

BATS AND BUILDINGS

Several species of bats are regularly associated with buildings in Indiana. Buildings are also used in four ways.

1. Maternity colonies.
2. Hibernacula.
3. Night roosts - where the bats rest between feedings.
4. Summer bachelor quarter.

BATS AND TREES

Five species of bats regularly use trees in Indiana, the three species of solitary bats and two species of *Myotis*. Red and hoary bats produce young in foliage of trees. Silver-haired bats produce their young farther to the north. Indiana and northern bats regularly form maternity colonies under the loose bark of trees. Also, any of the bats that form maternity colonies in buildings may presumably use hollow trees as well.

BATS AND BAT HOUSES

Bat houses are designed with the opening on the bottom and narrow crevices between strips of rough-sawn wood. Bats crawl up between these crevices, much as they would crawl into a crevice in a cave or the inside of a hollow tree. In the northern two-thirds of the U.S. and Canada, bat houses have been used as summer roosting spots by little brown bats, big brown bats and pipistrelles.

Bat houses have not been extremely successful in Indiana. In a study at Salamonie Lake, bats rarely used these structures. They preferred existing roost sites in hollow trees and buildings. Bat houses may be useful in areas where a roosting location is being removed or in areas where large colonies of bats already exist nearby. Bat houses must be placed so that temperature inside the structures is not too hot or too cold. For more information on bat houses, you can contact Bat Conservation International at their website <http://www.batcon.org/>, or check with your local park or reservoir interpretive naturalist.

THE TRUTH ABOUT BATS

- Bats are not blind. They are not likely to become entangled in human hair.
- The vampire bat of South America laps blood from tiny bites on the legs of cattle. No North American bat feeds on blood. Instead, they are major predators of night-flying insects and rootworms that damage farmers' crops.

- Bats play an active role in medical research. An anticoagulant from the South American vampire bat saliva may soon be used in treating human heart patients.
- Over 300 plant species in the Old World tropics rely on pollination and seed dispersal by bats. Bananas, avocados, dates, figs, peaches, mangoes, cloves, cashews are pollinated by bats.
- Bat guano is mined for fertilizer.
- Bats do not rank high as a mortality threat to humans. Bat rabies accounts for approximately one human death per year in the U.S.

THROUGH THE SEASONS

In the spring . . .

Even though bats mate in the fall, the sperm is stored in the female's body until spring. To insure successful rearing of the newborn, several species form maternity colonies. These colonies range in size from a few individuals to several thousand mothers and their young.

In the summer . . .

Bats have their young in summer. Bats hunt for nocturnal flying insects. In a single night one bat can consume several hundred insects.

In the fall . . .

Bats mate in fall. The little brown, Indiana, gray, southeastern, big brown and the pipistrelle bats commonly swarm at cave or mine entrances in search of mates.

In the winter . . .

Some of Indiana's bats hibernate; others migrate to a warmer climate, and some do both. Hibernating bats should not be disturbed.

Special thanks to:

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Do you want to know more?

Contact the property nearest you or the
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6/00

BATS

Of
Indiana State Parks
and Reservoirs



D N R

Indiana Department of Natural Resources
Division of State Parks and Reservoirs
Interpretive Services

BATS IN INDIANA

Twelve species of bat are known to be found in Indiana although the big-eared bat is extirpated (gone from Indiana, but still found in other areas) and the southeastern bat is nearly extirpated from the state.

The 12 species can roughly be placed in three groups:

1. Solitary bats

Red bat, *Lasiurus borealis*

Silver-haired bat, *Lasionycteris noctivagans*

Hoary bat, *Lasiurus cinereus*

2. Social bats in the genus *Myotis*

Little brown bat, *Myotis lucifugus*

Indiana bat, *M. sodalis*

Northern bat, *M. septentrionalis*

Gray bat, *M. grisecens*

Southeastern bat, *M. austroriparius*

3. Social bats in other genera

Big brown bat, *Eptesicus fuscus*

Pipistrelle, *Pipistrellus subflavus*

Evening bat, *Nycticeius humeralis*

Big-eared bat, *Plecotus rafinesquii*

The solitary bats are solitary and migratory. Red and hoary bats live among the foliage and migrate south for the winter (although the northern edge of their winter range is apparently in southern Indiana.). The silver-haired bat migrates through Indiana in spring and fall. It has its young to the north, but in winter a very few hibernate here in caves and mines.

The social bats are colonial at least in summer and include five species of *Myotis* (little brown or mouse-eared bats) plus four additional species all in different genera.

BATS AND CAVES

Caves are used by bats in four main ways.

1. Hibernacula (hibernating).

2. Swarming - Consist of bats flying into and out of the entrance, but not usually staying inside.

Primarily for mating purposes.

3. Maternity colonies.

4. Summer bachelor quarters.

BATS

	1	2	3	4	5	6
Big brown			■	■	■	
Red		■				■
Little brown			■	■		
Indiana		■		■		
Pipistrelle			■	■		
Northern		■		■		
Silver-haired		■		■		■
Hoary		■				■
Evening			■			■
Gray	■			■		
Southeastern	■			■		
Big-eared	■			■		



LEGEND

Produces young in:

1. Caves
2. Trees
3. Buildings

Hibernates in:

4. Caves
5. Buildings

Migrates:

6. Migrates

Endangered

Any animal species whose prospects for survival or recruitment within the state are in immediate jeopardy and are in danger of disappearing from the state.

Our Endangered Bats

Indiana bat

Evening bat

Gray bat

Southeastern bat

NOTE: We often think of bats as living in caves, and many do hibernate there. Others form bachelor colonies there. However, only two of the presently existing species would be expected to form maternity colonies (or produce young) in caves, the southeastern bat and the gray bat. The first is almost gone from Indiana and only one colony is known of the second.