

## Wildlife Control/ Nuisance Wildlife Control

07/17/09

\*\* 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 kill, harm, harass, or collect the species or any of their "parts" (e.g., feathers, shed skins).

**\*\* NO LETHAL MEANS SHOULD BE USED FOR ANY NATIVE SNAKES, BATS, RARE OR LISTED WILDLIFE. Please note, that there are species of invertebrates protected under ENSCA. Contractors should review the endangered and threatened species lists when working with invertebrates.**

\*\* No glue boards or fly paper should be used in any area where snakes or bats are likely to encounter the product. The glue permanently thins and creates holes in the wing membrane of bats making them unable to fly. For snakes, upon capture and unassisted release (i.e., pouring mineral spirits or vegetable oil on the snake and/or glue board), snakes will thrash about and can permanently (and critically) cause damage to their spine and jaw, making them unable to move and/or hunt and eat. Additionally, the thrashing attracts predators making them easy targets. While snakes are attached to glue boards, they often extend their tongues in an effort to understand their situation thereby causing their tongues to become attached to the glueboard. This causes permanent damage to the tongue, potentially rendering it useless to scent trail for food and orientation within their territory (e.g., locating their dens, other snakes).

### BATS

- 1) Exclusions from roosts?
  - a. NO exclusions from roosts from May 1 – August 1 as this is the period when nursery colonies are active. While females will leave the roost to forage, their young – who can not yet fly – remain in the roost. Excluding females from returning to the roost will lead to the death of their young.
  - b. Only exception would be for a public health/safety issue such as when bats are getting into the living area. If this is occurring, contractor should notify the Endangered and Nongame Species Program (ENSP; Mick Valent, 908-638-4158) who will then evaluate the situation and determine if steps must be taken. If approved, initial efforts will include blocking entry to the living area but not excluding bats from the roost until after the "safe dates."
- 2) Bats in living area in flight?
  - a. Bats in flight are likely not sick. If there has been no possible rabies exposure then the bat should be released. Occupants should contact the NJ Department of Health or the local health department to seek advise as to whether or not there has been a possible exposure to rabies. Simply being in a room or house with a flying bat is NOT considered an exposure. 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 wide and quietly remain in room to confirm that the bat has located and flown out of the open window. If this occurs at night leave on only enough lights to see the bat so you can confirm that it has flown out of the house. Too much light and noise will only excite and confuse the bat - often resulting in the bat not finding the open window. Once the bat has flown out of the house close the window(s). This often occurs within 15 minutes.
- 3) Suspected sick bats (i.e., bats crawling around on the ground and/or multiple bats dead on the ground)? If there has been a possible exposure to the bat contact the NJ Department of Health or the local health department to seek advise as to whether or not an exposure has occurred. If it is determined that no human exposure to the bat has occurred then proceed as directed below. \*\*White-nose syndrome (WNS; a fungus (*Geomyces destructans*) that is not a danger to humans) has been found in the NJ population and is killing many bats.
  - a. Using gloves, collect only dead specimens by tuning 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(s) with enough 10% bleach solution to dampen the bat's fur and seal the bag. Place the bat and plastic bag in another zip-

lock bag and seal it Using leather gloves, collect live, but sickly bats (i.e., those crawling on ground) into an animal transport container.

- i. All suspected ill, but live bats should be taken to a licensed bat rehabilitator in NJ.
  - ii. All dead bats should be disposed of using the USFWS protocol (designed to minimize the risk of fungal distribution into other populations).
- b. Contact Mick Valent at ENSP (908-638-4158) to report and discuss incident and location. ENSP is tracking potential WNS incidents statewide and sharing information with the USFWS and northeastern regional states.

## SNAKES

\*\* Contractors should know their snakes. First-year black racers, black rats, northern watersnakes are often mistaken for young timber rattlesnakes. Color SHOULD NOT be used to determine snake identification as coloration is highly variable among NJ snakes. Contractors should focus on the pattern which is unique to each species. There are only 2 native venomous snakes in NJ; the timber rattlesnake in northern and southern NJ and the northern copperhead in northern NJ. There are NO water moccasins.

\*\* ALL SNAKES MUST BE RELEASED WITHIN 200 METERS (~ 2 football fields) OF THE CAPTURE LOCATION in suitable habitat. Snakes do not survive relocation and must remain within their suspected territory. All efforts should be made to seal entry to the home (e.g., space between house siding and foundation, bilco doors).

