

Noteworthy Record of *Eptesicus brasiliensis* (Vespertilionidae) in Honduras

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Abstract. Although the Brazilian brown bat (*Eptesicus brasiliensis*) has been included in some Honduras bat lists, there is not an official record or a scientific publication supporting it. Here we confirm the presence of the Brazilian brown bat in Honduras. We mist-netted a female Brazilian brown bat in Choluteca, southern Honduras. The individual was captured over a path near a riparian corridor in a coffee plantation. We also include the spectrogram of the species call recorded at the same locality. The Honduras bat list achieves now 108 species although there is a debate about the real number of species in the country.

Key words. Bat list, Brazilian brown bat, coffee habitat, spectrogram.

Un Registro Destacado de *Eptesicus brasiliensis* (Vespertilionidae) en Honduras

Resumen. Aunque el eptésico de Brasil (*Eptesicus brasiliensis*) ha sido incluido en algunas listas de murciélagos de Honduras, no existe un registro oficial o una publicación científica que lo apoye. Aquí confirmamos la presencia de *E. brasiliensis* en Honduras. Capturamos un eptésico de Brasil, hembra, en una red de niebla en Choluteca, sur de Honduras. El individuo fue capturado en un camino cerca de un corredor ribereño en una plantación de café. Incluimos también un espectrograma de la llamada de la especie obtenido en la misma localidad. La lista de murciélagos de Honduras alcanza ahora 108 especies, aunque existe un debate sobre el número real de especies en el país.

Palabras clave. Eptésico de Brasil, espectrograma, hábitat de café, lista de murciélagos.

Introduction

The bat fauna of Honduras did not receive much attention in the past (McCarthy *et al.* 1993). However, lately the interest has increased due to several reasons (Espinal y Mora 2012). This interest has allowed the increase in our knowledge of the Honduras bat fauna which contains around 110 species. Recently, the Central America strategy for bat conservation listed 109 species for Honduras (Rodríguez y Sánchez 2015). However this list did not include *Vampyriscus nymphaea* recently reported for Honduras (Mora *et al.* 2014). The list has some other omissions such as *Lasiurus cinereus* reported recently for Honduras (Mora y López 2010) and Nicaragua (Medina-Fitoria *et al.* 2015) but not included in the list of this last country; curiously it is mentioned in the Nicaraguan chapter of the same volume (Medina and Saldaña 2015). At the same time Hernández (2015) in

his chapter of the same strategy, mentioned that there are 112 species of bats in Honduras. Espinal *et al.* (2015) pointed out that the number of bat species for Honduras is 107. This last count did not include the Brazilian brown bat (*Eptesicus brasiliensis*), a species expected for Honduras but without any official record. The species presence is not supported by a scientific publication. The species was also included in the list for Honduras of the previously mentioned Central America strategy (Rodríguez y Sánchez 2015).

Eptesicus brasiliensis is distributed from southern Mexico to northern Argentina, Paraguay, and Uruguay, as well as the islands of Trinidad and Tobago (Simmons, 2005). *Eptesicus brasiliensis* inhabits the lowlands to altitudes of 3,000 m. This species is uncommon and found in evergreen forest and forest edges (Reid 2009). Arita (1993) pointed out that this bat is widespread in its range, but locally rare. In

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Central America it has been registered in Guatemala (Pérez *et al.* 2012), Nicaragua (Medina-Fitoria *et al.* 2015), Costa Rica (Starrett y Casebeer 1968), and Panamá (Davis 1966). The IUCN red list does not include Honduras as one of the countries of occurrence of the Brazilian brown bat (Barquez *et al.* 2008), although this account is already seven years old.

Description and Discussion

On 21 March, 2015, (dry season) we caught an adult female *E. brasiliensis* in San Marcos de Colón, Choluteca, Honduras (Figure 1). We captured the bat in a mist net that was set over a path near a riparian corridor in a coffee farm. The netting site was located

inside the boundaries of the Corpus municipality (13° 23' 06.1" N, 86° 57' 53.1" W) at an elevation of 1,082 m. The Brazilian brown bat is an insectivorous bat that feeds over tropical streams, and along edges of other habitats (Redford and Eisenberg 1992).

