

Life History of the White-tailed Deer

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The white-tailed deer belongs to the family Cervidae, which includes elk, mule deer, moose, and caribou. It is the number one game animal in the south. Populations near extinction in the early 1900's have rebounded due to restocking efforts of state wildlife agencies, loss of large predators (cougars and wolves), and creation of diverse habitats.

DESCRIPTION: The coloration of deer varies seasonally, tan or reddish brown in summer and gray-brown in the winter. The throat, belly, inside of ears and underside of the tail are white. A white band is also visible around the eyes and nose. Males (bucks) have forward antlers with the opportunity for several unbranched tines. The antlers are shed each year, generally between February and March, and new antler growth starts immediately. Females (does) generally do not have antlers. The average weight of an adult buck is 160 to 190 pounds. Adult does generally weigh about two-thirds as much as bucks.



REPRODUCTION: White-tailed deer are polygamous breeders; a dominant buck may breed with several does in one breeding season. The breeding season occurs during the winter months (November-February). Gestation ranges from 190-210 days, with the fawning period from May- September.

HABITAT: It is a highly adaptive species. Habitat requirements include cover, food, water, and space. It prefers a fragmented habitat that contains woodland, brushland, and open areas. The home range size of adult does averages 300 to 600 acres; whereas, the home range size of adult bucks is 2 – 4 times larger. Home range size varies with distribution and quality of habitat, deer density and other factors.

DIET: Diet varies seasonally. During spring and summer, the diet may consist of grasses, legumes, weeds, fruits, certain agricultural crops and tender growth from trees, shrubs, and vines. In the fall and winter their diet shifts to acorns, grasses, and evergreen stems and leaves (greenbriar, blueberry, etc.). Deer seem to be able to sense more nutritious foods and will readily consume those foods before foraging on less nutritious foods. Soil fertility plays a big part in the nutritional level of the diet.

DISEASES: Many viruses, bacteria, protozoan, or internal/external parasites diseases and parasites affect white-tailed deer. Epizootic hemorrhagic disease (EHD or “blue tongue”), warts, anthrax, nasal bots, and parasitic protozoans, worms, and arthropods (ticks, deer keds, and lice) are all diseases and parasites that affect deer populations. Chronic wasting disease (CWD) has recently become the big scare among deer diseases. There have been no cases of CWD in Alabama or any southeastern state.

MANAGEMENT: White-tailed deer populations will benefit from timber harvests, prescribed burning, food plots and active herd management.

Harvesting trees opens the canopy of the forest so herbaceous plants are stimulated to grow. Pine stands thinned to a basal area of 50-70 square feet per acre are excellent for deer. In mixed pine-hardwood stands 20 square feet of the basal area should be mature mast producing trees, including an

even mix of red oak and white oak species. Retain soft mast producing trees (dogwood, persimmon, blueberries, etc.) where possible. Limit clearcuts to 5-10 acres and distribute them throughout the area.

Prescribed fire should be used in pine dominated stands to improve habitat for deer. Prescribe burns can be implemented on a 3-5 year rotation in thinned pine stands and to some extent in mixed pine-hardwood stands to improve habitat quality. Fire stimulates a herbaceous plant community that is more nutritious and palatable for deer. Prescribed burning is generally not recommended in hardwood stands because of the risk of damage caused by fire to the trees. Burning should only be done by trained professionals who are knowledgeable and experienced in dealing with fire.

Food plots are an important part of a comprehensive habitat management program for white-tailed deer. Food plots provide a nutritious food source for deer when other food sources are nutritiously low. Supplemental plantings should be used to target the nutritional stress periods of late summer and winter. This can be accomplished by planting both warm and cool season plantings. Soil samples should be taken to determine lime and fertilizer requirements. Food plots are to be viewed only as a supplement to natural food sources.

HERD MANAGEMENT: Deer harvest maintains populations below the habitat carrying capacity. Without sufficient harvest of the deer herd, the population can exceed its carrying capacity and cause considerable damage to the habitat and to the herd itself. Approximately 1/3 of the population should be harvested each year to maintain a healthy herd. Contact the Department of Conservation and Natural Resources, Division of Wildlife and Freshwater Fisheries for guidance.

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