



### A Tale of 3 Bats: Recent & Ongoing ESA Actions

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### Overview

- Three (3) bats undergoing ESA listing reviews
  - Tricolored bat, *Perimyotis subflavus*
  - Northern long-eared bat, Myotis septentrionalis
  - Little brown bat, M. lucifugus



- All have similar ecology & life histories (mostly tree roosting in summer, hibernate in caves during winter)
- All 3 experiencing widespread declines from White-Nose Syndrome (key threat)

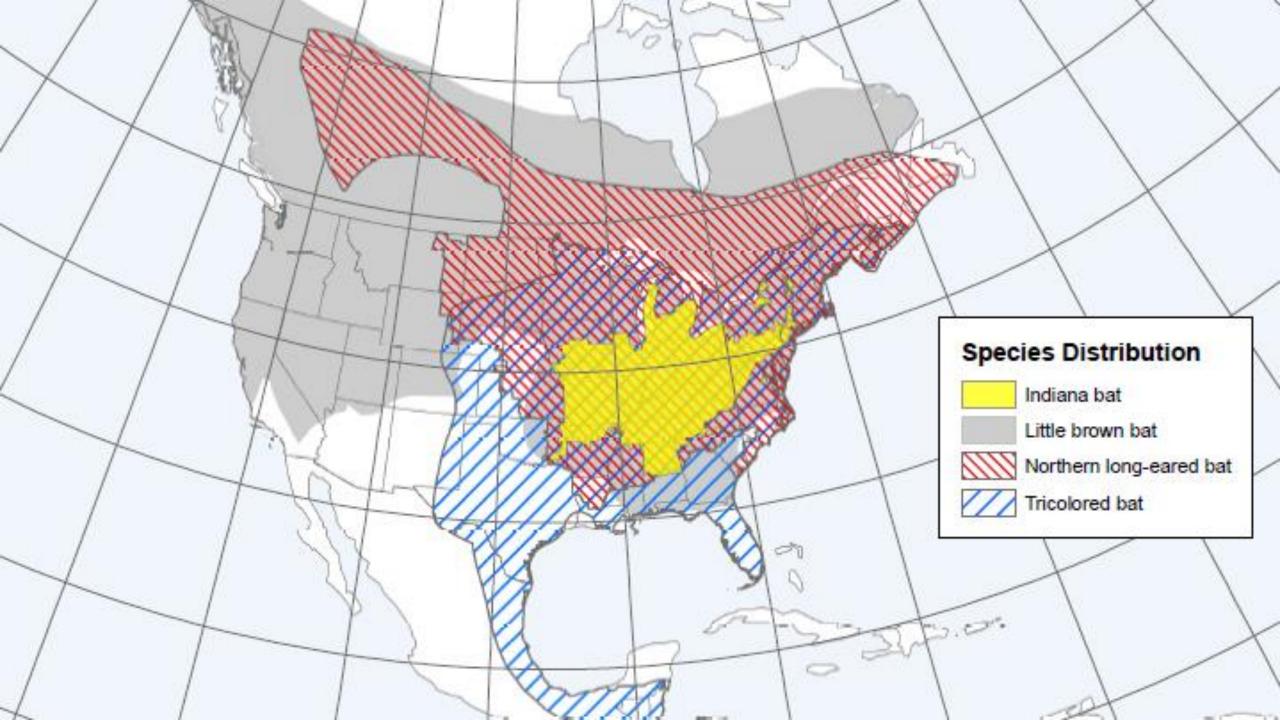
### Background

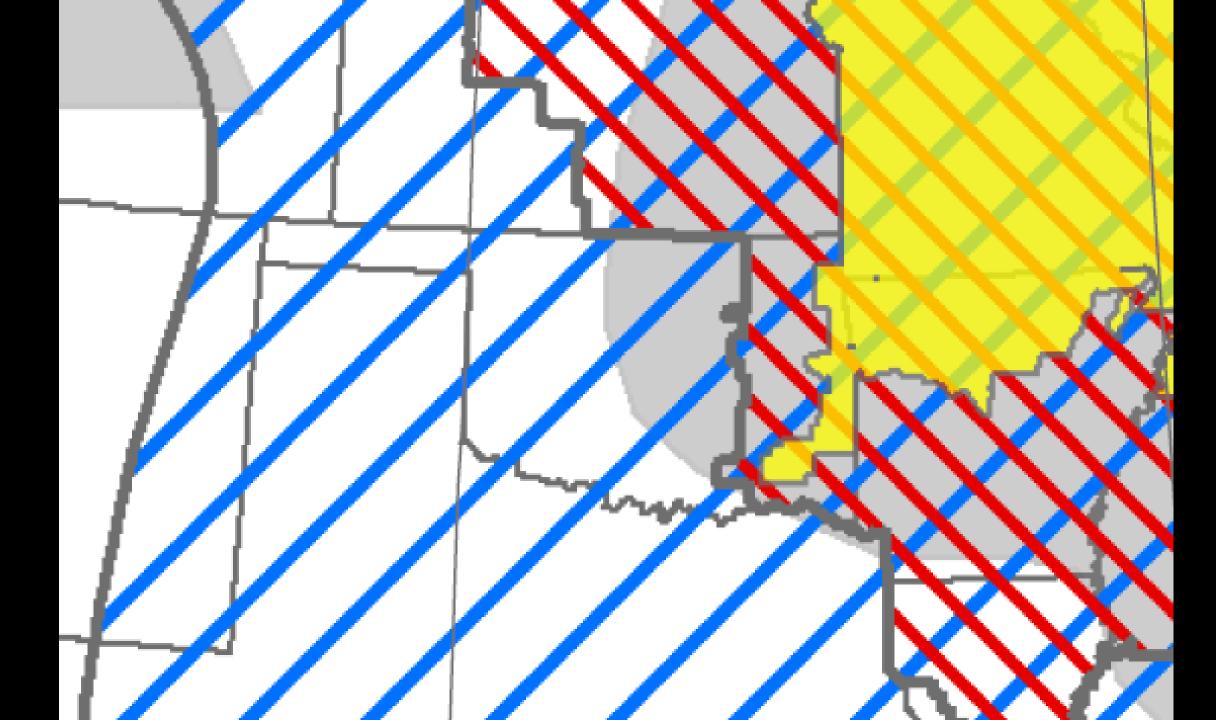
- Service petitioned to list tricolored bat in 2016.
- Northern long-eared bat listed as threatened in 2015; FWS litigated & court-ordered to re-evaluate status, pub. final rule by Nov. 2022
- Discretionary status review for little brown bat initiated due to significant WNS declines
- All 3 species were evaluated together as a "batch" in a Species Status Assessment



