

Lasiurus ega (Southern Yellow Bat)

Family: Vespertilionidae (Vesper or Evening Bats)

Order: Chiroptera (Bats)

Class: Mammalia (Mammals)



Fig. 1. Southern yellow bat, *Lasiurus ega*.

[<http://www.collett-trust.org/uploads/Dasypterus%20ega5.jpg>, downloaded 16 February 2016]

TRAITS. *Lasiurus ega* is medium sized with relatively long ears and dull yellow/orange fur (Fig. 1). The span of its wing is approximately 35cm. Its mean body length is 11.8cm; tail length, 5.1cm; foot length, 0.90cm and forearm length 4.7cm and its mass ranges from 10-18g; however, the males are smaller in length and size than the females. They have a short body with a lateral projection of the upper lip and short, rounded ears (Fig. 2). The digits shorten from the 3rd to the 5th finger. Each female possesses 4 mammae whereas the males have a distally spiny penis (Kurta and Lehr, 1995).

DISTRIBUTION. Found from the southwestern United States to northern Argentina and Uruguay; also can be found in Mexico and Central America (Fig. 3). The southern yellow bat is native to Trinidad. It has a seasonal migratory pattern in which it moves from the north to avoid the harsh/cold conditions (Encyclopedia of Life, 2016).

HABITAT AND ACTIVITY. The habitat of the southern yellow bat is forest which has a lot of wooded surroundings, foliage as well as palms. The bat is nocturnal in nature. Sometimes it inhabits thatched roofing and corn stalks that are dried, however they avoid entering mountainous areas. Vegetation and trees are the main places where the southern yellow bat settles to rest/sleep. It is normal to find one bat occupying a roost tree (Fig. 4). They do not undergo hibernation but under extreme cold weather conditions they can undergo torpor (lowering of metabolic rate in an attempt to reduce energy usage) (Biodiversity.gov.tt, 2012).

FOOD AND FEEDING. The southern yellow bat is an insectivore that feeds at night on flying insects that are medium sized. Research indicates that *Lasiurus ega* diet changes according to the availability of food each season (Freeman, 1981). Since it feeds on insects it is found in the second trophic level. They feed near to their roost and forage for approximately 2 hours after sunset. They often fly 6-15 m above water/land in search of their food. This bat species have a tail membrane that is well developed and during flight it is used as a pouch in collecting their insect prey (Wilkinson and South, 2002).

POPULATION ECOLOGY. The southern yellow bat is sometimes found alone or in groups of approximately 20. The bat is subtropical and solitary in nature. As a result of their ability to lower their metabolic rate during torpor, it is believed that these bats are long lived as opposed to other mammals similar in size. Also since they have the ability to fly, they lower their mortality risks which make it easier for them to escape predators. Snakes and hawks are bat predators.

REPRODUCTION. Mating starts in May and ovulation occurs in mid-August. This suggests that for three months sperm is stored by the females. The gestation period is approximately three and a half months, with birth occurring in November and December. This is a monestrous (one period for the year in which the female experiences fertility or “heat”) species with breeding occurring in the first year of life. Generally pregnant females carry one to four embryos (Kurta and Lehr, 1995).

BEHAVIOUR. The southern yellow bat is seasonal in migration and during this period they use short cuts to get to their southern destination; mainly over the coastlines. They have a migratory strategy in the direction of the equator. Activity occurs prior to midnight since the bat is most active between sundown and five hours later. This species communicates by touch and the release of chemicals (Kurta and Lehr, 1995).

APPLIED ECOLOGY. *Lasiurus ega* is affected by the use of pesticides on the mosquito population as well as the removal of palm fronds which also remove the bats from their roosting spots in many areas. In a study conducted in California, *Lasiurus ega* has been linked to rabies (Constantine and Humphrey, 1979). In the IUCN it is listed as being least concern due to the fact that it is plentiful in nature and is widespread, it normally occurs in areas that are protected, they possess the ability to adjust to environmental modifications and their rate of decline is not fast enough for them to be qualified as an at risk group (Iucnredlist.org, 2015).

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Author: Vanessa Kalaiski

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Fig. 2. Southern yellow bat displaying some of its physical traits.

[<http://www.inaturalist.org/taxa/40526-Lasiurus-ega>, downloaded 16 February 2016]

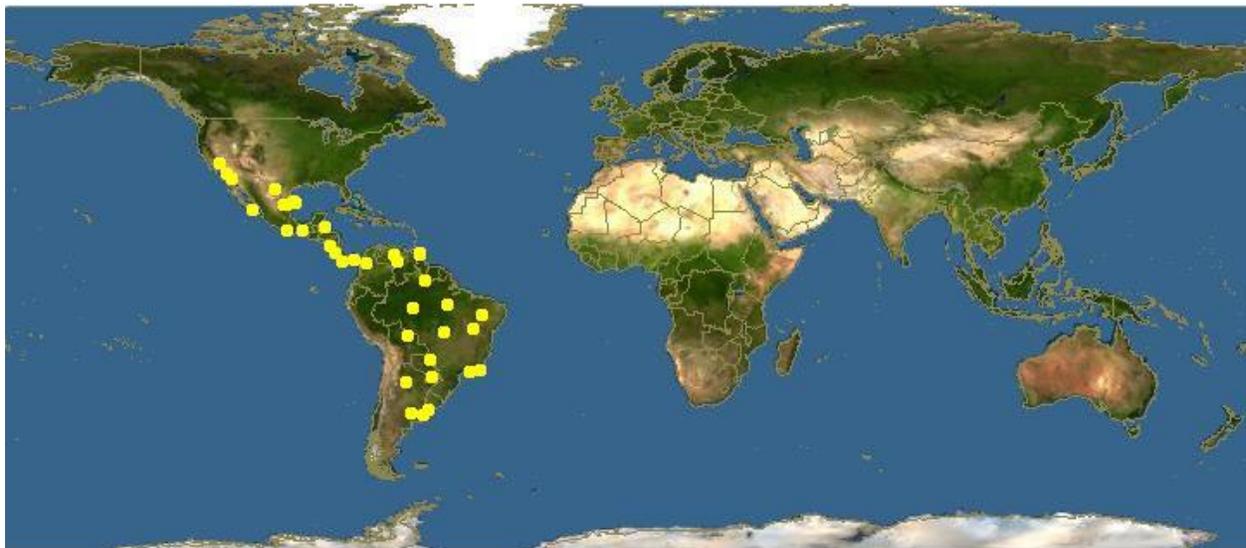


Fig. 3. Southern yellow bat geographical distribution.

[<http://www.discoverlife.org/20/q?search=Lasiurus+ega>, downloaded 16 February 2016]



Fig. 4. Southern yellow bat roosting on vegetation.

[http://www.mnh.si.edu/mna/full_image.cfm?image_id=1793, downloaded 16 February 2016]

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