

## **BAT SPECIES FOUND AT WEST POINT**

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After snakes, bats are probably the group of animals with the most myths and misconceptions concerning them. I'm sure many readers have heard the phrases/statements "blind as a bat", "flying mice", and "bats will fly into and get tangled up in your hair".

Each one of those statements is a myth. Bats are not blind, but because many bat species are nocturnal or live in caves, they do not rely on their eyesight to get around. Bats are not closely related to mice and other rodents; in fact, they are more closely related to primates than they are to rodents. And, bats have a highly developed echolocation system that allows them to navigate even in total darkness, so, it is almost impossible for one to get tangled in your hair, let alone, collide with you.

All nine species of bat found in New York call West Point home. They are: the little brown myotis, the big brown bat, the northern long-eared myotis, the eastern pipistrelle, the silver-haired bat, the small-footed myotis, the eastern red bat, the Indiana bat and the hoary bat. The Indiana bat is a Federally-listed and New York-listed endangered species but only rarely visits the USMA properties in search of food. Most of our species spend their lives out in the forests away from the Academy proper. Only three of West Point's bat species would likely have any contact with people – the little brown myotis, the big brown bat and the silver-haired bat.

The little brown myotis (commonly called the little brown bat) is West Point & New York's most common species. The little brown myotis measures about 3½ – 4 inches nose to tail with a wingspan of about 9 – 10 inches. They have black ears and glossy brown to grayish-brown fur. This is the bat species most often encountered by people. These bats often form maternity colonies in old buildings and attics during the summer. The female bats keep using the same location year after year. They do not hibernate there, though, as the attics are too warm for them to survive the winter. Closing up every hole and opening (no matter how small) in the attic during the winter months will keep the bats from returning the next summer. If you do it during summer months, the flightless baby bats will be trapped and die. So, if you have several bats within a building at once, most likely it is a little brown myotis.

Big brown bats are the next most frequently encountered bat species. Big brown bats are about 4 – 5 inches long nose to tail with 12 – 14-inch wingspans. They tend to be a more solitary species. Big brown bats have dull brown fur and blackish ears. Big brown bats are slightly more tolerant of colder temperatures and have been known to occasionally make an appearance during a mid-winter thaw.

Silver-haired bats are intermediate in size between the big brown bat and the little brown myotis. They have black fur tipped with white, which gives the bats a grizzled appearance. Silver-haired bats are migratory, heading south to hibernate in late August and returning north in mid-April.

All West Point bats are true hibernators. And the reason is simple: insects are their sole source of food. As there are few insects active from October through April, if bats didn't hibernate, they would starve to death. West Point bats consume from ½ to two times their weight in insects each night. Mostly, they eat flies, moths and mosquitoes, with beetles, mayflies and crickets making up smaller percentages of their diets. It has been estimated that a single little brown myotis can eat up to 100,000 mosquitoes each summer.

Bats are the only true flying mammals. Flying squirrels, flying lemurs and Australia's honey gliders are all "gliding" animals – that is, these species have large flaps of skin between their front legs and back legs that allow them to soar between trees much like a paper airplane.

While bats are susceptible to rabies, bats do not develop the "furious" form of rabies and viciously attack people and other animals. What usually happens is the sick bat falls to the ground and can't get off it again. A person finds the bat and picks it up. The bat reacts by biting the person. However, a bat's teeth are so sharp, the person may not even realize he/she has been bitten. Domestic cats are at risk because they will also find the sick bat flopping around on the ground and start playing with it. The cat will get bitten and, if not vaccinated, could end up transmitting the disease to its owner.

There is lots of information available on bats. One good Internet site is for Bat Conservation International at <http://www.batcon.org>. For additional information on West Point's bats, you can also contact the USMA Fish & Wildlife Biologist at 938-3857.