



Extension FactSheet

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Preventing and Controlling Deer Damage

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Believe it or not, white-tailed deer were nearly extirpated from much of the eastern United States in the early 1900s because of habitat changes and overhunting. However, numbers of deer have increased throughout Ohio and the East as forests matured over the past century and appropriate hunting seasons were established. The white-tailed deer is now among the most common mammals in the state. Although hunters and nature enthusiasts may enjoy the sight of deer, this animal has presented some problems throughout the state. Deer are involved in vehicular collisions, overbrowsing of parks and reserves, and damage to a variety of crops, gardens, nurseries, and trees. Damage by deer can be identified by the jagged or torn surface on twigs or stems that they browse (compared to the clean-cut surface left by rabbits and rodents). Deer tracks are also easily identified.

As with all nuisance wildlife problems and damage concerns, changing your level of tolerance is the easiest solution. However, you must ultimately decide what level of damage warrants action. If you choose to manage your deer problems, remember that there seldom are quick solutions. The key to success is persistence.

Damage Prevention and Control

Exclusion

Temporary electric fences are relatively inexpensive and provide protection for gardens or crops during vulnerable times of the year. Permanent fences, especially high-tensile electric fences, can provide year-round protection from deer. However, these can be expensive and difficult to install in large areas. If you use electric fencing, be sure to post caution signs. Wooden panels or plastic snow fences can be used to exclude deer from

haystacks. Individual tree protectors (woven wire, plastic cylinders, plastic netting, or plastic wrap) can be useful for protecting young trees.

Habitat Modification

Selecting plants that are less preferred by deer can reduce the amount of damage. See Table 1 for a list of plants and their susceptibility to damage.

Scare Tactics

Scare tactics can sometimes work if used when a problem first starts. Gas exploders, pyrotechnics, spotlights, gunfire, shell crackers, or fireworks can sometimes provide relief but are of limited use if the deer are accustomed to an area.

Repellents and Toxicants

No toxicants or poisons are registered for use with deer. Repellents are best suited for use in orchards and gardens because they can be expensive and have limitations on use. Contact repellents can be applied directly to trees during the dormant period; they reduce the palatability of plants by making them taste bad. Area repellents can be applied near plants; they repel deer by odor. "Deer-Away" Big Game Repellent, Hinder, Thiram, Tankage, and Ro-pel are examples of repellents. Bags of human hair can work, but effectiveness is inconsistent. Many people tie bars of soap to trees (each bar protects about 1 m²).

Shooting

Shooting is one of the better options. Increasing the harvest rate on your land may provide relief. Check with the Division of Wildlife for hunting regulations and limits.

Table 1. Susceptibility of Ornamental Plants to Deer Damage.

