Regulatory Issues Surrounding Listed Bats in Kentucky

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Indiana bat – USFWS photo
Presentation Goals

Provide information on the regulatory components of the Endangered Species Act

Discuss the regulatory implications of listed forest-dwelling bats to land managers in Kentucky

Provide basic information related to the 4(d) rule for Northern long-eared bats
Endangered Species Act

The purpose of the ESA is to protect and recover imperiled species and the ecosystems upon which they depend.

Under the ESA, species can be listed as either “threatened” or “endangered”.

The Fish and Wildlife Service (FWS) has primary responsibility for terrestrial and freshwater organisms, while the National Marine Fisheries Service (NMFS) has responsibility for marine wildlife, such as whales and anadromous fish like salmon.
Threatened species - any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Endangered species - any species which is in danger of extinction throughout all or a significant portion of its range.

Northern long-eared bat – a threatened species
ESA Section 9

• It is unlawful for any person subject to the jurisdiction of the United States to —

  (A) import any such species into, or export any such species from the United States;

  (B) take any such species within the United States or the territorial sea of the United States;

  (C) take any such species upon the high seas;

  (D) possess, sell, deliver, carry, transport, or ship, by any means whatsoever, any such species taken in violation of subparagraphs (B) and (C);

  (E) deliver, receive, carry, transport, or ship in interstate or foreign commerce, by any means whatsoever and in the course of a commercial activity, any such species;

  (F) sell or offer for sale in interstate or foreign commerce any such species; or

  (G) violate any regulation pertaining to such species or to any threatened species of fish or wildlife listed pursuant to section 4 of this Act and promulgated by the Secretary pursuant to authority provided by this Act.
Definition of Take

- Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct.

- Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering.

- Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering.
ESA Section 11

Section 11 of the ESA prescribes the penalties for violations of the ESA.

Penalties can include:

- Civil penalties of up to $25,000 per violation
- Criminal penalties of up to $50,000 per violation or up to 1 year imprisonment, or both
ESA Compliance

So, the big question is –
How do you stay out of jail and avoid paying these fines?
ANSWER – Ensure compliance with the ESA using one of the exemption processes

These processes are the only ways to receive an exemption to the ESA’s take prohibition – no get out of jail free cards
Take Exemptions

Section 6(g) – Cooperation with States – State agencies operating under a “section 6 cooperative agreement” are exempt from the take prohibition (KDFWR & KSNPC)

This exemption recognizes the important and shared role that the states and federal government have in the management and conservation of fish, wildlife and plants.

Fish and Wildlife are the “property” of the states until listed under the ESA – i.e., the FWS is then given authority under the ESA.
Take Exemptions

Section 7(a)(2) – Interagency Cooperation and Consultation –

Allows federal agency actions to be reviewed by the FWS.

If an action may affect species, FWS can authorize take through an Incidental Take Statement (ITS) in a biological opinion.

An action resulting in jeopardy to a listed species or the destruction or adverse modification of designated critical habitat requires the implementation of a reasonable and prudent alternative
Take Exemptions

Section 10 – Exemptions – Allows FWS to issue permits allowing take

Section 10(a)(1)(A) – Scientific and Collection Permits – Allows permittees to take species under an Enhancement of Survival (ESP) permit with special conditions

Section 10(a)(1)(B) – Incidental Take Permits – Allows permittees to take species based on an approved Habitat Conservation Plan supported by an Incidental Take Permit (ITP)
ESA Compliance in Kentucky

To date, ESA compliance for listed bats on projects involving habitat management or manipulation in Kentucky has been handled as –

1) Informal section 7 consultation – Most projects are “no effect” or “not likely to adversely affect” projects

2) Formal section 7 consultations –
   a) formal consultations tied to the Forest-dwelling Bat Conservation Strategy for the Commonwealth of Kentucky (i.e., CMOA process)
   b) stand-alone formal consultations for individual projects

But let’s talk about Section 10 first …
ESA Section 10

• Section 10(a)(1)(B) provides the FWS with authority to allow incidental take associated with Habitat Conservation Plans (HCPs) from non-federal entities.

• HCPs require mitigation, an application fee, and the issuance of an incidental take permit for any take that would occur as a result of project implementation.

• HCPs also have public notice and public comment periods associated with them and can take over 1 year to complete the process (usually 2+ years).
ESA Section 10

Kentucky Field Office has not pushed HCPs for non-federal actions due to the time investment involved.

Examples of non-federal actions that would require development of an HCP and associated ITP include any private actions where take is likely to occur and no federal permits or funding are involved –

- Private or industrial timber operations or management (e.g., burning, thinning)
- Commercial or residential development
- Any other action that may affect a listed species or critical habitat
ESA Section 7

- Section 7 of the Endangered Species Act (Act) [16 U.S.C. 1531 et seq.] outlines the procedures for Federal interagency cooperation to conserve Federally listed species and designated critical habitats.

- Requires a **federal action** for the initiation of section 7 consultation.

- Process is designed to allow Federal projects to move forward by following a prescribed process.
An ESA Action

An Action as defined by the ESA is -

“All activities or programs of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies in the United States or upon the high seas.”

Examples include, but are not limited to: (a) actions intended to conserve listed species or their habitat; (b) the promulgation of regulations; (c) the granting of licenses, contracts, leases, easements, rights-of-way, permits, or grants-in-aid; or (d) actions directly or indirectly causing modifications to the land, water, or air.
Consultation Processes

There are two consultation processes. The one used depends on the nature of the action –

Informal Consultation

Formal Consultation

The nature of the action is explained and evaluated in a biological assessment of the action.
Informal Consultation

It is used to determine whether an action may affect listed species or critical habitat.

