

**Presentation to the
Natural Resources Board
27 October 2010**

White-nose Syndrome (WNS)

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Goal of Presentation

- Where we are right now (biology, regulation)
- Proposed changes to ch. NR 40
- Next steps



What we Need to Accomplish Today

- Consider adoption of Emergency Board Order IS-49-10(E) and authorization for public hearings on proposed Order IS-47-10, permanent revisions to ch. NR 40, related to the management of white-nose syndrome in bats



Fall Bat Activity

- Swarming
- Selecting hibernacula



The Science Behind the Proposed Changes to Ch. NR 40

1. Early detection
2. Human transmission
3. Impact of excluding bats or people



The Science Behind the Proposed Changes to Ch. NR 40

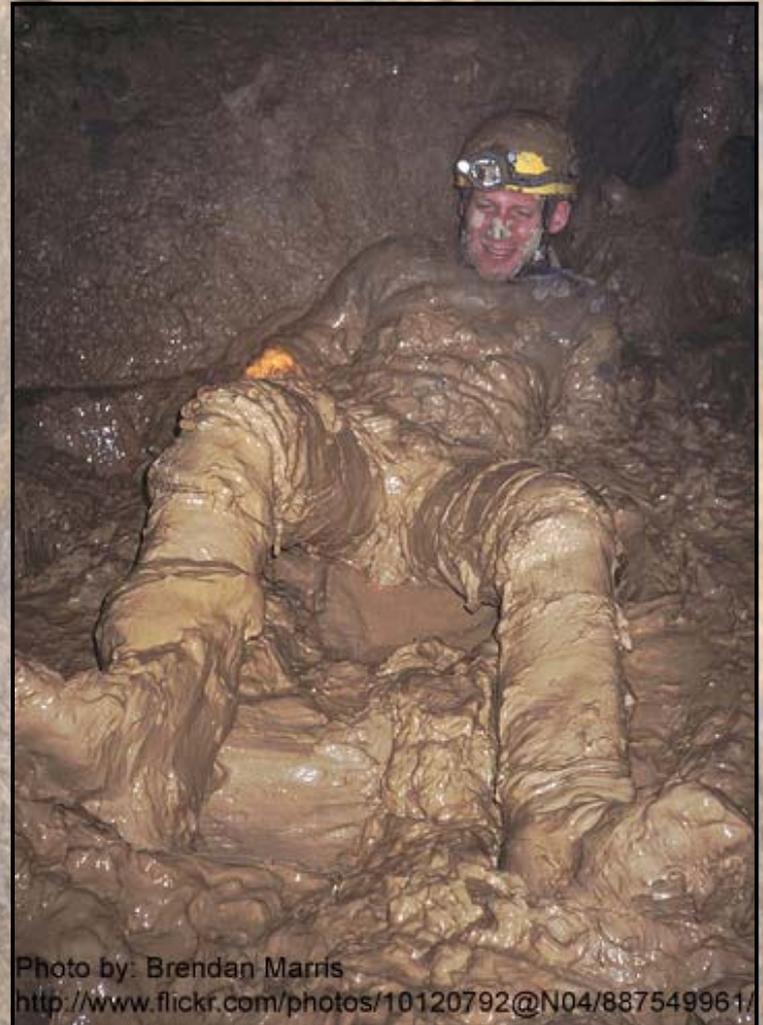
1. Early detection

- why?
- what is it?
- how many sites?



