



## Deterring Deer : Possible Strategies

Deer may form large, permanent populations, entering neighborhoods near wooded areas with good cover and plentiful forage. Tender new growth in gardens is most at risk and flower buds may be stripped just before opening. Look for torn leaves or stalks with ragged ends, as deer must jerk or tear plants when feeding. Young deer graze indiscriminately so even resistant plants can be damaged. Vertical scrapes and shredded bark on tree trunks are seasonal signs of male deer antler-rubbing. Damage will vary with the available food sources due to the severity of weather and changes in the deer population. When planning possible strategies, consider your worst-case scenario and chose from the following options:

### Finding a Plan of Action

- A solid fence which is a minimum of 8' tall is the best option to try to eliminate deer. It must reach all the way to the ground because deer prefer to go through or under a fence. A shorter fence may be repurposed by adding wire above.
- Creating width is also effective, either by slanting the fence outward at a 45° angle or by adding another low fence 4' to 5' away. Electric fence is an option if local ordinances allow it – use only if children won't be playing nearby.
- Protect newly planted trees with individual fencing until their primary branches are out of reach around 5'-7' high.
- Stake trunks of unprotected saplings to prevent uprooting; wrap them to prevent bark damage from antler-rubbing.
- Remove all suitable cover by clearing out underbrush along wooded edges. If possible, create and maintain a large cleared area between the deer habitat and your gardens. Interestingly, deer will forage in and like the cover created by the non-native bush-honeysuckle. Removing this invasive plant will create open areas that are less attractive to deer as well as provide a better habitat for native and garden plants.
- Certain organic pest deterrents, such as *Bobbex-R Animal Repellent*, may be used as a perimeter control or as protection for specific areas in the landscape. Apply as high as the reach of a browsing deer, usually to six feet. Even if repellents are listed as rain and snow resistant, they will need to be re-applied as new growth appears.
- Research has shown that choosing *Milorganite* as a fertilizer can be an effective deer-repellent for up to 5 weeks.
- Bags of soap, hair, and tankage (putrefied meat scraps) are non-commercial deterrents to tray.
- Touch, sight and sound repellents include electronic repellent stakes and motion-detecting lights, noise makers and water sprinklers. These are most effective if combined with other deterrents and moved often.
- With any of these repellents, the key to success is to rotate products or methods often, before the deer “learn” them.

### Gardens Yes, Deer No

Selecting plants that are considered rarely or seldom damaged by deer will reduce frustration and heartache. Look for plants that have: thorny or prickly leaves or stems; fuzzy, hairy, or rough textured foliage; strong scent and/or pungent taste; thick, latex-like sap as well as plants that are toxic or poisonous to mammals. Protect more vulnerable plants by creating a broad perimeter of plants with these qualities or by inter-planting them in your garden. Growing your gardens a little leaner may also help: over-fertilized and over-watered plants are particularly lush and appealing to deer.

# Deer-Resistant Plants for a Sunny Garden

## Annuals

<i>Ageratum</i>	<i>Centaurea</i> /Dusty Miller	<i>Lobelia</i>	<i>Papaver</i> /Poppy
<i>Antirrhinum</i> /Snapdragon	<i>Helianthus</i> /Sunflower	<i>Lobularia</i> /Sweet Alyssum	<i>Petunia</i>
<i>Calendula</i> /Pot Marigold	<i>Helichrysum</i> /Strawflower	<i>Matthiola</i> /Stock	<i>Salvia</i>
<i>Catharanthus</i> /Annual Vinca	<i>Heliotropium</i> /Heliotrope	<i>Mirabilis</i> /Four O'Clock	<i>Tagetes</i> /Marigold
<i>Celosia</i> /Cock's Comb	<i>Ipomoea</i> /Morning Glory	<i>Myosotis</i> /Forget-me-not	<i>Tropaeolum</i> /Nasturtium
<i>Cleome</i> /Spider Flower	<i>Lantana</i>	<i>Nicotiana</i> /Tobacco Flower	<i>Zinnia</i>

## Herbs

<i>Allium</i> spp./Chives	<i>Levisticum</i> /Lovage	<i>Oreganum</i> /Oregano/Marjoram	<i>Santolina</i> /Lavender Cotton
<i>Anethum</i> /Dill	<i>Matricaria</i> /Chamomile	<i>Petroselinum</i> /Parsley	<i>Satureja</i> /Winter Savory
<i>Artemisia drac</i> /Tarragon	<i>Melissa</i> /Lemon Balm	<i>Rosmarinus</i> /Rosemary	<i>Stachys</i> /Betony
<i>Borago</i> /Borage	<i>Mentha</i> /Mint	<i>Ruta</i> /Rue	<i>Tanacetum</i> /Tansy
<i>Foeniculum</i> /Fennel	<i>Nepeta</i> /Catnip	<i>Salvia</i> /Sage	<i>Teucrium</i> /Germander
<i>Lavandula</i> /Lavender	<i>Ocimum</i> /Basil	<i>Sanguisorba</i> /Salad Burnet	<i>Thymus</i> /Thyme

