Update on Northern Long-eared Bat in Minnesota

For

Minnesota Forest Resources Council
May 18, 2016

By

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Outline:
Update on Northern Long-eared Bat in MN

- **Federal listing and 4(d) rule**
- **Research**
- **Habitat Conservation Plan**

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Threatened Status and 4(d) Rule under the Federal ESA

Hibernating northern long-eared bat by Ann Froschauer/USFWS

- **"Take" is prohibited: "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Take can be "purposeful" or "incidental"**

- **Threatened designation allows protective regulation or "4(d) Rule" that is "necessary and advisable to provide for the conservation of the species."**

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4(d) Rule

Final 4(d) Rule effective 2/16/2016

A successful compromise

Provisions of the 4(d) Rule

- **"Purposeful" (Intentional) take is prohibited <u>except</u>:**
  - **removal from human structures,**
  - **in defense of human life,**
  - **research (for one year), or**
  - **as a result of removing trees hazardous to human life or property.**

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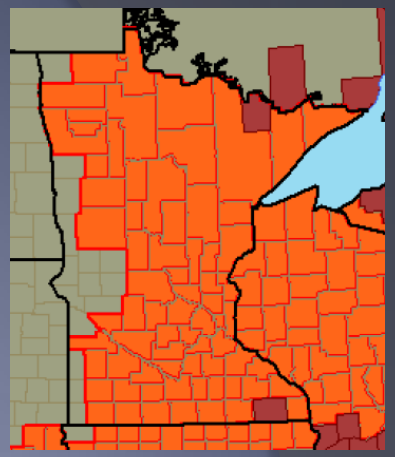
4(d) Rule



- "Incidental" take (resulting from otherwise legal activity) allowed outside of White Nose Syndrome Buffer Zone (15 western MN counties)
- "Incidental" take prohibited inside of White Nose Syndrome Buffer Zone (72 MN counties) only:
  - if it occurs within a hibernaculum
  - if tree removal is within ¼ mile of an entrance to a known, occupied hibernaculum
  - if tree removal cuts or destroys a known, occupied maternity roost tree or other trees within 150 feet of that tree during June and July

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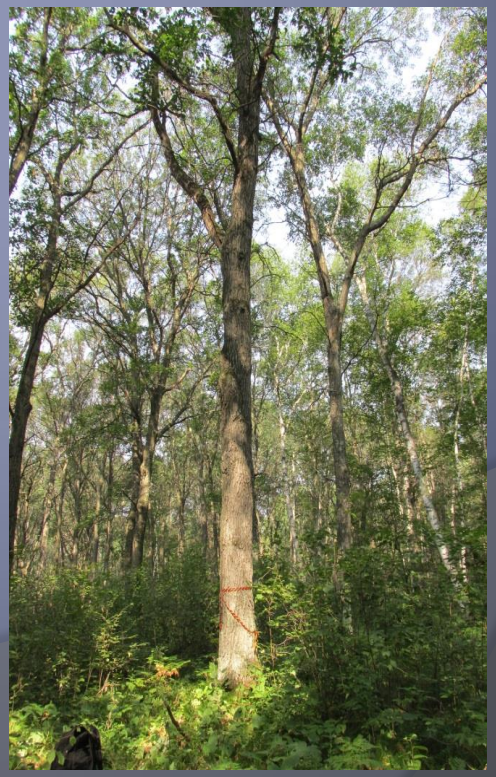
Known Northern Long-eared Bat Locations in Minnesota

- **"Occupied Hibernacula" – 34 known entrances**
- **"Maternity Roost Trees" – 230 known trees**
- **200+ additional roost trees likely to be found over next few years**



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TOWNSHIPS CONTAINING DOCUMENTED NORTHERN LONG-EARED BAT (NLEB) MATERNITY ROOST TREES AND/OR HIBERNACULA ENTRANCES IN MINNESOTA

