Deer and Agriculture
In West Virginia

Deer Behavior

LIFE HISTORY
The majority of deer in West Virginia breed from mid-November to mid-December. The gestation period is about 200 days, with about 80% of all births occurring in June. Two year old does will usually have a single fawn but older does most often have twins. Fawns are covered with white spots for the first three months and react to danger by lying still on the ground, depending on the color pattern for protective camouflage. Fawns are also odorless during the first month, providing further protection.

Although deer may live to be 10 or 12 years of age the average age is much lower. Adult bucks will average 110-120 pounds at maturity and adult does will average 80-140 pounds.

FOOD AND FEEDING HABITS
Deer are “selective browsers” and “grazers.” Deer have no upper incisor teeth and jerk or tear off leaves, stalks or twigs. These jagged edges can be used to identify plants that have been browsed by deer. Plants eaten by rabbits, woodchucks and other animals will have clean cuts.

Deer prefer to move slowly through the forest selectively eating a leaf or twig from different plants or shrubs. Deer prefer various species of plants over others. Deer also may heavily browse one plant while ignoring another of the same species which may be a few feet away.

Deer find the following plants to be preferred food plants in West Virginia’s woods.

TREES
Apple
Ash
Aspen
Basswood
Beech
Birch, yellow
Black cherry
Black gum
Black locust
Crab apple
Cucumber tree
Dogwood
Elm
Hemlock
Hickory
Hop-hornbeam
Juneberry (Serviceberry)
Maple, red
Maple, striped
Maple, sugar
Oak, chestnut
Oak, red
Oak, white
Persimmon
Pine, white
Pine, pitch
Poplar, yellow
Sassafras
Sourwood
Sumac
Willow

SHRUBS AND VINES
Azalea (Honeysuckle)
Blackberry
Blueberry
Buffalo-nut
Coralberry
Dewberry
Elderberry
Grape
Greenbrier
Hawthorn
Hazelnut
Honeysuckle (Lonicera)
Hydrangea
Mountain laurel
Raspberry
Rhododendron
Rose
Spicebush
Teaberry
Viburnum
Virginia creeper
Witch-hazel

HERBACEOUS PLANTS
Ferns
Grasses
Sedges
Stinging nettle

West Virginia University
Extension Service

August 1985
Printing cost 10¢
From these plants deer eat leaves, twigs and fruits. Fruits such as acorns, cherries, blackberries, crabapple, apple, hawthorn and grapes are especially preferred. Additionally deer eat numerous mushrooms and fungi that grow in our forests.

Deer are frequently seen in fields grazing grasses and clovers in early spring and late summer when food is most scarce in the forest of West Virginia. Deer will quickly return to the forests as spring wildflowers begin to grow in early spring or as fruits, beechnuts and acorns ripen in late summer. Deer are also attracted to other crops grown by farmers and gardeners. Fertilization seem to make many of these crops especially desirable. Peas, melons, and corn are frequent targets of deer feeding in gardens. Winter grains and forages such as oats, vetch, rye, clovers and alfalfa are readily eaten by deer. Corn may also be damaged. Similarly, fertilized nursery stock such as apples, pears, cherry and pines will be readily eaten when transplanted to field or forest.

Deer are creatures of habit and often will not return to eating an abundant supply of leaves and twigs in the forest once more nutritious plants such as alfalfa, corn or peas have been discovered. For this reason it is very important to plan ahead and take action to protect crops, orchards and shrubs before damage begins.

**GENERAL HABITS**

Deer have excellent eyesight, smell and hearing. Their eyes are adapted to detect movement and they often overlook stationary objects. Deer are color blind and only able to detect shades of black and white.

Steep, rugged terrain does not limit deer access. Deer use certain trails and feed areas on a regular basis. Any change along the trails or in the feeding areas is viewed with curiosity and suspicion. This habit is very important when electrified fences are constructed. Clear areas along the outside of the fence provide the deer with the opportunity to know a wire is present and to investigate it by sniffing the wire. In this process the deer normally receives a shock when its nose touches the wire and it will avoid the wire thereafter. If, however, deer approach an electric fence and the electricity is off, they will pass through the fence. Once this habit is developed, the fence will be less effective even though the fence is electrified. Also, deer will attempt to go under or through a fence rather than jump it, unless they are frightened.

The range in which deer travel is quite limited, often within a square mile. Heavy hunting pressure, dogs, seasonal changes in food supply or lack of food can cause deer to move slightly outside their normal territory on a temporary basis. Bucks will expand their territories slightly during the rut (mating season).

Deer will create a “browse line” at 4 to 5 feet height when food becomes scarce or the herd too large. This frequently happens even though an abundant food supply can be found within a few miles distance.

Deer also have a great preference for minerals such as phosphorus and salt (sodium or calcium). “Salt licks” will attract deer on a very regular basis at certain times of the year but may be unused at other times. Deer will take advantage of salt blocks which farmers provide for cattle.

In summary, deer are creatures of habit in many ways. People can take advantage of these habits to observe, photograph, or hunt these animals. Similarly, farmers, gardeners, orchardists and Christmas tree growers can utilize these habits to decrease or eliminate damage to crops.