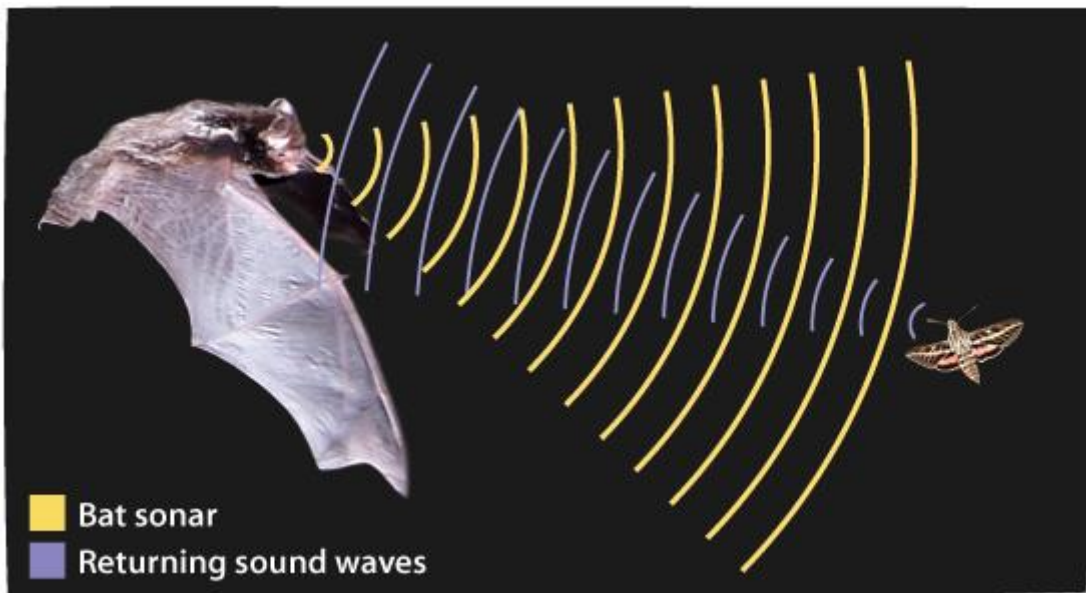


Virtual Creature Festival Lesson: Native New Jersey Bats

In this series of bat articles, you will have the opportunity to explore the 9 native bats of New Jersey and why they are essential to the ecosystem, why they are beneficial to humans, and why we must work harder to protect them.

Bats are nocturnal mammals that can be found on every continent, excluding Antarctica. Bats are the only mammals that are capable of true flight (flying squirrels don't actually fly, they glide). All bats that are native to the United States are insectivores, meaning they survive on insects as a food source. Once you start exploring outside the boundaries of the US, you will find that some bats survive on fruit and nectar, making them important pollinators for fruits like bananas and mangos. Many bats can eat over half of their body weight in insects, in one night! Without bats we would have to deal with a lot more of those pesky mosquitoes.

Bats use echolocation to locate their food sources. To do this, they release a soundwave from their mouth and wait for the sound to bounce off another object and come back to them. This allows them to determine the object's location, shape, and size. [Click here](#) to learn more about the science behind echolocation and how bats accurately use it.



New Jersey is lucky enough to be home to 9 native bat species! Those species are:

1. Eastern small-footed myotis (*Myotis leibii*)
2. Northern long-eared bat (*Myotis septentrionalis*)
3. Indiana bat (*Myotis sodalis*)
4. Tri-colored bat (*Perimyotis subflavus*)
5. Eastern red Bat (*Lasiurus borealis*)
6. Silver-haired bat (*Lasionycteris noctivagans*)
7. Little brown bat (*Myotis lucifugus*)
8. Big brown bat (*Eptesicus fuscus*)
9. Hoary bat (*Lasiurus cinereus*)

Eastern small-footed myotis

(*Myotis leibii*)



Size: 3 inches long

Weight: 4 to 6 grams

Conservation Status: Endangered

Lifespan: Up to 12 years

Diet: Soft-bodied prey, beetles, moths, flies, and mosquitoes

Source: [Kentucky Fish and Wildlife](#)

Learn more about the Eastern Small-footed Myotis [here](#).

Northern long-eared bat

(*Myotis septentrionalis*)



Size: 3 inches long

Weight: 6 to 9 grams

Conservation Status: Endangered

Lifespan: Up to 20 years

Diet: Caddisflies, moths, beetles, and leafhoppers

Source: [Kentucky Fish and Wildlife](#)

Learn more about the Northern Long-eared Bat [here](#).

