

CONSERVE WILDLIFE FOUNDATION OF NEW JERSEY

BATS OF NEW JERSEY

BATS ARE MAMMALS, possessing hair, giving birth to live young, and feeding young milk produced by mammary glands. Most produce only one offspring (called a pup) annually and rear their young for the first few weeks of life until they are able to fly and feed on their own. These reproductive and rearing practices make them the slowest reproducing mammals on earth for their size. Despite their slow reproduction, bats exist in large numbers and encompass one quarter of all mammal species, second in population only to rodents. Bats are the only true flying mammals and use echolocation to locate and acquire prey. Bat species found in New Jersey are insectivorous and can consume thousands of insects in a single night.

NEW JERSEY IS HOME TO NINE SPECIES OF BATS. Six species are year round residents and three species are migratory.

YEAR-ROUND RESIDENTS INCLUDE THE:

- Little brown bat
- Big brown bat
- Northern long-eared bat
- Indiana bat (a federal and state endangered species)
- Eastern small-footed bat and
- Eastern pipistrelle.



Little Brown Bats.
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These species are active throughout the late spring, summer, and early fall but go into dormancy, hibernating in caves and abandoned mines, for the cold winter months. **THE HOARY BAT, RED BAT, AND SILVER HAired BAT ARE PART-TIME RESIDENTS**, migrating to southern states in the fall to over winter in the milder climate.

Bats have evolved throughout millennia to be habitat and food specific. They rely on certain food sources and certain habitats in order to survive. Their reliance on these specific food resources and habitats makes them vulnerable to disturbance. Disturbance to hibernation or roosting areas and declines in locally available food or water can be detrimental to local bat populations. Disturbances can also interfere with the care of offspring so it is crucial that birthing and rearing sites remain largely undisturbed.

Bats need to eat and drink every night. Their food requirements are well served by open grasslands and edges of forests where insects are abundant. They also prefer roosting near open bodies of water which allows them to swoop down in flight and drink water without landing. During the day they prefer to roost in tight crevices such as cracks in rocks, under exfoliating tree bark and in awnings of buildings. These locations provide protection from predators and stable temperatures.

BATS ARE THE PRIMARY PREDATORS OF NIGHT FLYING INSECTS. A single little brown bat can consume up to 1,200 mosquito sized insects in an hour and up to 3,000 insects in a single night. Nursing mothers can eat up to 4,500 insects nightly - more than their own body weight. Many insect pests are consumed by bats including cucumber beetles, leaf hoppers, termites, ants, roaches, corn earworms, grasshoppers, and mosquitoes. Loss of bat species increases the need for chemical pesticides, increasing costs to landowners and farmers and endangering fragile ecosystems with unintended contamination and consequences.

MYTHS AND UNTRUTHS ABOUT BATS ARE NUMEROUS. In fact, bats are actually quite harmless and are important indicators of a healthy environment. Since they are particularly vulnerable to pollution and pesticides, their presence or absence can tell scientists a lot about the overall health of the local environment.

Bats seldom spread disease. Like most mammals, bats can contract and transmit rabies, although less than one-

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half of 1% of wild bats have rabies. In the past 50 years, only 48 U.S. residents are believed to have contracted rabies from bats. The fear of being infected with the disease by bats far exceeds the risks.

Furthermore bats do not entangle themselves in hair as widely believed, they will not encounter people by choice only in defense.

Lastly, very few species of bats are vampire or blood consuming. Out of the more than 1,100 different species of bats worldwide, there are only three species of vampire bats and none live in the United States. Vampire bats only live in tropical climates and typically feed on cattle or poultry livestock.

WHAT YOU CAN DO FOR BATS

Protecting natural habitats from disturbance, especially during hibernation and raising of young, is a key factor in maintaining healthy bat populations. If bats inhabit your home or an undesirable location, it is important to use proper eviction methods to remove them. **It is illegal for anyone, including animal control officers and exterminators, to kill bats.** Terminal traps and poisonous bait traps should never be used. Bats should never be trapped and relocated as they will return and re-inhabit their roosting sites if access is available. One way doors are a great way to evict bats from an unwanted area. If evicting bats from a building, it is important to provide a near-by shelter, such as a bat house, for the bats to inhabit. All evictions or exclusions should take place prior to mid-May or after mid-September.



Proper placement of a bat house.
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*For further information about proper bat exclusion techniques please visit www.batcon.org and link to their *Bats in Building* webpage.*

Building and hanging bat boxes is a simple and common practice which provides vital roosting locations for local bat populations. There are many designs for bat houses available today but research has shown that bats tend to use houses that include specific characteristics. A variety of sizes and styles of bat houses can be found online. *Bat Conservation International*, www.batcon.org, and *Bat Conservation and Management*, <http://www.batmanagement.com>, are excellent resources for bat houses.



A successful bat house.
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Additionally, the Conserve Wildlife Foundation of New Jersey, has begun an initiative through which New Jersey residents will be able to acquire bat houses and participate in research to gather information about roosting areas. Participants will be able to participate in the **Summer Bat Count**, that involves finding a roost and counting the bats as they exit in the evening. Counting should take place twice a year, between late May and August, and information will be recorded on a datasheet and submitted to Conserve Wildlife Foundation of New Jersey. Information collected will help biologists to document summer roosting locations and help to create a range map for some species of New Jersey bats. **Volunteer Today! For more information please call (609) 984-0621 or (908) 782-4614 x. 104.**

The Conserve Wildlife Foundation of New Jersey is a non-profit organization dedicated to protecting New Jersey's endangered and threatened wildlife and the habitats they depend on for survival. We accomplish this through research and conservation projects and education and outreach programs that advance the protection of New Jersey's rarest wildlife residents.

For more information, please visit our website at www.conservewildlifenj.org



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