

The Northern Long-eared Bat Listing and State Departments of Transportation Bat Surveys

Presented by Darrell Oakley & Meghan Lout

#### **NLEB Background**

- It is predominately found in eastern and north central United States.
- Hibernates in caves and mines
  - On the coast?
- During the summer months they prefer forested or generally wooded areas for roosting and foraging.
- April-November
- Heavily impacted by white-nose syndrome

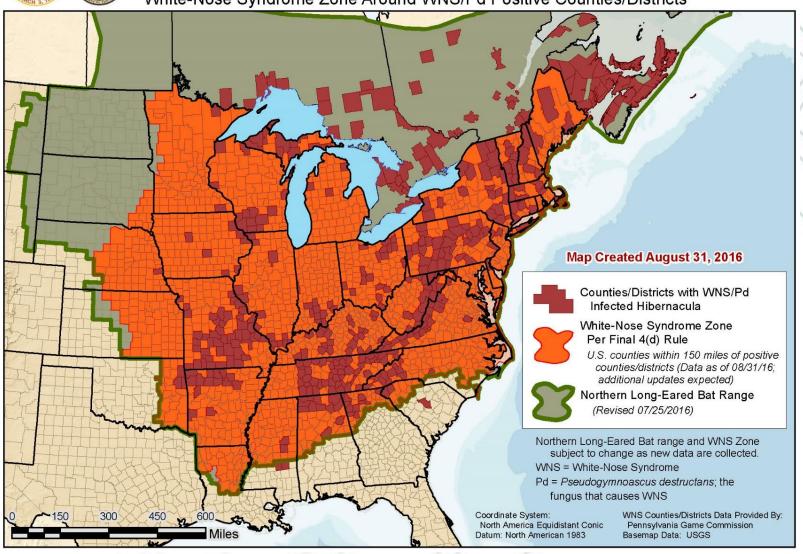
#### The White Nose Syndrome Zone



U.S. Fish & Wildlife Service

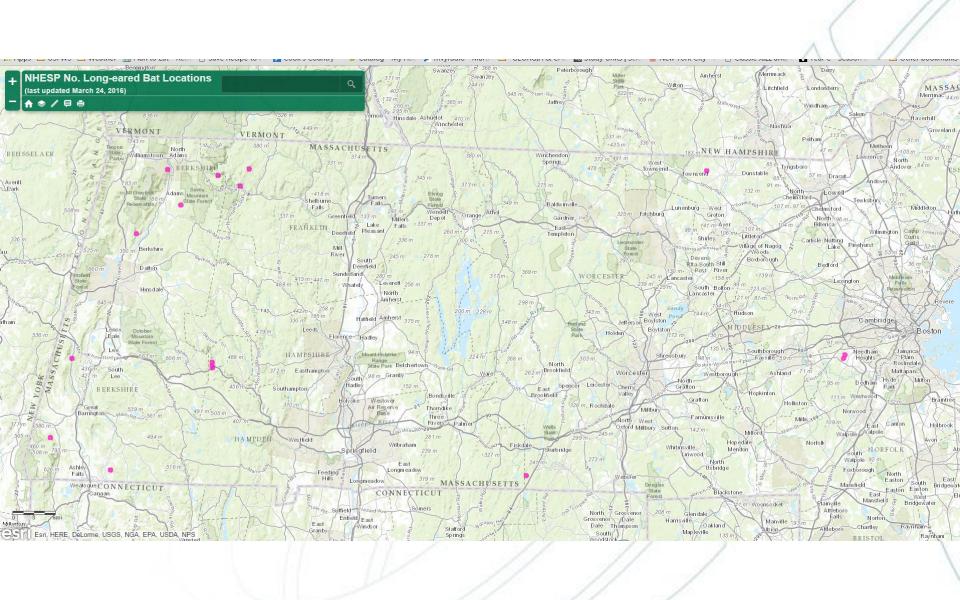
#### Northern Long-Eared Bat Final 4(d) Rule