The female *E. brasiliensis* had a total length of 88.22 mm; forearm length, 41.89 mm; tail length, 39.33 mm; length of hind foot, 5.86 mm; height of ear, 9.21 mm; and weight, 9 g. Dorsal pelage was cinnamon brown (43) in color (Kohler 2012), with a length of 6-7 mm (Figure 2). The specimen was preserved in alcohol and is currently in the personal collection of one of us (Mario Espinal). This finding represents the first verified record of the occurrence of *E. brasiliensis* in Honduras.

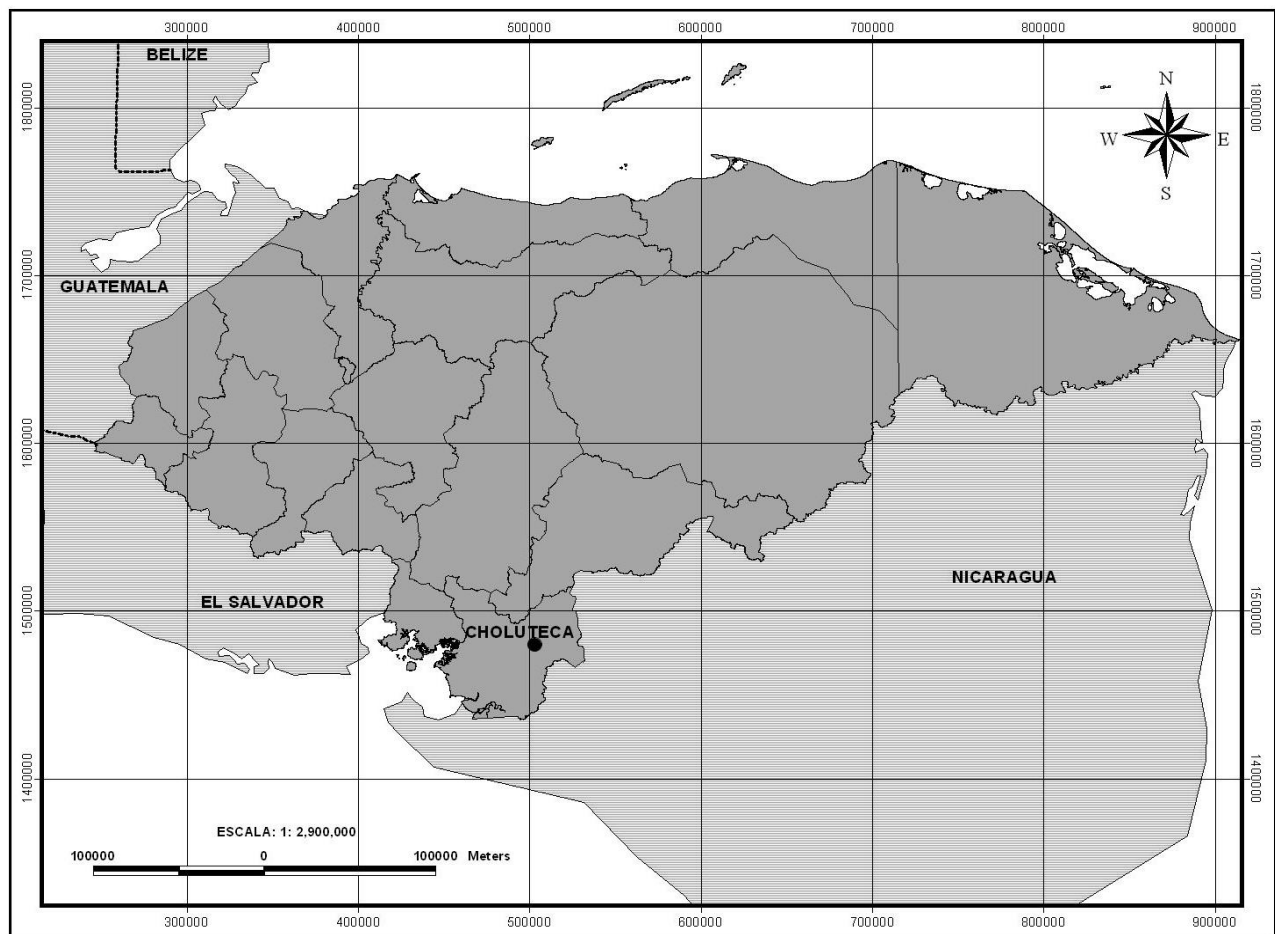


Figure 1. Locality in Honduras where a female *Eptesicus brasiliensis* was captured in a mist net (black dot), El Corpus, Choluteca, Honduras.



