

NUISANCE WILDLIFE CONTROL GUIDELINES FOR BATS

Prepared by the NJ Division of Fish and Wildlife's Endangered and Nongame Species Program

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**** All of NJ's native nongame wildlife are protected under the NJ Endangered and Nongame Species Conservation Act ("ENSCA"-- N.J.S.A. 23:2A-1-13), making it illegal to "take" (meaning to harass, hunt, capture, kill, or attempt to harass, hunt, capture or kill) endangered and nongame wildlife. The Act protects any species or subspecies of wildlife appearing on the following lists: (1) the list of wildlife determined to be endangered by the commissioner pursuant to N.J.S.A. 23:2A-1-13; (2) the list of nongame species regulated pursuant to N.J.S.A. 23:2A-1-13; and (3) any Federal list of endangered species.**

**** NO LETHAL MEANS SHOULD BE USED FOR ANY BATS.**

**** NO GLUE BOARDS OR FLY PAPER** should be used in any area where bats are likely to encounter these products. Even if found alive, a bat caught on a glue trap will have significant wing damage and be unable to fly.

GUIDELINES FOR DEALING WITH BATS IN DWELLINGS

1. Exclusions from roosts:

- a. Bat exclusions should only be conducted from April 1st to April 30th and August 1st to October 15th.
- b. NO exclusions from roosts should be conducted from May 1st to July 31st, as this is the period when nursery colonies are active. While females will leave the roost at night to forage, their young – who cannot yet fly – remain behind in the roost. Excluding females from their roost during this period will lead to the death of their young. This may result in: (1) an illegal "take" under ENSCA; (2) bats attempting to enter the structure in different locations, and; (3) odor problems in the building if young, pre-volant (pre-flight) bats die in the roost.
- c. A second timing restriction applies from October 16th to March 31st to protect bats that overwinter in buildings. This behavior is especially common among Big Brown Bats (*Eptesicus fuscus*). It is difficult to confirm whether bats are overwintering in a structure, since they are largely inactive, do not produce many droppings, and generally do not roost out in the open during winter. Therefore, most visual surveys are inadequate for ruling out their presence. Acoustic surveys may be performed by a qualified contractor to determine if bats are present; acoustic detectors should be stationed in the roost space for at least 3 consecutive weeks in attempt to record bat vocalizations. Exclusion work may proceed during this restricted period if bats are determined to be absent. Contact the Endangered and Nongame Species Program (MacKenzie Hall, 609-292-1244) to discuss this option.
- d. An exception can be made to these timing restrictions when it is determined by the NJ Dept. of Health (NJDOH) or the county or local health department, in consultation with the NJ Division of Fish and Wildlife (NJDFW), that there is an imminent public health/safety threat. An example of this would be when bats are getting into the living area and there is no way to temporarily block their entry. If such a situation occurs, the contractor should notify the Endangered and Nongame Species Program (MacKenzie Hall, 609-292-1244), who will evaluate the situation and determine if immediate action is warranted. If approved, initial efforts will still include an attempt to block entry to the living area without excluding bats from their roost until after the restricted period.
- e. Bat exclusion work should begin by identifying the primary entry/exit point(s) through visual inspections and emergence surveys. The contractor can then seal all noticeable *secondary* cracks and openings while *leaving the primary entry/exit point(s) open*. Once this work is completed, the contractor should install one-way passage devices* at the primary entry/exit point(s). One-way devices must be left in place for a minimum of one week prior to permanent closure (including at least 3 consecutive nights with temperatures above 50°F, winds below 10 mph, and no sustained rainfall), enabling all bats to safely exit the roost but not re-enter. The devices should be monitored during emergence on the last night before the entry/exit point is sealed, to confirm that all bats have vacated.

One-way devices are not necessary during the October 16th to March 31st period if bats are determined to be absent, per 1.c. above.

*Refer to http://batcon.org/pdfs/education/fof_ug.pdf for details on proper bat-proofing.

- f. Consider installing a bat box. Evicted bat colonies will need to find another place to roost. They may begin searching nearby, in some cases finding their way to a neighboring home. A bat box may accommodate the bats and prevent them from becoming someone else's nuisance. Ideally, the bat box should be installed prior to exclusion so the bats have time to locate and acclimate to it. For bat box information and floor plans, visit www.conservewildlifenj.org/protecting/projects/bat/. FREE bat boxes are available for exclusion projects via the Conserve Wildlife Foundation of New Jersey: www.conservewildlifenj.org/protecting/projects/bat/buildings/
- g. Consider becoming certified "Bat Standards Compliant": http://www.nwcoa.com/bat_standards.html

