WILDLIFE DAMAGE CONTROL 15

Snakes

Snakes can be found in most areas of Pennsylvania. They are among the most feared and misunderstood animals, yet many people fear them without knowing much about them. Contrary to the belief that most snakes are poisonous, only three of the 22 species existing in Pennsylvania are poisonous. Snakes rarely cause actual damage, but they are often considered a nuisance when found in or around buildings.

General Biology

Snakes are cold-blooded, which means their bodies become approximately the same temperature as their environment. To compensate, these reptiles often bask in the sun on cool days and hide in the shade on hot days when their bodies are too warm. A snake that is too cool will be sluggish and not able to digest food properly. When winter approaches, snakes look for areas in which to hibernate.

Most snakes are terrestrial or semiaquatic species. Semiaquatic snakes live on land but enter the water in search of prey. Water snakes hang from vegetation overhanging water. They drop into the water when startled, or when they find prey. Although many snakes can climb trees, the rough green snake is the only snake in the United States that regularly lives in trees. In Pennsylvania, the black rat snake is often found climbing in trees and shrubs in search of bird nests.

Food habitats vary. Water snakes consume large quantities of fish and amphibians. Terrestrial snakes eat rodents, bird eggs, amphibians such as toads or salamanders, and other snakes.

Poisonous Versus Nonpoisonous

A few general characteristics will help to distinguish poisonous from nonpoisonous snakes. The three species of poisonous snakes in Pennsylvania (northern copperhead, timber rattlesnake, eastern massasauga) belong to the pit viper family. Pit vipers have a "pit" or opening between the eye and the nostril. They also have a vertically elliptical eye pupil. Nonpoisonous snakes lack the "pit" and have round eye pupils (see page 2).

The pattern of scales on the underside of the tail can also be used to tell poisonous from nonpoisonous snakes. Poisonous snakes have a single row of scales under their tails, whereas nonpoisonous snakes have divided scales that appear to be in two rows. General color pattern characteristics are difficult to ascertain because of variations within the same species, but any Pennsylvania snake having lengthwise stripes or a uniformly solid color is nonpoisonous.



Damage and Damage Identification

Snakes are not known to cause physical damage to property. Some species prey on young chickens, but this is not common. Most complaints about snakes result from their coming in close proximity with people. Because many people are frightened by the sight of snakes, any they find in the vicinity of their homes or yards can cause them undue alarm.

Snake sheds, discarded outer layers of scales, are commonly referred to as snake skins. People find snake sheds in garages, barns, or rock walls and wonder where the snake is living. Snake sheds simply mean that a snake was in the vicinity at one time. When a snake is ready to shed its skin, it seeks a dark, secure environment because the scales that cover its eyes become cloudy, and its eyesight gets very poor. Once it has shed its skin, it moves on in search of food.

When a snake is found inside a building occupied by people, it is either trying to get out or it is there because it found a good supply of food. Many small snakes, such as garter and ringneck snakes, may occasionally become trapped in a house and need to be removed before they die. Others, such as rat snakes, king snakes, and other rodent-eating species, occupy houses because of a steady supply of food. Removing the food supply and closing the entrances the rodents and snakes have been using usually solves the snake problem.

Legal Status

All snakes in Pennsylvania are protected by Fish and Boat Commission regulations. Species that are not listed as endangered, threatened, or candidate may be captured or possessed under specific daily and possession limits. Consult the Fish and Boat Commission's Summary of Fishing Regulation and Laws for specific information. Endangered or threatened species such as Kirtland's snake, eastern massasauga, and rough green snake cannot be caught, killed, possessed, imported to, or exported from Pennsylvania. The timber rattlesnake is protected under additional regulations and permits regarding seasons and possession limits. Specific questions about current regulations can be directed to any of the Fish and Boat Commission's Regional Law Enforcement Offices or the Herpetology and Endangered Species Coordinator.

Damage Control

You can contact local wildlife pest control operators to remove snakes and other nuisance wildlife. These persons have experience in removing animals, allowing the homeowner to alleviate the problem without coming into contact with the animal. Contact your county extension office or the yellow pages for information regarding these companies and industries.

Exclusion

Snakes enter dwellings through torn screens, open basement windows, or cracks in foundations. Although snakes can climb, they rarely enter buildings from any appreciable height. Sealing cracks and closing windows excludes snakes from homes. If there are openings where wires or pipes enter the building, fill the holes with wire mesh. Fill any cracks in the foundation with mortar.

