

U.S. Fish & Wildlife Service

APPENDIX B. Biological Assessment Form for Project-Level Consultation under the Interim Consultation Framework for the Northern Long-Eared Bat

Valid from March 31, 2023 through November 30, 2024

This Biological Assessment Form (BA Form) is intended for use by Federal agencies as part of the Interim Consultation Framework for the northern long-eared bat (NLEB). Federal agencies must ensure the proposed action meets the requirements and follow the "Steps to Complete Consultation under the Interim Consultation Framework" section of the Interim Consultation Framework. This framework allows Federal agencies to rely on the Standing Analysis developed by the U.S. Fish and Wildlife Service (Service) for section 7(a)(2) compliance by: (1) notifying the Service that an action agency will use the Interim Consultation Framework; (2) describing the project with sufficient detail to support the required determination; and (3) enabling the Service to track effects and determine if reinitiation of consultation is required per 50 CFR 402.16. Providing this information also does not address section 7(a)(2) compliance for any other listed species. For questions about filling out this form, please contact your local Ecological Services Field Office.

I. PROJECT INFORMATION

Project Name:

[ANSWER HERE]

Action Agency:

[ANSWER HERE]

Point of Contact:

[ANSWER HERE]

Project Location (state, county, coordinates):

[ANSWER HERE]

IPaC Record Locator:

[ANSWER HERE]

Project Code:

[ANSWER HERE]

Project Description:

[ANSWER HERE. Include a description of the action being considered. It does not have to be very long, but include the purpose, timing, duration, location, and components of the action (i.e., answer the relevant questions of who, what, where, when, and why). Indicate which of the following activity types from the Standing Analysis are included in the project and the time of year the activities will occur: forest management, prescribed fire, habitat removal, disturbance/noise from with human activities, lighting, use of pesticides, contamination, water quality alteration, vehicle use/collision risk, noise from munitions, detonations, and training vehicles, use of military training smoke and obscurants, bridge maintenance, repair, or replacement. Remove Note.]

II. DEFINING THE ACTION AREA

The action area is defined as "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action" (50 CFR 402.02). The action area is not limited to the "footprint" of the project but rather encompasses the aerial extent of the biotic, chemical, and physical impacts to the environment resulting from the action.

Define the action area for associated with the project.

[ANSWER HERE. You can also reference the project area you drew in IPaC as it should be the same as the action area.]

III. DETERMINING SPECIES PRESENCE

Based on known locations, the NLEB is reasonably certain to occur within the action area. You must contact the appropriate agency to determine if the action area is within 0.25 miles of a known hibernacula or 150-ft of known maternity roost trees in order to ensure you are following the required conservation measures described in the next section (Section IV).

1. Has the appropriate agency informed you that the action area is within 0.25 miles of a known hibernacula or 150-ft of known maternity roost trees?

[ANSWER HERE]

2. Are you aware of any type of surveys that detected NLEBs within 3 miles of the action area?

[ANSWER HERE]

IV. CONSERVATION MEASURES

Indicate in the text box below which conservation measures will be implemented to avoid or minimize adverse effects to the NLEB. If your project will implement other conservation measures to reduce impacts to NLEBs, you can elect to add them to the text box.

Required Conservation Measures:

- 1. The project will not disturb hibernating NLEBs in a known hibernaculum during hibernation. Disturbance could include entry into a known hibernacula or the following activities within 0.25 miles of a known hibernacula: prescribed fire, blasting, pile driving, drilling, and certain military operations. Smaller buffer sizes may be appropriate depending on the intensity of the activity.
- 2. The project will not alter the entrance or interior environment of a known hibernaculum at any time of the year. Hibernacula alteration could include the following activities within 0.25 miles of a known hibernacula: prescribed fire, blasting, pile driving, drilling, certain pesticide use, and certain military operations. Smaller buffer sizes may be appropriate depending on the intensity of the activity.
- 3. The project will not remove any trees within 0.25 miles of a known hibernaculum at any time of year.
- 4. The project will not cut or destroy known occupied maternity roost trees, or any other trees within a 150-foot radius from the maternity roost tree, from June 1 through July 31.

Note: winter roosts in areas where the species may be active year-round (see Areas Where the NLEB is Active Year-Round, below) were not subject to any restrictions under the former 4(d) rule; therefore, no conservation measures or restrictions apply to these areas.

