



Dealing with Deer

White-tailed deer, already the most common deer in North America, are becoming more and more abundant, especially in suburban areas. Their adaptability allows them to make use of a wide variety of habitats, but suburban areas are especially attractive because they lack predators and provide ample forage.



Description and Life Cycle

White-tailed deer are approximately three feet high and have long thin legs. Their coats are reddish brown during the summer months and gray brown during the winter. A wide white stripe on the underside of the tail is visible as the deer run. Young fawns are reddish brown with many white spots; this coloring is lost before they are a year old. Adult males (bucks) weigh 125-200 pounds; females (does) are slightly smaller.

Deer breed from September through February, with a peak of activity in November. Young are born seven months later (after approximately 200 days). Fawns may be born singly or as twins or triplets, depending on the age of the doe and amount of food available.

Bucks grow an entire new pair of antlers each year, beginning in the spring. In fall, bucks rub the velvety covering of their antlers off on small trees or shrubs to mark their territory.

Habits

White-tailed deer are generally nocturnal and have an excellent sense of hearing, good eyesight and a highly developed sense of smell. They are creatures of habit and often follow the same trails within a limited range. Deer consume a wide variety of vegetation, including herbaceous plants, grasses, fruit, nuts, and the leaves and stems of woody plants. They eat woody plants when more succulent material is not available. Food preferences vary from individual to individual and herd to herd, although there are certain plants that are generally resistant or susceptible to damage (see pages at end). If food is scarce, almost any vegetation will be eaten.

Damage

Because deer lack upper front teeth, the damage caused by their browsing may be recognized by ragged edges on herbaceous plants or broken branches on the terminal growth of trees and shrubs. In contrast, damage caused by rodents displays cleanly cut edges. Most feeding damage to the home landscape occurs during winter when food is scarce. This injury may be severe if the ground is covered with snow. Deer may also trample vegetation as they feed. Antler rubbing activity removes bark and branches from trees and shrubs.

Management

Resistant Plantings

If you are starting a landscape from scratch, you may choose plants deer are less likely to dine on. The following lists can be used as a guide. Keep in mind that deer preferences can vary from location to location and from herd to herd. If you are unsure of the resistance of a certain species, you can set out a few plants in an area with moderate to heavy deer traffic. You will soon know if the deer find the plants palatable. Unfortunately, as more resistant plants are used, the likelihood that the deer will adapt to eating them increases.

Using Repellents

If you already have plantings in your yard that deer like to eat, you may try repellents. Repellents discourage deer feeding by giving the plants an offensive taste or odor. As with resistant plants, repellents vary in effectiveness from herd to herd and location to location. If the deer become accustomed to a specific scent or taste, that repellent is rendered useless. For this reason, it is best to alternate several types of repellents, rather than to rely on just one. Since preventing deer damage is easier than stopping it, repellents should be applied before deer become established in an area. Begin applications in early fall to reduce winter browsing. A major disadvantage of repellents is that they must be continually renewed.

Repellents should be applied when rain is not expected for 24 hours and temperatures remain between 40 and 80 degrees F. for that period. Applications should be thorough, covering all vulnerable portions of the plant. It is especially important to repeat applications to cover new growth or after a heavy rainfall.

Types of Repellents

Commercial repellents are usually sprayed on plants, but are sometimes applied as a dip or powder. Odor-based materials, especially those containing putrescent egg solids, are considered to be more effective than taste-based products. There are a wide variety of odor-based repellents to choose from, including Deer Away, Deer-Off, and Hinder. Examples of taste-based repellents are Chew-Not and Miller's Hot Sauce Animal Repellent. Follow the label directions for instructions on how to apply these products.

Fencing and Other Barriers

Permanent, woven wire fences at least eight feet tall create the most effective barrier, but are worth the considerable cost for only the most valuable plantings. These fences must completely encircle the area you wish to protect, with no gaps that deer can exploit. Electric fencing is also effective and is less expensive, but is not often appropriate for a suburban setting. Individual cages and plastic netting are useful tools for small plantings or individual plants, and when viewed from a distance may be practically invisible. Physical barriers are the only effective method to protect plants from antler rubbing.

Scare Devices

A variety of frightening devices, including lights, whistles, loud noises and scarecrows have been used to deter deer. Most of these devices are expensive, and deer become quickly accustomed to them.

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The information on pest management for New York State contained in this publication is dated March 2011. The user is responsible for obtaining the most up-to-date pest management information. Contact any Cornell Cooperative Extension county office or PMEP (<http://pmep.cce.cornell.edu/>), the Cornell Cooperative Extension pesticide information website. The information herein is no substitute for pesticide labeling. The user is solely responsible for reading and following manufacturer's labeling and instructions.

