

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 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 or RARE OR LISTED WILDLIFE.**

** No glue boards or fly paper should be used in any area where bats are likely to encounter these products. The glue permanently thins and creates holes in the wing membrane of bats, making them unable to fly.

GUIDELINES FOR DEALING WITH BATS IN DWELLINGS

1. Exclusions from roosts:

- a. 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.
- b. The only exception that can be made to this timing restriction is 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 (ENSP; Mick Valent, 908-638-4158) who will evaluate the situation and determine if immediate action is warranted. If approved, initial efforts will still include an attempt at blocking entry to the living area without excluding bats from their roost until after the timing restrictions.
- c. A second timing restriction shall be in effect from October 16th to March 31st to protect big brown bats (*Eptesicus fuscus*) that overwinter in buildings. If a bat exclusion project is planned to occur during this time period, it is the responsibility of the contractor to first ensure that no bats are overwintering in the building. To determine if bats are present in the building the contractor may: (1) conduct emergence surveys outside of the building at dusk for at least three consecutive evenings (air temperature must be at least 60 degrees F with no precipitation) prior to bat-proofing; (2) search likely locations in the attic and basement where bats are likely to roost during the winter, and; (3) clean up any droppings from the roost area and return several days later to determine if new droppings are present. If it is determined that bats are present, bat-proofing must be delayed until the period between April 1st and April 30th when bats are active but pups are not yet born.
- d. Bat exclusion work should begin by sealing all noticeable cracks and openings where bats could potentially enter the structure, with the exception of the primary entry/exit holes. Once this is completed the contractor should install one-way passage devices* at the primary entry/exit point(s), which are identified in advance through emergence surveys. One-way devices must be left in place for a minimum of one week prior to permanent closure, enabling all bats to safely exit the roost but not re-enter. The contractor should monitor the devices during emergence on at least 2-3 evenings to confirm that all bats have vacated before sealing. One-way devices are not necessary during the October 15th to March 31st period if bats are confirmed to have vacated, per 1) c. above.

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

- e. Evicted bat colonies will need to find another place to roost. They may begin nearby, in some cases finding their way to a neighbor's home. To accommodate the bats and avoid passing along your bat nuisance problem to a neighbor, a bat box may be installed. Ideally, a 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/.
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 "2b." below). If you have any questions regarding a potential exposure to rabies from a bat you are advised to immediately contact the NJ DOH or the local health department 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 NJ DOH or your local health department may advise that rabies post-exposure treatment be administered to the occupants.
 - b. 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).
 3. Suspected sick or injured bats (i.e., bats crawling around on the ground) and/or multiple bats dead on the ground. If you suspect that there has been a potential human exposure to a bat, immediately contact the NJ Department of Health or your county or local health department to seek advice. If it is determined that no human exposure to a bat has occurred, then proceed as directed below:
 - a. Using a pair of gloves, collect only dead specimens by turning 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 bat and plastic bag in 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. c. below].
 - b. Using leather gloves, collect injured or sickly bats (i.e., those crawling on ground) by gently brushing them into a suitable animal transport container (i.e, coffee can with air holes punched in the lid). These 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. 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 Mick Valent at ENSP (908-638-4158) to report and discuss any suspected incidents and provide a location.

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

<p style="text-align: center;">May 1st – July 31st</p>	<p>Nursery colonies are active: mother bats and their flightless pups may be present in the roost.</p>	<p style="text-align: center;">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 cracks and openings may be sealed</i> from the outside of the building while still allowing bats to enter through their primary route(s). There could be several potential entry points because bats can fit through a half-inch crack or 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 style="text-align: center;">April 1st – April 30th</p> <p style="text-align: center;">August 1st – October 15th</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 style="text-align: center;">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, 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 prior to installing one-way doors, since bats will try to get inside the building using another hole or crack.</p>
<p style="text-align: center;">October 16th – March 31st</p>	<p>Little brown bats have returned to caves and mines for the winter. Big brown bats may remain.</p>	<p style="text-align: center;">Complete bat-proofing</p> <p>Caution should be taken to insure that big brown bats are not hibernating in the building (usually in the attic or basement) before bat-proofing.</p> <p><i>If bats are not hibernating in the building</i>, all potential openings (cracks or holes greater than a half-inch in size) can be sealed with caulking, foam insulation, wood, or other appropriate materials.</p>