Indicate if your project includes the Required Conservation Measures in the text box. Briefly describe any other relevant conservation measures if applicable:

[ADD YOUR TEXT HERE]

V. EVALUATING EFFECTS TO THE SPECIES

Because the species is reasonably certain to occur within the action area, the NLEB is likely to be exposed to the stressors that could be caused by the proposed action. The Standing Analysis for the Interim Consultation Framework describes the biological response of the NLEB to potential stressors (i.e., adverse effects) that correspond to the statutory and regulatory definitions of take¹. The following questions indicate the potential stressors that could result in take. Indicate the question numbers that correspond to your project in the text box below. Dates

¹ The ESA and its implementing regulations (50 CFR 17) define take as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. "Incidental taking" is defined at 50 CFR 17.3 as "any taking otherwise prohibited, if such taking is incidental to, and not the purpose of, an otherwise lawful activity."

associated with seasons can be found in Table 1. If your project will continue past November 30, 2024, only include the stressors for activities that will occur through November 30, 2024 (any stressors after November 30, 2024 require reinitiation at that time in order to insure compliance with section 7 of the ESA).

Does your project include any of the following stressors that can result in take under the Interim Consultation Framework?

- 1. Removal of occupied roost trees via the removal of roosting habitat² during the active season. This can cause harm (death or injury) of pups and adults from predation resulting from fleeing roost trees during the day.
- 2. Removal of occupied roost trees via the removal of roosting habitat during the maternity season. This can cause harm (death or injury) of pups and adults when the tree falls or from predation.
- 3. Removal of occupied roost trees via the removal of roosting habitat during the swarming or staging season. This can cause harm (death or injury) of adults and juveniles when the tree falls or from predation.
- 4. Removal of occupied roost trees via the removal of roosting habitat in forested wetlands during the cold winter months (December 15- February 15) in areas where the NLEB may be active year-round, which is the Southeast Coastal Plain from the James River in Virginia south to the border of Georgia and the species' entire range in Louisiana. We only anticipate these effects if they occur in forested wetlands because nearly all winter tree roosts have been located in forested wetlands. If bats are in torpor (i.e., state of mental or physical inactivity), this can cause harm (death or injury) of adults and juveniles when the tree falls or from predation.
- 5. Removal of unoccupied roost trees via the permanent removal of roosting habitat during the inactive season. This <u>does not</u> apply to forest management activities. This can cause harm through reduced fitness by fragmenting maternity colonies and significantly affecting behavioral patterns associated with breeding.
- 6. Disturbance associated with human activities (e.g., noise, exhaust, vibration, detonations, military aircraft, etc.) occurring during the active season that is significant enough to result in result in NLEBs fleeing occupied roost tree(s) during the day time. This can cause harm (death or injury) of adults and pups from predation resulting from fleeing roost trees during the day.
- 7. Prescribed fire conducted during the active season. This can cause harm (death or injury) of adults and pups from predation resulting from fleeing roost trees during the day.

² Roosting habitat consists of forests and woodlots containing potential roost trees, which are defined as live and/or dead trees (i.e., snags) \geq 3 inches diameter at breast height (dbh) that have exfoliating bark, cracks, crevices, and/or cavities.

- 8. Prescribed fire conducted during the pup season. Exposure to heat and smoke during fires can cause harm (death or injury) of pups and females caring for pups.
- 9. Prescribed fire conducted during the cold winter months (December 15- February 15) in areas where the NLEB may be active year-round. If bats are in torpor, exposure to heat and smoke during fires can cause harm (death or injury) of adults and juveniles.
- 10. Use of military training smoke and obscurants during the active season. Exposure to smoke and obscurants can cause harm (death or injury) of pups and adults.
- 11. Work on bridges (maintenance and demolition) and culverts >4ft in diameter (removal and sliplining) where NLEBs are roosting during the active season. This can cause harm (death or injury) of adults and pups during construction activities or from predation resulting from fleeing the structure during the day.
- 12. Collision risk resulting from construction of new roads within 1,000-ft of documented habitat. NLEBs colliding with vehicles can cause harm (death or injury) of adults and juveniles during the active season.
- 13. Use of waste pits and tanks containing water and contaminants during the active season. This can cause harm (death or injury) when NLEBs drink contaminated water or become trapped in waste pits or tanks.