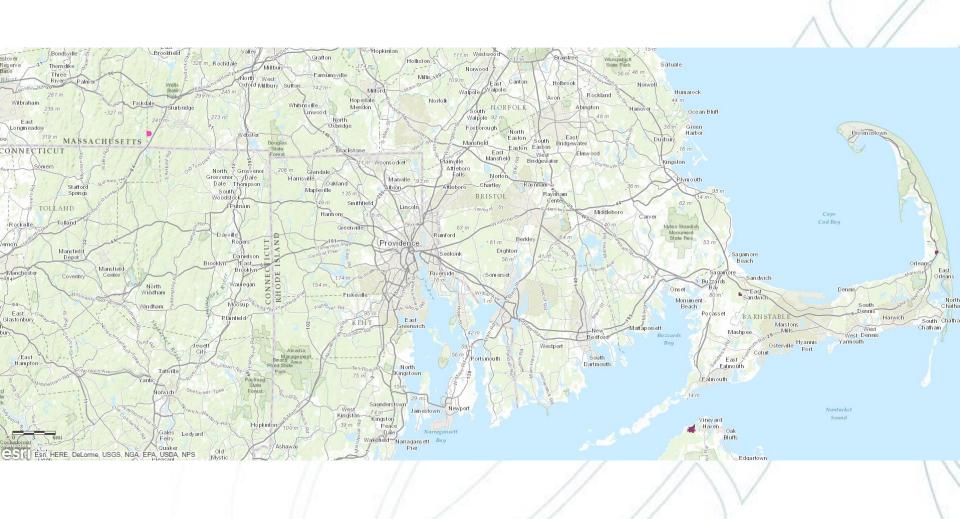
White-Nose Syndrome Zone Around WNS/Pd Positive Counties/Districts



#### Final 4(d) Rule

- USFWS issued its final 4(d) rule January 14, 2016
- Incidental take prohibited if
  - Activity occurs within a hibernaculum
  - Tree removal within 1/4 mile of hibernaculum
  - Known maternity roost tree (June 1-July 31)
  - Tree removal within 150 feet of known, maternity roost tree (June 1-July 31)





# Acoustic Surveys For Department of Transportation Projects



#### Why Conduct Volunteer Surveys?

- Helps federal agencies meet their responsibilities under section 7(a)(1) of the Endangered Species Act.
- NLEB may be reclassified as Endangered in the not to distant future.
- Surveys now should help expedite consultation and incidental take statements in the future.
- Tri-colored bat (Perimyotis subflavus) may be next
  - USFWS petitioned to analyze whether Tri-colored warrants listing.
- Little brown bat (Myotis lucifugus) used to be most common in NE
  - 90-100% of population wiped out

#### **Acoustic Surveys**

- Can sample large areas
- Automated software can sift through large files relatively quickly
- NLEB is a relatively quiet bat that likes forested habitat



