**Rhogeessa io** (Thomas’s Yellow Bat)

Family: Vespertilionidae (Vesper or Evening Bats)
Order: Chiroptera (Bats)
Class: Mammalia (Mammals)

![Thomas’s yellow bat](http://www.inaturalist.org/observations/742507, downloaded 28 April 2016)

**Fig. 1.** Thomas’s yellow bat, *Rhogeessa io*.

**TRAITS.** *Rhogeessa io*, also referred to as Thomas’s yellow bat, is a small, plain-nosed bat (Hargreaves, 2016). The dorsal fur is yellow to brown while the ventral fur is pale yellow or gold (Fig. 1), the hairs having slight but distinct bands of yellow at the base and a browner shade at the tips (Murcielagosdebolivia.com, 2016). The forearms measure 25-33mm, the third through fifth metacarpals of the fingers measure 26-28mm, and weight is around 5g (Academia.edu, 2016). The skull is small, with its greatest length around 11.7-12.6mm, and lacks a helmet region on the cranium (Pacheco et al., 2007). Thomas’s yellow bats have a blunt tragus (projection in the ear – Fig. 2) and glands are sometimes seen at the base of the males’ ears, which look like large bumps (Trinibats.com, 2016).
DISTRIBUTION. Thomas’s yellow bat is native to several parts of Central and South America (Czaplewski et al., 2005), and it can often be found in parts of Trinidad and Tobago (Fig. 3). Thomas’s yellow bat is the most widely distributed Rhogeessa species to inhabit South America.

HABITAT AND ACTIVITY. Thomas’s yellow bats are a common species of bats that dwell in warm, mesic, open habitats (Czaplewski et al., 2005) for example, in evergreen woodlands, thorn shrubs and villages. However, it appears to favour slightly disturbed forested areas (Gbif.org, 2016). Like other species in its genus, Thomas’s yellow bat can take refuge inside buildings and hollow trees, although the definite areas where these bats roost remain unknown (Gbif.org, 2016).

FOOD AND FEEDING. Unlike fruit bats which account for more than half of the bat population of the world, Thomas’s yellow bat favours a diet comprising exclusively of airborne insects. These insectivorous bats can be spotted from sea-level to roughly 1500m. Many of these bats have been caught over pools of water or streams and along forested trails which indicates that they feed on small, flying insects found about a few metres from the ground. Individuals use established hunting routes, sending out echolocation calls which allows them to examine returning echoes in order to detect, localize and characterize objects that are reflected. The maximum frequency of these echolocation calls of Rhogeessa io is 50-60 kHz (Gbif.org, 2016).

BEHAVIOUR. Thomas’s yellow bat is crepuscular, in that their activity peaks mainly in the hours immediately after dawn and before dusk, flying at ground-level along roads or wide trails (Gbif.org, 2016). These bats emit short, broad-band echolocation calls, and instead of flying horizontally in straight lines, they tend to fly in circular motions with intricate aerial manoeuvres. This behaviour of Rhogeessa io allows for efficient foraging as well as in escaping from possible predators.

APPLIED ECOLOGY. Rhogeessa io was recorded as “Least Concern” in 2008 by the IUCN Red List (Encyclopedia of Life, 2016), because of its widespread distribution and large populations, their constant sightings in quite a few protected areas, their tolerance for adjustments in new habitats, and because it is unlikely to be declining almost at the level required to be deemed suitable for listing in a threatened category (Gbif.org, 2016).

REFERENCES

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**Thomas’ yellow bat**
(*Rhogeessa io*)


**Fig. 2.** Examining *Rhogeessa io* to show the blunt tragus.

Fig. 3. Geographic distribution (brown) of Thomas’s yellow bat, *Rhogeessa io*.

[https://commons.wikimedia.org/wiki/File:Distribution_of_Rhogeessa_io.png, downloaded 8 March 2016]

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