NOTEWORTHY RECORDS FROM THE EASTERN ANDEAN SLOPES OF NORTHERN ECUADOR

Registros notables de la vertiente oriental de los Andes del norte de Ecuador

Esteban A. Guevara
Aves & Conservación (Corporación Ornitológica del Ecuador) y Escuela de Biología, Pontificia Universidad Católica del Ecuador, Quito, Ecuador. eguevara@avesconservacion.org

Alejandro Solano
Fundación Imaymana, Quito, Ecuador. jhalezion@gmail.com

Galo Buitrón
Escuela de Biología, Pontificia Universidad Católica del Ecuador, Quito, Ecuador

ABSTRACT

New occurrence sites for two neartic/neotropical migrants and altitudinal extensions for five resident species in the Ecuadorian eastern Andean foothills are reported, based on our field observations along an altitudinal range from 600 to 1600 m elevation within three localities along the Ecuador-Perú East Andes Endemic Bird Area (EBA). Gathering species occurrence data will aid us to better understand the effects that changes in land use have on resident birds' movement patterns and distribution as well as elucidate wintering distribution for migrant ones.

Key Words: altitudinal extensions, distribution, Eastern Andes, Ecuador

RESUMEN

Se reportan nuevas localidades para dos especies migratorias neárticas/neotropicales y extensiones altitudinales para cinco especies residentes dentro de las estribaciones orientales de los Andes de Ecuador, con base en nuestras observaciones de campo entre 600 y 1600 m de elevación en tres localidades incluidas en el Área de Endemismo de los Andes del Este Ecuador -Perú. Reunir nuevos datos sobre registros de especies nos ayudará a entender mejor los efectos que el cambio en el uso del suelo tiene sobre los movimientos y distribución de aves residentes y migratorias.

Palabras clave: Andes del Este, distribución, Ecuador, extensiones altitudinales.

The distribution of the Ecuadorian avifauna is generally well described (Ridgely & Greenfield 2001), but it needs frequent reviews due to drastic changes that occur throughout time in forested landscapes. These unnatural changes could directly affect the distribution and movements of resident species as well as influence the survival and breeding performance of migrants (Studds & Marra 2005). The eastern slopes of the Andes harbor a rich avifauna and constitute an Endemic Bird Area (EBA) extending from southernmost Colombia to northernmost Peru, over the entire length of Ecuador (Stattersfield et al. 1998). In addition, lowlands and foothills below 1,300 m, on both sides of the Andes, harbor 30% of the total birdlife in Ecuador (Sierra et al. 1999) and there are at least five Important Bird Areas (IBAs) in the eastern foothills (Freile & Santander 2005).

In this paper we present several altitudinal range

extensions and new occurrence sites for two neotropical migratory species from the eastern Ecuadorian Andes. Records were made between November 2005 and March 2006. We conducted field observations at three localities in the eastern foothills: Wawa Sumaco (00º41'S, 77º36'W, 1200 m elevation, Napo province), Campo Bermejo (00º08'N, 77º18'W', 870 m elevation, Sucumbíos province) and Gonzalo Díaz de Pineda (00º18'S, 77º46'W, 1600 m elevation, Napo province). Wawa Sumaco is located in the vicinity of Sumaco Napo-Galeras National Park, and encompasses a matrix of small patches of mature evergreen foothill forest, second growth forest, cattle pastures and naranjilla crops (Solanaceae). Gonzalo Díaz de Pineda is a small hamlet consisting mostly of cattle pastures and small evergreen montane forest patches in the vicinity of the Cayambe-Coca Reserve. Campo Bermejo is an oil extraction field area that encompasses large tracts of disturbed evergreen foothill forest. In each locality, a minimum of two persons performed field observations, focusing mainly on mixed-species flock associations. We summarize our observations including scientific and English names according to Ridgely & Greenfield (2001), and present some notes on distribution and behavior.