[ADD YOUR TEXT HERE]

Other stressors that can also result in adverse effects are evaluated in the Standing Analysis, but these stressors are not reasonably certain to result in incidental take. Indicate the question numbers that correspond to your project in the text box below. Dates associated with seasons can be found in Table 1. If your project will continue past November 30, 2024, only include the stressors for activities that will occur through November 30, 2024.

Does your project include any of these additional stressors that can also adversely affect the NLEB?

- 1. Removal of unoccupied roost trees via the removal of roosting habitat during the inactive season associated with forest management activities. This can affect fitness by temporarily disturbing behavioral patterns associated with breeding, feeding, and sheltering.
- 2. Removal of foraging, swarming, or staging habitat during the inactive season. This can affect fitness by temporarily disturbing behavioral patterns associated with feeding and sheltering.
- 3. Installation of new lighting sources can affect fitness by disturbing foraging patterns.
- 4. Use of pesticides can cause adverse effects by temporarily disturbing behavioral patterns associated with feeding and sheltering.

- 5. Water quality alteration can cause temporary effects on water quality and reduce insect populations. This could affect fitness by temporarily disturbing behavioral patterns associated with feeding and sheltering.
- 6. Work on bridges (maintenance and demolition) and culverts >4ft in diameter (removal and sliplining) during the inactive season that renders a structure unsuitable for roosting. This can affect fitness by temporarily disturbing behavioral patterns associated with sheltering.

[ADD YOUR TEXT HERE]

The following activities can also result in beneficial effects to the species: forest management and prescribed fire. More information about the benefits of forest management and prescribed fire can be found in the Standing Analysis. Does your project include any of these activities or other beneficial effects? Briefly describe beneficial effects in the text box below.

[ADD YOUR TEXT HERE]

VI. EFFECT DETERMINATION

As described in the Interim Consultation Framework (see Steps to Complete Consultation Section), the use of this BA Form is only needed for projects that are located within an area where NLEBs are reasonably certain to occur, and the project is likely to adversely affect the NLEB. If your project includes any of the stressors listed above, and you have not included any additional conservation measures to avoid adverse effect, the most likely logical determination for your project is may affect, likely to adversely affect the NLEB. However, the determination must be made by you, the action agency. Make your determination is the text box below and include a justification if you have determined your project is not likely to adversely affect the NLEB.

[ADD YOUR TEXT HERE]

VII. ADDITIONAL INFORMATION REQUIRED FOR FORMAL CONSULTATION

Providing the information below will aid the Service in developing the project-specific biological opinion (BO) and incidental take statement (ITS), which will typically follow the BO and ITS Form included in Appendix C of the Interim Consultation Framework.

Other Activities Caused by the Action

Within a biological opinion, all consequences to species or critical habitat caused by the proposed Federal action are evaluated, including the consequences of other activities caused by the proposed action, that are reasonably certain to occur (see definition of "effects of the action" at 50 CFR 402.02). Additional regulations at 50 CFR 402.17(a) identify factors to consider when

determining whether activities caused by the proposed action (but not part of the proposed action) are reasonably certain to occur. These factors include, but are not limited to:

- 1. past experiences with activities that have resulted from actions that are similar in scope, nature, and magnitude to the proposed action;
- 2. existing plans for the activity; and
- 3. any remaining economic, administrative, and legal requirements necessary for the activity to go forward.

Describe below any other activities caused by the proposed action if applicable.

[ADD YOUR TEXT HERE]

Cumulative Effects

Cumulative effects are those effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation (50 CFR 402.02). Additional regulations at 50 CFR 402.17(a) identify factors to consider when determining whether activities are reasonably certain to occur. These factors include but are not limited to: existing plans for the activity; and any remaining economic, administrative, and legal requirements necessary for the activity to go forward.

The Standing Analysis lists the following potential State or private activities that could result in cumulative effects within the Action Area and may need to be considered during project-specific consultation: wind facility development or operation; activities that may impact known hibernacula or hibernating bats; use of pesticides; water quality alteration; road construction that could result in collision risk; bridge maintenance, repair, or replacement; subsurface drilling or blasting for utility line and road installation; purposeful take; or other activities that may affect NLEBs not listed here. You do not need to include the following activities because they are accounted for in the Standing Analysis: forest management, prescribed fire, and habitat removal. Describe below any anticipated cumulative effects within the action area. If none are anticipated, note "none".