The Science Behind the Proposed Changes to Ch. NR 40

2. Human transmission
- evidence
 - cave closures by federal agencies and some states
 - decontamination



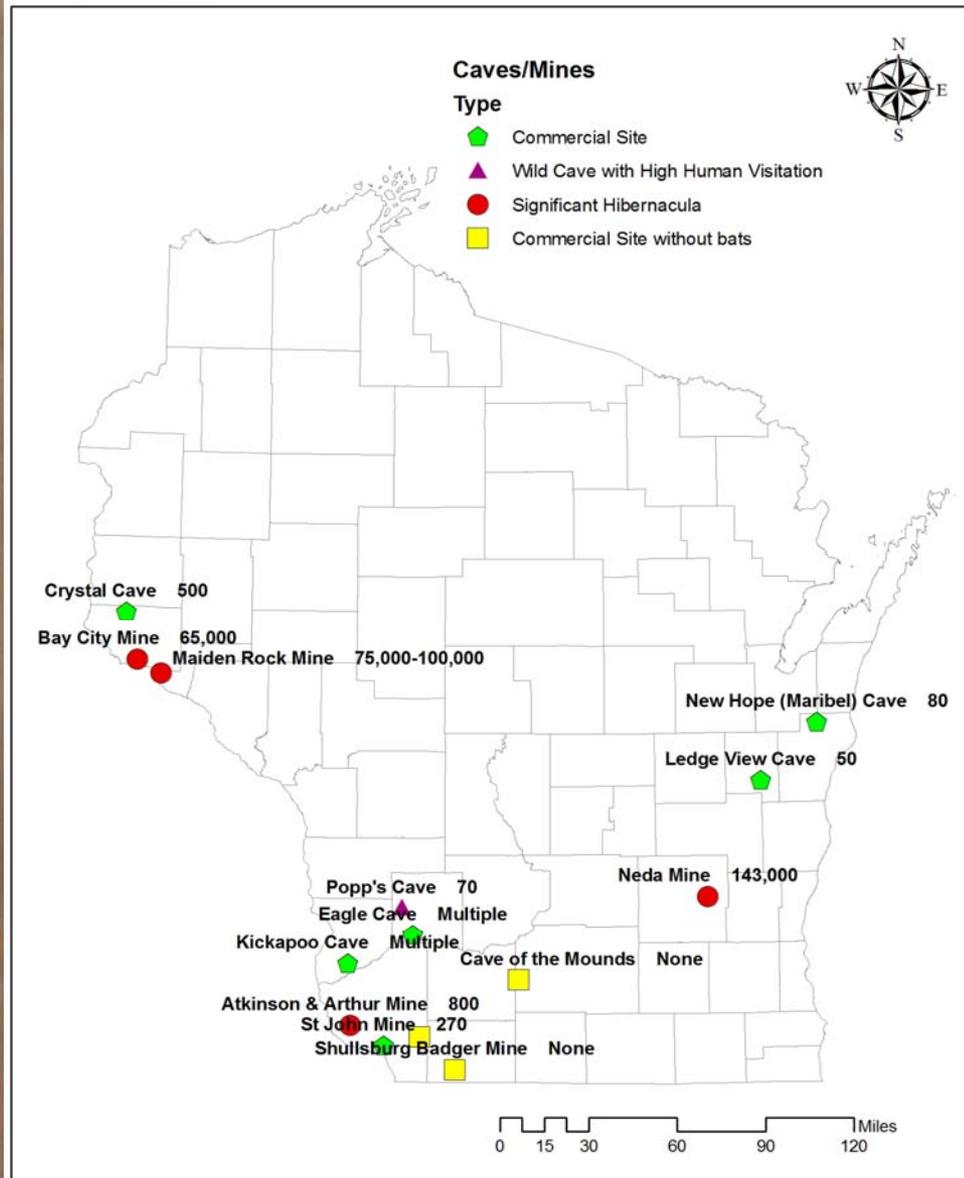
The Science Behind the Proposed Changes to Ch. NR 40

3. Impact of exclusion:

- bats
- people
- cave biota



Commercial Sites & Known Hibernacula

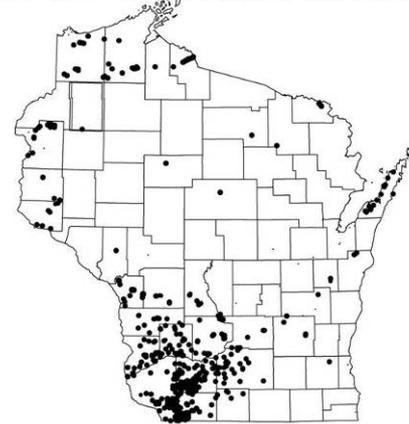


Commercial Sites in Relation to Significant Bat Hibernacula

Current Field Activities

- Contacting landowners
 - narrowed from 800 to 70
- Voluntary agreements/
control plans
 - signs
 - exclusion
 - decontamination protocols

Known & Potential Hibernacula



Actions on Department-owned Lands

- Department-owned properties with caves/mines
- Currently working with property managers to develop control plans
 - Blue Mound State Park

Our Regulatory Approach

- Listing the fungus, *Geomyces destructans*, as a prohibited invasive species under ch. NR 40
- Listing Wisconsin's cave bats as threatened species under ch. NR 27
- **Activities related to the management of WNS under ch. NR 40**



Two Aspects of Proposed Changes to Ch. NR 40

- Listed fungus, *Geomyces destructans*, as a prohibited invasive species
- Proposing changes specific to management of *G. destructans* and not to any other species listed under ch. NR 40

Listing the Fungus as a Prohibited Invasive Species Under Ch. NR 40

- Regulate possession, transportation, transfer and introduction
- General preventive measures (restrict human spread or introduction)
- Inspect, survey and treat