CHESTNUT-CAPPED PUFFBIRD
Bucco macrodactylus

One individual of this uncommon and inconspicuous lower-growth puffbird was seen at Wawa Sumaco (1200 m) on 22 March 2006. It was perched 1 m above ground in a shrubby clearing dominated by Asteraceae spp. with a few trees, near forest edge. No vocalizations were noted during the observation, which lasted five minutes. Our observation is the highest on record in Ecuador, exceeding by 600 m the upper altitudinal limit suggested by Ridgely & Greenfield (2001). However, the species is known to range to 1000 m in Peru (Clements & Shany 2001) and to 500 m in Colombia (Hilty & Brown 1986).

RUSTY-WINGED BARBTAIL
Premnornis guttuligera

This species is uncommon and local in the subtropical Andes, mainly at 1600–2300 m (Ridgely & Greenfield 2001). We saw one individual at Wawa Sumaco (1200 m) on 27 November 2005, foraging in the midstory with a mixed-species flock of tanagers and flycatchers, in a small second-growth forest patch. Apparently, this record is one of the lowest reported in eastern Ecuador, 400 m lower than the lower altitudinal limit cited by Ridgely & Greenfield (2001). However, there is an isolated observation at río Bombuscaro (1250 m) in south-eastern Ecuador (Ridgely & Greenfield 2001). These records could indicate that this species is rare and therefore hard to detect. In Colombia the species is recorded as low as 1600 m (Hilty & Brown 1986), and in neighboring Peru it is known to 1300 m (Clements & Shany 2001).

AMAZONIAN BARRED WOODCREEPER
Dendrocolaptes certhia

Ridgely & Greenfield (2001) described this woodcreeper as uncommon to locally fairly common in humid forest, mostly below 600 m, but at least locally up to 900 m in the Bermejo oil-field area and río Nangaritza Valley. We recorded one at Wawa Sumaco (1200 m), on 27 November 2005, foraging with a mixed flock of treerunners, flycatchers, migrant and resident parulids, tanagers and another woodcreeper (*Glyphorynchus spirurus*), near a secondary forest fragment. This record extends 300 m the upper altitudinal limit mentioned by Ridgely & Greenfield (2001). In Colombia the species ranges up to 900 m, with one isolated observation at 1200 m (Hilty & Brown 1986), while in Peru it reaches 900 m as well (Clements & Shany 2001).

WHITE-BROWED PURPLETUFT
Iodopleura isabellae

At least five different individuals were recorded at Wawa Sumaco in a heavy altered forest dominated by trees of *Croton* sp. (Euphorbiaceae), *Inga* sp. (Fabaceae) and *Terminalia amazonica* (Combretaceae), near a secondary road. In one observation (22 March 2006) two individuals were seen perched high in a *Croton* tree, emitting sporadically short high-pitched notes and then flying together, also vocalizing. Three were seen in a second observation (23 March 2006) and an aggressive interaction was detected between two of them,

followed by a vocal interaction. These records represent the highest altitudinal observations that we know of, 300 m above the upper altitudinal limit previously reported in Schulenberg & Awbrey (1997), and 700 m higher than previously reported for Colombia (Hilty & Brown 1986) and Peru (Clements & Shany 2001).

NORTHERN WATERTHRUSH
Seiurus noveboracensis

A rare boreal winter visitor to mangroves near water shrubbery and undergrowth vegetation, recorded mainly in northern Ecuador (Ridgely & Greenfield 2001). We encountered two solitary individuals at Gonzalo Díaz de Pineda area (1600 m) on 10 February 2006, on two different occasions by a small river near pasture with dense shrubby vegetation. Presumably these records correspond to transient individuals but are also among the highest altitudinal records in Ecuador, according to Ridgely & Greenfield´s (2001) suggested distribution. Previously documented occurrence sites of Northern Waterthrush in Ecuador do not cover Gonzalo Díaz de Pineda area (Ridgely & Greenfield 2001). The majority of records for Ecuador fall mainly in the northern provinces (Ridgely & Greenfield 2001), but there are several records from southwestern Ecuador (Becker & López-Lanús 1997, Berg 1994). In Colombia the species occurs regularly as a rare transient and winter resident in the Bogotá area at ca. 2600m (Asociación Bogotana de Ornitología 2000).