Snakeproof fences can be built to keep snakes from a small area, but they are expensive to construct. They may be a worthwhile investment for families with young children in areas with venomous snakes. The fence should be made of heavy galvanized hardware cloth, 36 inches wide with a 1/4-inch mesh. The lower edge should be buried 6 inches in the ground, and the fence

should be slanted outward from the bottom to the top at a 30-degree angle. Place supporting stakes inside the fence and make sure any gates are fitted tightly. Gates should be hinged to swing inward because of the slope of the fence. Vegetation near the fence should be kept short because snakes can use it to crawl over the fence.

Habitat Modification

Snakes are attracted to habitats by a food source and cover from predators. Removing the food and cover decreases the likelihood of seeing a snake in the vicinity of your home. Eliminating rodent habitat discourages mice and their predators from living in the area. Removing debris and weeds and keeping the grass mowed around buildings reduces protective cover for snakes and rodents. Stack wood away from buildings and, if possible, stack it at least 12 inches above the ground.

Repellents

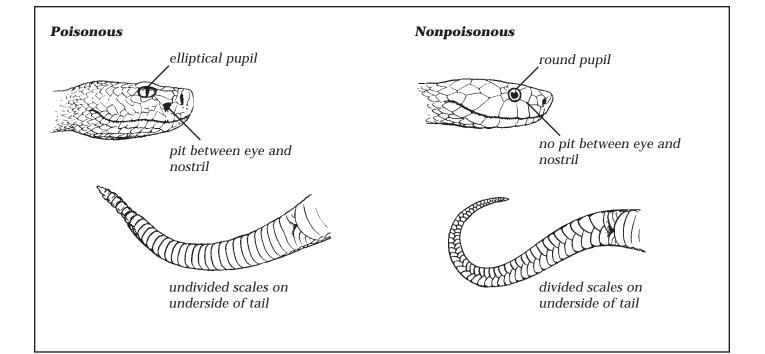
A repellent, Snake-A-Way[®], is registered for use against snakes in Pennsylvania, but test results have not been conclusive as to its effectiveness.

Toxicants

No toxicants are registered for use against snakes.

Fumigants

No fumigants are registered for use against snakes.



Trapping

Although a few traps for snakes are available commercially, they are of questionable effectiveness. One way to "trap" snakes is to place a pile of damp burlap bags on the floor where snakes have been seen. The snakes may be drawn to the secure environment of the bags, and the whole pile can be taken out of the area with a shovel; or the snake can be lifted using long tongs or another device to keep the animal away from your body.

Facts to Remember

• Twenty-two snake species are found in Pennsylvania; only three are venomous.

• Snakes eat rats, mice, insects, and other pest species.

• No toxicants or fumigants are registered for use against snakes.

• The most effective means of eliminating snakes in an area is to make the area less attractive to snakes, that is, to remove hiding places and food sources.

• Identifying the species of snake that was observed will calm fears. Field guides are available in bookstores and libraries.

For Additional Information

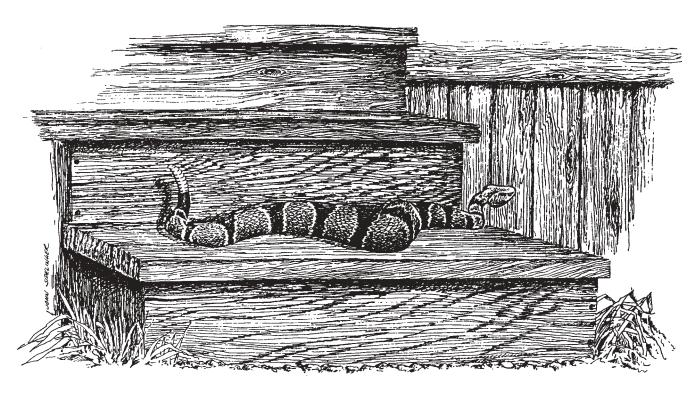
For additional information on snakes, contact the Pennsylvania Fish and Boat Commission (Natural Diversity Section, 450 Robinson Lane, Bellefonte, PA 16823). The commission has produced fact sheets and a poster on snakes. It also sells a book on Pennsylvania amphibians and reptiles (*Pennsylvania Amphibians and Reptiles* by Larry Shaffer. Pennsylvania Fish and Boat Commission, Harrisburg, 1991).

Materials and Suppliers

Listed below is a supplier of control products. Many of these can be purchased in local garden supply stores, feed mills, and department stores. If products are unavailable locally, you can order them from the following company.

Repellents

Dr. T's Snake-A-Way® Dr. T's Nature Products Co., Inc. P. O. Box 682 Pelham, GA 31779 1-800-299-6288 http:www.animalrepellents.com



Timber rattlesnake



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