Non chemical control of deer

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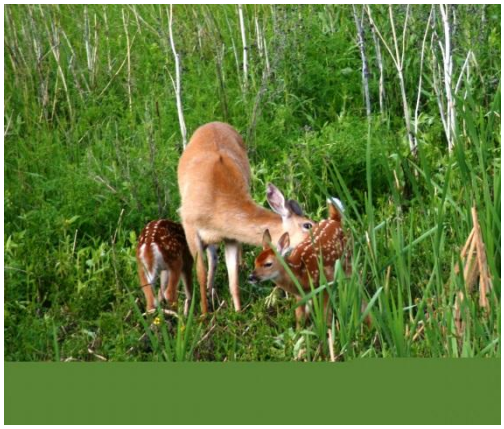

Deer are probably the most widely distributed and best recognized large animal in North America. Deer habitat includes wildlands, agricultural areas and residential areas. Deer favor early vegetation stages that keep brush and sapling browse within reach. Dense cover is used for shelter and protection. Because deer are so adaptable, residential areas sometimes provide suitable habitat and deer can pose challenges to homeowners.

Damage identification is not difficult. Because both mule deer and white-tailed deer lack upper incisors, deer often leave a jagged or torn surface on twigs or stems that they browse.

Homeowners can be frustrated in keeping these pests away from their trees or garden plants. Scare devices, exclusion and repellents have a place in deer damage control. Initial selection of plantings may provide the best remedy to prevent deer damage to ornamentals

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Habitat Modification

Choose plants that are less favorable to browsing deer. While no plant is deer-proof if a deer gets hungry enough, it is clear deer prefer some plants over others. Harvest garden crops as early as possible to reduce the period of vulnerability to deer. Planting susceptible crops as far as possible from wooded cover will also reduce deer damage.

Exclusion

Protect young trees from browse and scrape damage by wrapping them with Vexar®, Tubex®, plastic tree wrap or woven-wire cylinders. Usually a four foot high woven wire

cylinder will keep deer from rubbing tree trunks with their antlers.

Permanent Woven-Wire Fencing

Woven-wire fences are best for year-round protection of areas subject to deer pressures. Initial cost is high but they last a long time and they are easy to maintain. Cost, excluding labor, is about $2 to $4 per linear foot.

Research at Montana State University has shown a six foot high fence is sufficient to keep deer out of a garden.

Modify existing fences that are 48 inches high by extending them to 6 feet. Height of fence posts can be extended by welding rebar to steel fence posts or by drilling 3/8 inch holes for rebar in the top of wooden posts. (http://store.msuextension.org/Products/Modifying-Fences-to-Protect-High-Value-Pastures-from-Deer-and-Elk__MT201401AG.aspx)

Electric Fencing

Electric fences are effective at protecting gardens and orchards from moderate to high deer pressures. Because of the prescribed wire spacing, deer either attempt to go through the fence and are effectively shocked or they are physically impeded by the barrier. A wide variety of fence materials, wire spacings and specific designs are available. Costs, excluding labor, range from $0.75 to $1.50 per linear foot.

To build an 8-wire electric deer fence (see Figure 1 below), follow the steps below.

1. Install rigid corner assemblies where necessary.
2. String a 12-gauge high-tensile wire around the corner assemblies and apply light tension.
3. Set 8-foot line posts along the wire at 33-foot intervals.
4. Attach a wire to insulators at 8 inches above ground level and apply tension.
5. Attach the remaining wires to insulators at the spacing indicated in Figure 1 and apply tension.
6. Connect the second, fourth, sixth and eighth wires from the top to the positive

(+) post of a well-grounded, low-impedance fence charger providing at least 2000 volts.
7. Connect the top, third, fifth and seventh wires directly to ground. The top wire should be negative for lightning protection.
8. Clear and maintain a 6- to 12-foot open area outside the fence so deer can see the fence.
9. Apply a molasses-peanut butter mixture to the hot wires using a mop glove. This will encourage deer to touch the fence with their noses or tongues.

Maintenance includes weekly fence inspection and voltage checks.

Repellents and Frightening Devices

Some types of deer repellent are organic. Contact repellents are applied directly to plants, causing them to taste bad. Area repellents are placed in a problem area and repel by their foul odor. Repellents are generally more effective on less preferred plants.

Apply repellents on a dry day with temperatures above freezing. Treat young trees completely. Older trees may be treated only on their new growth. Treat to a height 6 feet above the maximum expected snow depth. Deer browse from the top down. Hang or apply repellents at the bud or new growth level of the plants you wish to protect.

A spray of 20 percent whole eggs and 80 percent water is one of the most effective repellents. To prevent the sprayer from clogging, remove the chalaza or white membrane attached to the yolk before mixing the eggs. The egg mixture is weather resistant but must be reapplied in about 30 days.

Home-remedy repellents are questionable at best. These include small, fine-mesh

bags of human hair and bar soap hung from branches of trees. Deer have been reported to eat the soap bars. Materials that work in one area or for one person may not work at all in an area more highly frequented by deer.

Tying a dog near garden areas will often repel deer.

Ultrasonic devices have not proven to be effective deer repellents in research trials.

Motion activated scare devices work well to keep deer out of an area. Most spray water from a connected hose or a water reservoir. They are solar or battery powered. Several manufacturers such as Havahart® and Guardener® have models that work well.

Other Methods

Regulated hunting should be considered as a method of deer population control in areas where it is legal. Landowners should be intricately involved in harvest decisions such as hunter numbers, hunting locations, safety rules, and sex and age of harvested animals. *Remember: harvest of a buck removes one deer from the population; harvest of a doe removes that animal, her future offspring and her offspring's offspring.*

Acknowledgments

Much of the information presented here was adapted from S.E. Hygnstrom (1994) in Prevention and Control of Wildlife Damage, University of Nebraska, Lincoln, NE. Ideas from Colorado State University Extension were also included.

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