble-faced Bristle-tyrant Phylloscartes opthalmicus Variegated Bristle-tyrant Phylloscartes poecilotis Bronze-olive Pygmy-tyrant Pseudotriccus pelzelni Rufous-headed Pygmy-tyrant Pseudotriccus ruficeps Scale-crested Pygmy-tyrant Lophotriccus pileatus Black-throated Tody-tyrant Hemitriccus granadensis Common Tody-flycatcher Todirostrum cinereum Fulvous-breasted Flatbill Rhynchocyclus fulvipectus Eye-ringed Flatbill Rhynchocyclus brevirostris White-throated Spadebill Platyrinchus mystaceus Ornate Flycatcher Myiotriccus ornatus Tawny-breasted Flycatcher Myiobius villosus Black-tailed Flycatcher Myiobius atricaudus Flavescent Flycatcher Myiophobus flavicans Handsome Flycatcher Myiophobus pulcher Cinnamon Flycatcher Pyrrhomyias cinnamomea Smoke-colored Pewee Contopus fumigatus Olive-sided Flycatcher Contopus borealis Eastern Wood-pewee Contopus virens Acadian Flycatcher Empidonax virescens Black Phoebe Sayornis nigricans Yellow-bellied Chat-tyrant Ochthoeca diadema Slaty-backed Chat-tyrant Ochthoeca cinnamomeiventris Long-tailed Tyrant Colonia colonus Panama Flycatcher Myiarchus panamensis Pale-edged Flycatcher Myiarchus cephalotes Rusty-marginated Flycatcher Myiozetetes cayanensis Lemon-browed Flycatcher Conopias cinchoneti Golden-crowned Flycatcher Myiodynastes chrysocephalus Eastern Kingbird Tyrannus tyrannus Tropical Kingbird Tyrannus melancholicus

PIPRIDAE: Manakins (6) Blue-crowned Manakin Pipra coronata White-crowned Manakin Pipra pipra Golden-winged Manakin Masius chrysopterus Golden-collared Manakin Manacus vitellinus Club-winged Manakin Machaeropterus deliciosus (EBA) Thrush-like Manakin Schiffornis turdinus

COTINGIDAE: Cotingas (8) Masked Tityra Tityra semifasciata Green-and-black Fruiteater Pipreola riefferii Barred Fruiteater Pipreola arcuata Andean Cock-of-the-Rock Rupicola peruviana White-winged Becard Pachyramphus polychopterus Barred Becard Pachyramphus versicolor Red-ruffed Fruitcrow Pyroderus scutatus Long-wattled Umbrellabird Cephalopterus penduliger (YU) HIRUNDINIDAE: Swallows, Martins (5) Blue-and-white Swallow Notiochelidon cyanoleuca Southern Rough-winged Swallow Stelgidopteryx ruficollis Brown-bellied Swallow Notiochelidon murina Bank Swallow Riparia riparia Barn Swallow Hirundo rustica

Corvidae: Jays (1) Beautiful Jay Cyanolyca pulchra (N-T)

CINCLIDAE: Dippers (1) White-capped Dipper Cinclus leucocephalus

TROGLODYTIDAE: Wrens (6) Sooty-headed Wren Thryothorus spadix Bay Wren Thryothorus nigricapillus House Wren Troglodytes aedon Mountain Wren Troglodytes solsitialis Grey-breasted Wron Avren Henicorhina leucophrys Chestnut-breasted Wren Cyphorhinus thoracicus

TURDIDAE: Thrushes, Solitaires (7) Andean Solitaire Myadestes ralloides **Black Solitaire** Entomodestes coracinus (EBA) Swainson's Thrush Catharus ustulatus Pale-eyed Thrush Platycichla leucops Great Thrush Turdus fuscater Glossy Black Thrush Turdus serranus Black-billed Thrush Turdus ignobilis

VIREONIDAE: Vireos, Peppershrikes, Shrike-vireos (4) Black-billed Peppershrike *Cyclarhis nigrirostris* Brown-capped Vireo Vireo leucophrys Red-eyed Vireo Vireo olivaceus Tawny-crowned Greenlet Hylophilus ochraceiceps

ICTERIDAE: Oropendolas, Orioles, Blackbirds (6) Shiny Cowbird Molothrus bonariensis Giant Cowbird Scaphidura oryzivora Russet-backed Oropendola Psarocolius angustifrons Mountain Cacique Cacicus leucoramphus Yellow-billed Cacique Amblycercus holosericeus Yellow-backed Oriole Icterus chrysater

