

11hr\_AC-NR\_CRule\_10-123\_pt01



(FORM UPDATED: 08/11/2010)

## WISCONSIN STATE LEGISLATURE ... PUBLIC HEARING - COMMITTEE RECORDS

2011-12

(session year)

Assembly

(Assembly, Senate or Joint)

Committee on Natural Resources...

### COMMITTEE NOTICES ...

- Committee Reports ... **CR**
- Executive Sessions ... **ES**
- Public Hearings ... **PH**

### INFORMATION COLLECTED BY COMMITTEE FOR AND AGAINST PROPOSAL

- Appointments ... **Appt** (w/Record of Comm. Proceedings)
- Clearinghouse Rules ... **CRule** (w/Record of Comm. Proceedings)
- Hearing Records ... bills and resolutions (w/Record of Comm. Proceedings)  
(**ab** = Assembly Bill)                      (**ar** = Assembly Resolution)                      (**ajr** = Assembly Joint Resolution)  
(**sb** = Senate Bill)                              (**sr** = Senate Resolution)                              (**sjr** = Senate Joint Resolution)
- Miscellaneous ... **Misc**

\* Contents organized for archiving by: Stefanie Rose (LRB) (August 2013)



Registrations Against

- Isaac Gomez, Madison

Registrations for Information Only

- None.

March 2, 2011

**EXECUTIVE SESSION HELD**

- Present: (12) Representatives Mursau, Rivard, Williams, Nerison, J. Ott, Tiffany, Mason, Molepske Jr, Danou, Clark, Milroy and Hulsey.
- Absent: (3) Representatives Kleefisch, Severson and Steineke.
- Excused: (0) None.


Moved by Representative Mursau, seconded by Representative Rivard that **Clearinghouse Rule 10-123** be recommended for modifications requested.

- Ayes: (12) Representatives Mursau, Rivard, Williams, Nerison, J. Ott, Tiffany, Mason, Molepske Jr, Danou, Clark, Milroy and Hulsey.
- Noes: (0) None.
- Absent: (3) Representatives Kleefisch, Severson and Steineke.

MODIFICATIONS REQUESTED RECOMMENDED, Ayes 12,  
Noes 0

March 21, 2011

No action taken.

  
Tim Gary  
Committee Clerk

## Vote Record

### Committee on Natural Resources

---

Date: March 2, 2011

Clearing house Rule: CR-10-123

Moved by: Mursau                      Seconded by: Rivard

Motion: That the Assembly Committee on Natural Resources, pursuant to s. 227.19 (4) (b), Statutes, request that the DNR agree to consider modifications to Clearinghouse Rule 10-123.

<u>Committee Member</u>	<u>Aye</u>	<u>No</u>	<u>Absent</u>	<u>Not Voting</u>
Representative Jeffrey Mursau, Chair	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Representative Roger Rivard	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Representative Mary Williams	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Representative Joel Kleefisch	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Representative Lee Nerison	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Representative Jim Ott	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Representative Erik Severson	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Representative Jim Steineke	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Representative Thomas Tiffany	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Representative Cory Mason	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Representative Louis Molepske Jr	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Representative Chris Danou	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Representative Fred Clark	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Representative Nick Milroy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Representative Brett Hulsey	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Totals:	<u>12</u>	<u>0</u>	<u>3</u>	<u>    </u>

Motion Carried

Motion Failed





# Jeff Mursau

STATE REPRESENTATIVE • 36<sup>TH</sup> ASSEMBLY DISTRICT

February 16, 2011  
Cathy Stepp, Secretary  
Department of Natural Resources  
101 S. Webster Street  
Madison, WI 53707-7921

**SUBJECT: Meeting Request on Clearinghouse Rules 10-114, 10-115 and 10-123**

Dear Secretary Stepp,

By this letter, I am requesting a meeting with the Department of Natural Resources regarding Clearinghouse Rules 10-114, 10-115 and 10-123, relating to cave bats and the classification and control of invasive species.

Per Wisconsin Statutes 227.19 (4)(b)1a, this will extend the 30-day review period another 30 days from today's date. It is my intention to conduct a public hearing on these rules in the near future where we can meet together. Thank you.

Sincerely,

*Rep. Jeff Mursau*

**Representative Jeff Mursau**  
Wisconsin State Assembly  
**36th Assembly District**  
**Committee on Natural Resources, Chair**  
**Committee on Forestry, Chair**  
**Committee on Agriculture, Member**  
PO Box 8952  
Madison, WI 53708-8952  
(608) 266-3780



State of Wisconsin  
DEPARTMENT OF NATURAL RESOURCES  
101 S. Webster Street  
Box 7921  
Madison WI 53707-7921

Scott Walker, Governor  
Cathy Stepp, Secretary  
Telephone 608-266-2621  
FAX 608-267-3579  
TTY Access via relay - 711



February 17, 2011

Representative Jeff Mursau, Chair  
Assembly Committee on Natural Resources  
Room 18 North  
P.O. Box 8952  
Madison WI 53708

Dear Representative Mursau:

Thank you for your letter requesting a meeting with the Department of Natural Resources regarding Clearinghouse Rules 10-114, 10-115 and 10-123, relating to cave bats and the classification and control of invasive species.

We are happy to meet and continue talking about the rule and understand that the Committee's review period will be extended another 30 days.

Sincerely,

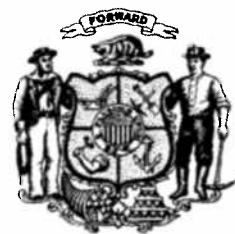
Cathy Stepp  
DNR Secretary

cc. Linda Haddix  
Tim Andryk  
Kurt Thiede  
Laurie Osterndorf





WISCONSIN STATE LEGISLATURE



**Ross, Laurie J - DNR**

**DECEMBER 2010 NRB MEETING  
Dawn Ryan -  
3.B.1, 3.B.2, & 3.B.3**

**From:** DNR NRB CHAIR  
**Sent:** Tuesday, November 16, 2010 2:47 PM  
**To:** Ross, Laurie J - DNR  
**Subject:** FW: Opposition to the WIDNR WNS management policy

Laurie: please distribute to NRB and to Bat Staff. The writer raises some interesting point, and I think that the Board would like to see staff's response.

Thanks,  
Jonathan

---

**From:** DNR NRB CHAIR  
**Sent:** Tuesday, November 16, 2010 2:43 PM  
**To:** Dawn\_Ryan@nps.gov  
**Subject:** RE: Opposition to the WIDNR WNS management policy

Dear Ms. Ryan:

Thank you for your extremely interesting e-mail on White Nose Syndrome and the Wisconsin DNR's proposed response. I am distributing it to my colleagues on the Natural Resources Board, and also to the appropriate staff for review and comment.

Sincerely yours,  
Jonathan P. Ela  
Chair, Wisconsin Natural Resources Board

---

**From:** Dawn\_Ryan@nps.gov [Dawn\_Ryan@nps.gov]  
**Sent:** Thursday, November 11, 2010 10:29 AM  
**To:** DNR NRB CHAIR  
**Subject:** Opposition to the WIDNR WNS management policy

**Wisconsin Department of Natural Resources  
Jonathan P. Ela, Chair**

**Opposition letter regarding the management of White Nose Syndrome, caves and bats in  
Wisconsin**

Sir, we all know the importance of bats and the great service they provide to humans through their nightly consumption of insects. But I'd like to add little more insight to the cave ecosystem that I believe is being overlooked by this NR40 rule the WIDNR is trying to implement. Let me first begin with my background.

I have worked in and studied caves in the United States including Puerto Rico for over 12 years. In Wisconsin and Illinois, I am currently researching the effects on cave adapted invertebrates because of the loss of bats by the *Geomyces destructans* fungus. I have been collecting and identifying invertebrate

Documented close to 500 caves

11/16/2010

species in caves in the Driftless Area while being advised by Dr. Steve Taylor of the Illinois Geologic and Natural History Survey. I am also conducting the same research in caves in Kings Canyon, Sequoia National Forest, California, with the permission of Sequoia National Forest Resource Management. This research is looking at cave invertebrate populations before and after WNS arrives in these areas. I also work as a National Park ranger in Sequoia National Park where I, among many things related to caves, teach park visitors about the 275 caves the park protects. I am also a Fellow of the Cave Research

Foundation where I lead research expeditions into Mammoth Cave.

*20p Mole asked can't you just evict the bats?*

Caves are cold, wet and dark environments, but also harbor rare and unique life; and not just bats.

The animals that I am studying in caves are invertebrates such as spiders, millipedes and crickets. These animals are related to their cousins on the surface but were pressured underground over 10,000 year before present because of advancing glaciers. In

order to survive in the harsh environment of the cave, they have had to adapt. Most cave adapted animals, also known as troglobites; have evolved over time to have much longer appendages (legs and antennae) than their surface relatives. They use those long appendages to feel their way around in the dark. A second adaptation is their lack of eyes. Because there is no light in caves, troglobites have evolved over time with no eyes. A final significant adaptation is their lack of pigment. Because there is no sun in a cave, pigment is no longer needed. Most troglobites have very pink, white or even clear skin. These interesting adaptations make these animals very unique but it also confines

them to their cave environment. Their lack of UV protection and eyes plus the inability to blend in with their surroundings would make them easily predated upon if they moved to the surface.