BAY-BREASTED WARBLER
Dendroica castanea

A male of this casual boreal winter visitant in non-breeding plumage was recorded at Campo Bermejo on 24 February 2006 in canopy borders of second growth forest patches. It foraged alone, on the outskirts of a mixed-species flock of tanagers, flycatchers and other migrant parulids (e.g. Canada Warbler *Wilsonia canadensis*, Blackpoll Warbler *Dendroica striata*). This locality represents a new occurrence site for the species in Ecuador and it is also one of the southernmost localities within its wintering grounds (Curson et al. 1994). In Colombia the winter distribution of this species is centered on the Magdalena valley and there are very few records on the eastern slope of the Andes (F. G. Stiles, pers. comm.)

CAQUETÁ SEEDEATER
Sporophila murallae

We recorded several individuals at Wawa Sumaco (1200 m) on 22 March 2006, dwelling in shrubby clearings and open canopy habitats. Males were identified by their incomplete black pectoral bands. The species was also recorded in the Archidona area (S00º54’45’’ W77º47’26’’, Napo province), where a solitary male was observed in May 2006, at 617 m, foraging in pasture land with isolated trees. There are several previous records along eastern foothills in Napo province (B. Palacios pers. comm.), also outside the altitudinal limit mentioned by Ridgely & Greenfield (2001). These observations probably reflect the species’ ability to disperse into recently deforested areas. Range extensions due to human activities are not recent phenomena. In fact, it is a matter of concern because it reveals patterns of serious deforestation in some localities, therefore distributions of some opportunistic and open-area species need review (Cisneros-Heredia & Henry 2004, Buitrón & Freile 2006).The altitudinal range is to be increased to 1200 m; in neighboring Peru, Caquetá Seedeaters are also known to this elevation (Clements & Shany 2001).

Currently forest remnants within north-east Andean slopes undergo serious conservation pressures due to human activities such as logging and increase of cattle pastures and agriculture, which have transformed forest landscapes into extensive areas of degraded habitat over the last several decades (Mogollón & Guevara 2003). The eastern Andean slope of Ecuador harbors a variety of vegetation types of high species diversity. Evergreen montane forest is one of these and it occurs between 1300–1700 m elevation, with high annual mean precipitation rates (2000–4000 mm) and a great abundance of epiphytes (Palacios et al. 1999). Another vegetation type in eastern Andean slope is evergreen foothill forest, characterized by taller canopy heights than evergreen montane forest and great tree diversity (Gentry 1995). The area covered by these two vegetation types support a rich avifauna (Stattersfield et al. 1998), that could be undergoing the effects of habitat loss and fragmentation, which

is reflected through changes in avian distribution patterns. We feel that this is the case for the Chestnut-capped Puffbird and the Caquetá Seedeater, which might benefit from substitution of mature forest by secondary and shrubby areas that represent proper habitat for these species. However, some records presented in this paper represent lack of previous knowledge on distribution rather than land use change; this might be the case for the Rusty-winged Barbtail and the Amazonian Barred Woodcreeper, which seem to be locally uncommon and easily overlooked species (Ridgely & Greenfield 2001). It is not clear whether the White-browed Purpletuft range extension represents a consequence of landscape or climate change, or both. Nevertheless, our observations suggest that this species could be engaged in reproductive activities at Wawa Sumaco, therefore our records may not represent merely vagrant individuals or dispersed juveniles that occasionally occupy the area.

We are certain that since the publication of Birds of Ecuador (2001) more and more eyes are now open to the vast avifauna that was once only studied by a small number of scientists. There are probably many more records resting in field notes and waiting to be published, so we urge the need of a continuum of publications of such valuable information to nourish the process of elucidating the constant changes in the distribution and natural history of the Ecuadorian avifauna.