Minnesota DNR/U.S. Fish and Wildlife Service April 1, 2016

- The **federal 4(d) Rule for conserving the northern long-eared bat (NLEB)** is administered by the U.S. Fish and Wildlife Service (FWS) and **may regulate tree removal or other activities if they are conducted**:
  - **within ¼ mile of an entrance to a known NLEB hibernaculum** (a cave, mine, or other feature in which NLEBs have been documented to overwinter)
  - **within 150 feet of a known NLEB maternity roost tree** (a tree in which a female NLEB has been documented to roost)
- To learn more about NLEBs, NLEB conservation, the NLEB 4(d) Rule, and how you may be affected by this regulation, review the information available at http://www.fws.gov/midwest/endangered/mammals/nleb/. See especially the "FAQs" and "**Key to the 4(d) Rule**".
- **Use the "Key to the 4(d) Rule" to determine if your activity is regulated by the 4(d) Rule.**
- **Use this Township List and Map to help you answer questions #3 and #6 in the Key.**
  - **If your tree removal or other activity is not within a listed township, and does not involve federal funding, a federal permit, or federal lands, no further action is required.**
  - **If your tree removal or other activity is within a listed township, you can determine more precisely where in the township the 4(d) Rule restrictions apply** by requesting from the DNR a data printout or a data license to access additional details on the location of the feature within the township. (see http://www.dnr.state.mn.us/nhnrp/nhis.html#datarequest for instructions)
    - If you can determine from this additional information that your tree removal or other activity **is not within 150 feet of a documented maternity roost tree, or within ¼ mile of a hibernaculum entrance**, and if your project does not involve federal funding, a federal permit or federal lands, then **no further action is required**.
    - **Contact the FWS** (see below) to obtain guidance on how to proceed with your project if:
      - **you have chosen to not obtain additional locational information from the DNR**, or
      - **your tree removal or other activity is within 150 feet of a maternity roost tree**, or
      - **your tree removal or other activity could alter a hibernaculum interior, a hibernaculum entrance, or the environment within ¼ mile of a hibernaculum entrance**, or
      - **your tree removal or other activity involves federal funding, a federal permit, or federal lands.**
- These data are current as of April 1, 2016. Updates of this information will be released annually on April 1.
- As of this date, there are 230 known maternity roost trees and 34 known hibernaculum entrances in Minnesota.
- This document should not be used to determine the distribution of the NLEB in Minnesota, since NLEB surveys in Minnesota are incomplete, and not all known locations of the NLEB were included in preparing the list and map.
- A township that lies within more than one county is listed under every county in which the township lies.

For more information, contact:

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County	Township	Contains Hibernaculum	Contains Roost Tree
Aitkin	T48N R23W		X
Aitkin	T48N R24W		X
Aitkin	T48N R25W		X
Aitkin	T49N R24W		X
Aitkin	T49N R25W		X
Aitkin	T49N R26W		X
Aitkin	T50N R26W		X
Aitkin	T51N R27W		X
Benton	T36N R31W	X	
Carlton	T47N R18W		X
Carlton	T47N R19W		X
Carlton	T47N R20W		X
Carlton	T47N R21W		X
Carlton	T48N R17W		X
Carlton	T48N R18W		X
Carlton	T48N R19W		X
Carlton	T48N R20W		X
Carlton	T48N R21W		X
Cass	T133N R29W		X
Cass	T133N R30W		X
Cass	T138N R29W		X
Cass	T138N R31W		X
Cass	T139N R25W		X
Cass	T139N R26W		X
Cass	T139N R27W		X
Cass	T139N R28W		X
Cook	T63N R1E		X
Cook	T63N R4W	X	
Crow Wing	T133N R29W		X
Crow Wing	T138N R29W		X
Dakota	T28N R22W	X	
Dakota	T28N R23W	X	
Fillmore	T102N R12W	X	
Fillmore	T103N R10W	X	
Fillmore	T103N R12W	X	
Fillmore	T103N R13W	X	
Fillmore	T104N R10W	X	
Fillmore	T104N R12W	X	
Goodhue	T112N R15W	X	
Goodhue	T113N R14W	X	
Hennepin	T28N R23W	X	
Hubbard	T144N R35W		X

