

The Wilson Journal of Ornithology 119(2):292–295, 2007

First Record of the White-tipped Sicklebill (*Eutoxeres aquila aquila*: Trochilidae) for Venezuela

Carlos Rengifo,^{1,2,4} Marja H. Bakermans,³ Roger Puente,^{1,2} Andrew Vitz,³
Amanda D. Rodewald,³ and Mario Zambrano²

ABSTRACT.—A female White-tipped Sicklebill (*Eutoxeres aquila aquila*) was caught on 3 February 2006 at 1,050 m elevation in Agua Blanca, Municipio Andrés Bello, Mérida, Venezuela, 2 km southeast of La Azulita. This account represents the first record of this hummingbird species in Venezuela, extending the taxon's known distribution at least 500 km northeastward. Received 23 February 2006. Accepted 11 September 2006.

The White-tipped Sicklebill (*Eutoxeres aquila*) is a resident species in Central America from Costa Rica to Panama, in South America from the Colombian Pacific slope to northwestern Ecuador, and from the eastern slope of the Colombian Andes to northern Peru (Hilty and Brown 1986, Schuchmann 1999, Zamora et al. 2004). The altitudinal range is from sea-level to 2,100 m (Hilty and Brown 1986, Mazariegos 2000, Ridgely and Greenfield 2001, Zamora et al. 2004). Throughout most of its range, *E. aquila* inhabits the understory of humid forest, including second-growth forest and forest edges (Hilty and Brown 1986, Ridgely and Gwynne 1989, Stiles and Skutch 1989). It feeds mainly on *Heliconia*, *Columnnea*, and *Centropogon* spp. (Borgella and Snow 2001, Zamora et al. 2004), and is frequently seen near patches of *Heliconia* spp. (Stiles 1975, Hilty and Brown 1986, Gill 1987, Ridgely and Gwynne 1989, Stiles and Skutch 1989, Borgella and Snow 2001).

A female White-tipped Sicklebill (Fig. 1) was mist-netted and collected on 3 February

2006 at Agua Blanca, 1,050 m elevation, 8° 42' 32" N, 71° 25' 55" W, Municipio Andrés Bello, Mérida, Venezuela, 2 km southeast of the town of La Azulita (Fig. 2). The vegetation at the capture site is predominantly second-growth forest surrounded by shade coffee plantations where *Miconia*, *Erythrina*, *Heliconia*, *Inga*, and *Heliocarpus* spp. are abundant. The forest stand is adjacent to La Sierra de la Culata National Park, an area comprising 200,400 ha of contiguous primary forest. The landscape surrounding the forest stand is characterized by a variety of land uses, including pasture, coffee plantations, farms, and towns. Annual mean temperatures oscillate between 10 and 18° C, with day-night amplitudes of 6–8° C, and annual rainfall varying from 100 to 260 cm (Ataroff and Sarmiento 2003). The vicinity of La Azulita is a hotspot for migratory and resident bird taxa in this Andean region; 456 species have been recorded in this area (Rengifo et al. 2005).

Our capture represents the first record of *E. aquila* for Venezuela (Phelps and De Schauensee 1979, Hilty 2003, Rengifo et al. 2005), extending the known distribution of this taxon at least 500 km northeastward from the closest location on the eastern slope of the Colombia Andes in the Cundinamarca Department (Hilty and Brown 1986). The individual captured had a strongly decurved bill (typical for the genus) and was bronzy green above, dark green on the crown and nape, heavily streaked (sooty and white) below, with a bifurcated tail which was bronzy green and broadly tipped with white. Measurements from the living individual were: total length 125 mm, wing chord 69.5 mm, tail 74.6 mm, bill 30.2 mm, tarsus 9.6 mm, and body mass 9.2 g. The specimen was prepared as a round skin and deposited in the Colección de Vertebrados de la Universidad de los Andes, Facultad de

¹ Colección de Vertebrados de la Universidad de los Andes (CVULA), Facultad de Ciencias, Apartado Postal 229, Mérida, Venezuela.

² Estación Ornitológica La Mucuy, Parque Nacional Sierra Nevada, Mérida, Venezuela.

³ School of Environment and Natural Resources, Ohio State University, Columbus, OH, USA.

⁴ Corresponding author; e-mail: crengifo@ula.ve



FIG. 1. Female White-tipped Sicklebill captured 3 February 2006 at Agua Blanca, Municipio Andrés Bello, Mérida, Venezuela.

Ciencias in Mérida, Venezuela (CVULA-522).

The known subspecies of the White-tipped Sicklebill, *E. a. aquila* (Bourcier 1847), *E. a. heterura* (Gould 1868), and *E. a. salvini* (Gould 1868), show only slight morphological differences. Our specimen appears to represent the nominotypical form based on the prominent white tips to the rectrices and the bright orange-ochraceous edges of the undertail coverts (Schuchmann 1999). Of the three subspecies of *Eutoxeres aquila*, *E. a. aquila* would be most likely to occur in Venezuela, given its current distribution along the eastern Andes from Colombia to Peru (Schuchmann 1999, Mazariegos 2000). This mountain range is linked with the Venezuelan Andes by a faunal exchange corridor of submontane and seasonal forests, which form a relatively continuous belt across the Táchira low (Anderson and Soriano 1999, Soriano et al. 2005). Further studies will be needed to evaluate if the specimen of *E. aquila* is a member of an isolated relict population, part of a larger popu-

lation continuous with Colombian populations, or even a new taxon.