Proposed Additions to Ch. NR 40

1. Monitoring for *Geomyces destructans*
2. Importation
3. Decontamination
4. Access

1. *Geomyces destructans* Monitoring

- As part of the early detection program, the department may enter a cave or mine to monitor, survey, and inspect for the presence of *G. destructans*
- All data obtained will be made available to the person(s) who owns, controls or manages the property

1. *Geomyces destructans* Monitoring

- If permission is not granted, or if the owner cannot be located, the department may seek an inspection warrant
- No cost to cave/mine owner

2. Importation

- Prohibition on bringing or placing equipment, gear, clothing, or other objects into or near a cave or mine in Wisconsin if those items have been in or near a cave or mine outside of Wisconsin
- Department may issue written exemptions

3. Decontamination

- No decontamination requirement for equipment, gear, clothing, or other objects dedicated to a specific site in Wisconsin if these items are stored at that site

3. Decontamination

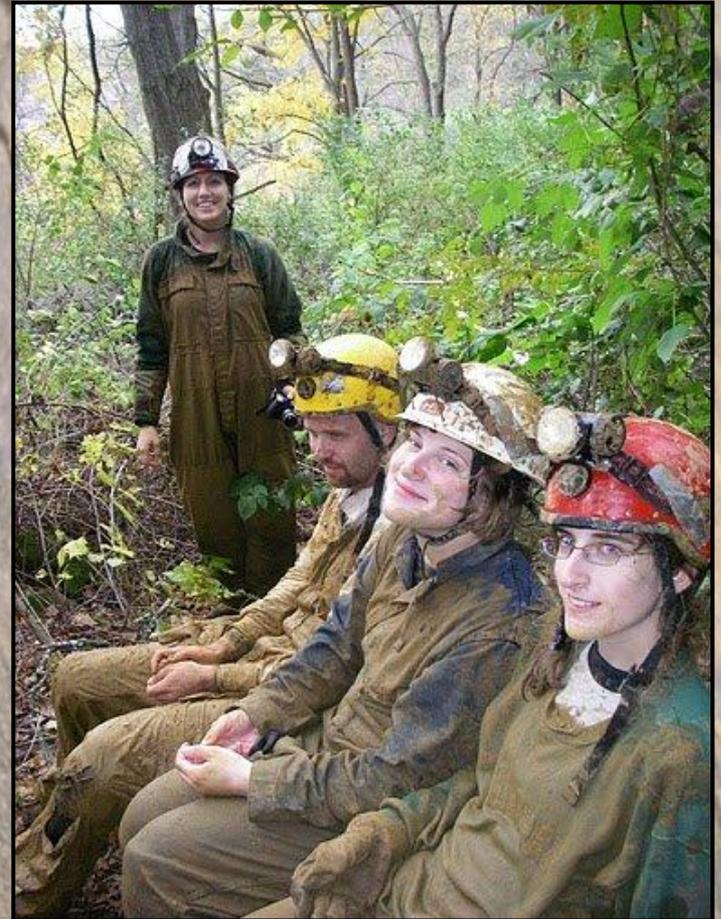
- For equipment used only in Wisconsin:
 - decontamination required before entering a cave/mine
 - decontamination required immediately upon leaving a cave/mine

3. Decontamination

- Must follow department approved protocols
 - consistent with U.S. Fish & Wildlife Service guidelines
- Currently developing specialized decontamination protocol options for commercial sites
 - based on types of activities offered
 - for example, protocols similar to those used at Mammoth Cave National Park
 - guidelines for school groups