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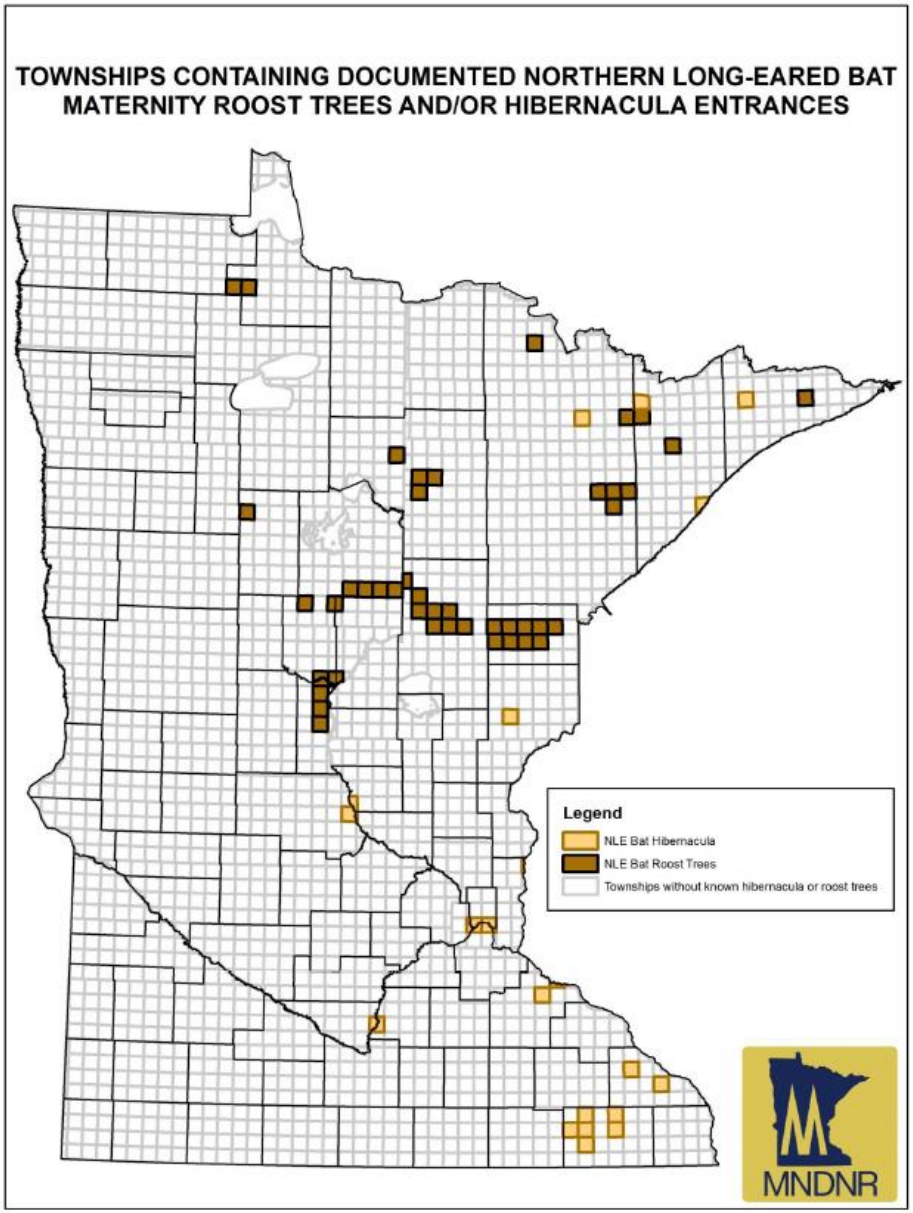
TOWNSHIPS CONTAINING DOCUMENTED NORTHERN LONG-EARED BAT MATERNITY ROOST TREES AND/OR HIBERNACULA ENTRANCES
Legend
NLE Bat Hibernacula
NLE Bat Roost Trees
Townships without known hibernacula or roost trees
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Known Northern Long-eared Bat Locations in Minnesota

