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Midwest Region

Midwest Endangered Species Home

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The Midwest Region includes Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio and Wisconsin. <u>Find a</u> <u>location near you</u>

Endangered Species Program

Conserving and restoring threatened and endangered species and their ecosystems





Hibernating Indiana bats; one with a wing band by Andrew King/USFWS

Indiana Bat (Myotis sodalis)

<u>White-nose Syndrome | Population | Life History | Management | Recovery</u> Section 7 Consultation | Summer Survey Guidance | Images | For Teachers

The Indiana bat was listed as endangered in 1967 due to episodes of people disturbing hibernating bats in caves during winter, resulting in the death of large numbers of bats. Indiana bats are vulnerable to disturbance because they hibernate in large numbers in only a few caves (the largest hibernation caves support from 20,000 to 50,000 bats). Other threats that have contributed to the Indiana bat's decline include commercialization of caves, loss of summer habitat, pesticides and other contaminants, and most recently, the disease white-nose syndrome.

Indiana bats are quite small, weighing only onequarter of an ounce (about the weight of three pennies) although in flight they have a wingspan of 9 to 11 inches. Their fur is dark-brown to black. They hibernate during winter in caves or, occasionally, in abandoned mines. During summer they roost under the peeling bark of dead and dying trees. Indiana bats eat a variety of flying insects found along rivers or lakes and in uplands.

New Article If You Build It, They Will Come: A Field of Dreams for Endangered Bats

White-nose Syndrome

White nose syndrome (WNS) is an illness that has killed over a million bats since 2006 when dead and dying bats, with the distinctive "white nose," were first observed. "White nose" refers to a ring of white fungus often seen on the faces and wings of affected bats. First observed in a cave in



Indiana bats hibernate in tight clusters on the ceilings and sides of caves and mines. *Photo by Andrew King/USFWS*

Check out the Bat Facts Calendar!

Indiana Bat images on Flickr

Status: Endangered, first listed March 11, 1967

Habitat: Summer habitat includes small to medium river and stream corridors with well developed riparian woods; woodlots within 1 to 3 miles of small to medium rivers and streams; and upland forests. Caves and mines as hibernacula.

Range: Alabama, Arkansas, Connecticut, Georgia, Illinois, Indiana, Iowa, Kentucky, Maryland, Michigan, Mississippi, Missouri, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, New York in February 2006, <u>white-nose syndrome</u> has spread from New York caves to caves in Vermont, Massachusetts, Connecticut, New Hampshire, New Jersey, Pennsylvania, and West Virginia.

White-nose Syndrome: Something is Killing Our Bats - USFWS White-nose Syndrome website

Video: The Battle for Bats: White Nose Syndrome

Decontamination Protocol for Bat Field

Studies Use the most current version of the Protocol provided on the website. These protocols apply to anyone handling bats and working under a Federal Fish and Wildlife Permit (aka Federal Research Permit). The purpose of the protocols are to minimize the potential for transmission of white-nose syndrome (WNS) while handling bats (both between handler and bats and between bats).

Photos of bats with white-nose syndrome

Population

2017 Rangewide Population (9-page PDF 12)

Management

Helping bats survive white-nose syndrome includes helping them survive overall. The White-Nose Syndrome website provides information that can help you help bats when carrying out various management activities.

<u>Management Practices to Help Bats Survive</u> - links to White-Nose Sydrome Response Team

Life History, ESA Status and Population Size

News Release: Celebrate Endangered Species Day, Learn about the Endangered Indiana Bat

Indiana Bat Range Map and Recovery Units

Shapefile of Recovery Units (.zip file)

Fact Sheet

Fact Sheet - Northeastern U.S. (PDF)

Michigan Summer Life History Information

Species Profile (U.S. Fish & Wildlife Service's National Endangered Species Website)

Recovery Activities

<u>Recovery</u> is the process used to restore threatened and endangered species to the point that protection under the Endangered Species Act is no longer needed. The Endangered Species Act requires that a "Recovery Plan" be prepared for every listed species and that the status of every listed species is reviewed every five years (i.e., <u>"Five-Year Reviews"</u>).



Beneficial Forest Management Practices for WNS-affected Bats Voluntary Guidance for Land Managers and Woodland Owners in the Eastern United States

Draft Recovery Plan; First Revision (258-page PDF 2; 1.4MB) - April 2007

Hopes For Indiana Bat Rise and Fall at Indiana's Cave River Valley (Dec. 2012)

Five-Year Review (45-page PDF 1) - Sept. 2009

Private Stewardship Grant (May 2007): <u>Restoring Southeast Michigan's High</u> <u>Diversity Landscapes Through</u> <u>Collaborative Stewardship</u> – Hillsdale, Jackson, Lenawee, Oakland, and Washtenaw Counties, Michigan

Private Stewardship Grant (May 2007): <u>Reforestation and Wetland Restoration for Permanent Native Habitat in the St.</u> <u>Joseph River Watershed – Hillsdale County, Michigan; Defiance and Williams</u> <u>Counties, Ohio; Allen, Dekalb, and Noble Counties, Indiana – (\$45,000*)</u>

2006 S6 Grant Project - Mine Stability and Implications For Endangered Bat Conservation

Section 7 Consultation

Under <u>Section 7</u>, the Endangered Species Act directs all Federal agencies to work to conserve endangered and threatened species and to use their authorities to further the purposes of the Act. Section 7 of the Act, called "Interagency Cooperation," is the mechanism by which Federal agencies ensure the actions they take, including those they fund or authorize, do not jeopardize the existence of any listed species.

Section 7 Consultation with Federal Highway Administration, Federal Railroad Administration and Federal Transit Administration

Section 7 and Section 10 Wind Energy Guidance

Indiana Bat Fatalities at Wind Energy Facilities

Summer Survey Guidelines

Automated Acoustic Bat ID Software Programs

Indiana Bat Biological Opinions

Section 7 Consultation Guidance

Habitat Conservation Plans (HCPs) Habitat Conservation Plans in the Midwest Region

Images Photos on Flickr

Photos of bats with white-nose syndrome



<u>on Flickr</u>

Videos of Indiana bats and their habitat - cavebiota.com

For Teachers

Indiana Bats, Kids, and Caves - Oh My! (an activity book for teachers)

News Release: Celebrate Endangered Species Day, Learn about the Endangered Indiana Bat

Photos on Flickr

Photos of bats with white-nose syndrome on Flickr

Videos of Indiana Bats and their habitat - cavebiota.com

Bat Box Fact Sheet (PDF) Minnesota | Indiana | Wisconsin

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