*These animals have been documented in Crystal Cave.*

Because of the dark environment, caves are considered starved environments. The only food source for these troglobites is either organic matter that washes into the cave or through the guano deposited from animals that use and travel in and out of caves (troglonexes) such as bats, raccoons and rodents. While guano may not seem appetizing, these troglobites rely heavily on this food source for survival. When their environment is impacted and made unsuitable and their food source eliminated, they are unable to relocate. Their home becomes their grave.

Geomyces Destructans hasn't reached Wisconsin yet but it is on its' doorstep. In preparation of the fungus's arrival the Wisconsin Department of Natural Resources has established management directives that are detrimental to the cave and its' ecosystem. Under the NR40.04 rule noted under the paragraph labeled Small Business and Initial Regulatory Flexibility Analysis that the WIDNR wants to enact it states "Commercial caves will have the option to exclude bats from the cave with help of the department, allowing them to remain open for tourism, and resulting in no loss of tourism dollars." The problems created by sealing caves from bats are twofold. First by sealing the cave from bats and in turn,

*This has been already done in Lehigh Valley caves*

raccoons and all the other energy providing animals, you have removed the food source for the troglobitic invertebrates and have just rendered a death sentence to them. The cave ecosystem is destroyed! And while NR40.04 order intends to exclude bats from caves it also contradicts itself by concurring that the disappearance of bats in the cave will cause the disappearance of troglobites.

**“In many cases, only bats regularly move in and out of the cave environment, while other cave species must rely solely on what is found or brought inside. Thus, the disappearance of bats from caves could cause the disappearance of other species as well.”**

The second problem caused by exclusion of bats is that bat habitat is quickly dwindling. The caves and forests where bats reside in Wisconsin are being quarried and logged away. And yet the NR40.04 rule is promoting even more habitat loss.

The basis of the WIDNR claim is a fallacious assumption that humans are spreading the fungus. In the NR40.04 rule it cites the discovery of the fungus in two caves that are beyond the flight distance capable of bats. One cave is located in Tennessee and the other in Oklahoma. Not only can I state from personal experience but also Dr. Hazel Barton at the recent WIDNR meeting noted that the Oklahoma cave has been gated and there has been no access to humans in several years. It was also brought to the attention of the presenter Gregor Schuurman of the WIDNR who used this as evidence to back his claim and the in the following comment stated that he was unfamiliar with the cave. Therefore it would be impossible for humans to bring the fungus to the cave; it was the bats that brought the fungus with them. And when it comes to the WIDNR argument that the fungus has spread beyond the flight distance capabilities of bats, I must also cite a paper published by the Center for Disease Control titled Geographic Translocation of Bats: Known and Potential Problems. In this paper the author documents the translocation of bats through the use of ships, shipping containers, cars and all manner of transportation and the emergent consequences.

**“Natural, accidental and intentional translocation of bats, both intra- and intercontinentally has been documented. Some bats have been translocated while incubating infectious diseases, including rabies or related lyssavirus infection; others have escaped confinement en route to or at their destinations.”**

So in this case it is certainly possible that an effected WNS bat or bats could have hitch hiked their way well beyond their flight capability and found refuge in the caves in Oklahoma and Tennessee. With knowing that the cave in Oklahoma where WNS recently appeared has no human access and also knowing the long distance translocation habits of bats, the argument that humans have introduced this

fungus to the cave and is spreading the fungus to other locations is unfounded. There is no research available to this date that supports a claim that humans are spreading the fungus. The implementing of this management plan is misguided and is based solely on opinion and assumptions, rather than science and research.

Certainly this fungus and the massive die-offs of bats is a huge tragedy with enormous environmental implications. However, common sense and best science available should prevail rather than shooting from the hip. Managing for one species rather than the community is narrow minded and not what the Wisconsin Department of Natural Resources is tasked with; and certainly not destroying the cave ecosystem. I would like to ask you to please review the data provided by agencies such as the US Fish and Wildlife and seriously consider the recent discrepancies Dr. Hazel Barton pointed out at the last meeting regarding the spread of the fungus.

I would also hope that communications between Erin Crane and the stake holders she has claimed to contact improves. As a director for a local speleological survey and knowing other cave owners, we have not been contacted as Ms. Crane claims.

Regards,

Dawn Ryan

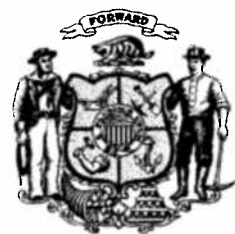
[Dawn\\_Ryan@nps.gov](mailto:Dawn_Ryan@nps.gov)

[dwn\\_ryan41@yahoo.com](mailto:dwn_ryan41@yahoo.com)

815-260-3454



# WISCONSIN STATE LEGISLATURE



# BAT CONSERVATION INTERNATIONAL

[www.batcon.org](http://www.batcon.org)

Post Office Box 162603 • Austin, Texas 78716  
512/327-9721 • Fax 327-9724

Stacy Rowe  
DNR Bureau of Endangered Resources  
PO Box 7921  
Madison, WI 53707

DECEMBER 2010 NRB MEETING  
Fascione/Bat Conservation Int'l -  
3.B.1, 3.B.2, & 3.B.3

November 29, 2010

Dear Ms. Rowe,

On behalf of Bat Conservation International, we are submitting the following written comments regarding three upcoming proposed board orders: 1) ER-35-10, revisions to NR Ch. 27, addition of Wisconsin cave bats to the threatened species list; 2) IS-41-10, revisions to NR Ch. 40, addition of the fungus, *Geomyces destructans* (*Gd*), as a prohibited invasive species; and 3) IS-47-10, revisions to Ch. NR 40, regarding the management of White-nose Syndrome (WNS) in bats.

Bat Conservation International (BCI), based in Austin, Texas, is devoted to conservation, education and research initiatives involving bats and the ecosystems they serve. It was founded in 1982, as scientists around the world became concerned that bats essential to the balance of nature and the health of human economies were in alarming decline. Our membership now totals nearly 10,000 worldwide.

While we applaud the Wisconsin Department of Natural Resources' (WDNR) commitment to conservation and its willingness to take legislative steps to address the threat of WNS, we offer these comments to clarify our position regarding these proposed rules. WNS is a threatening disease that should be taken very seriously. We agree with the DNR's assessment of the significant risk to Wisconsin's cave bat populations, outlined in Matthew Frank's memorandum to the Natural Resources Board dated October 14, 2010, and we support the addition of Wisconsin cave bats to the threatened species list. We further agree that the fungus, *Gd*, is the most likely pathogen driving WNS disease, as available research suggests that *Gd* is present wherever WNS is diagnosed. Thus, listing *Gd* as a prohibited invasive species will provide the WDNR with tools to manage the disease. Regardless of the Board's decision on these three rules, we encourage the Natural Resources Board to provide adequate staff and financial resources to enable the DNR to respond proactively to this disease threat.

We previously submitted comments to the Natural Resources Board on October 22, 2010, regarding IS-47-10. Subsequent to that submission, we have had several conversations with the WDNR clarifying the intent and the objectives of the proposed orders. Those conversations provided more detail regarding interpretation of the proposed rules and the specific circumstances in Wisconsin that led to them. Our revised comments are provided below.

- 1) We support the requirement of mandatory decontamination for all cave and bat activities occurring within the state of Wisconsin according to guidelines developed and continually updated by the U.S. Fish and Wildlife Service. We believe that any deviations from the U.S. Fish

and Wildlife Service protocols should be based on accurate interpretations of the most current science and at least meet or exceed standard set by the Service protocols. We urge the WDNR to provide clear and concise guidelines outlining specific decontamination requirements to prevent confusion and/or inadvertent non-compliance with this legal regulation. We also encourage the Natural Resources Board to provide funding and support to the WDNR to ensure adequate dissemination, outreach and training to ensure guidelines for decontamination are accessible, understood and followed.

- 2) In our conversation with WDNR, we were assured that landowners will not be liable for the occurrence of *Geomyces destructans* (*Gd*) on their property if they make a good faith effort to work with the WDNR toward a mutually acceptable method of prevention. We are concerned that many landowners may choose bat exclusion as a method of reducing their liability, regardless of WDNR assurances. But we have been told that the response from landowners to the proposed revisions has been overwhelmingly positive, and that bat conservation remains at the forefront of both DNR's and landowners' intentions. However, we remain concerned that this provision may remove some natural roost sites from the landscape, thus potentially hindering long-term bat conservation. During our conversations, WDNR clarified that few hibernacula will be impacted on private lands, with the likely impact limited to less than 100 individual bats. Further, the WDNR articulated that the implementation of this rule would not extend to other bat-roosting sites (snags, barns, bat houses, etc) that could significantly impact bat conservation.

We expect the WDNR to keep the number of bat exclusions to a minimum and to ensure that new exclusions would not be initiated after the onset of hibernation season. Where existing exclusions have taken place, removing the occasional bat or bats that find their way into the site may be necessary, but every effort should be taken to limit this undesirable activity. All bats removed during winter months must be placed with a knowledgeable and licensed rehabilitation facility to minimize mortality. Assuming that these clarifications are consistent with the Natural Resources Board's interpretation of this rule, we are comfortable that this proposed action will affect relatively few hibernacula. We would emphasize, however, that this approach may not be appropriate in other states or in other circumstances and should not be used as a model for other states. Wisconsin is unique in that it has few bat hibernacula on private land. This approach may not be effective or "bat-friendly" in other regions.