Costs Associated with Importation and Decontamination

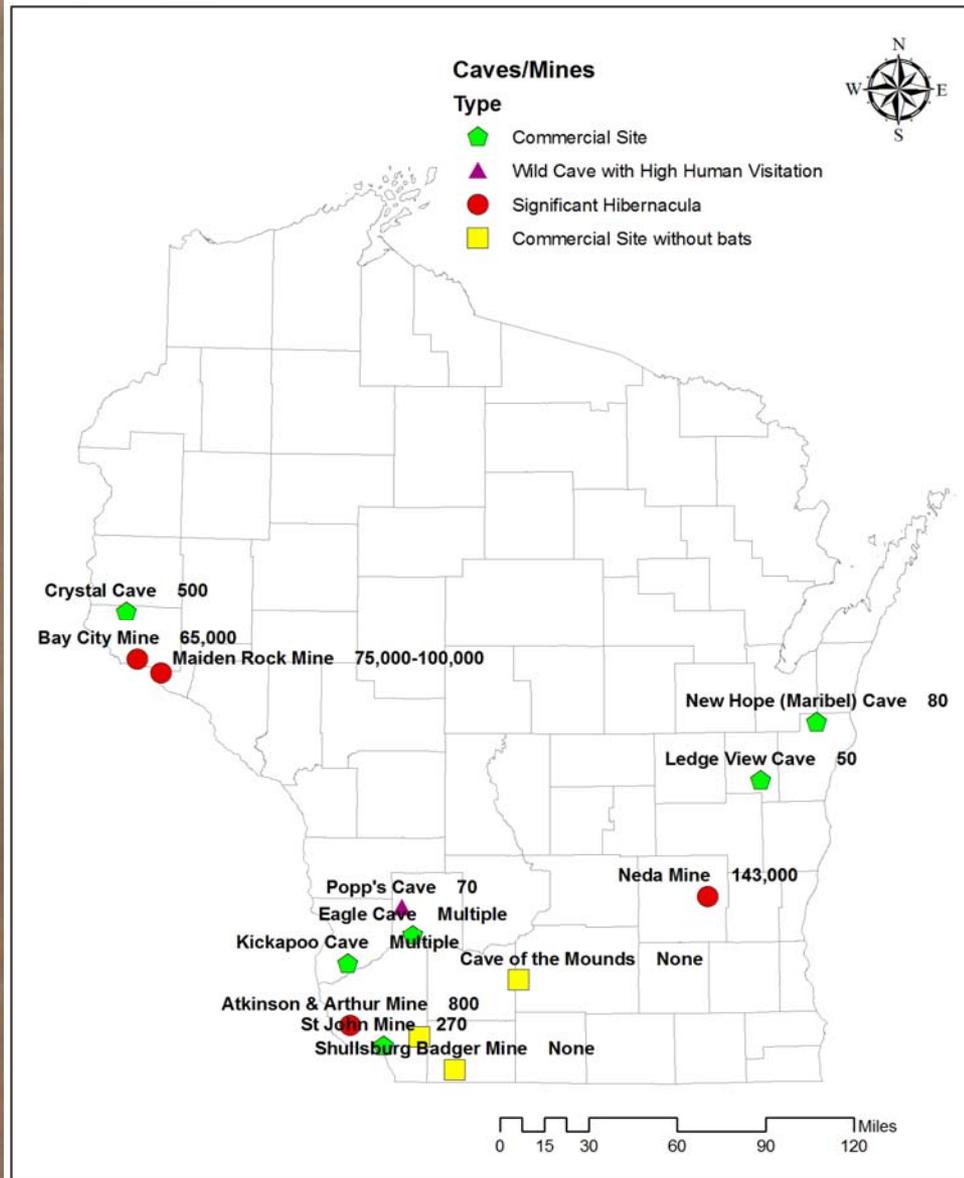
- Caving equipment:
ranges from \$125-\$750
– few sites in WI require
vertical climbing gear
- Decontamination:
minimal



4. Access and Exclusion

- The department will work with cave/mine owners to develop control plans based on their conservation, commercial, or recreational goals
- May include restricted access to caves/mines to either humans or bats
- The department will seek funds to implement these activities

