

## *Tonatia saurophila* (Stripe-headed Round-eared Bat)

Family: Phyllostomidae (Leaf-nosed Bats)

Order: Chiroptera (Bats)

Class: Mammalia (Mammals)



**Fig. 1.** Stripe-headed round-eared bat, *Tonatia saurophila*.

[[https://inpn.mnhn.fr/espece/cd\\_nom/443706](https://inpn.mnhn.fr/espece/cd_nom/443706), downloaded 28 February 2016]

**TRAITS.** The stripe-headed round-eared bat averages 74-88mm in length of the head and body and 14-23mm tail length, weighing 24-36g (Koopman and Williams, 1951). It has dark grey, grizzled hairs with grey tips, the ears are large, highly membranous and rounded at the end. A pale stripe is formed by white-tipped hairs at the top of the head, between the ears. The nose-leaf is lance-shaped, greater in length than width. On the lower lip there are warts present in 3 or 4 crowded, arched series (Fig. 1). The genus is sexually dimorphic with males having longer measurements than the females in forearms, skull breadth behind the eyes and across the canines (Carter and Dolan, 1978).

**DISTRIBUTION.** *Tonatia saurophila* is widespread across Central and South America, they inhabit the lowlands and forests up to elevations of 600m from southern Mexico, Belize, Honduras, Colombia, Venezuela, the Guianas, Brazil, Jamaica and Trinidad (Koopman, 1967). However there are no records of the species being sighted anywhere south of the Amazon (Sampaio et al., 2008; Reid, 1997).

**HABITAT AND ACTIVITY.** *Tonatia saurophila* inhabits the subcanopy of forests as compared to other species that prefer the understory. The species has been found in both wet and dry climate conditions, in primary and secondary forests. They have also been recorded in pastures near forests and fragmented forests (Sampaio et al., 2008). As with other neotropical species of bats, *T. saurophila* makes its roosts in caves and tree hollows and is nocturnal, becoming most active at dusk and returning to the roost near dawn (Reid, 1997).

**FOOD AND FEEDING.** The stripe-headed round-eared bat is classed as insectivorous-omnivorous, mostly consuming insects such as katydids, beetles, planthoppers, mealybugs, and leafhoppers. However its diet is not limited to insects as tropical forests are highly seasonal and prey composition may vary during annual cycles (Bonaccorso, 1979). To adapt to this the diet consists of other sources of nourishment such as small lizards, arachnids and fruits, mostly soft fleshy types, mangoes, cherries and bananas (Kunz, 1982). *T. saurophila* leaves its roost at or soon after the sun sets and spends the majority of the night catching and feeding, it may diverge to other feeding locations depending on the presence of prey species. After feeding, they typically return to the roost between 3am to 5am, near the approach of sunrise (Bernard, 2002). Handley (1976) reports that this species has been observed roosting with other species of bat in tree hollows in the forests of Venezuela.

**REPRODUCTION.** Flemming et al. (1972) and Bonaccorso (1979) indicate that most neotropical bat species, and by inclusion *T. saurophila*, produce two offspring per year. The births of the offspring coincide with the highest periods of food availability, thus one young comes near the end of the dry season and the other is born in the middle of the wet season. Flemming et al. (1972) found that the Phyllostomidea family of bats had a bimodal reproductive season, with the peaks in offspring coming in January/February and July/August. In Gardner's (1976) report it was noted that two females each had two embryos at the same time.

**BEHAVIOUR.** *T. saurophila* is a highly social species, which has been recorded to share roosts with other species of bats in both hollow trees and caves (Handley, 1976). The bats form individual clusters of mostly female members, between 2-14 and their young with one dominant male. The young are kept close to the mother, hanging on to the belly, where it nurses. The young, when born, do not have fully developed wings and depend solely on the mother for food, after about six weeks they are able to fly and forage on their own (Bioexpedition.com, 2015). The bats form clusters in their roosts, for both warmth and safety in numbers. However they do not have many predators that can access their roost, apart from a few species of snakes. They make full use of their echolocation sonar senses to avoid predation while foraging outside of the roost. Reid (1997) notes that they respond to the calls of cicadas and the distress calls of other small bat species.

**APPLIED ECOLOGY.** According to the IUCN Red List of Threatened Species (IUCN, 2016), *T. saurophila* is regarded as a least concern species. While the stripe-headed round-eared bat is not a commonly found species, it has a wide range of habitat and adaptability, with a large presumed population. The only threat to the species, so far, is habitat loss in a few parts of its range, and this is not yet considered major. Bats have been known to carry diseases such as rabies, but no cases have ever been reported of this species carrying any disease or posing a threat to humans.

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