- 3) Available evidence suggests that while human transmission may play a limited role in the movement of *Gd*, bat-to-bat transmission is the primary route of disease. Research to date suggests that human transmission may occur, but the likelihood and circumstances of human-vectored movement are still under investigation. Recent research indicates that multiple *Geomyces spp.* may produce curved conidia (indicating that the presence of curved conidia alone is not diagnostic for *Gd*); thus, further studies using genetic tools or cultivation will be necessary to augment previous research results that implicated potential human transmission. Management actions to address human transmission are prudent and a conservative course of action, but they should not be interpreted as sufficient to prevent WNS from entering Wisconsin.

Removing people or bats from some caves may prevent *Gd* from establishing in those caves, but the largest bat roosts will still be at risk of transmission from bats. Forcing bats to congregate in only the largest roosts owned by state or federal agencies (which we assume will be restricting



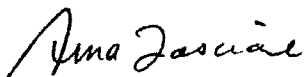
human access) may have the unintended effect of condensing populations in fewer sites and thereby promoting disease transmission. Although it is too soon to predict which colonies may survive WNS, it is possible that smaller, isolated colonies of bats scattered across the landscape might survive WNS due to the variability in roost environments and sparse roosting congregations. We still believe this should be considered and that every effort should be made to keep all existing hibernacula open to bat colonies, regardless of their size.

- 4) Public perception of the critical value of bats to the ecosystem has improved over the past 30 years, and that has led to significant advancements in bat conservation in the United States. We previously expressed concern that an unintended consequence of this rule may be that the public will perceive bats as a liability, a threat to their income or financial stability, and a vector of disease. For example, many of the show caves currently focus heavily on bat education, and this message may be diluted without bats present. We understand from conversations with WDNR that the agency has an active education campaign promoting bats and bat conservation. If the WDNR proceeds with this ruling as it is written, we encourage the Natural Resources Board to provide sufficient staff and funding to maintain an active education campaign that will ensure the public perception of bats and their benefits is not irreparably harmed.
- 5) Given the spread and severity of this disease, how will the DNR and the Board measure the success of this rule at reducing the impacts or slowing the spread of WNS? Other states will be watching to see how this rule is implemented. If this rule is adopted, we strongly encourage the development of measurable outcomes that will clearly demonstrate the successes and consequences of this ruling.

We acknowledge that Wisconsin is proactively addressing a serious threat to bats in the state and, given the limited number of hibernacula that may be impacted in Wisconsin, this strong course of action may be warranted. However, we remain concerned about the impacts to both bat populations and the humans who need to support them. We encourage the WDNR to do everything in its power to ensure that these strong actions are successful in slowing the spread of WNS and protecting bats. Bat Conservation International will be watching closely to assist in these efforts if we can and to evaluate both the effectiveness and consequences of this experimental ruling. Bold actions such as those proposed by WDNR may not be appropriate in other regions or states; thus, we do not think this is appropriate for broad implementation by other agencies at this time without careful review. We do not believe the proposed measures will stop the spread of WNS into Wisconsin, but acknowledge that they allow the WDNR access to caves and mines for statewide surveillance and provide experimental tools to address the possibility of limited human transmission.

Thank you for taking the time to consider our comments prior to the revision or adoption of these proposed rules. Please contact me if you have questions or would like clarification regarding our comments.

Sincerely,

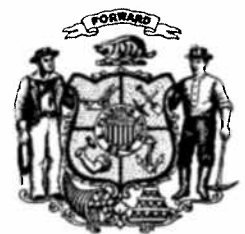


Nina Fascione  
Executive Director  
Bat Conservation International



# WISCONSIN STATE LEGISLATURE

1000  
1000  
1000





Testimony to the Assembly Committee on Natural Resources  
White-nose Syndrome Administrative Rules  
Erin Crain – Department of Natural Resources  
March 2, 2011

**The disease and its impact - the introduction of white-nose syndrome to the state will have economic and human health impacts:**

- Bats play an integral role in agriculture, forestry and human health by consuming large numbers of agricultural pests and insects that transmit human disease. A single little brown bat can eat up to 1000 insects per hour, often consuming large numbers of agricultural pests, which cost farmers and foresters billions of dollars per year. As predators of many insects, bats also may play an important role in reducing risk of human disease, such as West Nile Virus.
- White-nose syndrome has been linked to the death of over one million bats since 2007 and threatens to cause the extinction of several Wisconsin bat species. Mortality rates of affected bat colonies reach 100%.
- Research at the national level has found that the disease is caused by a non-native fungus which is believed to have originated in Europe. The fungus can be spread by bats at a rate of 150-200 miles per year. It can also be spread by humans. The longest documented distance of human transmission of the fungus occurred last year and was over 800 miles. US Fish and Wildlife Service guidelines for the disease focus on efforts to slow the spread of the disease by humans.
- The disease is already present in the Midwest. Therefore it is anticipated that the disease will be present in Wisconsin as early as this winter and no later than next year.



Bat White Nose Syndrome (WNS) Occurrence by State/Province (2/18/2011)  
Fall/Winter/Spring ■ 2007-2008 ■ 2008-2009 ■ 2009-2010 ■ 2010-2011

Adapted from Cal Butchkoski, PA Game Commission

**Goals of the management approach - the department has tried to meet the following goals in its management of the fungus associated with white-nose syndrome:**

- Slow the human transfer of the WNS fungus to preserve as large a recovery population as possible in order to take advantage of new research that can treat both hibernacula and bats. Studies are currently being conducted by federal agencies, including the US Fish and Wildlife Service, US Forest Service, and US Geological Survey, as well as state agencies and universities across the eastern United States and Canada.
- Create temporary preventive measures that can be removed as their efficacy changes or as recovery goals are met.
- Provide protection for bats without the need for additional individual permits (prior to the listing of cave bats as threatened species, bats in Wisconsin did not have any form of protection).
- Create a response that is specific to Wisconsin's needs yet consistent with US Fish and Wildlife Service guidelines.

**Response strategy - in order to accomplish the above goals the department has developed a strategy with the following elements:**

- Utilize federal funds and contract for the gathering of data on the size of Wisconsin's cave bat population and location of viable hibernacula.
- Work closely with landowners to develop voluntary agreements and to provide management assistance to preserve hibernacula and maternity sites.
- Create of the following three rules to provide protection for cave bat species and to slow the human spread of the WNS fungus.
  1. CR 10-114 (ER-35-10) – Designates four species of cave bats as threatened. We have worked extensively with animal control operators and property owners to ensure that the listing of cave bats does not negatively impact their businesses or ability to remove bats from their properties. This is being accomplished through a broad incidental take. In 1995 Representative DuWayne Johnsrud (R-Eastman) introduced Assembly Bill 585 which established a broad incidental take provision to the WI Endangered Species Law (then s. 29.415, Wis. Stats.). A broad incidental take permit allows for the taking of a listed species if it is part of an otherwise lawful activity. There is no application, fee or public notice period required to be covered under a broad incidental take. Further, the removal of bats from a dwelling is not restricted if the property owner believes the presence of bats presents a health concern.
  2. CR 10-115 (IS-41-10) – Designates *Geomyces destructans*, the fungus that causes white-nose syndrome as a prohibited invasive species under Wisconsin's existing invasive species law.
  3. CR 10-123 (IS-47-10) – Details management activities related to early detection of white-nose syndrome and limiting its spread due to human activities. The department has provided assistance to private and commercial cave and mine owners to help slow the spread of the WNS fungus by humans. This assistance has come in the form of decontamination supplies, dedicated caving equipment, educational materials, the development of customized decontamination protocols and prevention plans, signage, gates, bat removals and advertisement of bat friendly tourist sites.
- Return to the Natural Resources Board in September 2011 to report on the efficacy of prevention measures, any recommended modifications and what is planned for the coming year.

**Public comment summary:**

- The department held five public hearings on the proposed rules. The public comment periods were 30-60 days for the rules and 30 days for the broad incidental take permit. There were 208 comments (75%) in support of the rules and 71 comments (25%) opposed.

Support	208	(203 Wisconsin residents, 5 nonresidents)
Oppose	71	(40 Wisconsin residents, 31 nonresidents)
Support/Oppose	3	(1 Wisconsin resident, 2 nonresidents)
Total	282	

**Changes to the proposed rules and their implementation: the department has integrated public comments and suggestions from animal control operators, agricultural interests, recreational cavers and commercial and private property owners into the final versions of the rules. These changes include:**

- In response to commercial cave operators and recreational cavers, the final version of CR 10-123 (IS-47-10) provides for exemptions from the prohibition on the use of caving equipment that has been used in other states, decontamination protocols, and the need for WNS prevention plans for caves or mines that restrict human access or are primarily used for food or beverage storage.
- Diving in lakes, rivers or any other surface water body is not restricted by the proposed changes to NR 40. Cave diving at sites that are fully inundated with water is also exempt from the proposed changes to NR 40. The department is currently working with the diving community to develop decontamination protocols for sump diving. While the protocols are in development, there is no restriction on sump diving.
- In response to concerns from animal control operators, property owners, and agricultural interests, the final version of the incidental take shortens the bat removal restriction period and limits it to maternity colonies only. Further, it exempts hospitals, medical clinics, day cares, assisted living facilities, food preparation areas and any dwelling where the property owner feels a health concern exists. All restrictions on tree cutting were removed.

