

Questions and Answers

1. Describe the Florida bonneted bat and its habitats.

The Florida bonneted bat is the largest bat in Florida. This bat can reach a length of 6.5 inches with a wingspan of 20 inches. This non-migratory bat is only found in south Florida. Its fur ranges in color from dark gray to brownish-gray. Its tail extends well beyond a short tail membrane. The name “bonneted bat” originates from its large, broad ears, which project forward over the eyes.

This Florida bonneted bat has one of the most restricted ranges of any bat species. It uses forests, wetlands, open water, and other natural habitats. It also has been recorded in residential and urban areas. At present, no active, natural roost sites are known. All active, known roosts are artificial structures (i.e., bat houses).

2. Why is the Florida bonneted bat at-risk of extinction?

Because of its extremely limited range and low numbers, the Florida bonneted bat is vulnerable to a wide array of natural and human-related threats. Habitat loss, degradation, and modification from human population growth and the associated development and agriculture are major threats and are expected to further curtail the species’ limited range. The effects resulting from climate change, including sea level rise and coastal squeeze, are expected to become severe in the future and result in additional habitat losses, including the loss of roost sites and foraging habitat.

The effects of small population size, restricted range, few colonies, slow reproduction, low fertility, and relative isolation also contribute to its vulnerability. Other factors also may impact the species, such as its removal from buildings or artificial structures being used as roost sites, removal of roost trees, impacts from large or intense hurricanes, and pesticides and contaminants from multiple sources (impacting both the bat and prey insects). Other potential threats include competition with native species for roost sites and disease and predation. Existing regulatory mechanisms, due to a variety of constraints, do not provide adequate protection from these threats. Overall, these threats pose significant risk to the survival of the species.

3. How many of these bats are left?

The population size is not known, but is estimated to be in the low hundreds to low thousands, based upon experts’ opinions and inferences from available data.

4. What action is the Service taking now? Is this action too late?

The Service is listing the Florida bonneted bat as an endangered species. This listing action, coupled with the upcoming proposed critical habitat designation, will help conserve and recover the species. This species is already afforded some protection as a “State-designated Threatened” species under the Florida Administrative Code (Chapter 68A–27 rules (68A–27.0011 and 68A–27.003)).

5. If not for the litigation would the Service have taken this action?

Yes, eventually, but the action was delayed because of limited resources. The Florida bonneted bat was identified by the Service as a candidate species in 2009. Candidates are plants and animals for which the Service has sufficient information on their biological status and threats to propose them as endangered or threatened under the Endangered Species Act (ESA), but for which development of a proposed listing regulation is precluded by other higher priority listing activities.

Limited resources and an ever-increasing workload have led to litigation over nearly every aspect of the listing program. Litigation obligations have made it difficult for the Service to manage its workload based on biological priorities. However, the work plan agreed upon by the Service and the litigants allows the Service to focus efforts on species most in need of protection.

6. Why aren't you designating critical habitat now?

Information on the Florida bonneted bat's habitat needs and preferences is limited, and many data gaps remain. The Service is working on obtaining and analyzing available data. It intends to propose critical habitat in a separate rule in late 2013 or early 2014, and will seek public comment and peer review on that proposal. The Service intends to meet its statutory requirements to publish a final critical habitat designation by October 4, 2014.

7. Exactly what will a critical habitat designation, if finalized, mean for this species?

When a species is proposed for listing as endangered or threatened under the ESA, the Service must consider whether there are areas that meet the ESA's definition of "critical habitat." The Service may propose to designate those areas as critical habitat if it is prudent to do so. An area designated as critical habitat is not a refuge or sanctuary for the species. It is a specific geographic area that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection, or that is otherwise essential to the conservation of the species.

Federal agencies are required to consult with the Service on actions they carry out, fund, or authorize to ensure that their actions will not destroy or adversely modify critical habitat. In this way, a critical habitat designation protects areas that are necessary for the conservation of the species. A critical habitat designation generally has no effect on situations that do not involve a federal agency—for example, a private landowner undertaking a project that involves no federal funding or permit.

8. Why should people care about bats?

The ecological roles of some bats include pollinating and dispersing the seeds of hundreds of species of plants. In addition, bats, such as the Florida bonneted bat, eat lots of insects and other arthropods. On a typical night, a bat consumes the equivalent of its own body weight in these creatures. As bats fulfill their ecological roles, they provide many economically important services. For example, bats serve as essential pollinators for various types of commercially-valuable crops, including bananas, mangos, and guavas. In addition, bats consume many crop-eating insects and thereby reduce farmers' need for pesticides.

According to a 2011 study published in *Science*, insect consumption by bats reduces the pesticide bill of the agriculture industry in the United States by roughly \$22.9 billion per year on average. Another study, partially funded by the National Science Foundation, calculated the average annual value of Brazilian free-tailed bats as pest control for cotton production in eight counties of south-central Texas at about \$741,000.

9. What can landowners and individuals do to help conserve bats?

People can help bats by learning more about them and sharing information with others. Fear and misunderstanding sometimes causes humans to take action against bats, when bats are vital components of the natural ecosystem and provide important benefits.

If you want to attract bats to your property, consider installing a bat house. Florida bonneted bats can occupy large houses erected on poles high above the ground (~17 feet). Bat houses should be positioned in either a

north or south direction, rather than towards the west, due to excessive temperatures from facing the sun. Bat advocacy groups such as the Florida Bat Conservancy and Bat Conservation International have tips on how to build bat houses.

Try to retain natural habitat and suitable roosting sites on your property. Old, mature trees may provide important roosting sites for the Florida bonneted bat. Check trees and foliage for these bats prior to landscaping. Reduce the use of pesticides around your home and property. Consider attracting bats to your property to control insects rather than using a bug-zapper type device.

If unwanted bats occupy your dwelling or structures, learn about safe, humane, and legal ways to move and exclude individuals. Since the Florida bonneted bat is a State-threatened species, protective provisions specified in Chapter 68A-27 rules (68A-27.0011 and 68A-27.003) apply. However, since humans often considered bats to be a “nuisance” when they occur in or around human dwellings or infrastructure, certain rules for taking of nuisance wildlife are provided under Florida Administrative Code Chapter 68A-9.010. Contact the Florida Fish and Wildlife Conservation Commission for more information.

Consider becoming a member of a bat advocacy group and participating in research. The Florida Bat Conservancy, Bat Conservation International, and other bat advocacy groups have helpful information on their websites.

10. Where can more information be found?

For more information about the Florida bonneted bat and this final rule, please visit <http://www.fws.gov/southeast/> or <http://www.fws.gov/verobeach/>.

To learn more about the Endangered Species Program, visit <http://www.fws.gov/angered/>