Previous accounts of the natural history and ecology of *E. aquila* describe the species as a trapliner (foraging strategy used by pollinators in which they proceed from one plant to another, often over great distances; McDade 1992) with some altitudinal movement that depends on the flowering periods of *Heliconia* spp. (Musaceae; Ridgely and Gwynne 1989, Stiles and Skutch 1989, Mazariegos 2000, Borgella and Snow 2001, Zamora et al. 2004). We removed pollen grains from the hummingbird specimen following Kearns and Inouye (1993). They were subsequently identified to species level by comparison with samples of *Heliconia* spp. pollen collected in the same area. All of the pollen grains ($n = 57$) collected from the bird were from *Heliconia bihai*. This plant reaches heights of 2–3 m and may dominate the understory, especially along ridges where sufficient light is available (Aristeguieta 1961, Berry and Kress 1991). A large stand of this species occurred at the cap-

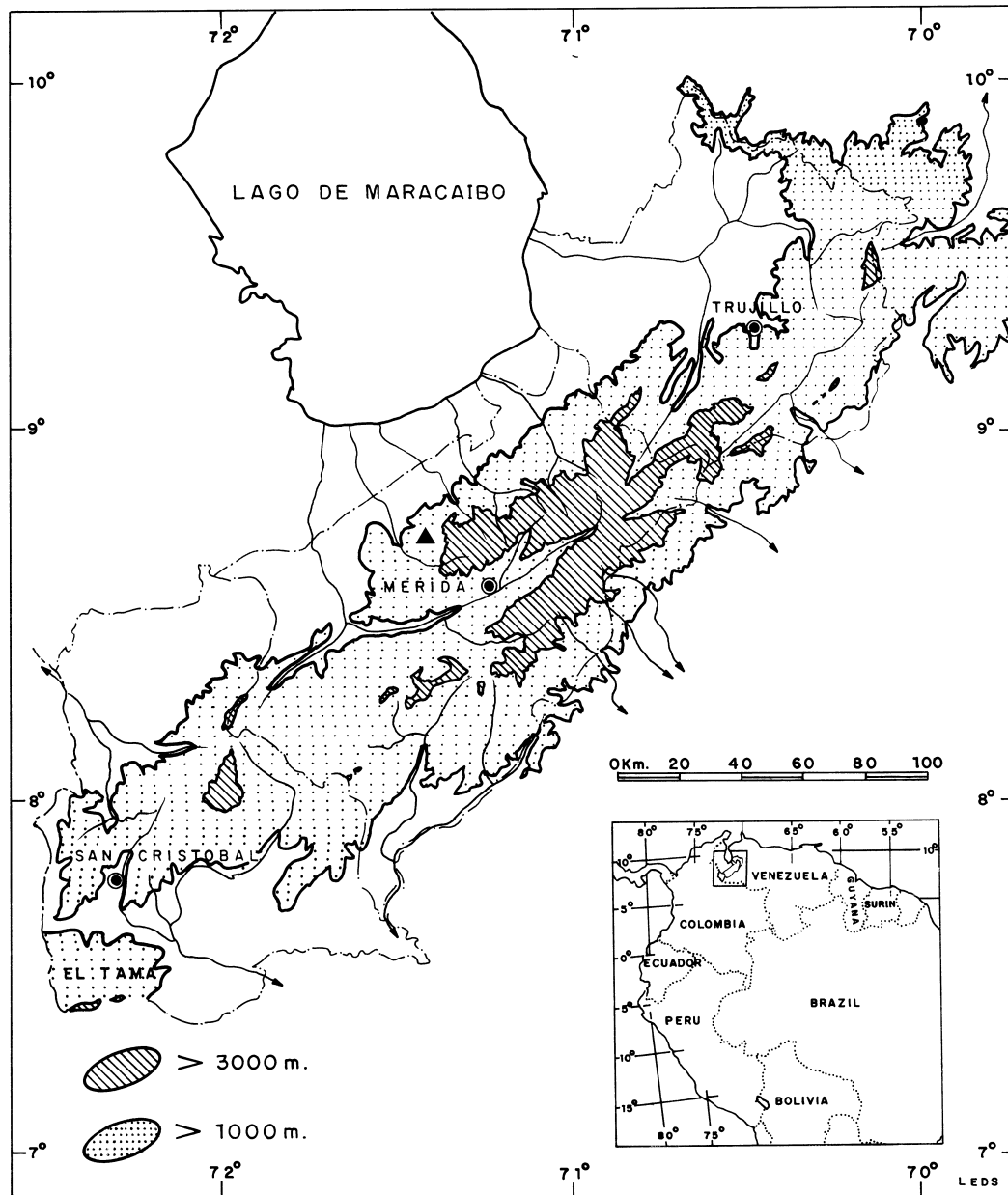


FIG. 2. General vicinity of Mérida, Venezuela. Solid black triangle indicates where the White-tipped Sicklebill was captured.

ture site, indicating it was an appropriate microhabitat for specialized avian visitors such as *Eutoxeres*.

