

## *Molossus sinaloae* (Sinaloan Mastiff bat)

Family: Molossidae (Free-tailed Bats)

Order: Chiroptera (Bats)

Class: Mammalia (Mammals)



**Fig. 1.** Sinaloan mastiff bat, *Molossus sinaloae*.

[<https://www.inaturalist.org/observations/380400>, downloaded 7 March 2016]

**TRAITS.** The average size of the Sinaloan mastiff ranges from 11-14cm in length. It has a wingspan of 33cm and weighs about 14-24g (Wikipedia, 2015). The fur is dull, dark brown above and brown to light brown below (Fig. 1) (Jennings et al., 2002). It has a narrow head and pincer-like incisors (Fig. 2) (Wikipedia, 2015). The males are generally larger and heavier than females and also possess throat glands which secrete an oily substance (Smithsonian, 2010).

**DISTRIBUTION.** Can be found in western Mexico, from Sinaloa southwards, within the Yucatan Peninsula, regions in Central America and Trinidad, and from northern Colombia to the Guianas in South America (Fig. 3) (IUCN, 2015). They typically occupy dry deciduous forests and tropical evergreen forests, to between 1000m and 2400m of elevation (Wikipedia, 2015).

**HABITAT AND ACTIVITY.** Found in both tropical evergreen and dry deciduous forests, and are exclusively nocturnal. They roost in palm trees, caves and artificial structures, in large groups (Reid, 2009). Males can either roost alone or in groups of only other males. The females tend to roost in large groups of only females with occasional male visitors (Smithsonian, 2010). *M. sinaloae* are the most common molossid encountered in the region. In Costa Rica, a single roost containing 76 bats were captured, and some roosts were found to have up to 100 individuals in it (Timm et al., 1989).

**FOOD AND FEEDING.** Sinaloan mastiff bats are aerial insectivores, meaning they eat mostly moths, other insects and occasionally beetles, caught in the air. They are most active right after sunset and again right before daybreak (Smithsonian, 2010).

**POPULATION ECOLOGY.** Typically found in large roosts that can have up to 100 individuals. The roosts usually contain single-sex groups, with the females have occasional male visitors. Some males have been found to be solitary as well and can also reside in roosts inhabited solely by males. They can range from uncommon to locally common within their regions (Reid, 2009).

**REPRODUCTION.** Females reach sexual maturity at 1 year of age and have typically one offspring per year, with a 5% exception of twins (Wikipedia, 2015). They have a gestational period of 3 months and breeding occurs in March and April. The male Sinaloan bats have scent glands on their throat which produces an oily substance with a strong odour which they use to mark females' backs (Smithsonian, 2010). The throat glands are largest and most active during the months females give birth. The young have a weaning period of 6-8 weeks.

**APPLIED ECOLOGY.** Listed by the IUCN as LC or least concern meaning that there are no immediate or pressing threats to the species. The species was listed as least concern because of its wide distribution and large population, also because of its tolerance to changes in habitat. There are no conservation methods in place for this species but it is found in protected areas (IUCN, 2015).

## REFERENCES

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**Fig. 2.** Incisors of the Sinaloan mastiff bat.

[<http://robbobert.deviantart.com/art/Molossus-sinaloae-Sinaloan-Mastiff-Bat-317565357>, downloaded 7 March 2016]



**Fig. 3.** Distribution of Sinaloan mastiff bat.

[[https://en.wikipedia.org/wiki/Sinaloan\\_mastiff\\_bat](https://en.wikipedia.org/wiki/Sinaloan_mastiff_bat), downloaded 8 March 2016]