## Perennials

<i>Achillea</i> /Yarrow	<i>Dianthus</i> /Pinks	<i>Leucanthemum</i> /Daisy	<i>Salvia</i> spp.
<i>Agastache</i> /Anise Hyssop	<i>Digitalis</i> /Foxglove	<i>Lobelia</i> /Cardinal Flower	<i>Scabiosa</i> /Pincushion Flower
<i>Anemone</i> /Windflower	<i>Delphinium</i>	<i>Monarda</i> /Bee Balm	<i>Sedum</i> spp./Stonecrop
<i>Aquilegia</i> /Columbine	<i>Echinacea</i> /Coneflower	<i>Nepeta</i> /Catmint	<i>Sempervivum</i> /Hens & Chicks
<i>Artemisia</i> /Wormwood	<i>Eupatorium</i> /Joe Pye Weed	<i>Ophiopogon</i> /Mondo Grass	<i>Solidago</i> /Goldenrod
<i>Asclepias</i> /Milkweed	<i>Euphorbia</i> /Spurge	Ornamental Grasses (most)	<i>Stachys</i> /Betony/Lamb's Ear
<i>Baptisia</i> /False Indigo	<i>Geranium</i> /Cranesbill	<i>Paeonia</i> spp./Peony	<i>Stokesia</i> /Stokes' Aster
<i>Buddleja</i> /Butterfly Bush	<i>Helenium</i> /Sneezeweed	<i>Papaver</i> /Poppy	<i>Symphotrichum</i> /Aster
<i>Carex</i> /Sedge	<i>Hibiscus</i>	<i>Perovskia</i> /Russian Sage	<i>Veronica</i> /Speedwell
<i>Caryopteris</i> /Bluebeard	<i>Iris</i>	<i>Phlox</i> spp.	<i>Yucca</i>
<i>Coreopsis</i> /Tickseed	<i>Liatris</i> /Blazing Star	<i>Rudbeckia</i> /Black-eyed Susan	

## Trees / Shrubs / Vines

<i>Acer</i> spp./Maple	<i>Chionanthus</i> /Fringetree	<i>Hibiscus syr</i> /Rose of Sharon	<i>Prunus ser</i> /Flowering Cherry
<i>Akebia</i> /Chocolate Vine	<i>Cercis</i> /Redbud	<i>Hypericum</i> /St. Johnswort	<i>Pyracantha</i> /Firethorn
<i>Amelanchier</i> /Serviceberry	<i>Clethra</i> /Summersweet	<i>Ilex</i> spp./Holly	<i>Rhamnus</i> /Buckthorn
<i>Berberis</i> /Barberry	<i>Cornus kou</i> /Kousa Dogwood	<i>Juniperus</i> spp./Juniper	<i>Salix</i> /Willow
<i>Betula</i> /Birch	<i>Cornus ser</i> /Redtwig Dogwood	<i>Lagerstroemia</i> /Crape Myrtle	<i>Sambucus</i> /Elderberry
<i>Buxus</i> /Boxwood	<i>Cotinus</i> /Smoketree	<i>Lindera</i> /Spicebush	<i>Spiraea</i> /Spirea
<i>Callicarpa</i> /Beautyberry	<i>Cotoneaster</i>	<i>Lonicera</i> /Honeysuckle Vine	<i>Syringa</i> /Lilac
<i>Calycanthus</i> /Sweetshrub	<i>Deutzia</i>	<i>Metasequoia</i> /Dawn Redwood	<i>Taxodium</i> /Bald Cypress
<i>Campsis</i> /Trumpet Creeper	<i>Fagus</i> /Beech	<i>Parthenocissus</i> /Boston Ivy	<i>Viburnum</i>
<i>Celastrus</i> /Bittersweet	<i>Forsythia</i>	<i>Picea</i> spp./Spruce	<i>Vitis</i> /Grape
<i>Chaenomeles</i> /Quince	<i>Ginkgo</i>	<i>Pinus</i> spp./Pine	<i>Weigela</i>
<i>Chamaecyparis pis</i> /Falsecypress	<i>Hamamelis</i> /Witch Hazel	<i>Potentilla</i> /Bush Cinquefoil	<i>Wisteria</i>

# Deer-Resistant Plants for a Part-Sun to Shade Garden

## Bulbs

<i>Allium</i> spp./Ornamental Onion	<i>Convallaria</i> /Lily of the Valley	<i>Fritillaria</i> /Fritillary	<i>Muscari</i> /Grape Hyacinth
<i>Chionodoxa</i> /Glory-of-the-Snow	Crocus	<i>Galanthus</i> /Snowdrop	<i>Narcissus</i> /Daffodil
<i>Colchicum</i> /Autumn Crocus	<i>Eranthus</i> /Winter Aconite	<i>Hyacinthoides</i> /Spanish Bluebell	<i>Scilla</i> /Siberian Squill