Plant Species	Common Name	Plant Species	Common Name
Rarely Damaged:			
<i>Berberis</i> spp.	Barberry	<i>Ilex (x) meserveae</i>	China Girl/Boy Holly
<i>Berberis vulgaris</i>	Common Barberry	<i>Juniperus virginiana</i>	Eastern Red Cedar
<i>Betula papyrifera</i>	Paper Birch	<i>Larix decidua</i>	European Larch
<i>Buxus sempervirens</i>	Common Boxwood	<i>Lonicera (x) heckrottii</i>	Goldflame Honeysuckle
<i>Elaeagnus angustifolia</i>	Russian Olive	<i>Ligustrum</i> spp.	Privet
<i>Ilex opaca</i>	American Holly	<i>Magnolia (x) soulangiana</i>	Saucer Magnolia
<i>Leucothoe fontanesiana</i>	Drooping Leucothoe	<i>Metasequoia glyptostroboides</i>	Dawn Redwood
<i>Picea pungens</i>	Colorado Blue Spruce	<i>Parthenocissus quinquefolia</i>	Virginia Creeper
<i>Pieris japonica</i>	Japanese Pieris	<i>Philadelphus coronarius</i>	Sweet Mock Orange
Seldom Severely Damaged:		<i>Pinus strobus</i>	Eastern White Pine
<i>Betula pendula</i>	European White Birch	<i>Potentilla fruticosa</i>	Bush Cinquefoil
<i>Calatrpa scandens</i>	American Bittersweet	<i>Prunus avium</i>	Sweet Cherry
<i>Cornus sericea</i>	Red Osier Dogwood	<i>Pseudotsuga menziesii</i>	Douglas Fir
<i>Cornus florida</i>	Flowering Dogwood	<i>Pyracantha coccinea</i>	Firethorn
<i>Cornus kousa</i>	Kousa Dogwood	<i>Pyrus calleryana 'Bradford'</i>	Bradford Callery Pear
<i>Crataegus laevigata</i>	English Hawthorn	<i>Quercus alba</i>	White Oak
<i>Enkianthus campanulatus</i>	Redvein Enkianthus	<i>Quercus prinus</i>	Chestnut Oak
<i>Fagus sylvatica</i>	European Beech	<i>Quercus rubra</i>	Northern Red Oak
<i>Forsythia</i> spp.	Forsythia	<i>Rhododendron</i> spp.	Deciduous Azaleas
<i>Gleditsia triacanthos</i>	Honey Locust	<i>Rhododendron carolinianum</i>	Carolina Rhododendron
<i>Ilex glabra</i>	Inkberry	<i>Rhododendron maximum</i>	Rosebay Rhododendron
<i>Ilex cornuta</i>	Chinese Holly	<i>Rhus typhina</i>	Staghorn Sumac
<i>Juniperus chinensis</i>	Chinese Junipers (green)	<i>Rosa rugosa</i>	Rugosa Rose
<i>Juniperus chinensis</i>	Chinese Junipers (blue)	<i>Salix</i> spp.	Willows
<i>Kalmia latifolia</i>	Mountain Laurel	<i>Spiraea (x) bumalda</i>	Anthony Waterer Spiraea
<i>Kolkwitzia amabilis</i>	Beautybush	<i>Spiraea prunifolia</i>	Bridalwreath Spiraea
<i>Picea abies</i>	Norway Spruce	<i>Syringa (x) persica</i>	Persian Lilac
<i>Picea glauca</i>	White Spruce	<i>Syringa reticulata</i>	Japanese Tree Lilac
<i>Pinus nigra</i>	Austrian Pine	<i>Syringa villosa</i>	Late Lilac
<i>Pinus rigida</i>	Pitch Pine	<i>Tilia cordata 'Greenspire'</i>	Greenspire Littleleaf Linden
<i>Pinus mugo</i>	Mugo Pine	<i>Tilia americana</i>	Basswood
<i>Pinus resinosa</i>	Red Pine	<i>Tsuga canadensis</i>	Eastern Hemlock
<i>Pinus sylvestris</i>	Scots Pine	<i>Tsuga caroliniana</i>	Carolina Hemlock
<i>Prunus serrulata</i>	Japanese Flowering Cherry	<i>Viburnum (x) juddii</i>	Judd Viburnum
<i>Salix matsudana tortuosa</i>	Corkscrew Willow	<i>Viburnum rhytidophyllum</i>	Leatherleaf Viburnum
<i>Sassafras albidum</i>	Common Sassafras	<i>Viburnum plicatum tomentosum</i>	Doublefile Viburnum
<i>Syringa vulgaris</i>	Common Lilac	<i>Viburnum carlesii</i>	Koreanspice Viburnum
<i>Wisteria floribunda</i>	Japanese Wisteria	<i>Weigela florida</i>	Oldfashion Weigela
Occasionally Severely Damaged:		Frequently Severely Damaged:	
<i>Abies concolor</i>	White Fir	<i>Abies balsamea</i>	Balsam Fir
<i>Acer griseum</i>	Paperbark Maple	<i>Abies fraseri</i>	Fraser Fir
<i>Acer rubrum</i>	Red Maple	<i>Acer platanoides</i>	Norway Maple
<i>Acer saccharinum</i>	Silver Maple	<i>Cercis canadensis</i>	Eastern Redbud
<i>Acer saccharum</i>	Sugar Maple	<i>Chamaecyparis thyoides</i>	Atlantic White Cedar
<i>Aesculus hippocastanum</i>	Common Horsechestnut	<i>Clematis</i> spp.	Clematis
<i>Amelanchier arborea</i>	Downy Serviceberry	<i>Cornus mas</i>	Cornelian Cherry
<i>Amelanchier laevis</i>	Allegheny Serviceberry	<i>Euonymus alatus</i>	Winged Euonymus
<i>Campsis radicans</i>	Trumpet Creeper	<i>Euonymus fortunei</i>	Wintercreeper
<i>Chaenomeles speciosa</i>	Japanese Flowering Quince	<i>Hedera helix</i>	English Ivy
<i>Cornus racemosa</i>	Panicle Dogwood	<i>Malus</i> spp.	Apples
<i>Cotinus coggygria</i>	Smokebush	<i>Prunus</i> spp.	Cherries
<i>Cotoneaster</i> spp.	Cotoneaster	<i>Prunus</i> spp.	Plums
<i>Cotoneaster apiculatus</i>	Rockspray Cotoneaster	<i>Rhododendron</i> spp.	Rhododendrons and azaleas
<i>Cotoneaster horizontalis</i>	Cranberry Cotoneaster	<i>Rhododendron catawbiense</i>	Catawba Rhododendron
<i>Cryptomeria japonica</i>	Japanese Cedar	<i>Rhododendron periclymenoides</i>	Pinxterbloom Azalea
<i>Forsythia (x) intermedia</i>	Border Forsythia	<i>Rosa (x) hybrid</i>	Hybrid Tea Rose
<i>Hamamelis virginiana</i>	Common Witchhazel	<i>Sorbus aucuparia</i>	European Mountain Ash
<i>Hibiscus syriacus</i>	Rose of Sharon	<i>Taxus</i> spp.	Yews
<i>Hydrangea arborescens</i>	Smooth Hydrangea	<i>Taxus baccata</i>	English Yew
<i>Hydrangea anomala petiolaris</i>	Climbing Hydrangea	<i>Taxus brevifolia</i>	Western Yew
<i>Hydrangea paniculata</i>	Panicle Hydrangea	<i>Taxus cuspidata</i>	Japanese Yew
<i>Ilex crenata</i>	Japanese Holly	<i>Taxus (x) media</i>	Hybrid Yew
		<i>Thuja occidentalis</i>	American Arborvitae

From M. J. Fargione, P. D. Curtis, and M. E. Richmond. 1991. Resistance of woody ornamental plants to deer damage. Cornell Coop. Ext. Fact Sheet. Ithaca, NY. 4 pp.

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