

Florida's Bats: Brazilian Free-tailed Bat¹

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Figure 1. Brazilian free-tailed bat (*Tadarida brasiliensis*).
Credits: Merlin Tuttle, Merlin Tuttle's Bat Conservation <http://www.merlintuttle.com/>

The Brazilian free-tailed bat (Figure 1) is found throughout Florida and is the state's most common bat. With a wingspan of 12 inches (31 cm), it is a medium-sized bat. Fur color varies from dark brown to gray-brown. Brazilian free-tailed bats have long tails and wrinkled cheeks.

Found throughout the southern United States, the species has been seen throughout the entire state of Florida with the exception of the Florida Keys (Figure 2). They are highly gregarious, living in large congregations.

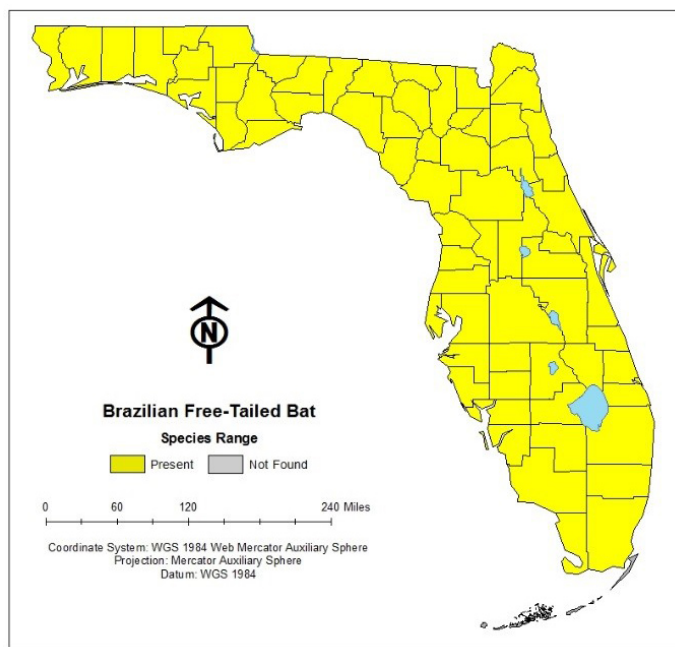


Figure 2. Brazilian free-tailed bats can be found in every county throughout Florida.
Credits: Emily Evans

1. This document is WEC379, one of a series of the Department of Wildlife Ecology and Conservation, UF/IFAS Extension. Original publication date November 2016. Visit the EDIS website at <http://edis.ifas.ufl.edu>.
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In Florida, these bats roost (sleep during the day) primarily in man-made structures. They have been found roosting in attics and sheds, under bridges (e.g., highway overpasses), under barrel roof tiles, and in bat houses. Less commonly they can be found roosting in palm trees.

Brazilian free-tailed bats emerge from their roosts shortly before sunset to forage on insects at high altitudes. They are important economically because they consume large quantities of insect pests. They feed on a variety of moths, beetles, and bugs that afflict common agricultural crops such as corn, cotton, soybeans, and pecans.



Figure 3. Free-tailed bats (those in the family Molossidae) have long tails that extend >1 inch beyond their tail membrane, like the bat on the left. In comparison, other bats have short, stubby tails, like the bat on the right (not a free-tailed bat).

Credits: Merlin Tuttle

How do you know if you have found a Brazilian free-tailed bat?

First, check the rump to determine if a tail is visible. If a tail >1 inch can be seen (Figure 3), the bat is one of Florida's three species of free-tailed bats (in the family Molossidae).

Read below to determine how to differentiate the three species of free-tailed bats found in Florida.

Brazilian Free-Tailed Bat (*Tadarida brasiliensis*)

- Found throughout the entire state of Florida, except the Keys
- Often roosts during the day in man-made structures (attics, stadiums, bridges, and bat houses)
- Typically roosts in large congregations (1,000–500,000 individuals)
- Produces a musky odor that is noticeable from some distance away

- Has ears that are fully separated from one another (not joined at the base like velvety free-tailed or bonneted bat ears; Figure 4)
- Is about the size of a standard business card when it is at rest and its wings are folded

Florida Bonneted Bat (*Eumops floridanus*)

- Is found only in central and south Florida (as far north as Polk County)
- Roosts in pine tree cavities, palms, rock crevices, and man-made structures (beneath barrel tile roofs and in bat houses)
- Roosts in small groups (less than 50 individuals)
- Has ears that are not fully separated from one another (they are joined at the base; Figure 4)
- Is the largest bat in Florida, about the size of a standard I-phone when it is at rest and its wings are folded



Figure 4. The ears of Brazilian free-tailed bats are not joined at the base (left), whereas those of the Florida bonneted bat are joined (right).

Credits: Elizabeth Braun de Torrez, UF/IFAS; Kathleen Smith, FFWCC, used with permission

Velvety Free-Tailed Bat (*Molossus molossus*)

- Is found only in extreme south Florida (the Keys and perhaps the Everglades region)
- Typically roosts beneath roofs of man-made structures
- Roosts in the Keys in moderately-sized groups (50–300 individuals)
- Has ears that are not fully separated from one another (they are joined at the base)
- Is about the size of a standard business card when it is at rest and its wings are folded

Additional Information

Florida Fish and Wildlife Conservation Commission.
Living with bats.

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Acknowledgement

This publication is funded in part by the Renewable Resources Extension Act (RREA).