[ADD YOUR TEXT HERE]

Incidental Take Statement

Provide the spatial extent (acres) for each activity and time period listed below. If your project will continue past November 30, 2024, only include the spatial extent (acres) that will occur through November 30, 2024.

Activity where Take is Reasonably Certain	Time Period	Areal Extent of Impacts (acres)
Removal of roosting habitat	Active Season	[ADD TEXT HERE]
Removal of roosting habitat	Maternity Season	[ADD TEXT HERE]
Removal of roosting habitat in forested wetlands where NLEBs occur year-round	December 15 - February 15	[ADD TEXT HERE. Note: only estimate the acres of roosting habitat in forested wetlands.]
Permanent removal of roosting habitat. Note: this does not apply to forest management activities.	Inactive Season	[ADD TEXT HERE]
Prescribed fire	Active Season	[ADD TEXT HERE]
Prescribed fire	Pup Season	[ADD TEXT HERE]
Prescribed fire in areas where NLEBs occur year-round	December 15 - February 15	[ADD TEXT HERE]
Military training smoke and obscurants	Active Season	[ADD TEXT HERE]

Provide the number of structures and linear distance that will be affected during the corresponding time period for activities where take is reasonably certain to occur. If known, provide the estimated number of individuals that may be present. Leave it blank if unknown. If your project will continue past November 30, 2024, only include the structures that be affected through November 30, 2024.

Structures	Time Period	Number of Structures	Linear Distance of Structures	Estimated number of individuals present (if known)
Bridges	Active	[ADD TEXT	[ADD TEXT	[ADD TEXT
	Season	HERE]	HERE]	HERE]
Culverts >4ft in	Active	[ADD TEXT	[ADD TEXT	[ADD TEXT
diameter	Season	HERE]	HERE]	HERE]
Roads with collision	Year-Round	[ADD TEXT	[ADD TEXT	[ADD TEXT
potential		HERE]	HERE]	HERE]
Waste Pits or tanks	Active	[ADD TEXT	[ADD TEXT	[ADD TEXT
	Season	HERE]	HERE]	HERE]

The Standing Analysis and Interim Consultation Framework only consider and address the effects of covered actions that are expected to occur from March 2023 until November 30, 2024. In other words, the Standing Analysis and Interim Consultation Framework do not consider any effects (i.e., incidental take) of the covered actions that may occur after November 30, 2024. Therefore, after November 30, 2024, any action agency that was issued an individual BO that relied on this Standing Analysis and Interim Consultation Framework will need to reinitiate consultation if its continuing, discretionary action is expected to affect the NLEB (i.e., cause incidental take). If the action agency fails to reinitiate consultation on or before November 30, 2024, its individual BO will no longer be based on the best available information, which means the action agency's section 7 compliance and incidental take exemptions provided by section 7(o)(2) may lapse. Will any of the stressors that can result in take (see Section V), occur past November 30, 2024? Briefly describe in the text box below.

[ADD YOUR TEXT HERE]

VIII. SUBMISSION OF FORM

By signing this form, the action agency is 1) confirming that it evaluated its project in accordance with the Interim Consultation Framework and that its project activities are within the scope of the Service's 2023 Standing Analysis, 2) confirming that anticipated effects are consistent with the effects analysis in the Standing Analysis, and 3) conveying your determination that your project is Likely to Adversely Affect the NLEB.

The action agency understands that the conclusions contained in any biological opinion rendered by the Service are conditioned on the action agency implementing all activities as described herein. Any departures from the described activities must be reported to the local Ecological Services Field Office.