Township List and Map will be updated each April 1st

Natural Heritage Information System – official source of information on "known" rare species locations

- **Obtain access through a Data License**
- **Submit a Data Request Form**
- **Contact U.S. Fish and Wildlife Service**

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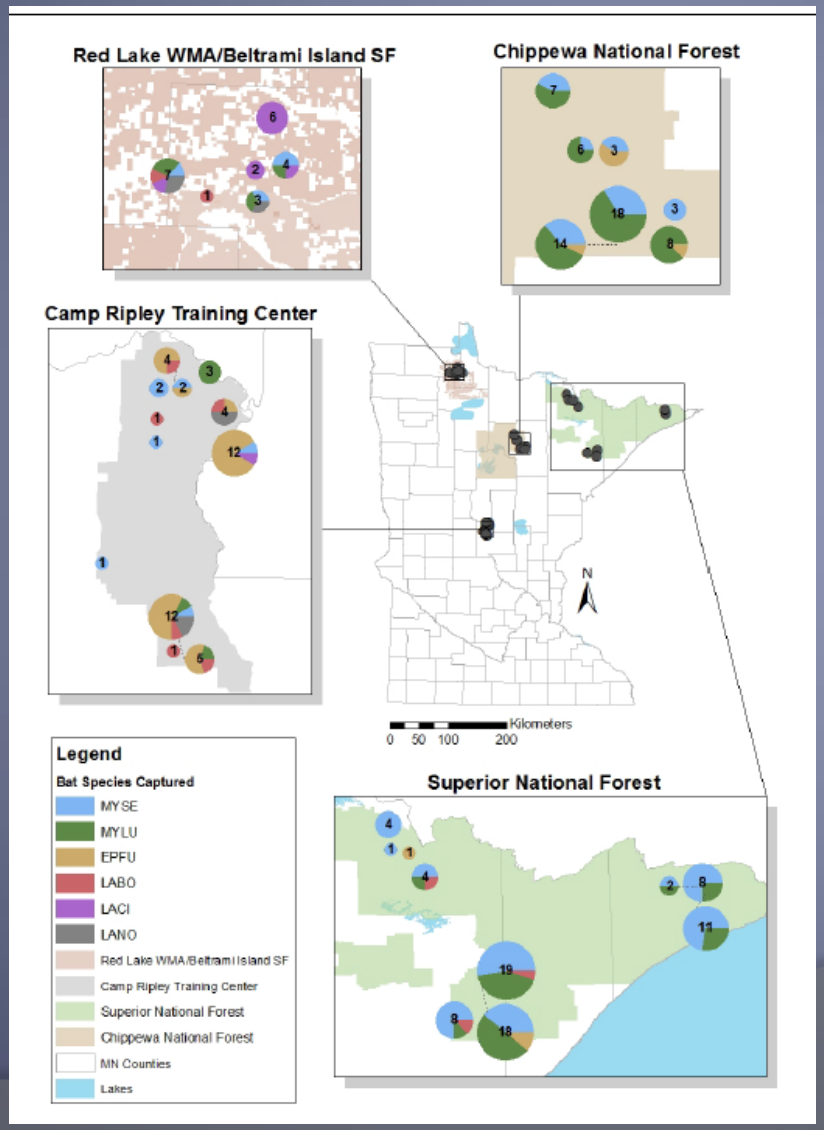
Northern Long-eared Bat Research in Minnesota

- Research on NLEBs began in 2014
- $1.25 million ENRTF grant: July 2015 – June 2018
  - Summarize data on distribution of NLEBs in Minnesota
  - Conduct acoustic surveys to complete info on range in MN
  - Capture and place radios on female NLEBs
  - Follow to roost trees; document use
  - Characterize roost trees and stands in which they occur