Figure 2. The individual of *Eptesicus brasiliensis* captured in El Corpus, Choluteca, Honduras. Photo by Mario Espinal taken March 21, 2015.

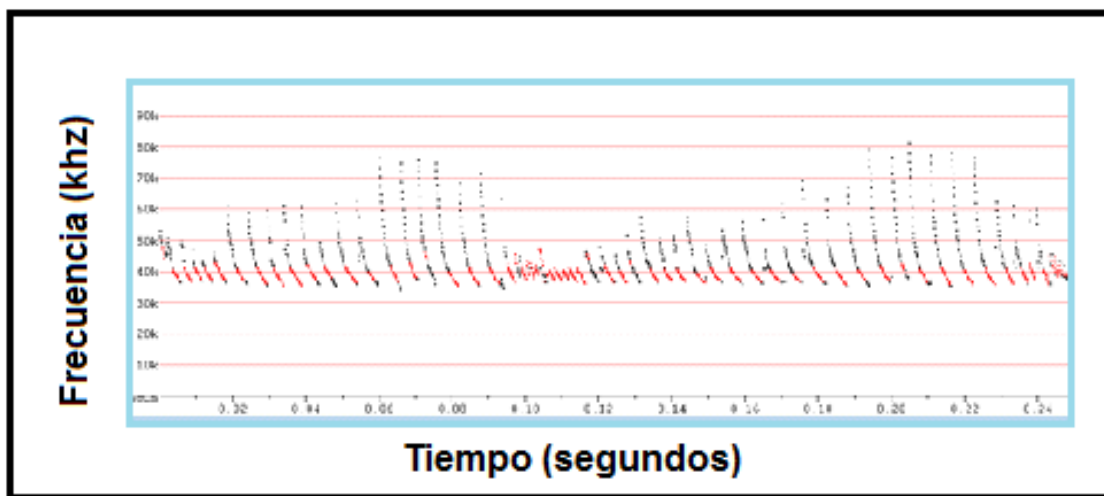


Figure 3. Spectrogram of *Eptesicus brasiliensis*; recording made in La Arrinconada, El Corpus, Choluteca, southern Honduras.

On the same date we recorded an individual of *E. brasiliensis* by means of a ANABAT SD2 CF Bat Detector (Titley Electronics, Australia) while we sampled for insectivorous bats early in the evening. We also used the zipline flight technique (Estrada-Villegas *et al.* 2015) to obtain a spectrogram and confirm the individual's identification. Recordings were analyzed with the Analoow versión 3.9 program. The spectrogram (Figure 3) was compared with the one *E.*

brasiliensis included in Kraker-Castañeda (2010).

We captured the female *E. brasiliensis* at 6:42 p.m., relatively early in the evening. This bat is active about half an hour to one hour after sunset (Reid 2009), and remains active all night; even from sunset to dawn (Miranda *et al.* 2006). The species has been considered uncommon (Reid 2009). The Brazilian brown bat is classified as of least concern (LC) in the IUCN Red List (Barquez *et al.* 2008).

There are several species of bats that are expected for Honduras. At the same time there are some species in the same previous condition of *E. brasiliensis*, without any official records nor a scientific publication for support. More field work is needed to elucidate these types of situations. Also, there is a need of a keen revision and preparation of the complete list of Honduras bats to confirm the actual number of species inhabiting the country.

Acknowledgments

Carlos O'reilly, Mauricio Medina, Rony Valle and Rodie Ordoñez provided valuable assistance during field work.

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Sometido para publicación el 8 de diciembre de 2015.

Aceptado para publicación el 3 de febrero de 2016.