Financial support for our research was provided by The Nature Conservancy's Migratory Bird Program and the US Forest Service, Office of International Programs, in the scope of Cerulean Warbler non-breeding surveys. We extend our thanks to Aves&Conservación staff for logistical support, especially Tatiana Santander who helped with field expedition planning and data collection. For help and companionship during field work we deeply thank Fabián Cupuerán, Alexandra Onofa, Adrián Soria and Carlos Rodríguez. We are grateful to Byron Palacios who provided valuable information for some species. Juan F. Freile and Tjitte de Vries made helpful comments on earlier drafts of the manuscript. F. G. Stiles and two anonymous reviewers provided thoughtful comments on the submitted version.

LITERATURE CITED

BECKER, C. D. & B. LÓPEZ-LANÚS. 1997. Conservation value of a garúa forest in the dry season: a bird survey in reserve Ecológica Loma Alta, Ecuador. Cotinga 8: 66–74.

BERG, K. S. 1994. New and interesting records of birds from a dry forest reserve in south-west Ecuador. Cotinga 2: 14–19.

BIRDLIFE INTERNATIONAL. 2004. Threatened birds of the world 2004. CD-ROM. BirdLife International, Cambridge, UK.

BUITRÓN, G. & J. F. FREILE. 2006. Registros inusuales de aves migratorias y de bosques subtropicales en Quito, Ecuador. Cotinga 26: 54–56.

CISNEROS-HEREDIA, D. F. & P. Y. HENRY. 2004. New records concerning range and altitudinal distribution of Tropical Mockingbird Mimus gilvus in Ecuador. Cotinga 21: 74–75.

CLEMENTS, J. F. & N. SHANY. 2001. A field guide to the Birds of Peru. Ibis Publishing Company. Temecula.

CURSON, J., D. QUINN & D. BEADLE. 1994. New World warblers. Christopher Helm, London.

HILTY, S. L & W. L. BROWN. 1986. A guide to the birds of Colombia. Princenton University Press, Princeton, NJ.

FREILE, J. F. & T. SANTANDER. 2005. Areas importantes para la conservación de las aves en Ecuador. Pp. 283–470 *in* BirdLife International y Conservation International Áreas importantes para la conservación de las Aves en los Andes Tropicales: sitios prioritarios para la conservación de la biodiversidad. Quito, Ecuador: BirdLife International.

GENTRY, A. H. 1995. Patterns of diversity and floristic composition in Neotropical montane forest. Pp. 103–126 *in* Churchill, S. T., Balslev, H., Forero, E. & Luteyn, J. L. (eds.) Biodiversity and conservation of Neotropical montane forests. New York Botanical Garden.

MOGOLLÓN, H. & J. E. GUEVARA. 2003. Caracterización vegetal de la Bioreserva del Cóndor. Unpubl. ms.

RIDGELY, R. S. & P. GREENFIELD. 2001. The birds of Ecuador. Cornell University Press, Ithaca, NY, USA.

PALACIOS, W., C. CERÓN, R. VALENCIA & R. SIERRA. 1999. Las formaciones naturales de la amazonía del Ecuador. Pp. 109–119 in: Sierra,

R. (ed.). Propuesta preeliminar de un sistema de clasificación para el Ecuador Continental. Proyecto INEFAN/GEF-BIRF y EcoCiencia. Quito.

SCHULENBERG, T. S. & K. AWBREY. 1997. The Cordillera del Cóndor region of Ecuador and Perú: a biological assessment. RAP Working Paper no. 7. Washington, DC: Conservation International.

SIERRA, R., F. CAMPOS & J. CHAMBERLIN. 1999. Áreas prioritarias para la conservación de la biodiversidad en el Ecuador continental. Un estudio basado en la diversidad de ecosistemas y su ornitofauna. Ministerio del Ambiente, Proyecto INEFAN/GEF-BIRF & EcoCiencia, Quito.

STATTERSFIELD, A. J., M. J. CROSBY, A. J. LONG & D. C. WEGE. 1998. Endemic Bird Areas of the world: priorities for biodiversity conservation. Cambridge, UK: BirdLife International.

STUDDS, C. E. & P. MARRA. 2005. Nonbreeding habitat occupancy and population processes: an upgrade experiment with a migratory bird. Ecology 86: 2380–2385.

Recibido: 10 junio 2007
Aceptado: 15 julio 2008