



## ***SOUTH CAROLINA FAMILY AND COMMUNITY LEADERS***

Affiliated with National Volunteer Outreach Network, Country Women's Council, U.S.A., Associated Country Women of the World and in partnership with Clemson University Cooperative Extension Service  
SCFCL website: <http://www.scfcl.com>

### **Leader Training Guide**

#### **Tips for Controlling Nuisance Wildlife**

##### **Objectives:**

Most wildlife species have the potential of becoming pests. Whether or not a species becomes a pest can be directly correlated to the degree at which that animal can be tolerated. For many people, squirrels feeding in their yards or gardens is not a problem; while at the same time, a neighbor may feel the squirrels are a complete nuisance. Some of the common wildlife pests in South Carolina include armadillos, chipmunks, groundhogs, moles, raccoons, skunks, squirrels, and voles. This lesson will give basic control methods for each of these common wildlife pests in South Carolina.

##### **Lesson Overview/Introduction:**

Wildlife damage management, regardless of the problem species, has four basic components: 1) problem definition (identification and assessment of damage), 2) an understanding of the behavior and ecology of the problem wildlife species, 3) selection and application of control techniques, and 4) evaluation of control efforts. Problem definition refers to determining the species and numbers of animals causing the problem, the amount of loss or nature of the conflict, and other biological and social factors related to the problem. Proper identification of the pest species is important, since it determines which control strategy will be used.

##### **Lesson:**

Before attempting any control method it is vital to check federal and state regulations, as well as local ordinances, that govern the use of various control methods. The SC Department of Natural Resources (DNR) does not allow the trapping and relocation of trapped animals to another location because of animal and human disease considerations, such as rabies. However, if the landowner has a large piece of property, the animal can be released further away from the home on the landowner's own property. If this is not an option, then the trapped animal must be killed by shooting or drowning, and then buried or bagged and disposed of in the garbage. Town and city ordinances must be checked before discharging a firearm within the town/city limits. Shooting or trapping certain nuisance species out of season may require a special permit from SC DNR.

##### **Habitat Modification**

Modifying an animal's habitat often provides lasting and cost-effective relief from damage caused by nuisance wildlife. Habitat modification is effective because it limits access to one or more of the requirements for life – food, water, or shelter. Eliminating or reducing access to food and water along with cleaning up debris piles used for shelter will help control nuisance wildlife problems.

## **Habitat Modification with Grub Control**

Managing the beetle larvae (grubs) in the lawn, which may be fed upon by armadillos, moles, raccoons, and skunks, is an effective method of habitat modification. There are many brands of grub killers sold in a granular form that can be spread over the lawn and watered in. The most efficient time to treat is during early July when the grubs are small and close to the surface. Grub treatments that contain contact insecticides will last about 2 weeks. Grub treatments specifically containing the insecticide imidacloprid may be applied to the lawn during May. These imidacloprid products are systemic within the turfgrass and will last the entire season. The grubs are controlled as they feed on the grass roots. Follow label directions for rate applications, safety, and instructions for watering in all granular products.

## **Cages and Glue Boards**

There are many brands and sizes of wire cage traps, such as those by Havahart Traps, Comstock Custom Cages, Tomahawk Live Traps, Catch & Release Live Animal Traps, Kage-All Live Cages, JT Eaton Live Animal Cage Traps, and Petrum Humane Animal Trap Cages. Glue boards and traps can be either a lethal or non-lethal method of control. Glue boards can be used to trap small mammals. Applying vegetable oil to the caught animal will dissolve the glue allowing for the release of the animal.

## **Armadillos**

Armadillos eat mostly insects, earthworms, and spiders. They are active from sunset to early morning hours and will root in lawns, vegetable gardens, and flower beds. Holes are typically 1 to 3 inches deep and 3 to 5 inches wide, but the disturbed area can be as wide as 3 feet. Their burrow is up to 15 feet long and has an entrance that is 7 to 8 inches in diameter. Recently, armadillos have been sited as far north in South Carolina as Anderson and York counties.

Wire cage traps can be used to capture armadillos, but baits are not typically used. Instead, the best locations to set traps are along pathways to armadillo burrows and along fences, buildings, or the side of the house where the animals have traveled. "Wings" can be made using 1 x 6 inch boards to funnel the animals into the traps (i.e., in a V-shaped arrangement). Sweeney's Mole & Gopher Repellent (containing castor oil) also lists on the label that it repels armadillos. Avoid touching armadillos because in the Southern states they may be carriers of Hansen's disease (leprosy).

## **Chipmunks**

Entrances to Eastern chipmunk tunnels are usually found in less conspicuous places such as near stumps, buildings, brush piles, or log piles. They are about 2 inches in diameter and typically have no loose or piled soil near the opening.

Chipmunks can be caught in rat snap traps or small live animal cage traps baited with peanut butter.

## **Ground Hogs**

Ground hogs have been known to visit vegetable gardens and help themselves to broccoli, carrot tops, and beans. They are active during daylight hours. Their burrow entrance is usually 10 to 12 inches in diameter and is distinguished by a large mound of excavated dirt.