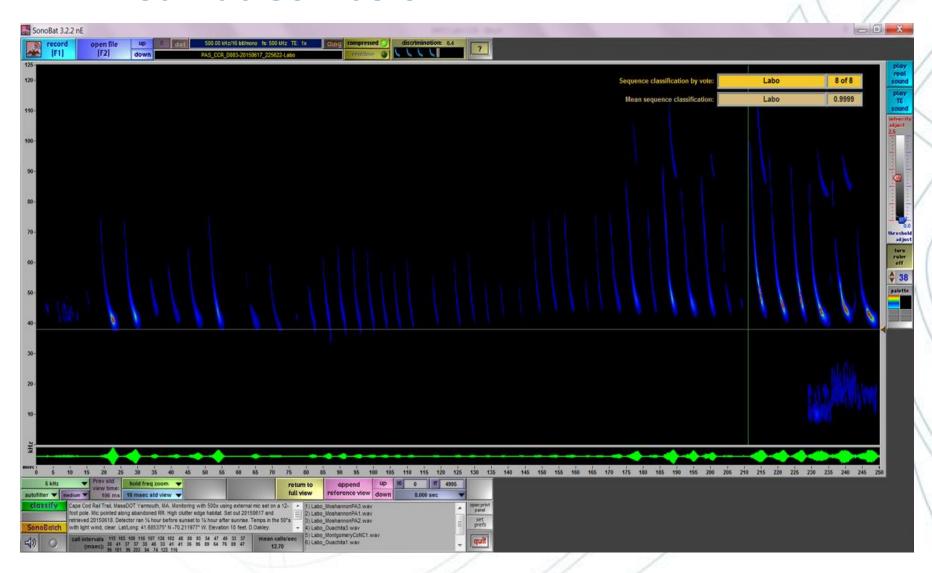


## **Acoustic Surveys Challenges**

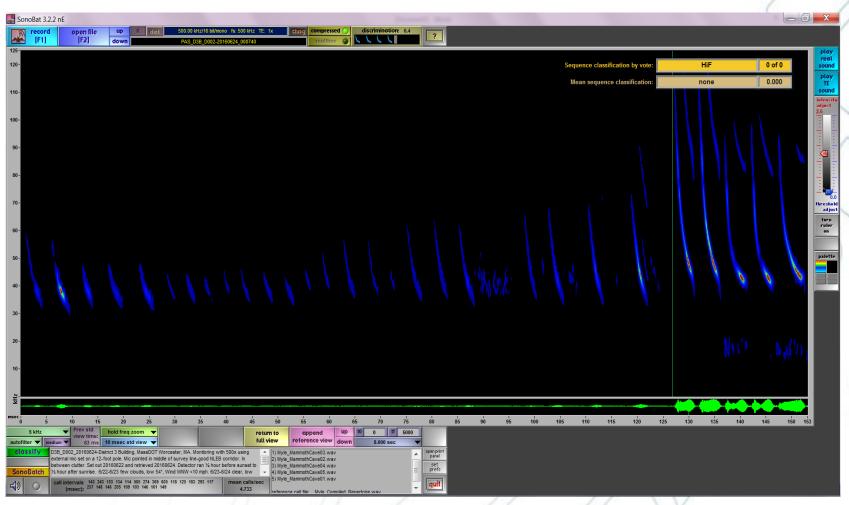
- Automated software (approved)
  - False positives for two federally listed bats
    - Indiana bat
    - Northern long-eared bat
  - Trouble with red bats-misidentified as Myotis species



#### **Red Bat Confusion**

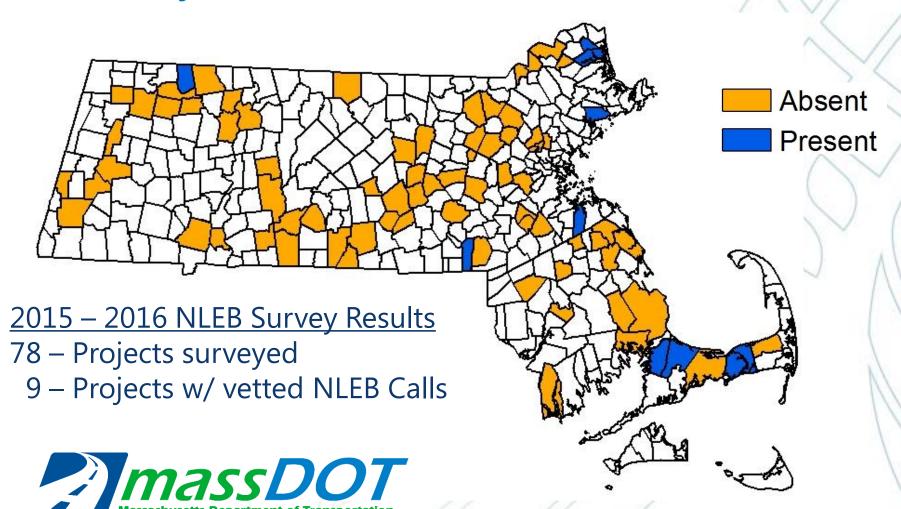


## Quality calls are hard to come by



- Shape of call more closely matches MYLE voucher call than MYSE
- Too poor to make a positive identification

# 2015-2016 Northern long-eared bat Surveys





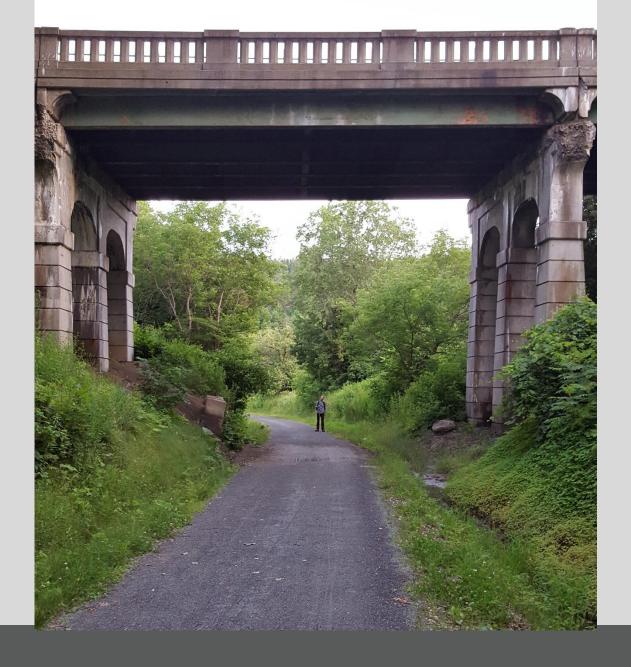




























Mitigation: Spray foam application, TOY cutting restrictions, bat house installation



Results: little brown bat, Indiana bat and northern long-eared bats are roosting in both bridges.

Forested habitat, although not typical for MYSO or MYSE, is suitable after all.



#### **Special Acknowledgement**

- MassDOT (Tim Dexter)
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- US Fish and Wildlife Service (Susi von Oettingen)









## Thank you!



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