2015 Capture Locations



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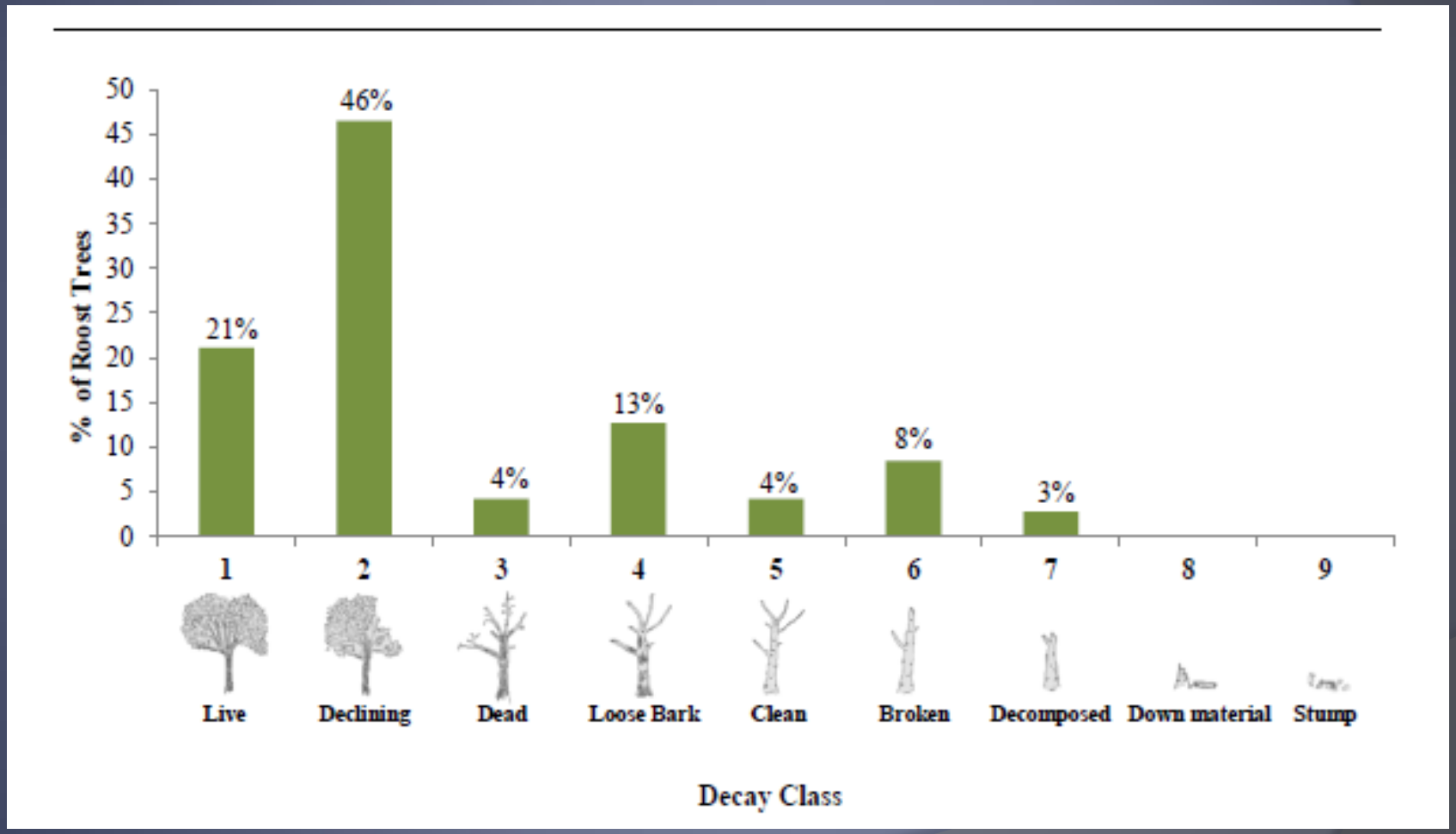
