

U.S. Fish & Wildlife Service

Bats Need Our Help



Importance of Bats



- Most North American bats are insectivorous and consume thousands of insects, including many crop and forest pests, each night.
- Bats are critical to healthy, functioning ecosystems and contribute at least \$3 billion/year to the US agricultural economy through pest control and pollination.
- Declining bat populations are expected to lead to greater use of chemical pesticides, increasing the economic burden for farmers and bringing along another set of ecological concerns .

MI Bat Species of Conservation Concern

The Endangered Species Act (ESA) is a federal act that provides protections for species listed as threatened or endangered. It turned 50 in 2023. The growing extinction crisis highlights the importance of the ESA and efforts to conserve species before declines become irreversible. The current ESA statuses for 4 MI bat species are shown below.

Indiana Bat: Endangered



Ann Froschauer/USFWS

Northern Long-eared Bat: Endangered



Dave Thomas

Tricolored Bat: Proposed to be listed as endangered.



Pete Pattacina/USFWS

Little Brown Bat: Status under review



Pipe Spring NPS

Threats Bats are Facing

White Nose Syndrome

- Caused by a fungus known as Pd, which invades the skin of hibernating bats and disrupts their normal *torpor patterns and behavior, leading to starvation, dehydration, and/or other injuries.
- Has killed millions of hibernating bats across North America since it was first documented in New York in 2006.
- The USFWS leads the collaborative response to white-nose syndrome in the U.S., coordinating with over 150 partnering agencies, organizations, and institutions to implement the national response plan.



Ryan von Linden/New York
Department of Environmental
Conservation

*Little Brown Bat; close up of nose
with fungus, New York, Oct. 2008*

*Torpor: a state of lowered body temperature and metabolic activity

Wind Energy and Bats

- All 9 MI species are susceptible to wind energy mortality
- Most bat mortality at wind energy projects is caused by direct collisions with moving turbine blades



Climate Change

- Changes in temperature and precipitation may influence bat resource needs, such as suitable roosting habitat for all seasons, foraging habitat, and availability of prey and water.

Habitat Loss

- May include loss of suitable roosting or foraging habitat, resulting in longer flights between suitable roosting and foraging habitats due to habitat fragmentation

What You Can do to Help

- Avoid disturbing hibernating bats. Minimizing activity in caves, mines, and other locations where they spend the winter avoids disturbance that can cause excessive energetic demands and lead to mortality of bats.
- Provide homes for bats: Build a bat house in your yard.



- Plant native plants that foster healthy insect populations for bats to eat.
- Spread the word: Helping people learn more about bats can lead to more effective recovery efforts
- Support sustainable living
- Reduce disturbance to natural bat habitats around your home. Reduce outdoor lighting, minimize tree clearing, leave dead trees standing unless they are hazards, and protect streams and wetlands.