Indiana bat

(*Myotis sodalis*)



Size: 3.5 inches long

Weight: 6 to 9 grams

Conservation Status: Endangered

Lifespan: Typically 8-10 years, but up to 20

Diet: Moths, beetles, termites, flies, mosquitoes

Source: [Center for Biological Diversity](#)

Learn more about the Indiana Bat [here](#).

Tri-colored bat

(*Perimyotis subflavus*)



Size: 2 inches long

Weight: Up to 8 grams

Conservation Status: Special concern

Lifespan: Up to 14 years

Diet: Moths, beetles, and other flying insects

Source: [Bat Conservation International](#)

Learn more about the Tri-colored Bat [here](#).

Eastern red bat

(*Lasiurus borealis*)



Source: [Center for Biological Diversity](#)

Learn more about the Eastern Red Bat [here](#).

Size: 3.5 to 4.5 inches long

Weight: 7 to 13 grams

Conservation Status: Special Concern

Lifespan: Up to 12 years

Diet: Moths, beetles, ants, leafhoppers, and flies

Silver-haired bat

(*Lasionycteris noctivagans*)



Source: [Kentucky Fish and Wildlife](#)

Learn more about the Silver-haired Bat [here](#).

Size: 3.5 to 4.5 inches long

Weight: 8 to 11 grams

Conservation Status: Special Concern

Lifespan: Up to 12 years

Diet: Moths, flies, and beetles, as well as insect larvae in tree bark

Little brown bat

(Myotis lucifugus)



Size: 2 to 4 inches long

Weight: 10 grams

Conservation Status: Endangered

Lifespan: Up to 30 years or more

Diet: Mosquitoes, midges, moths, and beetles

Learn more about the Little Brown Bat [here](#).

Big brown bat

(Eptesicus fuscus)



Size: 4 to 5 inches long

Weight: 23 grams

Conservation Status: Special Concern

Lifespan: Up to 19 years

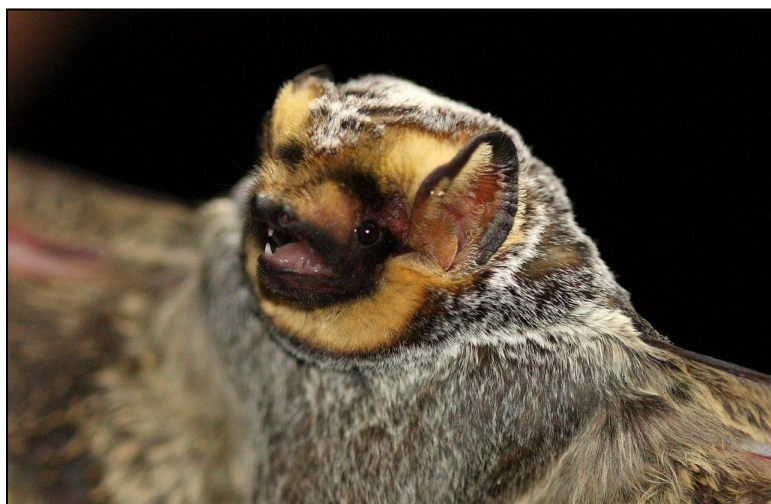
Diet: Mosquitoes and leafhoppers

Source: [Montana's Official State Website](#)

Learn more about the Big Brown Bat [here](#).

Hoary bat

(*Lasiurus cinereus*)



Size: 3 inches

Weight: 20 to 35 grams

Conservation Status: Special Concern

Lifespan: 2 years

Diet: Moths, mosquitoes, dragonflies, beetles, and other insects

Source: [Flickr](#)

Learn more about the Hoary Bat [here](#).

The goal of a conservation status is to specify the existence of a species and how likely they are to become extinct.

Here are some definitions...

- If a species is **extinct**, then it does not exist in the wild anymore and cannot be brought back.
- If a species is **threatened**, then it is likely to become extinct in the foreseeable future if drastic action is not taken to protect this species.
- If a species is of **special concern**, then it does not meet the criteria to be labeled as threatened *but* it is vulnerable and can become threatened or even extinct in the near future.
- If a species is of **least concern**, then the population of that species is widespread and abundant.

What stuck out about the conservation statuses of our NJ native bats? How does it make you feel?

[Click here](#) to learn more about the Endangered Species Act and view the full list of endangered species. We need to do a lot more to protect our bats and you will learn much more about bat conservation in the upcoming articles! Please also take a look at [this list](#) of environmental policy and regulations that have been degraded by the current administration including the Endangered Species Act.