**Stakeholder involvement - the department's efforts to involve stakeholders in the decision-making process are summarized below:**

- Cave/Mine Landowners – All potential cave and mine owners were contacted to verify whether their site could maintain the fungus that causes WNS. Through this process the department has reduced the number of sites to approximately 100. Among those contacted were nine of the most regularly visited commercial caves/mines in the state. The department has agreements in place with commercial caves that protect bats while allowing for the economic and recreational interests of landowners.
- Recreational Cavers – Several presentations were given to the Wisconsin Speleological Society, and members were contacted by email for their input. Information was also included in several caving/white-nose syndrome list serves and online discussion boards. The department utilizes US Fish and Wildlife Service decontamination protocols for recreational caving equipment and has supplied recreational caving groups with clean, dedicated gear and worked with small business owners and tourist operators to develop specialized decontamination protocols for cave diving equipment.
- Animal Control Operators – 25 bat excluders from throughout the state have been contacted via email and phone to solicit input on the broad incidental take permit. Several revisions have been made to the broad incidental take permit based on animal control operator input.

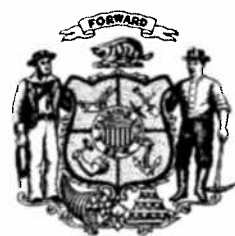
- Environmental Organizations – A variety of national, state, and local environmental organizations and agencies have provided input (e.g., US Fish and Wildlife Service, Wisconsin Conservation Congress, Wisconsin Wildlife Federation, The Nature Conservancy, Bat Conservation International and the North American Society for Bat Research).
- Wildlife Rehabilitators – Wisconsin bat rehabilitators have been contacted and have worked on the development of bat rehabilitation protocols and policy.
- No additional actions will be required of the wind energy industry at this time. The department will work collaboratively with wind energy stakeholders to develop minimization measures.

**Next steps in the management of white-nose syndrome:**

- The department is currently conducting winter hibernacula surveys and will conduct spring acoustic surveys. It will also complete the second phase of the population viability assessment to determine the minimum population sizes to maintain the species and which conservation actions are most effective.
- The department will meet with stakeholder groups to inform them of what was learned during the winter surveys and get feedback on how the prevention measures are working, in order to evaluate and whether the measures need to be modified.
- The department will report back to the Natural Resources Board in September 2011 on the efficacy of prevention measures, any recommended modifications, and what WNS management activities are planned for the coming year.



# WISCONSIN STATE LEGISLATURE



**Testimony before the Assembly Natural Resources Committee, March 2, 2011**  
**Clearinghouse Rules: CR 10-114, CR 10-115, CR 10-123**  
**Opposed**

Jeannie Place Cunningham  
Crystal Cave  
W965 State Road 29  
Spring Valley WI 54767  
715.778.4414  
cunninghamplacecave.com

Chairman Mursau, Committee members, thank you for the opportunity to address the committee this morning. My name is Jeannie Place Cunningham. My husband, Blaze Cunningham, and I are co-owners of Crystal Cave, a showcave located in western Wisconsin. We offer guided tours of our cave from April through October. Our cave has a hibernating population of bats which numbers approximately 3-350 individuals. During the winter months the cave is closed in order to avoid disturbance of the bats. Let me add that both my husband and I are deeply concerned about the bat population and will go to any length to see that they are cared for and protected. That said,

Our purpose today is to have the Assembly Natural Resources committee recommend CR 10-114, CR 10-115, and CR 10-123 not be passed to the Assembly to be voted into law. These rules deal with bats, the fungus, *Geomyces destructans*, and management of what is called White Nose Syndrome (WNS). We are recommending that the three clearinghouse rules before you be allowed to expire in 2012. We agree the WI Department of Natural Resources (WDNR) should be closely monitoring the ever-changing situation with bats and WNS. We also feel the WDNR should be developing and maintaining close contact with affected stakeholders. But, we feel any management of White Nose Syndrome can be dealt with through careful planning and open communication between the WDNR and stakeholders. Our position is that WNS is much too fluid a situation to have a legislative body pass laws to govern the potential outbreak. Passing permanent laws will not increase the likelihood of successful management. When WNS appears in WI, those laws will become a burden to all parties and, in the end, result in more harm than benefit to the bats.

I have two points I would like the committee to consider.

**1. Necessity of making these clearinghouse rules permanent laws**

In September 2010, the WDNR presented the Natural Resources Board (NRB) with two proposed emergency rules, one listing the four WI cave bats as threatened and the other the fungus, *Geomyces destructans*, as a prohibited invasive species. In October, 2010, the WDNR offered up the corresponding management plan. Response to these emergency rules and management plan was swift and vocal. Each of you has received copies of the letters from Bat Conservation International, the National Speleological Society, Drs. Merlin Tuttle and Tom Kunz, all expressing deep concern with regards to the emergency rules and management plan. Many more letters and emails were sent to the NRB from concerned stakeholders, cavers and citizens. These letters and emails questioned the legality of the



WDNR's right to enter onto private property, "...if the department has reason to believe that a prohibited species is present". They questioned the scientific validity of the management plan; what research was the basis for these plans? They asked what criteria the WDNR would use to measure the success of these proposed rules and management plan. These questions still remain unanswered.

The clearinghouse rules before you have not been embraced by other states, the research community, the stakeholders, even the federal government. WI is the only state to implement such focused, restrictive rules regarding WNS that specifically impact private businesses and landowners. The situation surrounding WNS is extremely fluid and dynamic, changing on an almost daily basis. It begs the question, how can you pass effective legislation in March 2011 knowing things will change in a matter of days, weeks or months? How can a law designed to slow or prevent the spread of WNS be effectively enforced two or three years later when WNS has swept through the bat population? Everything will have changed. Laws designed to avert a crisis will no longer be valid. WNS does not read the laws. It will appear in Wisconsin. It may already be here. It will sweep through the bat populations. And if you have passed a law, what is next?

**2. Financial Implications for Crystal Cave, Cave of the Mounds, and other stakeholders**

These clearinghouse rules were presented to the NRB in September and October 2010. It was stated, at that time, that no economic impact report was necessary and that there would be little to no expense incurred by the stakeholders. At no time did the WDNR make any inquiry as to how our business would be affected, how we would handle the new regulations, to what expenses we would be laying ourselves open, impact on payroll, public perception, loss of revenue.

Because of the secrecy and rapidity with which the WDNR developed and passed these rules and management plan, we had little time to evaluate the impact on our business. We are now evaluating our responsibilities and developing policies on just how we intend to implement such things as decontamination procedures on our guests. We are anticipating

**a. Increased payroll costs**

i. In order to insure a smoothly functioning operation during summer months, we appear we may have to employ an additional person to survey and screen visitors as they enter the facility. There are many days when we will host over 400 guests in an eight hour period of time, Cave of the Mounds will see double if not more on one day. Previous staffing needs will not suffice so an additional person will be required for survey duty.

**b. Loss of revenue due to lack of understanding by general public**

i. We have spent the past 25 years educating our guests on the benefits of bats. We have included information about WNS for the past two seasons. We know a significant portion of the general public has little to no understanding knowledge of WNS. Imagine what goes through the mind of a family

considering a visit to the Crystal Cave or Cave of the Mounds when they hear the term "deadly fungus". It is irrelevant at that point whether the fungus harms people or not, this "tidbit" of information will have serious impact on their decision. This is exactly the sort of situation experienced by the pork industry last year when the H1N1 flu was referred to as "swine flu".

c. Loss of revenue due to group cancellations

- i. We have approximately 12,000 school children visit Crystal Cave each year. We are now required to notify teachers and group leaders, who in turn must notify all parents of the restrictions on clothing when the group visits our Cave. In this current "germophobic" climate, what will be the response from parents and even teachers? Will many forgo a visit to the cave, in order to prevent students from potential exposure to a "deadly fungus"?

d. Loss of revenue due to general misunderstanding

- i. Phone calls have already begun asking if our caves are closed. Emails are being received asking the same. We all know the fallout from even good accurate press reports. We have no idea what this will do to our business this year.

We understand the critical nature of white nose syndrome and the potentially devastating effect this will have on our bat population. No one in this state has a deeper tie to bats, nor is anyone more concerned than my husband and I. But, we also understand the science that has been presented by experts throughout the US and find it difficult to support the rules and management plan set forth by the WDNR. As stewards of one of Wisconsin's most unique natural resources and as overseers of a population of unique wildlife, as scientists and as cavers, we recommend that the clearinghouse rules before this committee not be made into laws. We want to work as partners with the WDNR, working to save the bats and still maintain a successful business. We cannot do so under a set of untenable laws that will only be bad for the bats and result in significant expense to WI businesses and deep resentment from the stakeholders.