## Perennials

<i>Actaea</i> /Snakeroot	<i>Bergenia</i> /Pig Squeak	<i>Heuchera</i> /Coral Bells	<i>Podophyllum</i> /May Apple
<i>Aegopodium</i> /Bishop's Weed	<i>Brunnera</i> /Siberian Bugloss	<i>Lamium</i> / Archangel	<i>Polemonium</i> /Jacob's Ladder
<i>Ajuga</i> /Bugleweed	<i>Carex</i> /Sedge	<i>Lamium</i> /Deadnettle	<i>Pulmonaria</i> /Lungwort
<i>Alchemilla</i> /Lady's Mantle	<i>Dicentra</i> /Bleeding Heart	<i>Ligularia</i> /Leopard Plant	<i>Sedum ternatum</i> /Stonecrop
<i>Anemone</i> sylv./Snowdrop	<i>Epimedium</i> /Barrenwort	<i>Liriope</i> /Lilyturf	<i>Tiarella</i> /Foam Flower
<i>Aquilegia</i> /Columbine	<i>Euphorbia</i> /Spurge	<i>Lobelia</i> /Cardinal Flower	<i>Thalictrum</i> /Meadow Rue
<i>Arisaema</i> /Jack-in-the-Pulpit	<i>Galium</i> /Sweet Woodruff	<i>Mertensia</i> /Virginia Bluebells	<i>Tricyrtis</i> /Toad Lily
<i>Asarum</i> /Wild Ginger	<i>Geranium</i> /Cranesbill	<i>Ophiopogon</i> /Mondo Grass	<i>Veronica</i> /Speedwell
<i>Astilbe</i>	<i>Geum</i> /Avens	<i>Pachysandra</i> /Japanese Spurge	<i>Vinca</i> /Periwinkle
<i>Baptisia</i> /False Indigo	<i>Helleborus</i> /Lenten Rose	<i>Phlox div</i> /Sweet William	<i>Viola</i> /Violet

## Trees / Shrubs / Vines

<i>Acer palm</i> /Japanese Maple	<i>Cercis</i> /Redbud	<i>Halesia</i> /Carolina Silverbell	<i>Philadelphus</i> /Mock Orange
<i>Aesculus</i> spp./Buckeye	<i>Cornus kou</i> /Kousa Dogwood	<i>Hamamelis</i> /Witch Hazel	<i>Pieris</i>
<i>Akebia</i> /Chocolate Vine	<i>Cornus ser</i> /Redtwig Dogwood	<i>Hypericum</i> /St. Johnswort	<i>Potentilla</i> /Bush Cinquefoil
<i>Asimina</i> /Paw Paw	<i>Cotinus</i> /Smoke Bush	<i>Ilex</i> spp./Holly	<i>Rhamnus</i> /Buckthorn
<i>Betula</i> spp./Birch	<i>Daphne</i>	<i>Itea</i> /Sweetspire	<i>Rhus</i> /Fragrant Sumac
<i>Buxus</i> /Boxwood	<i>Deutzia</i>	<i>Kerria</i>	<i>Spiraea</i> /Spirea
<i>Calycanthus</i> /Sweetshrub	<i>Enkianthus</i>	<i>Lindera</i> /Spicebush	<i>Symphoricarpus</i> /Snowberry
<i>Campsis</i> /Trumpet Creeper	<i>Fagus</i> /Beech	<i>Mahonia</i> /Oregon Grape Holly	<i>Viburnum</i> spp.
<i>Celastrus</i> /Bittersweet	<i>Ginkgo</i>	<i>Parthenocissus</i> /Boston Ivy	<i>Weigela</i>

A final caveat: Remember that when deer are hungry, even these plants can be damaged.

## For Further Information

- Various lists have been gathered by different groups and are sometimes contradictory – which may indicate how deer populations vary geographically. If your problem is severe, research several lists and stick with the plants consistently found on all of them.
- Much of the information for this tip sheet was gathered from the Missouri Botanical Garden Website: <http://www.missouribotanicalgarden.org/gardens-gardening/your-garden/plant-finder.aspx> where you can search for attributes (deer-resistant, sun, shade, etc.) and then find detailed information on specific plants.
- Another resource was from Rutgers University: <http://njaes.rutgers.edu/deerresistance/> which divides plants into four ratings of deer-resistance – both “rarely damaged” and “seldom severely damaged” have been included above.
- The University of Vermont Extension has fence recommendations: <http://pss.uvm.edu/ppp/articles/deerfences.html>