Indiana Bat, FW3 <indiana_bat@fws.gov>

Fwd: Fw: Indiana Bat Summer Survey Guidelines

King, Andrew <andrew_king@fws.gov> Mon, Feb 25, 2013 at 2:48 PM
To: FW3 Indiana Bat <indiana_bat@fws.gov>

"Hickey, Jessica" <**Jessica.Hickey@davey.com**>
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To: "indiana_bat@fws.gov" <indiana_bat@fws.gov>
cc:
Subject: Indiana Bat Summer Survey Guidelines

Please see attached our comments for the Draft Indiana Bat Summer Survey Protocol changes. Thank you.

Jessica Hickey-Miller

Project Manager/Biologist

(See attached file: FINAL USFWS Indiana Bat Comments Protocols.pdf)

FINAL USFWS Indiana Bat Comments Protocols.pdf
140K

Davey Resource Group, A Division of the Davey Tree Expert Company
Proposed Draft Revised Rangewide Indiana Bat Summer Survey Guidelines
Comments

- **Change in the definition of 'suitable habitat' –** USFWS has previously described suitable habitat as being composed primarily of larger trees (typically greater than 6 inches diameter) that exhibit adequate habitat features (crevices, cavities, exfoliating bark) that provide shelter for the bat. The new proposed guidelines reduce the minimum size of suitable habitat trees (exhibiting the physical characteristics previously described) to 3 inches diameter. This reduction in the size of potential habitat trees increases the amount of suitable habitat present for males or non-reproductive females, but the protocols really do not distinguish between potential maternity colony trees and habitat trees. If we are to assume presence of a maternity colony, it would be very important to distinguish where the maternity colony may be located on a project site, instead of assuming it is in the center.

- **Acoustic Detection Standards –** With the allowance of a high acceptable error rate, protocols should allow for a repeat of the acoustic field study to determine if a repeat of the call(s) occurs. If the call is not identified during the repeat survey, this should be taken into account before "assuming presence" of a maternity colony on the project site.

- **Mist-Net Surveys** – Per the new protocols, mist-net survey results will not be taken into account unless an Indiana bat is captured and tracked to their respective roost site. This seems highly prejudicial and does not necessarily balance out the cost for the survey without knowing what the final results of "assuming presence" would mean to a project. For instance, if the avoidance measures were to complete winter clearing of all trees on the project site, why would the project proponent go through the extra cost of a mist-net survey when the results may be negative.

  In addition, the *Indiana Bat Survey Guidance for Kentucky* document has noted that acoustic sampling alone is not enough to determine species composition in an area and this was taken from the Murray et al, 1999 "the combination of both survey methods provides the most effective means of determining bat species composition in an area". Therefore, a negative result from a mist-net survey should not automatically determine that a maternity colony is present in the project area. In fact, it should show that the absence of Indiana bats indicate that a maternity colony is not likely present.

- **Acceptable Error Rate –** According to the protocols, a p-value of <0.10 is acceptable for the positive identification of an Indiana bat from an acoustic recording, resulting in a Type 1 error, or a false positive, in 10% of acoustic recordings (a call is identified as an Indiana bat, when in fact it is not). This 10% probability of misidentifying a bat's acoustic call could have major ramifications for a project, including delays and cost increases. A 10% chance of making a Type 1 error is a very wide margin of uncertainty, given the potential resulting impacts to a proposed project. Especially if this is based on just one call file.

- **2013 Contingency Plan –** The proposed 2013 Contingency Plan states that all calls above a certain frequency will be assumed to be an Indiana bat. However, several species of the *Myotis* genus (which includes the common little brown bat, *Myotis lucifugus*) produce calls above this frequency. Additionally, other studies have documented the challenging nature of teasing apart the identity of calls from bats in this genus. Surveys and data analysis need to be more scientifically rigorous and reproducible to avoid false positives. As there is presently no analysis programs that have been accepted for use by USFWS for evaluating acoustic survey results, completing the analysis for individual as previously described, this would place a large workload and cost on a project proponent. How would the USFWS conduct a QA/QC on call files to either support or dispute calls above 35kHz. This is especially important since any biologist (permitted or not) can conduct acoustic surveys.

- **Interpretation and Effects of Positive Acoustic Results –** As proposed, positive results from an acoustic survey allow for one of two avenues for proceeding with a project: 1) perform no additional surveys. If no further studies are conducted, USFWS assumes that the site contains a maternity colony within the middle of the project area, requiring the most conservative measures for protection of the species; or 2) conduct mist-netting and potential radio-tracking or emergence surveys. If a mist-net survey captures no Indiana bats, USFWS will still assume that Indiana bats are utilizing the site. If an Indiana bat is captured, it must be tracked to determine if a maternity colony is in fact present on the site. This type of assumed presence needs to be further clarified, and how and when efforts that USFWS will require to avoid impacts to this species should be described. For example, seasonal clearing restrictions, completion of a Biological Assessment/Opinion, etc. These avenues listed above can have a very different impact and result on a project in terms of project delay and cost. Experts should be able to fully explain the consequences of "assuming presence" to project proponents, which is unknown at this time.

- **Reliance on Use of Unpublished Data –** The shift to the use of acoustic survey methodology is based, in part, on the efficacy of a study conducted at Fort Drum, New York. This study has not been published and therefore has not been peer-reviewed. Regulatory rulemaking that relies on internal sampling data that has not been evaluated by the scientific community, and not available to the general public, is unscientific. Such studies should be repeated across the range of the species, and results compared and analyzed, before such significant and potentially costly guidelines are implemented.

- **Survey Effort -** Under Appendix B-Phase 2 Acoustic Survey Methodology, it is noted that a minimum of two acoustic sites are necessary, however, in the bullet list below it is noted that one site per 30 acres of suitable habitat is necessary. Which is correct?

  In addition, if calls of Indiana bat (with appropriate software) are identified on the first or second night of acoustic surveying, why would we need to continue surveying the entire 6 night period?

- **Costs to Project Proponent** – As proposed, these draft guidelines would place a large financial burden on a project proponent, due to the requirements for additional surveys not historically required (acoustic monitoring) in expanded habitat areas not previously considered suitable for the bat. In addition to the direct costs related to acoustic surveys, the increased potential of detecting a bat, even if one is not present, could add costly delays to a project seeking federal and state permits. USFWS should consider the potential total cost to the private sector that could result from these proposed guidelines and confirm its compliance with the **Unfunded Mandates Reform Act of 1995**.

- **Effects on Other Aspects of a Project** – Endangered species surveys are often conducted as part of a § 10 or § 404/401 permitting project. If acoustic surveys identify an Indiana bat call on a project site, and no further studies are conducted, USFWS states that it must assume the presence of a maternity colony within the middle of a project area. This raises a significant issue in Ohio. According to the Ohio Rapid Assessment Method, if a wetland is, "…known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species" it is automatically considered to be a Category 3 wetland. Without knowing exactly where, or if, a maternity colony is in fact located on a project site, must Ohio Environmental Protection Agency also assume that a maternity colony is present in wetlands and categorize all wetlands on the site as Category 3?

➢ **Email:**
indiana_bat@fws.gov