

## CARE SHEET

## Ornamentals and Deer: Realities and Landscape Plant Options

Many homeowners, golf course superintendents, landscape maintenance firms, and public and private park facility managers express frustration toward the prevalence of deer and the damage they cause through browsing and rubbing their antlers on prized landscape ornamentals throughout the year. Unfortunately, there are few simple solutions to preventing deer damage without eliminating deer completely, which is not an option. In reality, deer management in the landscape will require an integrated pest management (IPM) approach including monitoring deer pressure and population, fencing or excluding deer from prized or highly sensitive areas, using repellents, and choosing less-preferred plant species.

Deer are adaptive and are selective feeders. Choosing your plants carefully combined with using fences and repellents to prevent or reduce damage to your cherished ornamentals may be necessary. Understanding deer and their feeding habits may be helpful in planning your landscape with deer in mind.

### Deer feeding habits are affected by:

- Experience and previous movement patterns
- Nutritional needs
- Plant palatability
- Seasonal plant availability
- Weather conditions
- Geographic area
- Availability of alternative foods

Available food sources will change with the seasons and the local geography, thus changing the level of damage and the types of plants damaged by deer. A plant not commonly browsed during the summer may become a food source for deer in years in which the winter is long and cold. Deep or persistent snow cover on the ground for extended periods may also cause deer to seek alternative browse in the area.

Plants promoted as “deer resistant” often have common characteristics such as hairy, rough, or spiny stem and leaf texture, or the presence of aromatic compounds in the stems or leaves. For example, lavender and boxwood are considered aromatic plants, whereas lamb’s ear and oakleaf hydrangea possess leaf textures thought to be distasteful to deer.

During harsh winters when common food sources are scarce, even plants not normally preferred by deer may be damaged. Early spring succulent growth may also render a reportedly undesirable plant very susceptible. For example, the succulent new growth of *Berberis thunbergii* (barberry) can be a browse choice during the spring and early summer, especially if previously available browse has been eliminated by overgrazing.

Similarly, plants commonly not damaged in one region may be damaged in other regions where food options vary. For this reason, care should be taken in relying on lists of plants reported to be not preferred by deer. Your observation and monitoring will help you to determine the plants preferred by deer in your area and under your seasonal and climatic conditions throughout the year. Recording the types of plants not damaged by deer in your area is the best way to create a reliable preference list.

Recognizing available browse, weather conditions, seasons, and deer habits will help you to plan your deer and plant management activities. Implementing the use of repellents and physical barriers (fencing), choosing plants wisely, and managing the deer population in the area are the best ways of reducing deer damage in the landscape.

The following list represents a compilation of plants that have been observed by landscapers, nursery operators, horticulturists, researchers, and extension personnel to be less preferred by deer. This list is not complete and no plant is safe under all conditions.

Almost any plant is at risk for deer browsing if other conditions are stressing the herd. The purpose of this list is to provide ideas for selecting plants for high deer damage areas of Pennsylvania. As always, when choosing plants for your landscape, consider the

hardiness zone, soil conditions, topography, moisture availability, cultural requirements, relative size and growth rate, and local climatic conditions before purchasing and planting.

## Landscape Plants Rarely Damaged by Deer

### Trees

Botanical Name	Common Name	USDA Hardiness Zone
<i>Aesculus parviflora</i>	Bottlebrush Buckeye	4-8
<i>Betula albo-sinensis</i>	Chinese Paper Birch	5-6
<i>Betula nigra</i>	'Heritage' Heritage River Birch	3-9
<i>Betula papyrifera</i>	Paper Birch	2-6
<i>Chamaecyparis pisifera</i>	Japanese Falsecypress	4-8
<i>Cryptomeria japonica</i>	Japanese Cedar	5-6
<i>Juniperus scopulorum</i>	Rocky Mountain Juniper	3-7
<i>Ostrya virginiana</i>	Ironwood	3-9
<i>Picea pungens</i>	Colorado Blue Spruce	3-7
<i>Pinus sylvestris</i>	Scotch Pine	3-7
<i>Pseudotsuga menziesii</i>	Douglas Fir	4-6

