Deer and Agriculture
In West Virginia

Identification of Deer Damage

White-tailed deer may damage farm crops, gardens, orchards, ornamental shrubs and forest tree seedlings. The severity of damage ranges from slight to extreme depending primarily on the deer population level and the amount of food available. In addition, damage usually varies greatly among seasons of the year and often between years. One of the first things that a landowner must know in order to control deer damage is how to accurately identify the damage deer cause. Although this may at first seem a simple task, it does occasionally present problems.

By far the most common way in which deer cause damage is by eating some portion of a plant or crop. Other less frequent forms of damage include trampling of plants and damage to trees and shrubs caused by antler rubbing. The table below lists the most common types of damage to various crops or plants.

The two basic ways by which deer damage is identified are by observing characteristic “sign” that deer make and/or by actually observing what the deer are doing. Since much deer damage occurs at night or when people are not around, interpreting sign is the most common means of identifying deer damage.

Looking for deer tracks in damaged fields, gardens, etc. is the logical first step. Frequently, deer droppings or beds also may be found. Just the presence of tracks or other deer sign, however, does not always indicate deer damage. Examine the tracks and other sign and try to determine what the deer most likely were doing—running, walking, etc. A single set of deer tracks through a garden, lawn or crop field is little reason for concern. However, large amounts of deer sign in an obviously damaged field almost certainly confirms deer damage. In addition to finding tracks or other deer sign you should carefully examine plants for damage.

Common Types of Damage Caused by Deer

<table>
<thead>
<tr>
<th></th>
<th>Buds, leaves, flowers, twigs eaten; bark rubbed</th>
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<tbody>
<tr>
<td>Shrubs, ornamentals</td>
<td>Leaves, flowers, stems or edible portion of crop eaten; plants trampled</td>
</tr>
<tr>
<td>Home gardens</td>
<td>Foliage, flowers, crop eaten; plants trampled</td>
</tr>
<tr>
<td>Row crops</td>
<td>Foliage, flowers, stems eaten; plants trampled</td>
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<tr>
<td>Forage crops</td>
<td>Foliage, buds, twigs eaten; fruits eaten or damaged; bark rubbed</td>
</tr>
<tr>
<td>Orchards</td>
<td>Buds, leaves, twigs eaten; bark rubbed</td>
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<td>Forest seedlings</td>
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Severe localized deer damage (foreground) to corn.

Deer do not have upper incisors (upper front teeth) and therefore when eating they must jerk or tear the part being eaten from the rest of the plant. This tearing motion tends to leave ragged ends where the leaves or twigs were removed. This raggedness is very obvious on woody twigs browsed in winter but may not be readily noticeable on very tender new growth. In contrast, other animals such as rabbits or woodchucks have both upper and lower incisors and tend to leave very crisp clean cuts.

Deer also tend to exhibit preferences for certain portions of plants. In gardens, row crops and forage crops, deer will most often consume the recent growth on the most succulent portions of the plant. On plants less than about 3 feet tall they also typically consume the portions on the top or sides in preference to lower portions. Deer damage to shrubs, fruit trees and forest seedlings most often involves browsing of buds, twig ends and foliage. Severe damage may include every limb within reach, from ground level to a height of about 6 feet.
Deer damage almost never is uniform throughout a field or orchard. The most common site of damage is around the edge of the field where protective escape cover of woods or brush is nearby. Terrain also is used as cover by deer with swales or other areas hidden from view being damaged more frequently. One exception to the above is that in mature corn deer often will cause damage away from field edges. The tall corn provides sufficient cover for the deer to feel secure.

Perhaps the best way for someone who is not familiar with deer damage to learn how to identify it is by observation of the deer. This is best done from inside a building, a vehicle or some other spot where the deer can be observed without disturbance. Carefully watch what the deer are doing and make note of what specific plants they are eating. Then simply walk out to the area and carefully inspect what sign is present. Pay special attention to the pattern of the tracks and to the damaged plants that were browsed making note of what parts were eaten and the appearance of the stem ends. This will be a big aid in both helping you later evaluate damage when only deer sign is present and in telling deer damage from damage caused by other animals.
Defoliation of soybeans caused by feeding deer.

Occasionally deer damage may include trampled plants or damaged bark caused by antler polishing. Trampled plants may be found in gardens or row crops that are also receiving damage by deer eating them. In addition, occasionally deer will move to open meadows or hayland at night and bed down. This bedding activity may flatten the plants in an oblong shape 2 to 5 feet long by 2 to 3 feet wide. A single deer may bed several times a night between feedings. Antler rubbing by bucks also can at times be a problem in young orchards, Christmas tree plantations, and nurseries. Bucks rub small trees and saplings to remove the “velvet” once antler growth is complete. Rubs also serve as communication posts. Antler rubbing usually begins in September and has usually ceased by late November. Often the main stem or limbs of saplings may be broken during antler rubbing activities.

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