Commercial Sites & Known Hibernacula



Commercial Sites in Relation to Significant Bat Hibernacula

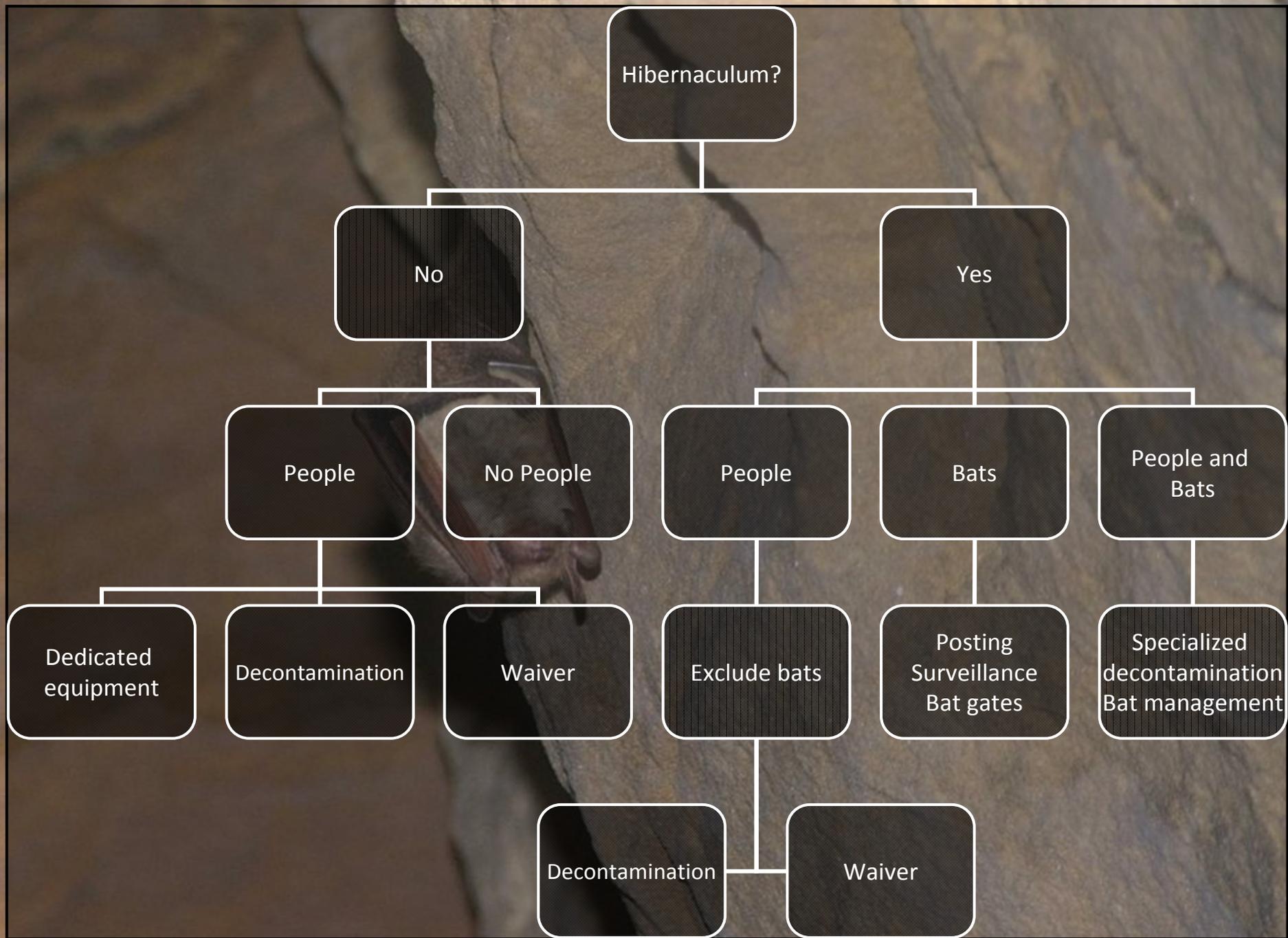
Costs Associated with Exclusion

- Excluding bats at a cave with high human visitation: \$100-\$500
 - department is seeking funds to cover these costs
- Signage at caves and mines: \$0
 - department will provide the signs



Components of a Control Plan

- Ch. NR 40 does not outline specific components of a control plan
- Each plan will be different based on the unique characteristics of the site
 - Maiden Rock & Bay City Mines: decontamination protocols, dedicated equipment, manage air flow
 - Ledgeview Cave: bat exclusion, decontamination protocols, dedicated equipment, decision tree



Other Proposed Additions to Ch. NR 40

- Adds key definitions:
 - cave
 - mine
 - near
 - rock shelter
 - Department may grant written exemptions from the requirements
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- A photograph of a bat hanging upside down from a rock overhang. The bat is brown and its wings are spread out. The rock surface is textured and layered.

Why Emergency Rule Proposal?

- Need to begin monitoring this fall (2010)
- Need importation and decontamination protocols followed to prevent human introduction of fungus while bats are hibernating
- Can work now with cave/mine owners on control plans

Current and Future Outreach Activities

- Cave and mine owners
- Animal control operators
- Wildlife rehabilitators
- Neighboring states
- Agricultural and forestry industries
- Conservation community
- Caving community
- School groups

Timeline

October 2010

- NRB Action: Proposed changes to ch. NR 40
- Environmental Assessment & Implementation Strategy
- Public Hearing: E/T & fungus listings
- Population Viability Analysis
- Underground site assessments

November 2010

- Public Hearings: E/T & fungus listings, proposed changes to ch. NR 40
- Environmental Assessment & Implementation Strategy
- Population Viability Analysis
- Underground site assessments

Timeline

December 2010

- NRB Actions: E/T & fungus listings, proposed changes to ch. NR 40
- Develop stakeholder minimization measures
- Population Viability Analysis

January 2011

- Hibernaculum surveys

Recommended Actions

Adopt Emergency Board Order IS-49-10(E) and authorize public hearings on Board Order IS-47-10, revisions to ch. NR 40, related to white-nose syndrome management in bats





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