

# First Record of the Hoary Bat (*Lasiurus cinereus*, Vespertilionidae) for Honduras

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**Abstract.** The distribution of the hoary bat (*Lasiurus cinereus*) extends from Canada to Chile, and it includes several islands in the Caribbean, Atlantic and Pacific oceans including Hawaii. The species seems to be a rare visitor to Central America where it has been reported from Guatemala and Panama. Here we report the first record for the hoary bat from Honduras which confirms its expected presence in other countries of the region. The specimen was found at a vegetation open area on Cerro de Hula, Santa Ana Municipality; 20 km south of Tegucigalpa, Honduras capital, on July 27, 2012.

**Key Words:** Acoustic detection, Central America, Cerro de Hula, migratory, Zamorano.

## Primer Record del Murciélago Canoso (*Lasiurus cinereus*, Vespertilionidae) en Honduras

**Resumen.** La distribución del murciélago canoso (*Lasiurus cinereus*) se extiende de Canadá a Chile e incluye varias islas en el Caribe, el Atlántico y el Pacífico, incluso Hawai. La especie parece ser un visitante raro en Centroamérica donde ha sido reportado de Guatemala y Panamá. Aquí hacemos el primer registro del murciélago canoso para Honduras lo que confirma su presencia esperada en otros países de la región. El espécimen fue encontrado en un área de escasa vegetación natural en Cerro de Hula, Santa Ana, 20 km al sur de Tegucigalpa, capital de Honduras, el 27 de julio de 2012.

**Palabras clave:** Centro América, cerro de Hula, detección acústica, migratorio, Zamorano.

### Introduction

The hoary bat (*Lasiurus cinereus*) is an unmistakable colorful vespertilionid that inhabits Colombia and Venezuela; Central Chile, Bolivia, Uruguay, Paraguay, and Central Argentina; Hawaii (USA); Guatemala and Mexico throughout the USA to Southern British Columbia, Southeastern Mackenzie, Hudson Bay and Southern Quebec (Canada); Galápagos Islands (Ecuador) (Simmons 2005) and Panamá (Reid 2009). Distribution of the hoary bat in Central America is patchy; it has been reported from two localities in the highland pine-oak forest of Guatemala, and the Cordillera Central of western Panama (Reid 2009). Herein, we report the first record for *L. cinereus* from Honduras. This is not a range extension report but a confirmation of the expected presence of this species in another Central American country.

The hoary bat is a very well-known species and its size and coloration are unmistakable. Dorsal color, including the uropatagium, is a mixed brown-gray

with a heavy white tinge, which gives this bat a frosty appearance or hoary effect (Shump and Shump 1982). Each individual silky hair is basally dark, medially yellowish, and distally black with white tips. Its venter is not heavily frosted but its throat has a distinct yellow patch. The hair on the elbow, at the base of the clawed thumb, and the upper arm is also yellowish. Ears are yellow with black edges and brownish fur extends out on the underside of the wing nearly to the wrist (Anderson 2002).

### Description and Discussion

A male hoary bat was found recently dead at a bat study site at Cerro de Hula in Santa Ana Municipality (13°56'19.94" N, 87°14'56.94"W, 1658 msnm), 20 km south of Tegucigalpa, Honduras on 27 July 2012. The site is a highly disturbed area with little scattered natural vegetation. The area is used for agriculture, cattle ranching and some human housing in the neighborhood. The specimen is a male without any reproductive symptoms; testes measured 64 × 32 and

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50 × 25mm. External measurements (mm) and mass (g) are: length of head and body, 83.1; length of tail, 50.0; length of hind foot, 10.0; length of ear, 18.0; length of forearm, 51.1; mass, 20.0. The specimen was prepared as a study skin and skull and is deposited at Zamorano Museum Collection, Honduras (collector number JM52-2012, collection number EAPZ-06).

The hoary bat seems to be abundant at some places and as such it is listed as Least Concern by the IUCN. This is due to its wide distribution, presumed large population, existence in a high number of protected areas, tolerance to some degree of habitat modification, and because it is unlikely to decline at a unfavorable rate to lead the species to a threatened category (Gonzalez *et al.* 2012). It is an aerial insectivore (more difficult to capture) and seems to be a rare visitor in Central America (Reid 2009). These two facts may explain why this species has not been reported previously in Honduras.

Although there is evidence to support the assumption that this bat migrates, specific migration patterns have not been plotted (Anderson 2002). There is no information about this behavior in Central America. The male hoary bat in Honduras was found during the northern hemisphere summer, presumably not a member of any latitudinal migratory population.

It is known that some hoary bat individuals often have trouble finding their way out of the caves and die there (Anderson 2002). Also accidental impalement on barbed wire fences is a common occurrence (Shump and Shump 1982). The hoary bat found in Honduras was in an open area and judging from its condition, probably died after an accident with a human-made structure. It has been reported that this bat forages around lights in towns and rural areas (Furlonger *et al.* 1987).

Several other species of bats have been identified at the study site in Santa Ana Municipality by means of mist netting and acoustic detection. The list includes *Lasiurus intermedius*, *L. ega* and *L. blossevillii*. Acoustic detections of bats conducted in the study area have not provided any recording of the hoary bat call.

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