Chairman Mursau, members of the committee- thank you for this opportunity to speak today. My name is John Lovaas. I am here today as the chair of the Save the Bats fund of the Minnesota Speleological Survey, a group of cavers and cave scientists based in the Twin Cities. The members of the MSS have been active in cave science and exploration activities in the upper Midwest since the early 1960s.

I am also a member of the Wisconsin Speleological Society, and of the Iowa "Grotto" of the National Speleological Society. I also currently serve as President of the Illinois Speleological Survey, and am a Director of the Cave Research Foundation, a non-profit group involved in the exploration and study of the cave and karst resources of our National Parks and Forests.

While more than one commentator in this process has characterized critics (such as myself, I suppose) of these WIDNR rules as outsiders with special interests, I have been active in Wisconsin caving for almost 20 years. My father and brother are UW alumni, and my family owns 180 acres of savanna and prairie near Dodgeville. The land is enrolled in the Managed Forestlands Program, is being intensively managed to return the land to pre-settlement condition, and ownership of the land will pass to the Nature Conservancy after my brother and I pass from this earth.

I would hope that the 12 miles that separates my home from the Wisconsin border, or my belief that a Manhattan should be made with bourbon, rather than brandy, is no impediment to the value of my opinion as a stakeholder. Recent news reports have suggested that WIDNR bat management activities will be supported through federal Pittman-Robertson funds- if there are federal dollars at stake here, then one might argue that every American might have a say in this issue.

The primary issues I have challenged through this process are those of bat exclusion, and of gear decontamination policies that address the ecologic realities surrounding cave bat movement in the upper Midwest.

*NATION'S*  
*W. M. PUBLIC PROCESS*  
*SYSTEMS*

*A BUCKRAUS B21*  
*COLLEGE*

*ILLINOIS*

I take great issue with any exclusion of bats from caves for the purpose of creating recreational opportunities. It makes no good management sense to remove native- and, in theory, threatened-species from their ecosystem in order to minimize their contact with humans. We do not depopulate lakes to ensure recreational opportunities for boaters who do not adequately remove aquatic invasives- we should not do so for caves.

Any effective effort to exclude bats will also effectively exclude all energy input into the cave ecosystems- primarily, in Wisconsin's case, raccoon guano. cursory inventories of Wisconsin caves have already identified new species of cave-adapted organisms. These organisms are troglobitic- they spend their lives inside the cave, and are entirely dependent on sparse external energy inputs for food sources. WIDNR's environmental assessment stated that the exclusion methods would allow cave biota to exit and enter the cave. Cave crickets, and overwintering moth and mosquito species are the only cave inhabitants that fit this description.

This brief comment on cave biota illustrates a clear lack of understanding- the organisms that would be impacted never leave the cave, and are dependent on energy sources from animals that would be excluded from the cave.

WIDNR has previously stated that their ~~untested~~ <sup>untested</sup> ideas regarding bat exclusion are based on PA Game Commission work. In fact, the PA experiments addressed the prevention of movement of infected bats to neighboring uninfected colonies during the winter hibernation season. Nothing PA has done has any real relevance or connection to WIDNR's exclusion activities conducted to date. The Midwest USFWS WNS coordinator characterized WIDNR's exclusion activities to me as "...options that, to date, have never been used to slow the spread of WNS. These somewhat innovative suite of actions are certainly untested and their effectiveness remains to be demonstrated..." I suggest that bat exclusion is bad for bats, bad for cave ecosystems, and as an untested option, should absolutely not be imposed on any landowner through any threat of regulatory action. If the work is to be conducted as scientific research, it should be conducted only with the landowner's full and informed voluntary cooperation. Even then, ~~no~~ <sup>no</sup> cave scientist or manager would ~~that would~~ <sup>that would</sup> ~~occur~~ <sup>occur</sup>

↑ I have not documented a single

characterize bat exclusion for the sake of preserving recreational opportunities as any kind of good management.

In September and October of 2010, WIDNR specifically discussed the results of stakeholder communications regarding bat exclusion- in particular, with commercial cave owners- with the NRB. There is no detailed evidence available to suggest that these meetings ever occurred prior to these NRB meetings. At the October NRB meeting, WIDNR assured the NRB that no more bats would be removed or excluded from WI caves and mines. Less than two weeks later, WIDNR was still removing (presumably hibernating) bats from a northeast WI cave. These bats are spending their winter hibernation season in wine refrigerators in Madison- this, despite repeated statements from WIDNR managers and biologists that they did not have an artificial hibernaculum, but were merely allowing the bats to 'overwinter'. This kind of imprecise language has no place in science and good management. EOL

The USFWS gear decontamination protocols for cavers are rigorous and effective. The WIDNR protocols should, at minimum, need to be amended to address the ecologic realities of bat movement, as opposed to arbitrary political boundaries. As it stands, a caver visiting a cave on the west side of Lake Pepin is violating WIDNR rules when he takes his equipment 10 minutes east to caves located east of Lake Pepin. Minnesota and Iowa cavers are no more than 60 miles from the border of Wisconsin. Responsible cavers in the upper Midwest have been following USFWS protocols for several years- long before WIDNR began to address the issue. If caving equipment can be safely decontaminated for Wisconsin cavers to transport and use between cave trips to Door County and Grant County- a distance of 300 miles- then one could make the logical argument that the same thing can be done for the 60 miles between the westernmost karst areas of Minnesota and Iowa and the Wisconsin border.

I have several observations on the addition of *Geomyces destructans* to the NR40 list. *Gd* has been classified as an invasive, even though the WI Invasives Council, which recommends what ought to be added to the list, never discussed the issue in their 2010 meetings, until it was determined, at their October 2010 meeting that they were prohibited by their own bylaws from addressing wildlife diseases,

which was then amended. Paul Schumacher, WIIC chair, deferred the decision to recommend listing the species in mid-August 2010; 8 months after the first- and only- public meeting on Gd. In addition, NR40 specifically excludes pathogens- and any microbiologist would say that Gd is a pathogen, and WNS is a wildlife disease.

spores will persist on walls & ceilings - where infections bats have roosted

To date, researchers have been unable to aerosolize Gd spores in order to infect bats- nor have researchers been able to culture Gd in cave sediments. Bat to bat transmission is brutally efficient, and bat translocation is well documented- despite the public statements of some WIDNR personnel. Just in the last few months, I can personally point to accounts of bats being translocated from South Korea to Hawaii, from Tennessee to Minnesota, and a new account of a bat from Europe arriving in a shipping container in Tennessee.

X

local of WNS infection 20 K from all best warm spots

go to WSS ARTICLE

800 mile jump to west of

BAT CAVE, RETURN ONLY FOR COUNT NO FURTHER REPORTS

WIDNR has repeatedly presented a 'smoking gun' of the NY- W. VA WNS jump, a jump that occurred before WNS monitoring was widespread, and has been used as 'evidence' to support the idea of a human-bat WNS vector. WIDNR accepts the speculation- and it appears that the account of New York caves transporting Gd to a West Virginia cave may be only that- as evidence of the human-bat vector, despite the utter lack of concurrent widespread WNS monitoring at the time this incident allegedly occurred. WIDNR personnel stated in a recent teleconference that the relatively few occurrences of Gd on bats in MO are poor indicators of the extent of WNS in MO- due to the lack of widespread monitoring in MO (c. 1% of all known caves), Therefore, Gd is probably far more widespread in MO caves that we know. Can we use the lack of monitoring as evidence supporting both fewer AND greater occurrences of Gd in different states? I don't think so.

Biologist

100%

US

WNS DOES NOT WALK

NIKE - BIRD STICK!

There has been a profound amount of haste in this process. I am hopeful that the committee will conduct some due diligence on all aspects of this program, beginning with the inventory and landowner contact work that was conducted during the summer of 2010. The committee needs to look carefully at the implications of NR40 as it applies to a spore that is approximately 9 microns in diameter- and to how, once the fungus is detected in the state, it's presence can be

ROCKY 1/3 THE SIZE OF NORMAL SPOR

JAMES SELMAN CAVE SYSTEM

NO TO MANAGEMENT  
LAWYNER'S IMPACT  
P. VS. PLANT MEASURES  
HAVE BEEN

connected to any intent to violate WIDNR rules. Caves and bats are woefully understudied and underappreciated in this state- and these rules have done little or nothing to help bats or caves, but do much to manage humans, whose connection to WNS is, at best, speculative.

Thank you.

1/11/10

NO NEED FOR PALMIS ABANDON  
OR ANY OTHER  
SITUATION TO DENY  
COURT RESTRICTION  
CHECKING TOO  
DICKY

TRANSITION STAYS  
E-NOVY SPARK NUB  
COMMON BENEFIT - ?  
FORAS TO FOIA PUBLIC'S  
COMMENTS SENT TO BA

BAT EXCLUSION  
IS  
NOT PROTECTION

PROTECT BAT ABANDON  
FEDERAL PUBLIC  
BURY HUMANUS  
IS USUALLY  
EUROPE - WAS &  
SOME DISPERSION  
HUMANUS





**Bureau of Endangered Resources  
Bats and White-Nose Syndrome Briefing**

**1. Background**

Bats play an integral role in agriculture, forestry and human health by consuming large numbers of agricultural pests and insects transmitting human disease. White-nose syndrome has been linked to the death of over one million bats since 2007 and threatens to cause the extinction of several Wisconsin bat species. Mortality rates of affected colonies reach 100%. The rules are preventative. If Wisconsin were to lose its bat population, our agriculture and Silva culture industries would be adversely impacted.

