

# Northern Long-Eared Bat Assisted Determination Key

## Selected Definitions

Term	Definition
Effects of the action	<p><i>Effects of the action</i> are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See <a href="#">§ 402.17</a>).</p> <p>50 CFR 402.02 “Effects of the action”</p>
Suitable summer habitat for the northern long-eared bat	<p>Suitable summer habitat for the northern long-eared bat (NLEB) consists of a wide variety of forested/wooded habitats where they roost, forage, and travel. NLEBs prefer intact mixed-type forests that contain only small gaps (for example, forest trails, small roads, or forest-covered creeks) for foraging and commuting (U.S. Fish and Wildlife Service 2015, p. 17992).</p> <p>Forested habitats used by the NLEB may be dense or loose aggregations of trees with variable amounts of canopy closure. NLEBs are nocturnal foragers and catch insects in flight or glean them from surfaces in conjunction with passive acoustic cues (Nagorsen and Brigham 1993, p. 88, Ratcliffe and Dawson 2003, p. 851).</p> <p>To be suitable for the NLEB, forests and woodlots must contain potential roosts –live trees and/or snags ≥3 inches diameter at breast height (dbh) that have exfoliating bark, cracks, crevices, and/or cavities. Linear features such as fencerows, riparian forests, and other wooded corridors are suitable for the species if they contain potential roost trees. Individual trees may be considered suitable habitat when they exhibit characteristics of suitable roost trees and are within 1,000 feet of other forested/wooded habitat.</p> <p>Suitable summer habitat for the NLEB may also include adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields, and pastures. NLEBs stay close to forest and woods – only those non-forested areas within 1000’ feet of forest or woods are presumed suitable for the species.</p> <p><b><i>Note that in portions of the range where bats roost in trees and are active year-round, the description of suitable habitat applies year-round.</i></b></p> <p>The NLEB has also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat when they are within 1000 feet of suitable forested habitat (see above).</p> <p>In Maine, suitable summer habitat for the northern long-eared bat also includes cliffs and talus, where they sometimes roost.</p> <p>Examples of <u>unsuitable</u> habitat for the NLEB include:</p> <ul style="list-style-type: none"> <li>• Individual trees that are greater than 1,000 feet from forested/wooded areas;</li> <li>• Trees found in highly developed urban areas (e.g., street trees, downtown areas) – but note that NLEBs sometimes use relatively extensive forested natural areas within urban areas for summer roosting habitat;</li> <li>• A pure stand of less than 3-inch dbh trees that are not mixed with larger trees.</li> </ul>

## Literature Cited

Nagorsen, D. W., and R. M. Brigham. 1993. Bats of British Columbia. Royal British Columbia Museum, Victoria, and the University of British Columbia Press, Vancouver.

Ratcliffe, J. M., and J. W. Dawson. 2003. Behavioural flexibility: the little brown bat, *Myotis lucifugus*, and the northern long-eared bat, *M. septentrionalis*, both glean and hawk prey. *Animal Behaviour* 66:847–856.

U.S. Fish and Wildlife Service. 2015. Endangered and Threatened Wildlife and Plants; Threatened Species Status for the Northern Long-Eared Bat With 4(d) Rule; Final Rule and Interim Rule. 80:17974–18033.