



HIGHLIGHTS... of Changes within the 2023 USFWS' Range-wide IBAT & NLEB Survey Guidelines¹

(ALL documents will be posted on the Service's bat survey guidelines website)

<https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>

- **NEW - 2023 Range-wide IBAT & NLEB Survey Guidelines** (76-page pdf)
 - Mist Netting LOE: The minimum mist netting survey level of effort (LOE) for both the IBAT and NLEB has been lowered (see figure and table below) **AND** we are returning to a single, range-wide mist netting LOE for IBat instead of the previous RU-based approach.

These changes are supported by an updated statistical analysis of post-WNS IBAT and NLEB mist netting data and capitalizes on a robust set of P/A survey data submitted to the Service via our standardized Sec. 10 permit reporting worksheets (a.k.a. Keith Lott's Database) from 2016 to 2022. This is the first time the Service and USGS have reanalyzed mist netting capture data since 2014. While we used the same methodology as presented in the original 2014 white paper, our analysis was more focused this time as we only included data originating from 1) survey sites where IBATs and/or NLEBs were captured, and 2) survey sites falling within a standard buffer distance of a recent post-WNS capture of either species (5 mi. for IBAT and 3 mi. for NLEB, respectively).

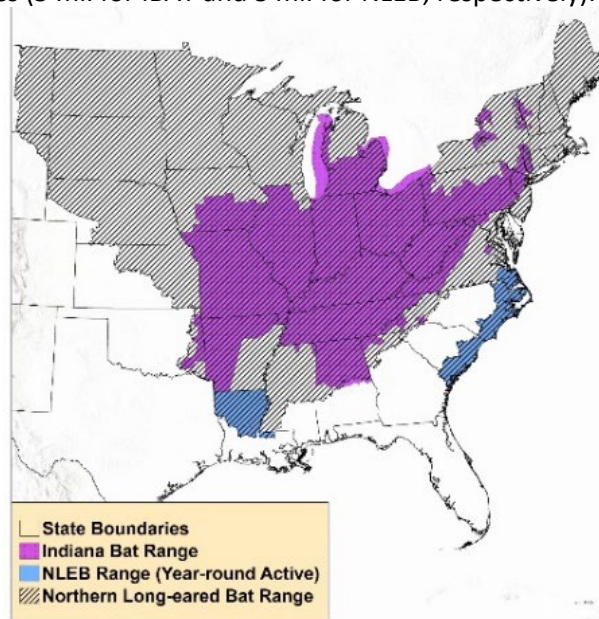


TABLE 2. Summary of current survey LOEs for IBAT and NLEB.

Species	Region	MIST-NETTING (net nights)		ACOUSTICS (detector nights)	
		Linear (per km)	Non-Linear (per 123 ac.)	Linear (per km)	Non-Linear (per 123 ac.)
IBAT	Range-wide	2	6	4	10
NLEB	Seasonal Range (non-coastal areas)	4	10	4	14
	Non-seasonal Range (year-round active / coastal areas)	2	6		

¹ This document is not an exhaustive list of every change made to the prior version of the bat survey guidelines.