Resistance of Woody and Herbaceous Plants to Deer Damage

This list is included only as a guideline and was developed from a variety of sources that may not all be equally reliable. Note that no plant is completely “deer-proof,” particularly when deer densities are high

Woody Ornamental Plants Rarely Damaged

American Holly	Colorado Blue Spruce.	Common Boxwood
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Herbaceous Plants Rarely Damaged

Annuals and Biennials		
Ageratum	Four o'clock	Poppy
Blanket Flower	Foxglove	Snapdragon
Blue Salvia	Heliotrope	Sweet Alyssum
Cleome	Marigold	Sweet Basil
Dahlia	Morning Glory	Sweet William
Dusty Miller	Painted Daisy	Verbena
Edging Lobelia	Parsley	Wax Begonia
Forget-Me-Not	Polka Dot Plant	Zonal Geranium
Perennials and Bulbs		
Amsonia	Coreopsis	Joe-Pye Weed
Anemone	Crown Imperial	Kirengeshoma
Angelica	Daffodil	Lamb's Ear
Astilbe	Dead Nettle	Lavender
Avens	Evening Primrose	Lily-of-the-Valley
Balloon Flower	False Indigo	Lupine
Barrenwort	Feverfew	Lungwort
Basket of Gold	Forget-Me-Not	Mint
Beebalm	Garlic Chives	Mullein
Bleeding Heart	Gas Plant	New York Fern
Boltonia	Globe Thistle	Oregano
Bugbane	Goatsbeard	Ornamental Onion
Bugleweed	Goldenrod	Ostrich Fern
Buttercup	Hay-Scented Fern	Oriental Poppy
Butterfly Bush	Heath	Ornamental Grasses
Candytuft	Heather	Perennial Blue Flax
Catmint	Hellebore	Plumbago
Christmas Fern	Interrupted Fern	Primrose
Cinnamon Fern	Jack-in-the-Pulpit	Purple Coneflower
Cinquefoil	Jacob's Ladder	Queen-of-the-Prairie
Columbine	Japanese Pachysandra	Rhubarb
Rosemary	Soapwort	Turtlehead
Royal Fern	Sundrops	Tussock Bellflower
Sage	Sweet Cicely	Violet
Scilla	Sweet Woodruff	Wormwood
Sensitive Fern	Tansy	Yarrow
Shasta Daisy	Tiger Lily	Yucca
Snowdrops	Toadflax	

Woody Ornamental Plants Seldom Severely Damaged

American Bittersweet	European White Birch	Norway Spruce
Austrian Pine	Forsythia	Pitch Pine
Beautybush	Honeylocust	Red Osier Dogwood
Chinese Holly	Inkberry	Red Pine
Chinese Junipers	Japanese Andromeda	Redvein Enkianthus
Common Lilac	Japanese Flowering Cherry	Scots Pine
Common Sassafra	Japanese Wisteria	White Spruce
Corkscrew Willow	Kousa Dogwood	
English Hawthorn	Mountain Laurel	

Woody Ornamental Plants Occasionally Severely Damaged

Allegheny Serviceberry	Downy Serviceberry	Red Maple
Anthony Waterer Spiraea	Eastern Red Cedar	Rockspray Cotoneaster
Basswood	Eastern White Pine	Rosebay Rhododendron
Border Forsythia	European Larch	Rose-of-Sharon
Bradford Callery Pear	Firethorn	Rugosa Rose
Bridal Wreath Spiraea	Greenspire Littleleaf Linden	Saucer Magnolia
Bush Cinquefoil	Japanese Cedar	Silver Maple
Carolina Hemlock	Japanese Flowering Quince	Smokebush
Carolina Rhododendron	Japanese Holly	Smooth Hydrangea
Chestnut Oak	Japanese Tree Lilac	Staghorn Sumac
China Girl/Boy Holly	Judd Viburnum	Sugar Maple
Climbing Hydrangea	Korean Spice Viburnum	Sweet Cherry
Common Horse Chestnut	Northern Red Oak	Sweet Mock Orange
Common Pear	Old-fashioned Weigela	Virginia Creeper
Common Witch Hazel	Panicked Dogwood	White Fir
Cranberry Cotoneaster	Panicked Hydrangea	White Oak
Dawn Redwood	Paper Bark Maple	Willow
Deciduous Azaleas	Persian Lilac	
Doublefile Viburnum	Privet	

Herbaceous Plants Frequently Damaged

Annuals and Biennials		
Impatiens	Pansy	Sunflower
Perennials		
Cardinal Flower	Daylily	Rose
Coneflower	Hosta	Sedum
Cranesbill Geranium	Iris	Tulip
Crocus	Peony	Wood Hyacinth

Woody Ornamental Plants Frequently Severely Damaged

American Arborvitae	English Ivy	Norway Maple
Apple	English Yew	Pinxterbloom Azalea
Atlantic White Cedar	European Mountain Ash	Plum
Balsam Fir	Evergreen Azalea	Rhododendron
Cherry	Frazer Fir	Wintercreeper
Clematis	Hybrid Tea Rose	
Cornelian Dogwood	Japanese Yew	

Source: Dr. Paul Curtis, Wildlife Management Specialist, Cornell University