

Deer

Prepared by the National Wildlife Control Training Program. <http://WildlifeControlTraining.com>
Researched based, certified wildlife control training programs to solve human – wildlife conflicts.
Your source for training, animal handling and control methods, and wildlife species information



Figure 1. White-tailed doe (*Odocoileus virginianus*).
Photo by Greg Clements.

Species Overview

Conflicts

Despite their economic and aesthetic values, white-tailed deer (*Odocoileus virginianus*) can conflict with a variety of human interests. Deer cause damage to garden vegetables, fruit trees, flowerbeds, and ornamentals. They feed on agricultural crops, and when overabundant, can negatively impact native plant communities. Deer threaten human health and safety by their involvement in deer-vehicle collisions and transmission of diseases, such as Lyme disease.

Legal Status

In South Carolina, deer are protected year-round, with the exception of legal harvest during appropriate hunting seasons. Regulations are set by the South Carolina

Department of Natural Resources and vary by game zone. Specific rules and regulations can be found online. <http://dnr.sc.gov>

Where severe or persistent damage occurs, depredation permits may be issued to shoot deer at times other than legal hunting seasons.

Request a permit from any South Carolina Department of Natural Resources (SCDNR) Wildlife Management or Law Enforcement office at no cost to the applicant. These permits are valid for 30 days, and are renewable if additional time is needed to alleviate the problem.

The popularity of deer as game animals and the need to curb poaching have led to the development of severe penalties for illegal possession. As a general rule, lethal control of deer cannot be initiated before consulting the SCDNR, which also may provide technical assistance.

For further information: <http://dnr.sc.gov>.

Identification

Deer are even-toed ungulates in the Cervidae family. White-tailed deer (Figure 1) are found throughout much of North America. The volume of literature on the ecology and management of deer exceeds that for any other species of wildlife. *Biology and Management of White-tailed Deer* by Hewitt (2011) is an excellent reference.

Physical Description

At birth, fawns are rust-colored with white spots. The spotted coats are shed in 3 to 4 months and are replaced by a grayish-brown

winter coat. The summer coat of an adult deer is reddish-brown. The area under the tail, belly, chin, and throat always are white.

Antlers grow on males (bucks) from April to August. Development of antlers is nourished by a layer of soft, vascularized “velvet.” The dried velvet is rubbed off and the antlers polished during the fall breeding season (rut). Size of antlers depends on nutrition, age, and genetics. The antler tines of male white-tailed deer grow from a central beam. The antlers are deciduous and shed in mid- to late winter.

In South Carolina, a mature buck may weigh 100 to 200 pounds. Does typically weigh 25% to 40% less than bucks.

Species Range

White-tailed deer are found in almost every state in the US, except Alaska and Hawaii and are found throughout most of South Carolina.

Health and Safety Concerns

Deer-vehicle strikes are the biggest threat to human safety that is posed by deer. In addition to the economic loss in damaged vehicles, 100 to 200 people in the US die each year, along with thousands who are injured by hitting or avoiding deer (Figure 2). About 65% of the deer-vehicle collisions that occur annually happen during the breeding season in October through December. To reduce the chance and impact of a deer-vehicle collision, drive cautiously, follow the speed limit, wear a seatbelt, observe deer-crossing signs, and be extra vigilant during the fall breeding season and spring dispersal period. When you see one deer, anticipate that more deer may be present.



Figure 2. Deer-vehicle strikes constitute a significant threat to human safety. Photo by unknown.

Deer are susceptible to several diseases, but only a few are of concern to humans. Deer assist in the movement and development of ticks that carry Lyme disease, ehrlichiosis, and babesiosis. Deer can be reservoirs for bovine tuberculosis, which threatens the health of livestock and humans. On rare occasions, deer have attacked people.

General Biology, Reproduction, and Behavior

Reproduction

White-tailed deer breed from October to January, depending on latitude. Peak activity for breeding is in November. Does are in heat for 24 hours every 28 days for 2 or 3 consecutive cycles. One buck may inseminate several does, and no pair bonding takes place. Most does breed during their second fall, although in good habitat, up to 30% of doe fawns (6 months old) will breed. Gestation is about 202 days. Fawns usually are born in May or June. Most reproducing fawns give birth to a single fawn, but adult does typically bear twins.

Bedding Cover (Loafing Areas)

Bedding areas vary, depending on time of year and location. Beds may be found in woodland, grassland, and agricultural fields.

Behavior

Deer have a home range of several hundred acres that varies with season, sex, and habitat quality. Deer are crepuscular, which means they are most active at dawn and dusk. Life expectancy depends on factors such as hunting and nutrition. Deer can live for up to 20 years, although 10 years is above average in the wild.

Habitat

Ideal habitat for deer is the forest edge rather than dense, old-growth forest. They thrive in agricultural areas interspersed with woodlots and riparian habitat. Deer favor early successional habitats where brush and saplings are within reach (typically 6 feet tall or less). Populations of deer flourish in many urban areas.

