Lophostoma brasiliense (Pygmy Round-eared Bat)

Family: Phyllostomidae (Leaf-nosed Bats)

Order: Chiroptera (Bats) Class: Mammalia (Mammals)



Fig. 1. Pygmy round-eared bat, *Lophostoma brasiliense*.

[http://www.inaturalist.org/observations/688563, downloaded 8 March 2017]

TRAITS. The pygmy round-eared bat, formerly known as *Tonatia brasiliense*, is a relatively small bat with a length of 42-61mm and a tail of 5-10mm, and weighs 7-13g (Wilson and Ruff, 1999). The bat has large rounded ears (Fig. 1) that are joined over the forehead by a piece of skin. Its upper body is grey or grey-brown in colour and its fur is soft and long. The tail and wings of the bat are short and the wings are attached to the base of the toes (Gomes and Reid, 2015).

DISTRIBUTION. Lophostoma brasiliense can be found in several countries in the Americas (Fig. 2); Bolivia, Peru and from southeast Mexico to northeast Brazil. It is also native to Trinidad (Gomes and Reid, 2015).

HABITAT AND ACTIVITY. The habitat of the *L. brasiliense* is not well known and limited information exists. However, it roosts in nests of arboreal termites, both abandoned nests and nests with an active termite population. Some general regions in which they can be found are; seasonal evergreen, semi-evergreen, second growth, woodland, manmade clearings in Venezuela and swamp community forests. Fruit groves may also play host to this species. In Trinidad, the species is known to roost in a variety of areas including, Chaguaramas, the Caroni Swamp, Rousillac, Aripo, Brasso Seco, Guaico, Maracas Valley, St.Patrick County, Guayaguayare Forest, Bush Bush Wildlife Sanctuary, Victoria Mayaro Reserve (VMFR), Trinity Hills and San Rafael (Gomes and Reid, 2015). All predatory bats, including *L. brasiliense*, use some variety of echolocation in flight as they are night fliers (Altringham, 2011).

FOOD AND FEEDING. The pygmy round-eared bat is a gleaner insectivore that feeds on insects but also feeds on fruits (IUCN, 2016). Insects are captured during flight and echolocation is used to identify insect prey (Altringham, 2011).

POPULATION ECOLOGY. The species is uncommon but widespread throughout the Caribbean and South America. The population is stable and the only threat to it is loss of tree cover (Gomes and Reid, 2015). The species can be found roosting in cavities of arboreal nests of termites. The species lives in a group of about five including a resident male who maintains the roost cavity and prevents the termites from taking over and repairing the damaged nest (York et al., 2008). *L. brasilie*nse is a small bat and such bats can usually live up to 7-8 years, in some cases for 10-30 plus years (Altringham, 2011). In Suriname, this species was found near many other species of bats such as *Artibeus concolor* and *Eptesicus brasiliensis* (Genoways and Williams, 1984).

REPRODUCTION. Details of the mating behaviour of the *L.brasiliense* remains largely unknown. Tropical bats such as *L. brasiliense* can have two or three oestrus cycles each year depending on the amount of food available per season which are influenced by rainfall and temperature. In Costa Rica, pregnant females were found in February and April (Gomes and Reid, 2015). A captured female in Suriname had a single foetus (Genoways and Williams, 1984).

BEHAVIOUR. After birth, the young stays under their mother's protection to be fed and taught the necessary skills before being weaned and eventually becoming an independent young adult. The ability to fly allows them to evade predators and thus increases their life span (Altringham, 2011).

APPLIED ECOLOGY. Under the IUCN, *L. brasiliense* is listed as Least Concern as the population is stable and widespread. Within the range of countries that the species may be found, it is usually located in protected areas and only in Mexico is it listed as endangered under the name *Tonatia brasiliense* (IUCN, 2016). Because the species is associated with restricted forest and secondary growth, its habitats are often subjected to anthropogenic ecological disturbances such as road construction and mining (Genoways and Williams, 1984).

REFERENCES

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Fig. 2. Pygmy round-eared bat geographic distribution

[http://maps.iucnredlist.org/map.html?id=21984, downloaded 8 March 2017]