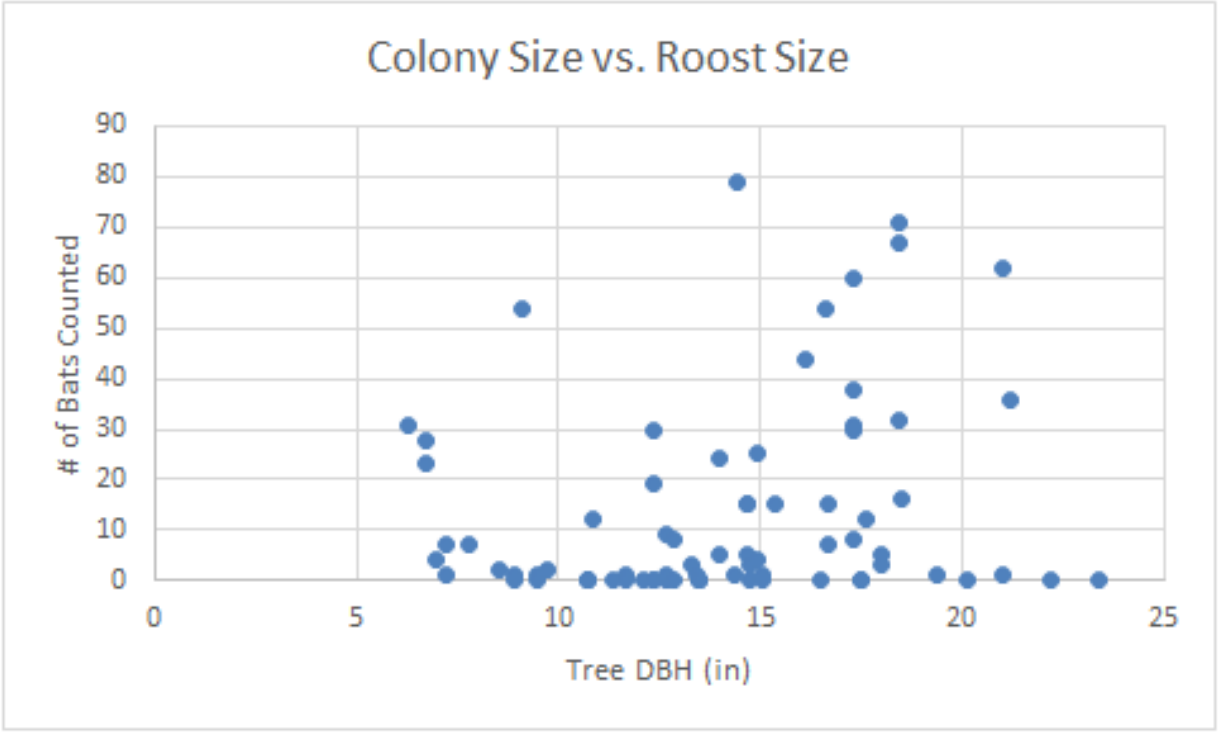
24 radioed NLEB females lead to 71 roost trees of 17 species



