



Wayne NF: Agency Update

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Hibernaculum WNS Surveillance Lawrence County Mine

- 19 January & 16 March 2012 winter visits
- Acoustic monitoring Dec 2011 – May 2012

Lawrence County Mine: WNS

2012 Observations:

- Abnormal roosting locations
- Few to no large clusters
- A few dead bats
- Early departure from hibernation

Confirmed WNS+ in 2011

Hibernaculum WNS Surveillance

Species	Midwinter	2012	2012	% Change
	2011	January	March	
MYLU (Little Brown)	916	1753	377	-78.5%
MYSO (Indiana)	276	277	4	-99.9%
PESU (Tri-color/Pip)	134	214	106	-50.5%
EPFU (Big Brown)	3	11	0	-100.0%
MYSE (Northern)	1	24	11	-54.2%
Unidentified	4	72	1	
Total	1334	2351	499	-78.8%

Hibernaculum WNS Surveillance

- More bats counted in Jan 2012 than ever before; could be WNS-indicative behavior of bats moving toward the entrance (where they could be counted)
- Confounding factor: extremely mild winter of 2011-2012 (Early Departure or Mortality?)
 - Only ~10 bats found dead; guessing at early departure
 - Based on previous yrs, bats should still be hibernating in late March, but MYSO were already gone
 - Take Percent Change with a grain of salt
- By March, most bats appeared affected

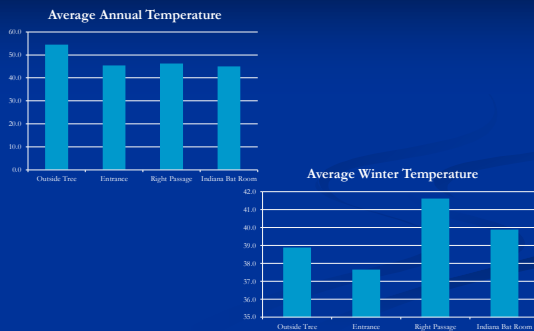
WNS-related Research

- August 2012 ... with Anne Ballmann, USGS National Wildlife Health Center (Assessing the risk of *Geomyces destructans* transmission in bats using contaminated hibernacula during late summer)
 - Overview: sample bats at 8 different hibernacula within the WNS confirmed region:
 - 3 contaminated hibernacula that have experienced winter population declines, 3 recently contaminated, and 2 apparently unaffected hibernacula.

Assessing the risk of *Geomyces destructans* transmission during late summer

- Conducted non-lethal screening of wings with long-wave UV light and collected wing swabs during evening emergence.
- Collected demographic data, measurements, and fecal samples.
- Collected environmental samples from inside each hibernaculum (where bats have historically roosted in large clusters).

Hibernaculum Dataloggers



Habitat Improvement Projects



Hibernaculum Area Foraging Enhancement Project

Habitat Improvement Projects



Forest-wide Acoustic Transects

- Collecting data since 2009 on 3 routes
- 3 additional routes established in 2010 (2 transects each in Athens, Marietta, & Ironton)
- Minimum 3 samples in Summer
 - 1 June to 15 July
- Minimum 3 samples in Fall
 - 1 August to 30 September

Fall Swarming Surveys



Information & Education Programs



Mine Closure/Safety/WNS
Education sign installation



Notice: All Underground Mines, Historic Fortifications, and Tunnels on the Wayne National Forest are Closed to Public Use.

Stay Safe – Stay Out!

Abandoned mines, tunnels, and tunnels are dangerous to people. Rules include potential collapses, entrapments, or carbon monoxide poisoning.

Non-recreational structures in these structures. The closure also prohibits any mining, fire, or other activities that could impact the forest's resources. The closure also prohibits any mining, fire, or other activities that could impact the forest's resources.

For more information: <http://www.dnr.pa.gov/PAWildlife/underground/>

Information & Education Programs



Bat Colony 101

What do you expect when you have built a colony? It's a common house and you'll probably notice the white box you built and see the colony.

It takes about 10-15 days for the colony to be built.

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What do bats do for me?

Bats are important for the ecosystem. They eat insects that are harmful to crops and forests. They also help to pollinate some plants.

Bat Basics

- Bats are mammals. They are not insects or birds.
- Bats are important for the ecosystem. They eat insects that are harmful to crops and forests. They also help to pollinate some plants.
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