Signature: _____ Date Submitted: _____

State	Active Season ¹	Inactive Season ²	Maternity Season ³	Pup Season ⁴
Alabama	April 1- November 15	November 16 to March 31	April 1 - July 30	April 15- July 30
Arkansas	March 16- November 14	November 15 to March 15	March 16- July 30	April 15- July 30
Connecticut	April 15- October 31	November 1 to April 14	April 15 - August 15	May 15 - August 15
Delaware	April 1- November 14	November 15 to March 31	April 1 - July 31	May 15 - July 31
District of Columbia	April 1- November 14	November 15- March 31	April 1 - July 31	May 15 - July 31
Georgia	April 1- October 31	November 1- March 31	April 1 - July 30	April 15- July 30
Illinois	April 1- November 15	November 16 - March 31	April 1 - July 31	May 15 - July 31
Indiana	April 1- November 15	November 16 to March 31	April 1 - July 31	May 15 - July 31
Iowa	April 1- November 15	November 16 - March 31	April 1 - July 31	May 15 - July 31
Kansas	March 16- October 31	November 1 - March 15	March 16 - August 10	May 25 - August 10
Kentucky	April 1- November 14	November 15 - March 31	April 1 - July 31	May 15 - July 31
Louisiana	Year round	None	April 15- July 30	April 15- July 30
Maine	April 15- October 31	November 1 - April 14	April 15 - August 15	May 15 - August 15
Maryland	April 1- November 14	November 15- March 31	April 1- July 31	May 15 - July 31
Massachusetts	April 15- October 31	November 1 - April 14	April 15 - August 15	May 15 - August 15
Michigan	April 1- November 14	November 15- March 31	April 1- July 31	May 15 - July 31
Minnesota	April 1- November 14	November 15- March 31	April 1- August 15	May 15 - August 15
Mississippi	Year round	None	April 15- July 30	April 15- July 30
Missouri	April 1- October 31	November 1 - March 31	April 1 - July 31	May 15 - July 31
Montana	May 2- October 14	Oct 15 - May 1	May 2 - August 7	June 10 - August 7
Nebraska	March 16- November 14	November 15 - March 15	March 16 - August 10	May 11- August 10
New Hampshire	April 15- October 31	November 1 - April 14	April 15 - August 15	May 15 - August 15

Table 1. Seasonal dates for each state in the range of the NLEB.

State	Active Season ¹	Inactive Season ²	Maternity Season ³	Pup Season ⁴
New Jersey	April 1- November	November 16 to	April 1 - July 30	May 15- July 30
2	15	March 31	1 2	
New York	April 1- October	November 1 -	April 1- July 30	May 15 - July 30
	31	March 31		
North Carolina	April 1- November	November 15 -	April 1 - July 31	May 15 - July 31
- Outside of	14	March 31		
Coastal Plain				
North Dakota	April 1- November 14	November 15- March 31	April 1-August 15	May 15 -August 15
Ohio	March 16-	November 15 -	March 16 - July 31	May 15 - July 31
	November 14	March 15		
Oklahoma	April 1- November 15	November 16 - March 31	April 1 - August 15	May 15 - August 15
Pennsylvania	April 1- November 14	November 15 to March 31	April 1 - August 15	May 15 - August 15
Rhode Island	April 15- October	November 1 -	April 15 - August	May 15 - August 15
Carath. Carathing	31 Auril 1 Norraultar	April 14	15 A with 1 - Iraha 20	A
South Carolina - Outside of	April 1- November 14	November 15 - March 31	April 1- July 30	April 15- July 30
Coastal Plain	14			
South Dakota	May 16-	Oct 1 - May 15	May 16 - August 31	May 15 -August 31
	September 30		inay io inagabi si	Triag 10 Tragast 51
Tennessee	March 16- October	November 1 -	March 16 - July 31	May 15 - July 31
	31	March 15		
Vermont	April 15- October	November 1 -	April 15 - August	May 15 - August 15
	31	April 14	15	
Virginia -	April 1- November	November 15 -	April 1 - July 31	May 15 - July 31
Outside of	14	March 31		
Coastal Plain				
West Virginia	April 1- November 14	November 15 to March 31	April 1 - August 15	May 15 - August 15
Wisconsin	April 1- November	November 15-	April 1 - August 15	May 15 - August 15
	14	March 31		
Wyoming	May 2- October 14	Oct 15 - May 1	May 2 - August 15	May 15 - August 15
North Carolina - Coastal Plain	Year round	None	April 15 - July 30	April 15 - July 30
South Carolina	Year round	None	April 15 – July 30	April 15 - July 30
- Coastal Plain			1	1
Virginia-	Year round	None	May 1 - June 30	May 1 - June 30
Coastal Plain				

¹ The active season includes the range of time when NLEBs may be present outside of hibernacula and using trees for roosting.

² The inactive season includes the range of time when NLEBs are hibernating. This season does not apply to coastal areas of Virginia, North Carolina, South Carolina, and Louisiana where NLEBs are expected to be active year-round.

³ The maternity season includes the range of time when NLEBs are concentrated in maternity colonies.

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⁴ The pup season includes the range of time when females are close to giving birth (two weeks prior to birth) and have non-volant (i.e., unable to fly) young.