**2. Rules**

Emergency rules are currently in effect and identical permanent rules were passed unanimously by the Natural Resources Board in December.

**3. Public Comments**

Comments were combined for all three rule orders (ER-35-10, IS-41-10, IS-47-10). A summary of the comments is provided in the table below. In general, those providing testimony did not identify specific rules but rather referred to the whole set of rules that they supported or opposed. Consequently, if comments contained opposition to any portion of the rules, the comments were considered in opposition to the whole group of rules. There were 208 comments (75%) in support of the rules and 71 comments (25%) opposed.

Support	208	(203 Wisconsin residents, 5 nonresidents)
Oppose	71	(40 Wisconsin residents, 31 nonresidents)
Support/Oppose	3	(1 Wisconsin resident, 2 nonresidents)
Total	282	

**4. Stakeholders**

We have worked extensively with pest control operators to ensure that the listing of cave bats as threatened species does not negatively impact their businesses. This is being accomplished through a broad incidental take permit. A broad incidental take permit allows for the taking of a listed bat resulting from public health concerns, bat removals, building demolitions, forestry activities, bridge demolitions, miscellaneous building repairs and wind energy development projects. There is no application, fee or waiting/processing period for this permit. Further, property owners always determine whether there is a health concern, thereby allowing take of the bats.

We have agreements in place with commercial caves that protect bats while allowing for the economic and recreational interests of landowners.

No additional actions will be required of the wind energy industry at this time. The Department will work collaboratively with wind energy stakeholders to develop minimization measures and produce a report containing recommendations for reducing adverse impacts.

The department utilizes United States Fish and Wildlife Service decontamination protocols for recreational caving equipment and has both supplied recreational caving groups with clean dedicated gear and worked with small business owners and tourist operators to develop specialized decontamination protocols for cave diving equipment.

## **5. Next Steps**

- Finalize broad incidental take permit and send to stakeholders for review (January)
- Legislative approval of three permanent administrative rules. (January? - TBA)
- Stakeholder meeting to receive feedback on how the rules are working (March)
- Conduct disease monitoring in the field (January – April)
- Report to the Natural Resources Board on the efficacy of the current management activities (December 2011)

## **Broad Incidental Take Permit for Wisconsin Cave Bats**

### **Plain Language Analysis**

Incidental take permits allow for the incidental taking of state endangered and threatened species in Wisconsin. Incidental take refers to the unintentional loss of individuals that does not put the overall population of the species at risk.

A broad incidental take permit, such as this, is public noticed and issued once to cover all projects involving similar activities. Conservation measures to reduce the number of animals killed are outlined in the broad incidental take permit. There is no application fee or approval process associated with a broad incidental take permit. Rather all actions falling under the broad incidental take permit are covered automatically.

This particular broad incidental take permit allows for the incidental taking of cave bats throughout the state of Wisconsin that may occur in the following situations if the associated minimization measures are followed: specific public health concerns, bat removals, building demolitions, tree cutting, bridge demolitions, miscellaneous building repairs and wind energy development projects.

The following measures must be followed if bats are present at the time of the activity or suspected to be present based on records in the Natural Heritage Inventory database.

It is not anticipated that there would be impacts during general development or road building activities.

Deliberate killing or harassment of bats is not covered under the broad incidental take permit.

#### **A. Health Exceptions**

The Centers for Disease Control and Prevention (CDC) website should be followed for all situations where rabies or histoplasmosis is a possibility or may become a possibility if action is not taken (<http://www.cdc.gov/rabies/bats/contact/index.html>). All bats killed for health reasons, following CDC protocols, must be reported (see Conservation Plan for more information on reporting – reporting is required in order for the department to track population trends).

It is always the determination of the property owner whether they feel the health exception is warranted.

#### **B. Bat Removal**

If individual bats enter a home or place of work, reasonable attempts must first be made to remove the bats alive in a humane manner. It is best to avoid killing bats during the summer maternity roost period of June 1 - August 15, as this could separate mothers from their young, which may cause the frantic mothers to potentially enter the living space as well as leaving the young to die of starvation. The easiest way to exclude bats is to first identify all of the holes used by bats and seal them with plastic mesh netting, loose enough so you can slide your hand into the bottom opening, though not so loose as to allow the bats to easily crawl back through the opening. Leave the netting up for 5-7 days to allow the bats to escape before sealing the openings permanently.

Removals from June 1 – August 15 are allowed in hospitals, medical clinics, day cares centers, nursing homes, assisted living facilities and restaurants. The department may also allow removals in similar facilities on a case-by-case basis June 1 – August 15. The department must be contacted and approval must be granted prior to these case-by-case removals taking place.

The department may also approve removals on a case-by-case basis from June 1 - August 15 if it can be shown that 1) the bats being excluded are not part of a maternity colony or 2) the young have already left the maternity colony. The department must be contacted and approval must be granted prior to these removals taking place.

It is permissible to kill individual bats for the purpose of removal if they cannot be realistically removed unharmed, however all bats that are killed must be reported (see Conservation Plan for more information on reporting – reporting is required in order for the department to track population trends). No more than 5 bats may be killed in a 24 hour period and a maximum of 10 may be killed from June 1 - August 15.

### **C. Building Demolition**

If there is no evidence of bat presence in a building that is planned for demolition, then there are no restrictions. Possible signs of bat presence may include observation of bats exiting a building in the evening, piles of guano under roosting sites, and urine stains near potential bat entrances (see Appendix 3 of the Conservation Plan for more information on determining bat presence – reporting is required in order for the department to track population trends). Even if bats are present, there are no restrictions on building demolition from August 16 - May 31. For building demolition occurring from June 1 - August 15, bats must be excluded from the building 5-7 days before demolition. Exclusion is not required if the building is deemed unsafe to enter.

### **D. Tree Cutting**

There are no restrictions for tree cutting, however special consideration should be given to protecting snags or dying trees, particularly during the bats' maternity period of June 1 – August 15.

### **E. Bridge Projects**

Bridge repairs or demolition projects occurring from August 16 - May 31 do not have any restrictions. Bridge repairs or demolition projects deemed to be emergency work that are conducted from June 1 - August 15 are covered under the incidental take permit if a report is filled within 5 working days (see Conservation Plan for more information on reporting – reporting is required in order for the department to track population trends). Non-emergency bridge repairs or demolition projects may not occur from June 1 - August 15 unless bats are excluded prior to April 1 to prevent bats from using the bridge.

### **F. Miscellaneous Building Projects (e.g. roofing, painting, siding)**

There are no restrictions for any building project occurring from August 16 - May 31. Furthermore, there are no restrictions from June 1 - August 15 if there is no evidence of bat presence.

For roofing projects, if bats are found during the summer maternity period of June 1 - August 15, they must be excluded 5-7 days before beginning the project. If the bats are found after the construction has begun, any new construction must include suitable open exits until August 16, at which time the exits may be sealed. During painting or siding projects, if bats are found behind shutters or siding, set the shutters or siding down and leave the area. Once the bats have left the repairs may continue.

# Broad Incidental Take Permit and Broad Incidental Take Authorization for Wisconsin Cave Bats Conservation Plan

---

The department has issued this broad incidental take authorization (used by state agencies) and broad incidental take permit (used by non-state agencies and individuals), as provided for under s. 29.604, Wis. Stats., to allow for the incidental taking of state listed cave bats in Wisconsin that may occur as a result of specific public health concerns, bat removals, building demolitions, tree cutting, bridge demolitions, miscellaneous building repairs and wind energy development projects.

Take will be minimized by following specific minimization measures and the Department has concluded that the projects covered under this permit or authorization are not likely to jeopardize the continued existence and recovery of the state population of these bats or the whole plant-animal community of which they are a part; and has benefit to the public health, safety or welfare that justifies the action.

An incidental take permit or authorization is typically issued on a project-by-project basis, however a broad incidental permit and authorization were created for this situation so that neither an application nor a permit fee are required. An individual following the minimization measures listed below is automatically covered by this broad incidental take permit or authorization.

These measures must be followed when a bat is present or suspected to be present (e.g., Natural Heritage Inventory report of bats in the area, evidence of bat presence).

## **Project Location**

Statewide

## **Project Information**

This permit and authorization cover specific public health concerns, bat removals, building demolitions, forestry activities, bridge demolitions, miscellaneous building repairs and wind energy development projects as described in *Minimization Measures*.

## **Species Information**

This permit and authorization cover all cave bats currently listed in Wisconsin (NR 27.07, Wis. Admin. Code):

- **Big brown bat (*Eptesicus fuscus*)** – Threatened  
The big brown bat is a large insectivorous bat, weighing 15.0-26.0 grams. Fur color is russet to dark brown, and the muzzle is black and hairless. In summer, big brown bats commonly roost in artificial structures such as barns, but these bats will also use crevices in trees and rock faces. Big brown bats migrate short distances to caves and mines where they will hibernate for the winter.
- **Eastern pipistrelle (*Perimyotis subflavus*)** – Threatened  
The eastern pipistrelle is Wisconsin's smallest bat weighing 4.0-8.0 grams. Fur color ranges from golden brown to reddish brown, and the wing membrane is black with red forearms which gives the bat a distinct tri-colored appearance. The eastern pipistrelle is an insectivorous bat. In summer, these bats commonly roost in the branches of deciduous trees disguised as a leaf. This species migrates short distances to caves and mines in the fall where they hibernate over the winter.