### SSA Findings

- Data from North American Bat Monitoring Program (NABat)
- Modeled all 3 species' viability, persistence, abundance under current & future condition scenarios
- Depending on species, rangewide abundance declines between 83-99% by 2030





#### Tricolored Bat

• Widely distributed in eastern U.S.; small, insectivorous bat

 Roosts in tree foliage in summer; hibernates in caves and manmade structures (i.e., culverts)

• Before onset of WNS, was one of the most abundant bats in North America



### Tricolored Bat Timeline

- June 2016 USFWS petitioned to list tricolored bat by CBD and Defenders of Wildlife
- Dec. 2017 90-day finding published
- Spring 2020 "3 Bat" Species Status Assessment began
- September 14, 2022 Proposed Rule for Endangered published on FR
  - Comment period open for 60 days
- 12 months to publish final listing rule

### Northern long-eared bat (NLEB)



• Inhabits "cluttered" interiors of forests in eastern U.S. & Canada

 Roosts under bark & crevices of trees during summer

 Hibernates in caves, mines, rock crevices, and occasionally artificial structures

### NLEB Timeline

• Listed as threatened with a 4(d) rule in 2014

- Service litigated over decision; court order to re-evaluate analysis
- Proposed rule to reclassify as endangered published March 2022

• If finalized, 4(d) rule exempting incidental take of the species would disappear



### Little brown bat

- Similar in appearance to northern long-eared bat
- Wide-ranging across U.S. and Canada, w/ narrow OK distribution (confirmed in 3 counties)
- Pre-WNS, likely most abundant bat in eastern U.S.
- Uses human dwellings as roosts most frequently out of the 3 species
- Discretionary status review; 12 mo. finding planned for 2023



# Challenges for the 3 bats

- Wind farm mortality, though mortality data is limited in portions of range
- SSA report determined 2nd highest threat to future viability for all 3 species
- Climate change causing disruptions in life history periods
- Habitat loss and disturbance of hibernacula



### Future Implications

 Tricolored bat – statewide distribution; if proposed rule finalized, projects w/ potential for incidental take may need to coordinate and/or consult with FWS

 Northern long-eared bat – 4(d) rule would no longer be applicable for previously-exempted for seasonal tree removal activities

 Within range & suitable habitat, presence can either be assumed OR presence/probable absence surveys can be conducted for many listed species

### Options & pathways for listed species

- Habitat Conservation Plan (No Federal nexus)
  - Associated with an ESA Section 10(a)(1)(B) permit
  - Mitigation plan
- Section 7 consultation (Federal nexus)
  - Applies to actions carried out / permitted by federal agencies
  - Informal consultation (not likely to adversely affect species)
  - Formal consultation / Biological Opinion (likely to adversely affect species)
- If proposed rule finalized, surveyors/biologists planning to handle or capture tricolored bats would need Recovery Permit (ESA Section 10(a)(A)).

### **Bat Survey Guidance**

• Guidance out since 2011 for Indiana bat, w/ NLEB added in 2022.

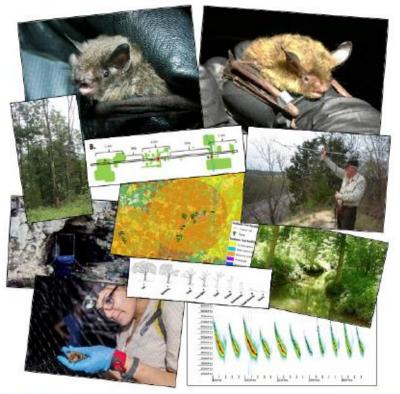
 Different survey methodologies allowed

Most recent vers., March 2022

Service will be reviewing/updating annually

#### U.S. Fish and Wildlife Service

### RANGE-WIDE INDIANA BAT & NORTHERN LONG-EARED BAT SURVEY GUIDELINES





March 2022



### Is there good news for bats in the future?

- Tricolored bats are adaptable; have capitalized on using manmade structures as roosts (bridges, culverts)
- NLEB & LBB are persisting, and may be slowly rebounding in New England & parts of the Appalachians
- Prelim. data in Mississippi & Georgia indicate that southern TCB populations may be more resilient to WNS
- W/ WNS just recently showing up in the West (i.e., TX panhandle, western OK), unknown how TCBs will be affected in these areas long-term

## Questions?? Please reach out!

!! Contact Info!!

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