2. Bats in living area in flight:

- a. Bats in flight are very likely to be healthy bats. If it is determined by the NJDOH, your local health department or the DFW that there has been a potential exposure to Rabies, follow any instructions that they provide regarding collecting the bat and the need for medical treatment. Otherwise, the bat should be released (see 2.b. below). If you have any questions regarding a potential exposure to Rabies from a bat, you are advised to immediately contact the NJDOH or your local (county or municipal) health department (www.state.nj.us/health/lh/directory/lhdselectcounty.shtml) to seek advice. Simply being in a room or house with a flying bat is typically NOT considered a potential exposure to Rabies. However, if the bat was flying in the house when the occupants were sleeping, the NJDOH or local health department may advise that Rabies post-exposure treatment be administered to the occupants.
- b. If releasable, the bat should be confined to one room if possible. The contractor should close all doors to the room and open one or more windows or doors to the outside. Remain quietly in the room to confirm that the bat has flown out of the open window or door. Too much light and noise will only excite and confuse the bat, so if it is dark, leave on only enough lights to see the bat so you can confirm that it has flown out of the house. This usually takes less than 15 minutes. Once the bat has flown out of the house, close the window(s) and/or door(s). If the bat lands instead in a reachable place, wear leather gloves and cover the bat with a container (like a plastic bucket or a box) and slide a lid in place to secure the bat. The bat should be released outdoors, either from an elevated position or at the base of a tree or other climbable feature, since bats have difficulty taking off from the ground.

3. Suspected sick or injured bats (i.e., bats crawling on the ground) and/or multiple bats dead on the ground:

- a. If you suspect there has been a potential human exposure to a bat, immediately contact the NJ Department of Health or your county or local health department (www.state.nj.us/health/lh/directory/lhdselectcounty.shtml) to seek advice. If it is determined that no human exposure to a bat has occurred, then proceed as directed below.
- b. To collect injured or sickly bats (i.e., those crawling on ground): Wearing leather gloves, gently brush the bat into a suitable animal transport container (i.e., a coffee can with air holes punched in the lid). Injured/sick bats may be taken to a licensed bat rehabilitator in NJ. For a list of rehabilitators, see www.state.nj.us/dep/fgw/pdf/rehab_species.pdf.
- c. To collect dead specimens only: Wearing a pair of gloves, turn a plastic bag inside out over your gloved hand. Pick the bat up with the plastic bag and pull the bag around the bat. Soak the bat with enough $\geq 10\%$ bleach solution to dampen its fur, and seal the bag. Place the bagged bat inside another zip-lock bag, seal it, and dispose of it in the trash. This protocol is designed to minimize the risk of fungus transmission into other populations (see 3.d. below).
- d. White-nose Syndrome (WNS; caused by the fungus *Pseudogymnoascus destructans*, which is not a danger to humans) has been confirmed in NJ's bat population and is killing large numbers of cave bats during hibernation. Greater than 90% mortality has been documented at some hibernacula. The characteristic white-nose symptom is not evident outside of the hibernacula, and seriously affected bats usually die before reaching their summer roosts. ENSP is tracking potential WNS incidents and monitoring the surviving bat population statewide. Contact MacKenzie Hall at ENSP (609-292-1244) to report and discuss any suspected incidents. For more information: www.whitenosesyndrome.org

QUICK GUIDE TO NJ BAT EXCLUSION FOR PEST CONTROL CONTRACTORS AND HOMEOWNERS

<p>May 1st – July 31st</p>	<p>Maternity Season:</p> <p>Nursery colonies are active: mother bats and their flightless pups may be present in the roost.</p>	<p>Only LIMITED bat-proofing is permitted</p> <p>Seal or screen all potential points of entry into human living quarters, such as gaps under the attic door, vents, and other spaces in the floors/ceilings and walls (most important step).</p> <p><i>Unused or secondary cracks and openings may be sealed</i> from the outside of the building while still allowing bats to enter & exit through their primary route(s). There could be several potential entry points because bats can fit through a half-inch crack or a hole smaller than a nickel. (Bats do NOT chew or claw new holes.)</p> <p><i>Do NOT seal the primary entry/exit hole(s)</i>, and don't separate the mothers from their pups. Bats must be able to enter and exit the building freely. If females are sealed out from their pups, they will actively search for a new entrance and may end up in the living quarters.</p>
<p>April 1st – April 30th</p> <p>August 1st – October 15th</p>	<p>Safe Dates:</p> <p>Bats may be present in the roost but pups are not yet born.</p> <p>Bats may be present in the roost but all young bats should be flying.</p>	<p>Bat-proofing with the use of one-way doors</p> <p>One-way doors (screening, tubes, etc.) enable the bats to leave the roost on their own but not get back inside. These devices must be <i>left in place for a minimum of one week</i> prior to permanent closure (including at least 3 consecutive nights of weather conducive to bat activity), and monitored to confirm that all bats have vacated before sealing their entry point(s).</p> <p>All other cracks and holes on the outside of the structure should be sealed <i>prior</i> to installing one-way doors, since bats will try to get inside the building through other entry points.</p>
<p>October 16th – March 31st</p>	<p>Hibernation Season:</p> <p>Little brown bats have returned to caves and mines for the winter.</p> <p>Big brown bats or other species may remain in buildings.</p>	<p>CONDITIONAL bat-proofing</p> <p>Limited bat-proofing is permitted, as during the maternity season:</p> <p>Seal or screen all potential points of entry into human living quarters and unused/secondary cracks and openings to the exterior, while still allowing bats to enter and exit through their primary route(s).</p> <p><i>Do NOT seal the primary entry/exit hole(s)</i> unless adequate surveys have been done to confirm that bats are not present in the building. Bats must be able to enter and exit freely.</p> <p><i>If bats are NOT hibernating in the building</i>, all potential openings can be sealed with caulking, foam insulation, wood, or other appropriate materials without the need for one-way exclusion devices.</p>