- Little brown bat (*Myotis lucifugus*) – Threatened  
The little brown bat is a medium-sized member of the genus *myotis*. This insectivorous bat weighs 5.0-12.5 grams, and has tan, reddish-brown or dark brown fur. This species commonly uses artificial structures such as attics and barns as summer roosting sites, but will also roost in crevices and cavities of trees. In fall, little brown bats make local long-distance migrations of up to 279 miles to caves and mines where they will hibernate for the winter.
- Northern long-eared bat (*Myotis septentrionalis*) – Threatened  
The northern long-eared bat is dark brown with a gray belly, weighing 5.0-8.0 grams and is insectivorous. In summer this bat roosts in trees close to the trunk. It rarely roosts in artificial structures. Unlike most of the state's bats, this species commonly forages in forest interior. In fall the northern long-eared bat migrates to caves and mines where they will hibernate for the winter.

### **Likely Impact to Species**

Although minimization measures to protect the big brown bat, eastern pipistrelle, little brown bat and northern long-eared bat are incorporated into this broad incidental take permit and authorization, it is not possible to fully avoid incidental take of these species in all situations. Due to the nature of activities covered under this permit and authorization, it is difficult to determine the exact number of individuals that could be taken as a result of the project, however take will be minimized by following specific minimization measures. The Department has concluded that the take allowed for under this permit or authorization is not likely to jeopardize the continued existence and recovery of the state population of these bats or the whole plant-animal community of which they are a part.

### **Alternative Actions**

The following alternatives were considered for this permit and authorization:

*Alternative 1: Do not allow for any take of cave bats.*

This alternative was determined to not be feasible, due to the large number of affected activities, and is not an appropriate public health decision.

*Alternative 2: Do not allow for any take of cave bats during the summer roosting period but allow for some take throughout the remainder of the year.*

This alternative was determined to not be feasible, due to the large number of affected activities that occur during the summer roosting period, and is not an appropriate public health decision.

*Alternative 3: Allow for some take of cave bats, with minimization measures in place, during the summer roosting period and throughout the remainder of the year.*

This option was the preferred alternative because it addresses public health concerns; protects a large number of bats; and allows for most affected activities to continue as planned, or with minimal modifications.

### **Minimization Measures**

This permit and authorization cover the following activities only if the associated minimization measures are followed and reported (where required). For activities not covered under this permit and authorization, contact the Bureau of Endangered Resources for further guidance, including information on individual incidental take permits and authorizations.

These measures must be followed when a bat is present or suspected to be present (e.g., Natural Heritage Inventory report of bats in the area, evidence of bat presence).

Take covered under this permit or authorization must be reported within 5 working days (where required). Take not reported within 5 working days is not legally covered and is in violation of the Wisconsin Endangered Species Law (s. 29.604, Wis. Stats.). Reports can be submitted via email ([DNRBats@wi.gov](mailto:DNRBats@wi.gov)), phone (DNR Bat Hotline: 608-266-5216) or mail (Wisconsin Department of Natural Resources, Bureau of Endangered Resources, Bat Reporting, P.O. Box 7921, Madison, WI 53707-7921).

#### A. Health Exceptions

The landowner, rather than the DNR, is allowed to determine if they believe there is a health risk under this section (Section A).

Centers for Disease Control and Prevention (CDC) protocols should be followed for all situations where rabies or histoplasmosis is a possibility or may become a possibility if action is not taken (see Appendix 1). (report required if a bat is killed)

If an activity qualifies as a health exception, it is exempt from the remaining minimization measures.

#### B. Bat Removal

##### 1. Residence or Place of Work

If individual bats (5 or fewer) enter a residence or place of work, reasonable attempts must first be made to remove the bats alive and unharmed (see Appendix 2). If individual bats cannot realistically be removed unharmed, up to 5 bats may be killed for the purpose of removing them from a residence or place of work. No more than 5 bats may be killed within any 24 hour period and a maximum of 10 bats may be killed from June 1 – August 15. (report required)

Removals from June 1 – August 15 are allowed in hospitals, medical clinics, day cares centers, nursing homes, assisted living facilities and restaurants. The department may also allow removals in similar facilities on a case-by-case basis June 1 – August 15. The department must be contacted at the address above and approval must be granted prior to these case-by-case removals taking place.

The department may also approve removals on a case-by-case basis from June 1- August 15 if it can be shown that 1) the bats being excluded are not part of a maternity colony or 2) the young have already left the maternity colony. The department must be contacted at the address above and approval must be granted prior to these removals taking place.

##### 2. Storage Areas, Attics, Barns, etc.

Bats found in storage areas, attics, barns, etc., may be excluded from the area August 16 – May 31 (see Appendix 2). Exclusion may not occur from June 1 – August 15.

#### C. Building Demolition

##### 1. Building demolition occurring from June 1 – August 15:

- If there is no evidence of bat presence (see Appendix 3), there are no restrictions.
- If there is evidence of bat presence (see Appendix 3), bats must be excluded from the building 5-7 days prior to demolition. Exclusion is not required if the building is unsafe to enter. (report required for unsafe buildings)

##### 2. Building demolition occurring from August 16 – May 31 does not have any restrictions.



#### D. Tree Cutting

There are no restrictions for tree cutting, however special consideration should be given to protecting snags or dying trees, particularly from June 1 – August 15.

#### E. Bridge Projects

The process for assessing transportation project impacts to listed species and the associated minimization measures will follow existing protocols.

1. Bridge repairs or demolition occurring from August 16 – May 31 do not have any restrictions.
2. Emergency bridge repairs or demolition occurring from June 1 – August 15 are covered under this permit or authorization but must be reported within 5 working days. (report required)
3. Non-emergency bridge repairs or demolition may not occur from June 1 - August 15 unless bats are excluded prior to April 1 to prevent bats from using the bridge.

#### F. Miscellaneous Building Projects (e.g., roofing, painting, siding)

1. Projects occurring from August 16 – May 31 do not have any restrictions.
2. Projects occurring from June 1 – August 15 where there is no evidence of bat presence (see Appendix 3) do not have any restrictions.
3. Projects occurring from June 1 – August 15 where there is evidence of bat presence (see Appendix 3):
  - For roofing projects, bats must be excluded from the building 5-7 days prior to the project. If bats are found during the initial stages of repair, new construction must include suitable open exits until August 16. Beginning August 16, the open exits may be sealed.
  - If painting or siding and bats are found behind shutters or siding, set the shutters or siding down and leave the area, once the bats have left continue with repairs.

#### G. Wind Energy Development

Wind energy projects typically affect tree bat species (not currently proposed for listing) and only impact cave bat species in certain situations (e.g., projects located near cave bat hibernacula may increase the occurrence of impacts to cave bats during fall migration in August and September). Further, there is not enough data at this time to determine the impact of potential mortality to local bat populations. Because of this uncertainty and the scope of impacts, no additional actions, above those currently requested by the Department, will be required of this industry at this time. The Department will work collaboratively with stakeholders to develop minimization measures and produce a conference report containing recommendations for reducing adverse impacts that will be presented to the Natural Resources Board. These recommendations will be advisory until such time that WNS is discovered in the state.

#### **Mitigation**

For every take of a cave bat that occurs, reasonable attempts must be made to prevent future take in the same area (e.g., exclusion of bats from the area, sealing of siding or eaves).

**Responsible Parties**

Landowners are responsible for all actions and costs incurred as a result of following this Broad Incidental Take Permit or Authorization.

**Funding**

Landowners are responsible for all costs incurred as a result of following this Broad Incidental Take Permit or Authorization.

