Altitudinal range extensions for Purple Gallinule Porphyrula martinica, Band-tailed Pigeon Columba fasciata and Purple-collared Woodstar Myrtis fanny in Ecuador

Galo Buitrón-Jurado and Tjitte de Vries

Received 16 September 2007; final revision accepted 13 November 2007 Cotinga 29 (2008): 80–81

Presentamos nuevos registros de distribución de tres especies ecuatorianas basados en especimenes depositados en la colección ornitológica del Museo de Zoología de la Universidad Católica de Quito. Reportamos a la Gallareta Púrpura *Porphyrula martinica* y la Paloma Collareja *Columba fasciata* por encima de los 4.000 m, y a la Estrellita Gargantillada *Myrtis fanny* dentro de la ciudad de Quito. Estos registros son próximos a sus áreas de distribución pero a altitudes inusuales.

Even in ornithologically relatively well-explored countries, like Ecuador, new information on avian distributions is constantly being garnered. Since the publication of *The birds of Ecuador*¹², important new data have been published, augmenting our knowledge of the distribution of Ecuadorian birds^{4,6,7}. This demonstrates how difficult it is to define avian ranges in tropical countries. Furthermore, such information is essential in order to detect potential population expansions or contractions. In recent years, the majority of new records were visual, or based on tape-recordings or photographs, whereas scientific collections have somewhat fallen into disuse in Ecuador¹. Due to the rapid degradation of natural habitats through human activities, it is important to accurately define species ranges. Here, we report three altitudinal range extensions for Ecuadorian birds based on specimens in the ornithological collection of the Museum of Zoology, Pontificia Universidad Católica del Ecuador, Quito (QCAZ).

Purple Gallinule Porphyrula martinica

The decaying corpse of an adult was found at Páramo de la Virgen, Cayambe-Coca Ecological Reserve, prov. Napo, on the east slope of the Andes, on 14 May 2005. The specimen (QCAZ 2964) was found in a grass páramo at 4,100 m (00°19'S 78°12'W). Despite the corpse's state, the head, neck and wings retained several diagnostic characters, such as the yellowish bill tip and red maxilla, and cobalt-blue neck and wings. In Ecuador, Purple Gallinule has been frequently found in the inter-Andean valley, including around Quito, and the wetlands of Yaguarcocha, prov. Imbabura^{3,12}, to 3,280 m, at Laguna de Colta, prov. Chimborazo⁴, whilst the previous highest record from anywhere in the Andes was in dpto. Junín, Perú, at 4,080 m⁵. The species' status in Ecuador is unclear. It is a breeding resident in the eastern and western lowlands¹², but migratory/dispersing individuals have been noted in the inter-Andean valley, with a surprising increase in the 1990s^{3,4} presumably due to greater ornithological activity in recent decades. The specimen probably represents a vagrant as no resident population has been reported from the wetlands of the Papallacta–Antisana area, despite rather intensive surveys¹¹.

Band-tailed Pigeon Columba fasciata

Common in the highlands and foothills of Ecuador, at 800-3,000 m^{5,12}, we found a dead bird at Páramo de la Virgen, at 4,060 m (00°19'S 78°12'W), in May 2005 (QCAZ 2960). This area comprises wet-grass páramo dominated by tussocks of Cortaderia nitida, with patches of Gynoxys and Monticalia shrubs and trees, and scattered Puya hamata bromeliads and cushion plants10. The bird was an adult with abundant fat and its stomach was full of seeds, pulp and leaves of an Ericaceae (Vaccinum sp.). This pigeon had already been noted at high altitude in Ecuador (e.g., one at Papallacta, prov. Napo, at 3,500 m¹², and at Pasochoa Protected Forest, at 3,200 m: GBJ pers. obs.). Our specimen confirms its occurrence above 3,500 m. Although Band-tailed Pigeon has been recorded as a vagrant up to 3,900 m², our specimen is apparently the highest on record in Ecuador. Seasonal movements have been reported in Colombia and Venezuela, but details are unknown^{2,8,9}. Such movements are plausible but require confirmation. The species' distribution might also coincide with that of tree or bush species with fleshy fruits, e.g. Vaccinium, Miconia, Brachyotum and others that grow as high as 4,200 m in Ecuadorian Andes¹⁵. Detailed accounts of the diet of this species in the northern Andes are unavailable, but Costa Rican populations feed on fruits of Hesperomeles, Prunus seroting and *Myrica*², which genera also occur in the Ecuadorian Andes and could be important in the occurrence of Band-tailed Pigeon above 3,500 m.

