A NEW RECORD OF NORTHERN GHOST BAT (*Diclidurus albus*, WIED-NEUWIED 1820) IN ECUADOR.

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Short title: NEW RECORD OF *Diclidurus albus* IN ECUADOR.

ABSTRACT. Only 9 records have been reported of *Diclidurus albus* in Ecuador. Little is known about this species due to its high altitude flight which avoids mist nets. Here, we report a new record of this species in a semi-deciduous forest in coastal Ecuador.

RESUMEN. Nuevo registro del murciélago blanco común (*Diclidurus albus*, Wied-Neuwied 1820) en Ecuador. Sólo se han reportado 9 registros de *Diclidurus albus* en Ecuador. Es una especie de la que se sabe poco, debido a que vuela a gran altura evitando las redes de neblina. En esta nota reportamos un nuevo registro de la especie en un bosque semi-caducifolio de la costa de Ecuador.

KEY WORDS. *Diclidurus*, Ecuador, Ghost bat, Manabí, Semi-deciduous forest.

PALABRAS CLAVE. Bosque semi-caducifolio, *Diclidurus*, Ecuador, Manabí, murciélago blanco.

Ecuador is one of the most biodiverse countries in the world (Mittermeier et al., 1997). With regard to mammals Ecuador ranks ninth in the world, presenting a total of 424 native species (Tirira, 2011; 2015). Of these, 171 species are bats, grouped in 8 families and 64 genera (Tirira, 2015). In the genus *Diclidurus*, the so-called ghost bats, only 2 species have been reported in Ecuador: *D. albus* and *D. scutatus*. The latter species has been reported only once in the country (Albuja, 1999).

There are only nine reported records of *Diclidurus albus* in Ecuador (Albuja, 1982; Hodd and Gardner, 2007; Moscoso and Tirira, 2009), two of which likely refer to the same individual (Moscoso and Tirira, 2009). The low number of records, as well as the scarcity of ecological information, is likely due to the species' habit of flying at high altitudes thus avoiding mist nets (Ceballos and Medellín, 1988; Linares, 1998). For this reason, most records of this species are photographic.

The present specimen (Fig. 1) was found in Lalo Loor Dry Forest Reserve, in Jama County, Manabí Province, Ecuador (UTM 9990944 S; 0594500 E; WGS84 zone 17) (Fig. 2). Between May 2013 and November 2015 this solitary animal was roosting in the biological station's dormitory building. The reserve, which encompasses 173 ha of semi-deciduous coastal forest from 50 to 250 m of elevation, presents a unique combination of dry forest (Tumbesian) and wet forest (Chocó) ecological elements, owing to its geographical location in the center of the moisture gradient between these two habitats. The mean annual temperature and annual precipitation at the reserve are 24.4 °C and 600 mm, respectively.

Diclidurus albus is a solitary species that roosts in small groups only during the breeding season (Ceballos and Medellín, 1988; Lim et al., 2008), when a male and several females can be found together at a roosting site (Hernández et al., 1985). The breeding season occurs between January and June with the copulation occurring in January and February (Hernández et al., 1985).

The species is known to roost in vegetation, such as palms and cacao plants (Ceballos and Medellín, 1988; Eisenberg and Redford, 1999) from 2-25m of height. However, this bat and several others also have been reported to occupy buildings (Moscoso and Tirira, 2009). Although it has been established that this species inhabits mostly riparian and tropical rainforest (Ceballos and Medellín, 1988; Lim et al., 2008) it has also been found in evergreen and deciduous forests (Eisenberg and Redford, 1999) as well as tropical dry forest (Moscoso and Tirira, 2009). This paper presents evidence of *D. albus* inhabiting semi-deciduous costal forest.

Diclurus albus is a species listed as Least Concern by the UICN due to its wide range (Lim et at., 2008); however, some authors suggest the possible existence of more than one species through its range (D.G. Tirira, pers. communication). The present paper contributes to

56 the scarce knowledge of the range of this species in Ecuador, where further studies are
57 warranted to explore its uncertain taxonomic, distributional, and ecological status.

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Figures

Figure 1: *Diclidurus albus* photographed in Lalo Loor Dry Forest Reserve on 9 May 2014.

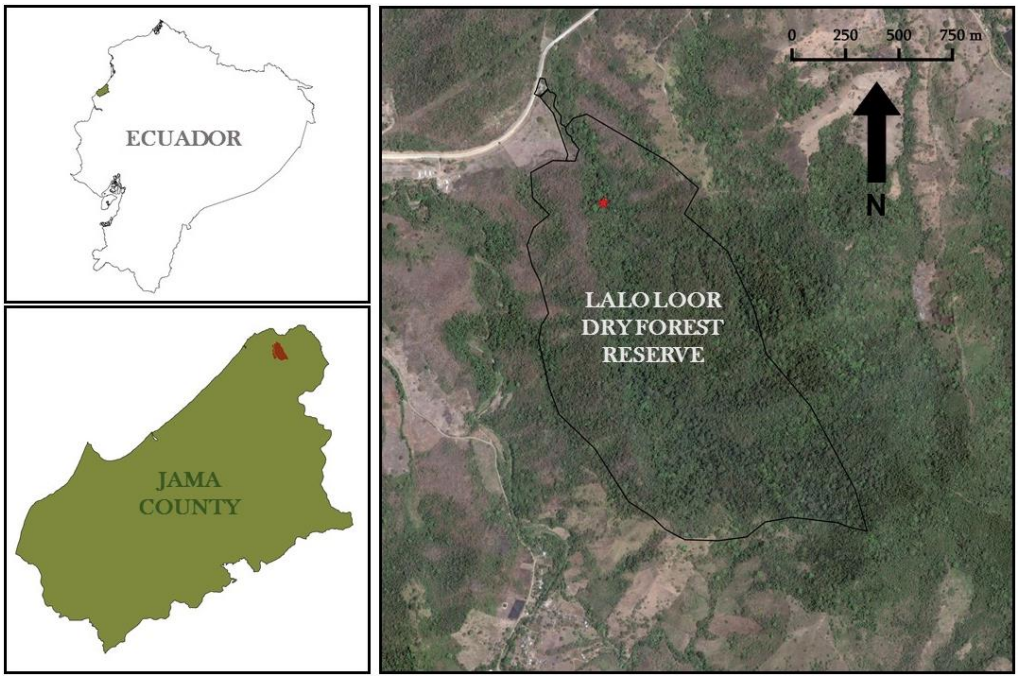

Figure 2: Location of Jama county in Ecuador (top left), Lalo Loor Dry Forest Reserve in the county (bottom left), and the new record into the reserve (red star in the main image).