DBH & # of bats for 71 roost trees

Size Class (inches)	Count of Roost Trees
0-5	0
5-10	16
10-15	30
15-20	20
20-25	5
25+	0



2015 Research Conclusions

- Female NLEBs showed no obvious preference of tree species for roost sites
- Most roost trees were in an advanced state of decay
- Weak relationship between DBH and # bats counted
- Females traveled an average of .5 miles from capture location to first roost tree
- Females used an average of 3.2 (0-6) roost trees while transmittered (6.4 day ave; 1-11 days)
- Females traveled an average of 770 feet between consecutive roost trees
- An average of 21.5 bats (up to 79) were observed emerging from a single roost tree

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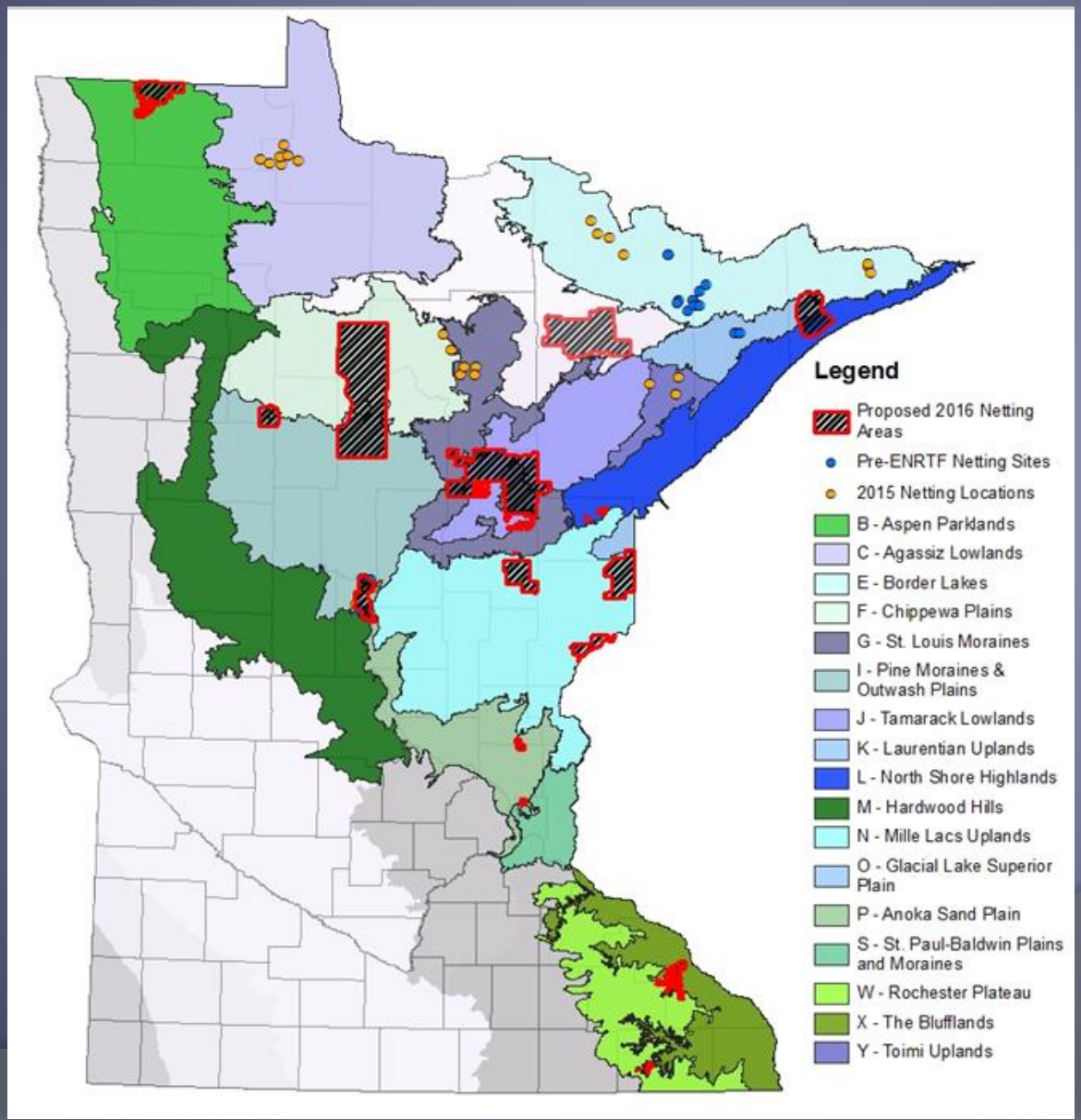
Proposed 2016 Capture Locations



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2014-2016 Capture Locations

2014

Land Unit	# of Sites	Managing Agency/Entity
Superior National Forest	5	USDA-Forest Service
Camp Ripley Training Center	7	US Military/MN DNR