PARULIDAE: Wood Warblers (16) Black-and-white Warbler Mniotilta varia Golden-winged Warbler Vermivora chrysoptera Tennessee Warbler Vermivora peregrina Tropical Parula Parula pitiayumi Blackburnian Warbler Dendroica fusca Blackpoll Warbler Dendroica striata Cerulean Warbler Dendroico ceruleo Canada Warbler Wilsonia canadensis Northern Waterthrush Seiurus noveboracensis Slate-throated Whitestart Myioborus miniatus Golden-fronted Whitestart Myjoborus ornatus Golden-crowned Warbler Basileuterus culicivorus Citrine Warbler Basileuterus luteoviridis Russet-crowned Warbler Basileuterus coronatus Three-striped Warbler Basileuterus tristriatus Buff-rumped Warbler Basileuterus fulvicauda

COEREBIDAE: Bananaquit (1) Bananaquit Coereba flaveola

THRAUPIDAE: Tanagers (49) Capped Conebill Conirostrum albifrons Bluish Flowerpiercer Diglossa caerulescens Masked Flowerpiercer Diglossa indigotica (EBA) White-sided Flowerpiercer Diglossa albilatera Rusty Flowerpiercer Diglossa sittoides Green Honeycreeper Cyanerpes spiza Golden-collared Honeycreeper Iridophanes pulcherrima Chestnut-breasted Chlorophonia Chlorophonia pyrrhophrys Orange-bellied Euphonia Euphonia xanthogaster Fawn-breasted Tanager Pipreeidea melanota Glistening-green Tanager Chlorochrysa phoenicotis (EBA) Multicolored Tanager Chlorochrysa nitidissima (VU)

Rufous-throated Tanager Tangara rufigula Golden Tanager Tangara arthus Silver-throated Tanager Tangara icterocephala Saffron-crowned Tanager Tangara xanthocephala Flame-faced Tanager Tangara parzudakii Metallic-green Tanager Tangara labradorides Blue-necked Tanager Tangara cyanicollis Golden-naped Tanager Tangara ruficervix Bay-headed Tanager Tangara gyrola Beryl-spangled Tanager Tangara nigroviridis Blue-and-black Tanager Tangara vassorii Black-capped Tanager Tangara heinei Purplish-mantled Tanager Iridosornis porphyrocephala (N-T) Golden-crowned Tanager Iridosornis rufivertex Lacrimose Mountain-tanager Anisognathus lacrymosus Blue-winged Mountain-tanager Anisognathus flavinucha Black-chinned Mountain-tanager Anisognathus notabilis Hooded Mountain-tanager Buthraupis montana Buff-breasted Mountain-tanager Dubusia taeniata Palm Tanager Thraupis palmarum Blue-grey Tanager Thraupis episcopus Blue-capped Tanager Thraupis cyanocephala Flame-rumped Tanager Ramphocelus flammigerus Lemon-rumped Tanager Ramphocelus icteronotus Summer Tanager Piranga rubra White-winged Tanager Piranga leucoptera Ochre-breasted Tanager Chlorothraupis stolzmanni Crested Ant-tanager Habia cristata (EBA) White-lined Tanager Tachyphonus rufus Tawny-crested Tanager Tachyphonus delatrii Dusky-faced Tanager Mitrospingus cassinii Yellow-throated Bush-tanager Chlorospingus flavigularis Dusky-bellied Bush-tanager Chlorospingus semifuscus (EBA) Gray-hooded Bush-tanager Cnemoscopus rubrirostris Oleaginous Hemispingus Hemispingus frontalis Grass-green Tanager Chlorornis riefferii

CATAMBLYRHYNCHIDAE: Plush-capped Finches (1) Plush-capped Finch Catamblyrhynchus diadema

CARDINALINAE: Cardinals, Grosbeaks (2) Black-winged Saltator Saltator atripennis Rose-breasted Grosbeak Pheucticus Iudovicianus

EMBERIZINAE: Emberizine finches (19) Rufous-collared Sparrow Zonotrichia capensis Slaty Finch Haplospiza rustica Variable Seedeater Sporophila aurita Black-and-white Seedeater Sporophila luctuosa Yellow-bellied Seedeater Sporophila nigricollis Ruddy-breasted Seedeater Sporophila minuta Blue-black Grassquit Volatinia jacarina Yellow-faced Grassquit Tiaris olivacea Dull-coloured Grassquit Tiaris obscura Yellow-throated Brush-finch Atlapetes gutturalis Rufous-naped Brush-finch Atlapetes rufinucha Tricoloured Brush-finch Atlapetes tricolor Slaty Brush-finch Atlapetes schistaceus Chestnut-capped Brush-finch Atlapetes brunneinucha Black-headed Brush-finch Atlapetes atricapillus Orange-billed Sparrow Arremon aurantiirostris Tanager Finch Oreothraupis arremonops (VU) Olive Finch Lysurus castaneiceps Lesser Siskin Spinus psaltria

TOTAL: 313 species