It allows the FWS to evaluate the potential effects of the action early and suggest modifications to the action that could avoid potential adverse effects.

If an action “may affect” a listed species or designated critical habitat, formal consultation is required, except when the FWS concurs, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat.
Formal Consultation

- Determines if an action is likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat.

- Begins with an agency's written request and submittal of a complete initiation package and ends with the issuance of a biological opinion and incidental take statement within 135 days, unless an extension is mutually agreed-to.

- Jeopardize means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.
What FWS Looks At

• In the following slides, we will look at and discuss some of the factors involved in our decision-making.

• Each of these factors tends to increase the complexity of project analysis.

• Let’s start with where Indiana bats and Northern long-eared bats occur.
Known Indiana bat habitat in Kentucky and within 20 miles (March 2015)

LEGEND:
- Sensitive Areas – work in these areas requires site-specific coordination with the KFO
- Known Summer 1 + Swarming 1 habitat
- Known Summer 1 + Swarming 2 habitat
- Known Summer 2 + Swarming 1 habitat
- Known Summer 2 + Swarming 2 habitat
- Known Swarming 1 habitat
- Known Swarming 2 habitat
- Known Summer 1 habitat
- Known Summer 2 habitat
- Potential habitat

NOTE: This map is based on species occurrence information and is subject to change as new data become available. Please contact our office at 502/696-0468 to ensure you are working with the most current version.

For an explanation of terms, please see the Conservation Strategy for Forest-Dwelling Bats in the Commonwealth of Kentucky.

The USFWS makes no warranty for use of this map and cannot be held liable for actions or decisions based on map content. This map was produced as an appendix to the Conservation Strategy for Forest-Dwelling Bats in the Commonwealth of Kentucky and should only be used in the context of this Strategy.
Known northern long-eared bat habitat in Kentucky and within 20 miles (March 2015)

**LEGEND**
- Sensitive Areas – work in these areas requires site-specific coordination with the KFO
- Known Summer 1 = Swarming 2 habitat
- Known Swarming 2 habitat
- Known Summer 1 habitat
- Potential habitat

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Life Cycle

- Indiana bats and NLEBs use different habitats at different times of the year

  Winter Habitat

  Summer Habitat

- Both species can migrate great distances between their winter hibernacula and summer habitat.
Summer Habitat

- Typically found in forest stands, but have been observed in man-made structures (buildings, bat houses, etc.)
- Maternity roosts beneath exfoliating bark and in tree cavities
- Males and non-reproductive females may roost in caves and mines
Summer / Maternity Roosts

Slash pile along new ROW in Ohio

Up to 5 bats roosted here (not a maternity roost)

Adds to complexity of what could result in adverse effects on the species

Photo: Chris Boggs, ESI
Summer / Maternity Roosts

Roosts can be small trees

Adult female NLEB roosted here

Old deer rub tree above the Green River in Hart County, KY
Regulatory Implications of Listed Bats in Kentucky

Project Factors

- Federal vs Non-Federal Project Proponent
- Threatened vs Endangered
- Formal vs Informal Consultation
- Likelihood of Take
- Type of Take (mortality, harm, harass)
- Advance Conservation Measures
- Project Flexibility (location, timing, etc.)
- Etc.
Regulatory Implications of Listed Bats in Kentucky

Biological Factors

Habitat Type and Suitability
NLEB vs Indiana Bat – NLEB has a 4(d) Rule
Presence/Absence or Habitat Use Data
Surveys to be Conducted? (Acoustic and/or mist-net)
Timing of Impact
Size and Severity of Impact
etc.
What is a 4(d) Rule?

- Section 4(d) of Endangered Species Act
  - Allows FWS to define protections for species listed as “threatened”
  - Allows FWS to focus on those protections necessary or advisable to conserve the species
  - Cannot be applied to species listed as endangered as specific protections for endangered species are defined in the ESA
Summary of Final 4(d) Rule

Entire Range of Bat
All “purposeful take” is prohibited, unless authorized by a permit, except under these circumstances:

• Defense of human life (e.g., public health monitoring)
• Removing hazardous trees
• Removing bats from human structures
• Limited research permit exemption through May 3, 2016
Summary of Final 4(d) Rule

Inside WNS Zone:

• All take within known hibernacula is prohibited

• Incidental take caused by tree removal is prohibited (without a permit) if:
  – Tree removal occurs within 1/4 mile of a known hibernaculum, at any time of year
  – Tree removal cuts or destroys a known occupied maternity roost tree or any other trees within a 150-foot radius of the maternity roost tree during the pup season (June 1 through July 31)
Map of Quadrangles Containing Known Northern long-eared Bat Hibernacula &/or Maternity Roost Trees (January 2016)

**LEGEND**
- Pink: Quads with Known Hibernaculum and Maternity Roost Tree Buffers
- Blue: Quads with Known Hibernaculum Buffers
- Yellow: Quads with Known Maternity Roost Tree Buffers

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Implications of 4(d) Rule

– 122 known NLEB hibernacula
  • Daniel Boone National Forest
  • Mammoth Cave National Park
  • Pine Mountain area
  • Barrens area from Meade/Breckinridge to Trigg/Christian

– 254 known roost trees
  • 217 on Fort Knox (one research project)
  • 28 on Mammoth Cave National Park
Implications of 4(d) Rule

– KY forestland largely unaffected by NLEB listing and 4(d) rule

– However, all of that forestland is still known or potential Indiana bat habitat
Thanks.

Any questions?

Occupied NLEB Summer Habitat