2015

Land Unit	# of Sites	Managing Agency/Entity
Superior National Forest	10	USDA-Forest Service
Chippewa National Forest	7	USDA-Forest Service
Camp Ripley Training Center	14	MN Department of Military Affairs/MN DNR
Red Lake WMA	2	MN DNR – Fish & Wildlife Division
Beltrami Island State Forest	6	MN DNR – Forestry Division

Distribution of Proposed 2016 Mist-Netting Sites

2016

Land Unit	Managing Agency/Entity
Superior National Forest	USDA-Forest Service
Chippewa National Forest	USDA-Forest Service
Camp Ripley Training Center	MN Department of Military Affairs/MN DNR
Hill River State Forest	MN DNR - Forestry Division
Savanna State Forest	MN DNR – Forestry Division
Cloquet Forestry Center	University of Minnesota
Carlton County Tax-Forfeited Land	Carlton County Land Department
St. Croix State Park	MN DNR – Parks & Trails Division
Arden Hills Army Training Site	MN Department of Military Affairs/MN DNR
Itasca State Park	MN DNR – Parks & Trails Division
Solana State Forest	MN DNR – Forestry Division
Nemadji State Forest	MN DNR – Forestry Division
Roseau River WMA	MN DNR – Fish & Wildlife Division
Whitewater WMA	MN DNR – Fish & Wildlife Division
Mystery Cave State Park	MN DNR – Parks & Trails Division

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What's New?

- White-nose Syndrome documented in Minnesota

- FWS determined on April 27 that Designation of Critical Habitat is Not Prudent
  - Critical Habitat is "specific geographic areas that contain … features that are essential to the conservation of the species …"
  - Critical Habitat only applies to actions with federal authorization, federal funding, or on federal lands (ESA Section 7)
  - Summer Habitat is not specific or limited
  - Winter Habitat should not be identified to avoid increasing vandalism and other human disturbance

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Why a Habitat Conservation Plan?

- ESA authorizes "citizen lawsuits" to require enforcement of take prohibition
- FWS has received Notices of Intent to Sue to challenge Threatened designation and 4(d) rule
- If reclassification or lawsuit leads to loss of the 4(d) rule, compliance with ESA will require an Incidental Take Permit (ITP)
- Habitat Conservation Plan (HCP) is required to apply for an ITP

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What is in an HCP?

- Species, Lands, and Activities covered by an ITP
- Amount of incidental take anticipated and covered by an ITP
- How take would be avoided and minimized
- How unavoidable take would be mitigated
- How mitigation would be funded
- How take and mitigation would be monitored
- How the plan would change if necessary
- How landowners would participate

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Examples of Bat HCPs

- Midwest Wind Energy HCP
- Pennsylvania Forest Management HCP
- NiSource/Columbia Pipeline HCP

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Lake States Forest Management Habitat Conservation Plan

- MN, WI, and MI have received over $1,230,000 in 2 federal grants to develop an HCP
- Risk management strategy
- If reclassified, limited options for ESA compliance
- Funding currently runs Oct 2014 – Sept 2017
- States can apply for up to 2 more grants

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How is the HCP being developed?

- Steering Committee of representatives from each state DNR:
  - Endangered Species Coordinator
  - Division of Forestry Representative
  - Participation of USFWS and consultant representatives, as needed
- Administered by MI
- Contractor (ICF International) hired as of late 2015
- Supported by senior leadership in each state (MN, WI, MI)
- Includes forest management on all non-federal forest lands
- Will take several more years, including required NEPA process (public review of an EIS)

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How will stakeholders participate?

- The HCP will need to characterize
  - Forest management activities
  - Scale of forest management (across ownerships) and estimated take
  - Conservation measures necessary to mitigate estimated take
- Structured to allow "opt-in" (or not) by individual landowners through a Certificate of Inclusion
- Stakeholders will include:
  - All Potentially Affected Interests
  - Potential Certificate (of Inclusion) Holders (forest landowners)
- Specific plans for opportunities to participate in the HCP development process pending

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Thank You!