Food Habits

Deer browse on leaves, stems, and buds of woody plants all year long. Forbs are eaten in spring and summer when available. Fruits and nuts, especially acorns, are seasonally important. Agricultural crops such as corn, soybeans, grains, alfalfa, vegetables, and fruit trees are eaten readily.

Voice, Sounds, Tracks, and Signs

Deer may emit a warning snort when alarmed and bleat when in distress.

Damage Identification

Damage to Landscapes

Deer damage a wide variety of ornamentals. Trees may be permanently disfigured by browsing or rubbing. High densities of deer may severely impact native plant communities and impair regeneration of several tree species and

wildflowers. Deer are changing future forest composition in the Eastern US.

Damage to Crops and Livestock

Deer may cause damage to a wide variety of row and forage crops, vegetables, fruit trees, nursery stock, ornamentals, and stacked hay. In addition to the immediate loss of the crop, feeding by deer can affect future yields of perennial plants such as alfalfa and fruit trees. Ornamental trees and nursery stock may be permanently disfigured by browsing.

Deer may compete with livestock for forages, both in the field and in storage. Deer are involved in the maintenance of diseases such as epizootic hemorrhagic disease and bluetongue in cattle.

Damage to Structures

In general, deer do not damage structures. They occasionally run through and break fences and plate-glass windows.

Damage Prevention and Control Methods

Habitat Modification

Harvest crops as early as possible to reduce damage by deer. Use deer-resistant ornamental plants in home landscapes. In a few cases, lure crops have diverted the interest of deer away from valued resources.

Exclusion

Protect individual trees with woven-wire or plastic cylinders at least 6 feet high. High-tensile, woven-wire fences provide premium protection for orchards, nurseries, truck farms, backyards, and other valuable resources. High-tensile, multi-strand electric fences are a lower-cost option for row crops, forages, livestock, and other farm facilities. Deer may learn how to penetrate electric fences, however, and fences are less effective on large fields (10 or more acres). Single-strand, baited polytape electric

fences are the lowest cost option for protecting gardens, small farm fields (less than 5 acres), and other areas from deer damage during the growing season.

Frightening Devices

In general, frightening devices are only minimally effective in protecting valued resources from white-tailed deer. Deer acclimate quickly to noises and new features in the environment, especially if they are motivated by hunger. Thus, gas exploders, strobe lights, sirens, and scarecrows do not provide reliable protection. The most effective frightening devices have been pyrotechnics, guard dogs, and deer-activated bioacoustic devices.

Repellents

Several repellents are registered for use to prevent deer damage to plants, including putrescent whole egg solids, ammonium soaps, thiram, capsaicin, garlic, and blood meal. Several home remedies, such as human hair and soap, are reported to be effective, but research does not support these claims. In general, the effectiveness of repellents is highly variable and dependent on alternative resources, deer densities, habituation, and motivation of individual deer. Repellents often must be reapplied after rain and to new growth.

Fertility Control

Reproduction in white-tailed deer can be altered by immunocontraceptive agents and surgical sterilization. Application of these procedures is limited due to expense, practicality, and regulatory issues. State permits are required to treat deer, and then only by trained professionals. Fertility control does little to reduce densities of overabundant deer without other herd reduction efforts.

Toxicants

None registered for control of deer.

Shooting

Shooting through regulated sport and managed hunting during the fall and winter can help maintain or reduce densities of deer.

Depredation or nuisance permits may be available during non-hunting seasons to reduce local densities and remove offending animals. Contact your nearest SCDNR field office for technical assistance and depredation permits.

Sharpshooting is a specialized form of population reduction, typically conducted by trained teams in urban and suburban areas where deer are overabundant. The effectiveness of shooting as a control method is dependent on access and vulnerability of deer, skill of the shooters, cost, and public acceptance. Depredation permits may allow shooting of deer at night and the use of bait to attract animals to specific safe shooting sites.

Trapping

Several techniques are available for capturing deer (e.g., cage traps, drop nets, cannon nets, net guns, and dart guns). All methods require authorization by the state wildlife agency. Each method requires high levels of expertise and all are expensive to apply.

Disposition

Relocation

Live capture and relocation of deer is not permitted..

Translocation

Translocation of deer is not permitted.

Euthanasia

The most convenient method of euthanasia is shooting. For more information see the National Wildlife Control Training Program.

Web Resources

<http://intranet.dnr.sc.gov>

<http://wildlifecontroltraining.com>

<http://icwdm.org/>

<http://wildlifecontrol.info>

**Prepared by the National Wildlife Control
Training Program. WildlifeControlTraining.com**

Certified wildlife control training programs to solve human – wildlife conflicts. The only research-based source for training, animal handling and control methods, and wildlife species information.