- NEW – “Pilot” Combined Netting & Acoustic Survey Option
For the first time the Service will be piloting a new survey option that allows for a traditional survey site (e.g., 123-acre area) to be surveyed using a combination of mist nets and acoustic detectors. We will seek FO and surveyor input on how well this approach worked after the 2023 field season. See Appendix I for details.
- NLEB Range is now split into two different areas... A “seasonal” range where the traditional P/A survey season of 15 May – 15 August will continue and a “non-seasonal” range (a.k.a., year-round active range) where an extended survey season of 1 March – 15 November will be allowed. The mist netting LOE also differs between these areas. See Appendix J for details.
- Added Flexibility within some Inner- & Outer-Tiers – FOs may allow project proponents whose project is either ≤ 123 acres in size or affects $\leq 1\%$ of existing suitable summer habitat within a 5-mile (IBAT) or 3-mile (NLEB) buffer (whichever is greater) the opportunity to conduct a P/A survey in both the inner-tier and outer-tier of known Seasonal Range NLEB buffers and IBAT buffers within the Northeast and Appalachian RUs when the buffered occurrence was prior to 2 years after WNS was first confirmed in the state. See Appendix G for details.
- New Tricolored Bat NOTE has been added...
In a nutshell, project proponents can complete P/A surveys for TCBs in 2023 using the NLEB LOEs for the 2023 field season. See the “Introduction” section of the guidelines for this note and a few other TCB-related issues.
- New Minimum Staffing at Net Sites – We added this statement... “A minimum of two (2) biologists (e.g., one qualified and one technician) must be on-site for every four (4) net-sets being operated. Exceptions to on-site minimum staffing levels may be allowed under extenuating circumstances, provided written justification is included in the proposed survey study plan and subsequently approved by the local USFWS FO(s).” See Appendix B.
- New Mist Net Spacing Distance Statement – “Mist-net sets should be spaced a minimum of 30 m apart, surveyors should attempt to evenly distribute net-sets throughout suitable habitat and not over-sample individual habitat features (e.g., three or more mist-net sets on a single travel corridor or stream).” (p. 25)
- New Requirement for those conducting Qualitative Acoustic Analysis – “At a minimum, conduct qualitative analysis on ALL call files (including no IDs) a program(s) attributed to IBAT and/or NLEB regardless of the MLE value reported.” (p. 38)
- New Glossary of Terms has been added. See Appendix K.
- Clarification of FO-level Approval of Study Plans... “USFWS Section 10 permits require FO approval for each individual survey study plan in order to be in compliance. Field

Offices have the authority to deny a proposed survey if it is determined that the study plan is insufficient for Section 7 consultation requirements of the ESA. For example, radio-tracking of captured IBAT and/or NLEB may be required by individual FOs and should be discussed as part of the study plan and pre-survey coordination.”

- New Clarification/Requirement for Western portion of NLEB range - regarding acoustic surveys in the portion of NLEB range overlapping with western bat species (see App. C, and Fig. 2 on p. 41). And this statement on page 38... “At this time, no acoustic bat ID programs are ‘approved’ for many western states (Figure 2). Two or more of the currently available ‘candidate’ programs must be used for surveys conducted in these locations (always use most recent versions of software programs).”

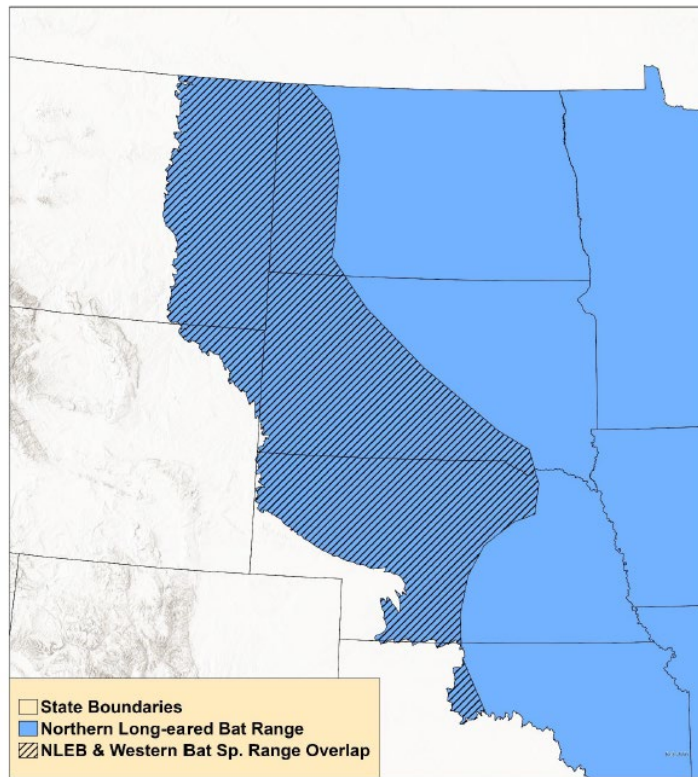


Figure 2. Portion of NLEB range overlapping with western bat species.

ALSO be sure to check out...

- **NEW - White Paper – “Addendum 3” supporting mist netting LOE changes** (4-page pdf)
- **NEW - Frequently Asked Questions (FAQs) for the 2023 Survey Guidelines** (7-page pdf)
- **NEW - Optional “Study Plan Form” for bat surveys** (4-page fillable pdf)