# Deterring Deer : Possible Strategies

## *learning about deer in the landscape*

Deer may form large, permanent populations in suburban landscapes as well as surrounding forests and farming areas. They especially prefer neighborhoods with wooded areas nearby, grazing near the edges where undergrowth provides good cover and food is plentiful. The tender new growth of plants in late winter and early spring is particularly appealing and deer can demolish plants to the point that they can't recover. Even deer-resistant plants may be at risk due to the propensity of young deer to nibble on everything. To recognize deer browsing look for torn leaves or stalks with ragged ends, as deer must jerk or tear plants when feeding. Sadly they may also strip off all the flower buds just as they are ready to open. Male deer will also damage the trunks of trees by rubbing their antlers on the bark – look for vertical scrapes and shredded bark. Landscape damage will vary from year to year with the amount of food sources available 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:

## *deterring deer*

• A solid fence which is a minimum of 8' tall is the best option to try to eliminate deer. It will need to be low 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. An electric fence may be an option if local ordinances allow it – use only if children won't have a chance of being injured.

• Newly planted trees can be protected with individual fencing until their primary branches are out of reach (5'-7'). Stake and wrap the trunks of unprotected saplings to prevent uprooting and bark damage from seasonal antler-rubbing.

• The best way to minimize damage from deer is to 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. On a more positive note, deer will find cover and forage in the underbrush created by the non-native bush-honeysuckle. Removing this invasive plant will create open areas less attractive to deer as well as provide a better habitat for native and garden plants.

• Certain organic pest deterrents, such as *Bobbex Deer* and *PlantSkydd* have been proven successful. They may be used as a perimeter control or as protection for specific areas in the landscape. These two liquid deterrents are listed as rain and snow resistant though they will need to be re-applied as new growth appears. Remember to apply the deterrent as high as the reach of a browsing deer, usually to six feet. As with any deer repellents, the key to success is to rotate products often.

• Bags of soap, hair, and tankage (putrefied meat scraps) are non-commercial deterrents to try.

• Research has shown that choosing *Milorganite* as a fertilizer can be an effective deer-repellant for up to 5 weeks.

• Touch, sight and sound repellants include electronic repellant stakes and motion-detecting lights, noise makers and water sprinklers. These are most effective if combined with other deterrents and moved often.

## *gardens yes, deer no*

Selecting plants for your garden that are known to be rarely or seldom damaged by deer will reduce frustration and heartache. Characteristics to look for are: thorny or prickly leaves or stems; fuzzy, hairy, or rough textured foliage; strong scent and/or pungent taste; thick, latex-like sap and plants that are toxic or poisonous to mammals. In order to protect more vulnerable plants, you might try creating a broad perimeter of plants with these qualities or 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

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

## herbs

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

## perennials

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

## trees/shrubs/vines

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

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

## bulbs

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

## perennials

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

## trees /shrubs /vines

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

*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" are included in the above lists.
- The University of Vermont Extension is a good source for fencing ideas: http://pss.uvm.edu/ppp/articles/deerfences.html