- 1) If a snake is mistakenly trapped on a glue board:
  - a. Venomous snake? DO NOT ATTEMPT TO HANDLE OR REMOVE! Immediately contact ENSP: Southern region – Dave Golden (609) 628-2985, Northern region – Kris Schantz (908) 638-4381. After hours and on weekends, call Trenton Dispatch (1-877-WARN DEP).
  - b. Nonvenomous snake?
    - i. DO NOT pour mineral spirits or vegetable oil on the snake and leave to release itself!
    - ii. Working from the tail forward, use vegetable oil ONLY and pour it on the glue board (avoiding the snakes head). Slowly and gently work your fingers through the glue to release the snake. Once removed of glue board, lightly wipe with towel or napkin to remove excess oil. Release snake within 200m of capture location in suitable forested habitat.
- 2) Snake trapped in landscape fencing?
  - a. Venomous snake? DO NOT ATTEMPT TO HANDLE OR REMOVE! Immediately contact ENSP: Southern region – Dave Golden (609) 628-2985, Northern region – Kris Schantz (908) 638-4381. After hours and on weekends, call Trenton Dispatch (1-877-WARN DEP).
  - b. Nonvenomous snake?
    - i. WORK AS A TEAM (2 people); one person, using thick leather gloves to gently restrain the snake holding one hand gently behind the head to prevent a bite; the other person to carefully cut the snake out of the netting.
    - ii. Release within 200m but away from netting.
- 3) Home entry?
  - a. Venomous snake? Although a rarity for venomous snakes to find their way into homes, it has happened. DO NOT ATTEMPT TO HANDLE OR REMOVE! Immediately contact ENSP: Southern region – Dave Golden (609) 628-2985, Northern region – Kris Schantz (908) 638-4381. After hours and on weekends, call Trenton Dispatch (1-877-WARN DEP).
  - b. Nonvenomous snake? (*NJ ENSP-approved techniques copied from NYSDEC's "Best Practices for Nuisance Wildlife Control Operators..."*)
    - i. Pick them up with a loose grip (to minimize stress), wearing heavy leather gloves. Support the snake's entire body to keep it calm and hold the snake loosely behind the head to prevent it from biting you.
    - ii. NEVER use snake tongs as this stresses the snake causing it to thrash about which can lead to permanent damage to the spine. Use snake hooks (mimicking a loose hand hold) to minimize stress and safely capture the snake. Place snake in a "transport container" for release.

- iii. Snakes in house/basement/landscaped pond?
  - 1) Lure them to a spot where they can be captured. Place piles of damp towels or burlap sacks on the floor, near walls. Cover the pile with a dry burlap bag to keep the pile moist. In a few days, return to the pile during the middle of the day when the snakes are most likely to be there. Carefully, scoop up the pile with a large shovel, put in clean garbage can and carry outside for release. Confirm capture(s) upon release. Repeat technique if necessary.
  - 2) Use a board of plywood to create a “cover board” instead of towels. The board should be ~ 1” off the ground. Place some composting materials (e.g., grass clippings) on top of the board. Dead mice or mouse droppings placed underneath the board may help to attract the snake(s). Check every few days. NYSDEC noted that this technique works well with garter and black rat snakes, but not so well with water snakes.
  - 3) Create a reptile tube trap, based on a technique suggested by HSUS animal capture consultant, Dave Pauli. Inside this trap, the temperature should be just right for the snake—more appealing than the surrounding area. The trap is a piece of thin-walled PVC tubing that's 2–3 ft. long. Drill a few 1/8" air holes along the length of the tube. Cap one end. In cold weather, place a disposable hand warmer, battery-operated electric sock, or heating pad in the far end of the tube, along with some soft cotton rags. If you have fresh rodent droppings, you may want to toss a few in there, too. (In hot weather, substitute an ice pack or cold, wet rag for the heat source.) Then drill a 1" hole into a cap and use it to cover the other end of the tube. Although the snakes can leave the trap, they usually stay inside because it's more comfortable for them. You can install a one-way valve by affixing a 1 1/2" stiff plastic circle over the inside of the cap. The snake can push its way in, but can't leave easily. (This trap also works with other reptiles, such as lizards.)
  - 4) To live trap water snakes, add a brick-sized piece of Styrofoam to a minnow trap (so the trap will float, allowing the snake to surface for air). Bait with about a half-dozen minnows. Attach a rope to the trap for easy retrieval, then float it in near the shoreline.
- 4) Minimize snake activity in and around buildings?
  - a. Remove food sources:
    - i. Grains, pet food, and bird seed will attract mice, insects, and other species, which then attract snakes. Keep these foods in mouse- or insect-proof containers. Exclude insects and mice from your buildings.
    - ii. Reduce the amount of mulch in your garden, around trees and shrubs (again, this will discourage mice and other potential snake food).
  - b. Reduce their shelter:
    - i. Mow closely around the building and keep lawns mowed short (also minimizes rodent activity, their primary food source).
    - ii. Remove debris piles, wood piles, junk, and piles of rocks (where possible). Additionally, “spread the mulch” – mulch is composting material that heats and provides excellent basking habitat for snakes.
    - iii. Don't plant right next to the foundation, because that provides cover for snakes and many pests.
  - c. Prevent them from entering buildings:
    - i. Seal all openings with mortar, expanding foam, cooper mesh (Stuf-Fit®), 1/4" hardware cloth, or sheet metal.
    - ii. Fences may keep them out. Use <1/4" hardware cloth (so you can't trap any young snakes). The fence should be 3 ft. high, buried 1 ft. deep, with the bottom edge bent outward into a "L"-shaped shelf that sticks out at a 90° angle to prevent the snakes from slipping under the fence. It may help to slightly slant the fence so the top is leaning outward rather than a direct vertical, which many large snakes could climb. Fences are more likely to work well around a

small area. Otherwise, high maintenance needs may make this impractical, because some snakes would be able to travel through chipmunk tunnels that pass under a fence.

- iii. Although snakes cannot create holes, they will use holes that were made by rodents and other animals. To prevent the problem from happening again, you may need to identify the maker of the holes and exclude them, too.