Purple-collared Woodstar Myrtis fanny

Common in the dry inter-Andean valleys of Ecuador, primarily at $1,400-2,600~\text{m}^{12}$, the species is easily observed in the Guayllabamba and

Tumbaco valleys, north and east of Quito, but not certainly recorded from the city itself (N. Krabbe pers. comm.). In June 2005, one was found in Carcelén, northern Quito (prov. Pichincha; 00°07'S 78°30'W; 2,700 m). The specimen (QCAZ 2962) is a female with slight moult in the head feathers. This record represents a 200 m increase in the species' altitudinal range in Ecuador¹². Several hummingbirds are common in urban areas of Central and South America^{8,13}. In Quito, at least 14 species have been recorded and Purple-collared Woodstar might also be resident as it was recorded, by various observers, in 1994–97 in Parque Metropolitano, towards the Cumbayá and Tumbaco valleys (D. Cisneros-Heredia unpubl.). Furthermore, it also occurs in the Pomasqui Valley, north of Carcelén (QCAZ 672-673). Increases in the temperature at Quito might explain the expansion towards higher altitudes by this hummingbird^{3,14}.

Acknowledgements

We thank Santiago Burneo, collection manager of Museo QCAZ in Quito for permitting access to the collection, and Niels Krabbe, Diego Cisneros-Heredia and Pierre-Yves Henry for sharing comments and unpublished observations.

References

- Ágreda, A., Nilsson, J., Tonato, L. & Román, H. (2005) Range extension for, and description of the juvenile of, Bicoloured Antvireo Dysithamnus occidentalis punctitectus in Ecuador. Cotinga 24: 20-21
- Baptista, L. F., Trail, P. W. & Horblit, H. M. (1997)
 Family Columbidae (pigeons and doves). In: del Hoyo, J., Elliott, A. & Sargatal, J. (eds.) Handbook of the birds of the world, 4. Barcelona: Lynx Edicions.
- Buitrón, G. & Freile, J. F. (2006) Registros inusuales de aves migratorias y de bosques subtropicales en Quito, Ecuador. Cotinga 26: 54-56.
- Cisneros-Heredia, D. (2006) Aves, Podilymbus podiceps, Ardea alba, Egretta thula, Nycticorax nycticorax, Ixobrychus exilis, Porzana carolina, Porphyrula martinica, Gallinula chloropus, Phalaropus tricolor, Vanellus resplendens: distribution extensions, filling gaps, historical occurrence. Checklist 2: 27–31.

- Fjeldså, J. & Krabbe, N. (1990) Birds of the high Andes. Copenhagen: Zool. Mus., Univ. of Copenhagen & Svendborg: Apollo Books.
- Freile, J. F. & Chaves, J. A. (2004) Interesting distributional records and notes on the biology of bird species from a cloud forest reserve in northwest Ecuador. *Bull. Brit. Orn. Club* 124: 6–16.
- Henry, P.-Y. (2004) New distributional records of birds from Andean and western Ecuador. Cotinga 23: 27–32.
- 8. Hilty, S. L. (2003) *The birds of Venezuela*. London, UK: Christopher Helm.
- Hilty, S. L. & Brown, W. L. (1986) A guide to the birds of Colombia. Princeton, NJ: Princeton University Press.
- Lægaard, S. (1992) Influence of fire in the grass páramo vegetation of Ecuador. In: Balslev, H. & Luteyn, J. (eds.) Páramo: an Andean ecosystem under human influence. London, UK: Academic Press.
- López-Lanús, B. & Blanco, D. E. (2005) El censo neotropical de aves acuáticas 2004. Buenos Aires: Wetlands International.
- Ridgely, R. S. & Greenfield, P. J. (2001) The birds of Ecuador, 1. Ithaca, NY: Cornell University Press.
- Ridgely, R. S. & Gwynne, J. A. (1989) A guide to the birds of Panama with Costa Rica, Nicaragua, and Honduras. Princeton, NJ: Princeton University Press.
- Ron, S., Duellman, W., Coloma, L. & Bustamante, M. (2003) Population decline of the Jambato Toad Atelopus ignescens (Anura: Bufonidae) in the Andes of Ecuador. J. Herpetology 37: 116–126.
- Ulloa, C. & Jorgensen, P. M. (1993) Árboles y arbustos de los Andes del Ecuador. AAU Reports 30: 1–264.

Galo Buitrón Jurado and Tjitte de Vries

Museo de Zoología, Escuela de Biología, Pontificia Universidad Católica del Ecuador, Casilla 17–01–2184, Quito, Ecuador. E-mails: galobuitronj@yahoo.es, tdevries@puce.edu.ec.