### Shrubs, Ground Covers, and Climbers

Botanical Name	Common Name	USDA Hardiness Zone
<i>Arctostaphylos uva-ursi</i>	Bearberry	2-6
<i>Asimina triloba</i>	Pawpaw	5-8
<i>Berberis spp.</i>	Barberry	4-8
<i>Buddleia davidii</i>	Butterfly bush	5-9
<i>Buxus spp.</i>	Boxwood	5-9
<i>Caryopteris x clandonensis</i>	Bluebeard	6-9
<i>Cephalotaxus harringtonia</i>	Japanese Plum-Yew	6-9
<i>Gaultheria procumbens</i>	Creeping Wintergreen	3-5
<i>Juniperus horizontalis</i>	Creeping Juniper	4-9
<i>Juniperus conferta</i>	Shore Juniper	5-9
<i>Leucothoe spp.</i>	Leucothoe	5-8
<i>Nandina domestica</i>	Nandina	6-9
<i>Pachysandra procumbens</i>	Allegheny Spurge	5-9
<i>Pachysandra terminalis</i>	Japanese Spurge	4-8
<i>Sambucus canadensis</i>	American Elderberry	4-9
<i>Sarcococca hookeriana var. humilis</i>	Dwarf Sweet Box	6-8
<i>Vinca minor</i>	Periwinkle	4-8
<i>Vitex sp</i>	Chastetree	6-9

## Annuals, Perennials, and Bulbs

Botanical Name	Common Name	USDA Hardiness Zone
<i>Achillea</i> spp.	Yarrow	3–8
<i>Aconitum</i> spp.	Monkshood	4–8
<i>Ajuga reptans</i>	Bugleweed	3–9
<i>Allium christophii</i>	Star of Persia	4–8
<i>Anethum graveolens</i>	Common Dill	Annual
<i>Antirrhinum majus</i>	Snapdragon	Annual
<i>Aquilegia</i> spp.	Columbine	3–9
<i>Arabis</i> spp.	Rock-cress	4–7
<i>Arisaema triphyllum</i>	Jack-in-the-Pulpit	4–9
<i>Aubrieta deltoidea</i>	Rock Cress	4–8
<i>Aurinia saxatilis</i>	Basket-of-Gold	3–7
<i>Bergenia</i> spp.	Berginia	3–8
<i>Ceratostigma plumbaginoides</i>	Plumbago	5–9
<i>Cimicifuga racemosa</i>	Snakeroot	3–8
<i>Colchicum</i> spp.	Colchicum	5–7
<i>Convallaria majalis</i>	Lily-of-the-Valley	2–7
<i>Dicentra spectabilis</i>	Bleeding Heart	3–9
<i>Digitalis</i> spp.	Foxglove	3–8
<i>Dryopteris marginalis</i>	Wood Fern	3–8
<i>Epimedium</i> spp.	Barrenwort	4–8
<i>Euphorbia</i> spp.	Euphorbia	4–8
<i>Fritillaria</i> spp.	Fritillary	5–8
<i>Galium odoratum</i>	Sweet Woodruff	4–8
<i>Helleborus orientalis</i>	Lenten Rose	4–9
<i>Hesperis matronalis</i>	Dame's Rocket	3–8
<i>Hyacinthus orientalis</i>	Hyacinth	3–7
<i>Lamium maculatum</i>	Deadnettle	3–8
<i>Lavandula</i> spp.	Lavender	5–9
<i>Lobularia maritima</i>	Sweet Alyssum	Annual
<i>Lychnis coronaria</i>	Rose Champion	4–8
<i>Matteuccia struthiopteris</i>	Ostrich Fern	4–7
<i>Narcissus</i> spp.	Daffodil	4–8
<i>Nicotiana</i> spp.	Flowering Tobacco	Annual
<i>Osmunda regalis</i> var. <i>spectabilis</i>	Royal Fern	3–10
<i>Papaver orientale</i>	Oriental Poppy	3–7
<i>Pelargonium graveolens</i>	Scented Geranium	10
<i>Penstemon digitalis</i> 'Husker Red'	Husker Red Penstemon	3–8

<b>Botanical Name</b>	<b>Common Name</b>	<b>USDA Hardiness Zone</b>
<i>Pervoskia atriplicifolia</i>	Russian Sage	5-9
<i>Pulmonaria sp.</i>	Lungwort	3-8
<i>Rheum rhabarbarum</i>	Rhubarb	4-7
<i>Santolina chamaecyparissus</i>	Lavender Cotton	6-8
<i>Scilla spp.</i>	Squill	2-8
<i>Stachys byzantina</i>	Lamb's Ears	4-8
<i>Tagetes spp.</i>	Marigold	Annual
<i>Tanacetum vulgare</i>	Common Tansy	3-9
<i>Thymus spp.</i>	Thyme	3-8
<i>Tiarella cordifolia</i>	Foam Flower	3-8

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