Groundhogs can be caught using larger wire cage traps. Use pieces of cantaloupe, sweet corn, or lettuce to entice groundhogs into the trap.

## **Moles**

As moles create deep tunnels, or encounter roots, rocks or hard to compress clay soils in shallow tunnels, they push the excess soil out of the tunnel and to the surface. These so-called mole hills can be from 2 inches to 24 inches tall and are volcano shaped. Over time, they may flatten and become a bare area. Moles are meat eaters or carnivores (remember: "M"ole=meat eater) primarily feed on beetle larvae (grubs) and earthworms.

Mole may be controlled within their tunnels with poison worm baits that are inserted into actively traveled tunnels. These baits contain bromethalin, which will work within 24 hours after being eaten to kill the moles. Examples of brands are Motomco Tom Cat Mole Killer, Talpirid, Victor Moleworms Kill Moles, and Sweeney's Kill Moles Poison Moleworms. Follow the label directions for use, including the determination of which tunnels are actively used by the moles. Use with caution as the poison worm baits are poisonous to children and pets.

## **Raccoons and Skunks**

Damage from raccoons and skunks occurs at night. They dig holes in lawns and gardens, looking for grubs and other insects. The holes are typically cone-shaped and 3 to 4 inches wide, but the area disturbed may be as wide as 10 inches. Both have been known to peel back newly laid sod.

Traps may be baited with watermelon, sweet corn, honeybuns, bacon, wet cat food, fish, or any cooked fatty meat for raccoons. Skunks can be baited with sardines, canned cat food, bacon, or bread with peanut butter into wire cage traps. Some trap brands are available with solid sides to prevent the person from being sprayed through the cage during removal. However, it may be advisable to hire a professional to remove animals, such as raccoons and skunks which are capable of transmitting rabies.

## **Squirrels**

Eastern grey squirrels will bury and dig up nuts in the lawn and in mulched beds. Shallow holes are typically 2 inches in diameter and there is no mound of soil around them. The first step in squirrel habitat modification is to purchase squirrel resistant bird feeders with protective domes as this will reduce access to a food source.

Squirrels can be baited into wire cage traps with sunflower seeds or peanut butter. They may be repelled by the use of sprays containing capsaicin, such as: Scoot Squirrel Repellent, Bonide Go Away! Deer & Rabbit Repellent, Hot Pepper Wax Animal Repellent, Squirrel Away, or Havahart Critter Ridder.

## **Voles**

Voles are small rodents, also called meadow mice or field mice. They do not hibernate, so they may be seen any time of the year. They construct surface runways as well as underground tunnels. They are vegetarians (remember: “V”ole = vegetarian) and eat a variety of plant material, especially hostas, roses, nandinas, and hibiscus. Tunnel entrances are 1 to 1½ inches in diameter and no mound of soil is present.

Voles can be caught using apple slices as bait in the wire cage live traps or in rat snap traps placed near their holes. Poison peanuts may also be put in the holes, but used with caution in the presence of children and pets.

### **Lesson Summary:**

After properly identifying the wildlife pest, proper control methods appropriate to the animal species involved may be used. Habitat modification should be the first step of control as it limits the animal’s access to food, water, or shelter before resorting to more severe tactics. It is important to know the laws governing wildlife nuisance removal before attempting removal practices, and the ecological impact of using poisons and how they may affect other non-targeted species.

### **Suggested Activities:**

Identification of animal species that are commonly classified as wildlife pests in South Carolina

Identification of the types of holes and dens that nuisance animals make along with their dietary preferences.

Identification of various means of control to use for specific nuisance animals along with proper knowledge of how to implement them.

How to properly bait, according to the target species, and set up a live trap.

### **Suggested Materials:**

Fact Sheet 37 Forestry and Natural Resources, Greg Yarrow, Professor of Wildlife Ecology, Extension Wildlife Specialist

[http://www.clemson.edu/extension/natural\\_resources/wildlife/publications/pdfs/fs37\\_wildlife\\_damage\\_management.pdf](http://www.clemson.edu/extension/natural_resources/wildlife/publications/pdfs/fs37_wildlife_damage_management.pdf)

HGIC 2362 Wildlife Control <http://www.clemson.edu/extension/hgic/pests/pdf/hgic2362.pdf>

HGIC 2364 Holes in the Lawn <http://www.clemson.edu/extension/hgic/pests/pdf/hgic2364.pdf>

South Carolina Department of Natural Resources <http://www.dnr.sc.gov/wildlife.html>  
<http://www.dnr.sc.gov/wildlife/nuisance.html>

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**Sources/References:**

Fact Sheet 37 Forestry and Natural Resources, Greg Yarrow, Professor of Wildlife Ecology,  
Extension Wildlife Specialist

[http://www.clemson.edu/extension/natural\\_resources/wildlife/publications/pdfs/fs37\\_wildlife\\_damage\\_management.pdf](http://www.clemson.edu/extension/natural_resources/wildlife/publications/pdfs/fs37_wildlife_damage_management.pdf)

South Carolina Department of Natural Resources

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