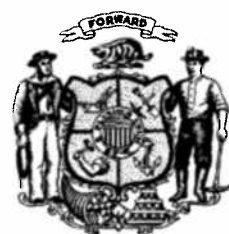
Appendix 1: Health Information

Appendix 2: Removing and Excluding Bats

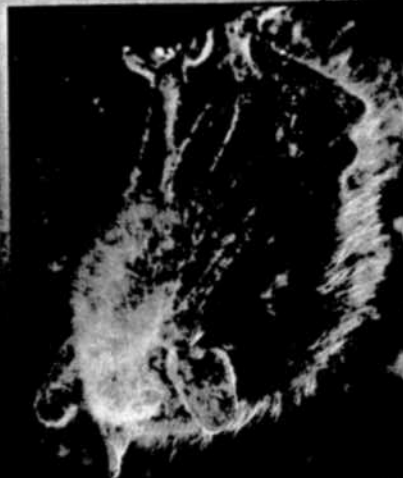
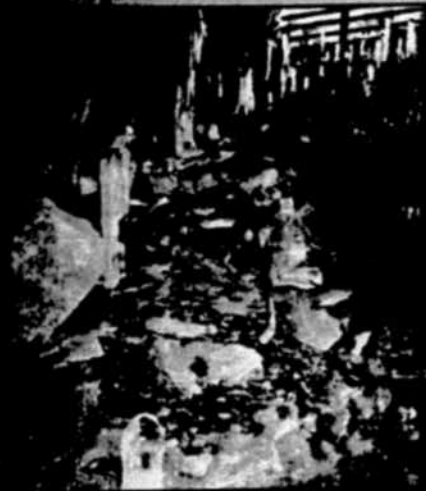
Appendix 3: Determining Bat Presence



# WISCONSIN STATE LEGISLATURE



## What is White-nose Syndrome?

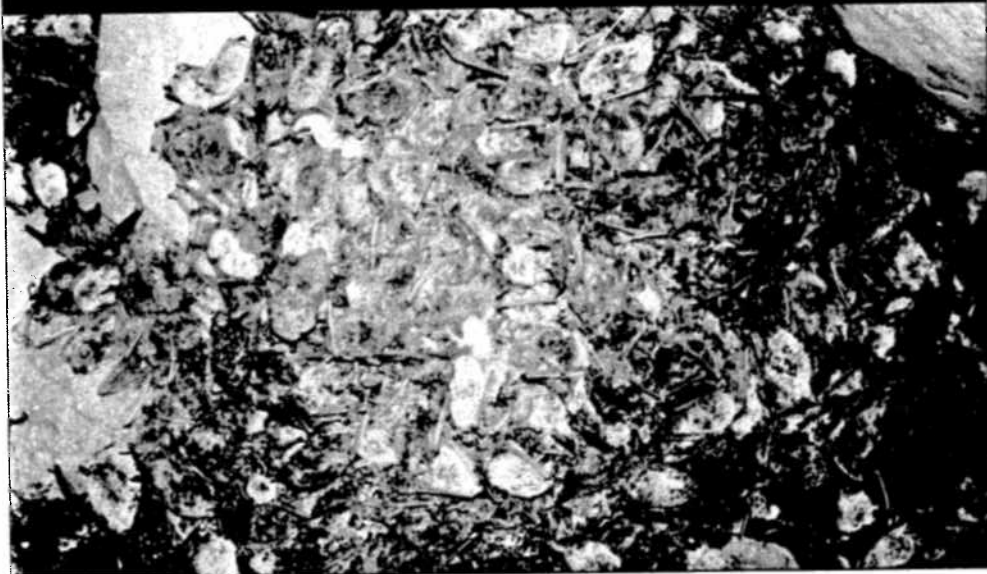




Photos by A. Hicks, NY DEC

 USGS

**Mortality: 90-100%**


**95% Overall Decline**



Winter  
2009-2010

Map prepared by P. Cryan, USGS-FORT



## Continued Expansion

- Recently confirmed in Indiana and North Carolina






Photo by A. Hicks, NY DEC

## What's at Stake for Wisconsin


### Four Cave Bat Species




Big brown bat



Eastern pipistrelle



Northern long-eared bat



Little brown bat

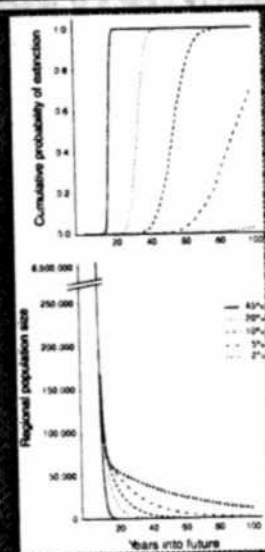
## What's at Stake for Wisconsin

- Bats provide ecosystem service = no cost
  - Agricultural crop damage – insect pests
  - Forest insect damage
  - Human health – mosquitoes & west nile virus
  - Intrinsic value & biodiversity
  - Component of cave system
- Regional importance

## Regional Population Collapse: little brown bat

“...we expect a 99% chance of regional extinction of little brown myotis within the next 16 years.”

Frick, W.F. et. al. 2010. An emerging disease causes regional collapse of a common North American bat species. *Science* 329:679-682.



**E/T Listing (Ch. NR 27):**  
**Proposed Rule ER-35-10**

- Add Wisconsin's four cave bat species to Wisconsin's threatened species list:
  - little brown bat (*Myotis lucifugus*)
  - northern long-eared bat (*Myotis septentrionalis*)
  - eastern pipistrelle (*Perimyotis subflavus*)
  - big brown bat (*Eptesicus fuscus*)



Broad Incidental Take "Permit" – no fee, no application, no hassle

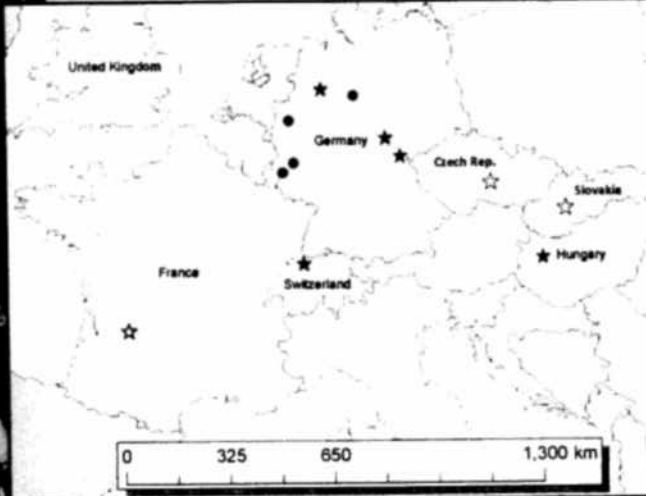
## WNS: A European Connection?

Hungary

Photo by Tamas Gorfal

Switzerland

Photo by Rene Güttinger



Citations: Wibbelt, et al. 2010. *EID* 16.  
Puechmaille, et al. 2010. *EID* 16.  
Martinkova, et al. 2010. *PLoS ONE* 5.

## Fungus Listing (Ch. NR 40):

Proposed Rule IS-41-10

- List *Geomyces destructans* as a prohibited invasive species



**Management of  
*Geomyces destructans* (Ch. NR 40):  
Proposed Rule IS-47-10**

- Early detection
- Decontamination
- Prevention plans

**Management Tool:  
decontamination**

- Science behind decontamination protocols
- Risk & evidence of human transmission
- Dedicated equipment, National Park Service protocol, research, and rehabilitation
- Example: WDNR field crews



### **Management Tool:** restricted access

- Eliminate, reduce, and minimize risk of transmission
- Science behind exclusions
  - Exclusion, environmental manipulation
  - Bat banding records
  - Reduced disturbance & bat population increase after installation of bat-friendly gates

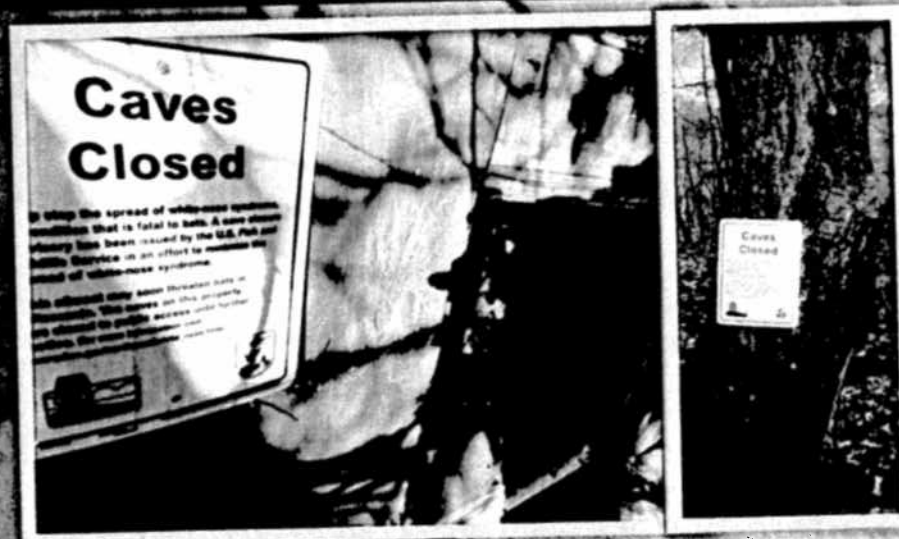
### **Management Tool:** working with private landowners

- Hibernacula catalogue – find all known and potential hibernacula in the state
  - Sites narrowed under emergency rule
- Positive response from many of these landowners

## Management Tool: working with private landowners

- WDNR goal is to establish a positive long-term relationship with each landowner for continued success at managing an invasive species and for their assistance in conservation and recovery efforts into the future
- Work directly with landowners: agreements on prevention plans that meet landowners' goals and the department's responsibility to manage the resource
- Bat-friendly gates, caves closed signage, access underground site for surveillance, monitoring, and management

## Management Tool: restricted access to humans



## Commercial and Recreational Agreements

- Ledge View Nature Center & Maribel County Park
  - Minimize risk of human transmission to bats
  - Dedicated gear allows continued recreational activities
  - Maintains commercial operation for county tour revenue
  - Education & awareness of bats and WNS to tourists and school group visitors
- Crystal Cave
- Cave of the Mounds

## Access by Bats Restricted

- At landowner request
- Currently approved at only two sites
  - No bat mortality associated with this action
- Impact to Wisconsin's bat population