

The big free-tailed bat *Nyctinomops macrotis* (Chiroptera: Molossidae) in Oaxaca, Mexico

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SHORT COMMUNICATION

Manuscript history:

Submitted in 03/Feb/2012

Accepted in 18/Mar/2012

Available on line in 4/Oct/2012

Section editor: Ludmilla M.S. Aguiar

Abstract - The big free-tailed bat (*Nyctinomops macrotis*) has a broad distribution in North and South America, although records tend to be sparse and there are large areas with no records. We report the first record of this species in Oaxaca, Mexico, which fills a gap in the known distribution of *N. macrotis* in the southeastern Mexico. The collection locality and characteristics of the specimen are described.

Resumen - El murciélago *Nyctinomops macrotis* presenta una distribución muy amplia en el continente americano, aunque con registros escasos y zonas amplias en las que se encuentra ausente. Se registra por primera ocasión a esta especie en el estado de Oaxaca, México, lo que llena un vacío en la distribución de *N. macrotis* en sureste del país. Se describen la localidad de colecta y las características del ejemplar.

Keywords:

Introduction

The known distribution for the big free-tailed bat *Nyctinomops macrotis* ranges from Southeastern British Columbia in Canada and Iowa in the United States to Southeastern Mexico, from Peru through Columbia, Venezuela, and Guyana to Surinam, as well as in the north of Argentina, Uruguay, Cuba, Jamaica, and Hispaniola (Simmons 2005). However, there are large areas in Central and South America where no record of this species has been reported (Milner et al. 1990). Similarly, although this bat has been recorded in more than half of the states of Mexico, it has been absent from Baja California Sur, Coahuila, San Luis Potosí, several central States, Oaxaca and Tabasco in the southeastern, as well as the Yucatan Peninsula (López-Wilchis & López Jardines 1998; Arita 2005).

On 12 March 2011, a specimen of *Nyctinomops macrotis* was captured at Paraje Rancho Primavera, 2.7 km E of Tlacolula de Matamoros (16° 57'33.8"N; 96° 27'12.1" W;

elevation 1660 m) in the municipality and district of the State of Oaxaca and within the area belonging to the Yagul Natural Monument. Capture was performed with a mist net placed over the bed of a wash; surrounding vegetation was xerophilous scrub, columnar cacti, secondary vegetation, pastureland, and crop fields. The specimen was an adult male, without evidence of reproductive activity. The skin and skull are deposited in the Colección de Referencia de Mamíferos del Laboratorio de Ecología Animal del Centro Interdisciplinario de Investigación para el Desarrollo Integral Regional, Unidad Oaxaca del Instituto Politécnico Nacional de México (ECOAN-MAM). The external measurements (mm) of this specimen are: total length, 137; vertebral tail length, 50; ear length (fresh), 10; length of hind foot, 23; length of the forearm, 61; weight, 13 g. Selected cranial measurements (mm) following Martin et al. (2000) are: greatest length of the skull, 22.2; rostral breadth, 4.25; zygomatic breadth, 12.48; maxillary tooth row, 8.78; mandible length, 15.48; mandibular tooth row, 8.45.

The closest previous record of this species in Mexico is in Casona en Paso de Ovejas, Veracruz (Villa-Ramírez 1967), 288 km to the NNW. This new record fills a gap in the distribution of *N. macrotis* in the Southeastern Mexico, as, in addition to the record in Veracruz, it has been reported in the states of Guerrero (Cañón de los Sabinos, 20 km E Teloloapán; Villa-Ramírez 1967) and Chiapas (Centro Piscícola “La Pesca”, Coapilla, Martínez-Coronel & Vidal-López 1997).

The area in which the specimen was captured shows a considerable degree of disturbance, which, together with the presence of cliffs and caves, is consistent with known habitat affinities of this species (Sánchez et al. 1989).

Acknowledgements

The authors would like to thank the Dirección Sierra Juárez-Mixteca de la Comisión Natural de Áreas Naturales Protegidas de México for providing the authorization and funding for this study, and the Instituto Politécnico Nacional de México for additional financing. They are also grateful to Liliana Martínez, Alba L. Santiago, and Víctor U. Ríos for their valuable help with the field work.

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