ACKNOWLEDGMENTS

Our work was funded by a U.S. Fish and Wildlife Service Assistance Award through the Neotropical Mi-

gratory Bird Conservation Act grant to A. D. Rodewald and M. H. Bakermans. Additional support was provided by the Cleveland Metroparks Zoo (Small Grant); Ohio State University Office of International Studies, Ohio State University Latin American Studies (Tinker Field Grant); and La Mucuy Bird Observatory (grants from The Nature Conservancy, The James Baillie Memorial Fund, and Ideawild). We thank Sr.

Pablo Rangel and his family for permitting us to work on their land, and INPARQUES for providing the necessary research permits. R. G. Smith, J. S. Gomez, P. G. Rodewald, and A. W. Jones kindly commented on an earlier draft of this manuscript.

LITERATURE CITED

- ANDERSON, R. L. AND P. J. SORIANO. 1999. The occurrence and biogeographic significance of the southern spiny pocket mouse *Heteromys australis* in Venezuela. *Zeitschrift für Säugetierkunde* 64:121–125.
- ARISTEGUIETA, L. 1961. El género *Heliconia* en Venezuela. Ministerio de Agricultura y Cría. Caracas, Venezuela.
- ATAROFF, M. AND L. SARMIENTO. 2003. Diversidad en Los Andes de Venezuela. I. Mapa de Unidades Ecológicas del Estado Mérida. CD-ROM Edition. Instituto de Ciencias Ambientales y Ecológicas (ICAE), Universidad de los Andes, Mérida, Venezuela.
- BERRY, F. H. AND W. J. KRESS. 1991. *Heliconia*: an identification guide. Smithsonian Institution Press, Washington, D.C., USA.
- BORGELLA, R. AND A. SNOW. 2001. Species richness and pollen loads of hummingbirds using forest fragments in southern Costa Rica. *Biotropica* 33:90–109.
- GILL, F. 1987. Ecological fitting: use of floral nectar in *Heliconia stilesii* Daniels by three species of hermit hummingbirds. *Condor* 89:779–787.
- HILTY, S. 2003. *Birds of Venezuela*. Second Edition. Princeton University Press, Princeton, New Jersey, USA.
- HILTY, S. AND L. BROWN. 1986. *A guide to the birds of Colombia*. Princeton University Press, Princeton, New Jersey, USA.
- KEARNS, C. A. AND D. W. INOUE. 1993. Techniques for pollination biologists. University Press of Colorado, Niwot, USA.
- MAZARIEGOS, L. A. 2000. *Joyas aladas de Colombia*. Imprelibros, Cali, Colombia.
- MCDADE, L. A. 1992. Pollinator relationships, biogeography, and phylogenetics. *BioScience* 42:21–26.
- PHELPS, W. H. AND M. DE SCHAUENSEE. 1979. *Una guía de las aves de Venezuela*. Artimano, Caracas, Venezuela.
- RENGIFO, C., M. ZAMBRANO, AND A. NAVA. 2005. *Lista de aves de La Azulita*, Municipio Andrés Bello, Mérida, Venezuela. Editorial Venezolana, Venezuela.
- RIDGELY, R. S. AND P. J. GREENFIELD. 2001. *The Birds of Ecuador*. Cornell University Press, Ithaca, New York, USA.
- RIDGELY, R. S. AND J. GWYNNE. 1989. *A guide to the birds of Panama*. Princeton University Press, Princeton, New Jersey, USA.
- SCHUCHMANN, K. L. 1999. Family Trochilidae (Hummingbirds). Pages 468–680 in *Handbook of the birds of the world*. Volume 5. Barn-owls to hummingbirds (J. del Hoyo, A. Elliot, and J. Sargatal, Editors). Lynx Editions, Barcelona, Spain.
- SORIANO, P., A. RUIZ, AND Z. ZAMBRANO. 2005. New noteworthy records of bats for the Andean region of Venezuela and Colombia. *Mamalia* 69:251–255.
- STILES, F. G. 1975. Ecology, flowering phenology and hummingbird pollination of some Costa Rican *Heliconia* species. *Ecology* 56:285–301.
- STILES, F. G. AND A. F. SKUTCH. 1989. *A guide to the birds of Costa Rica*. Cornell University Press, Ithaca, New York, USA.
- ZAMORA, A., E. CHICA, AND S. NOSSA. 2004. *Guía ilustrada de los colibríes de la Reserva Natural de Río Nambi*. Impresol Ediciones Ltda, Bogotá, Colombia.