



Deer Resistant Plants & Tips

Remember that very few plants are totally resistant to the predations of deer, and no list of plants will be iron-clad against them. If food becomes scarce, deer will be less choosy about what they eat. In addition to plants that deer seem to avoid, we have included a list of plants that deer love to eat. Besides these plant lists, there are a number of techniques you can deploy to help keep them out of the garden. *For more information, see the additional sections of this handout that provide tips on chemical and physical deterrents.*



ANNUALS and BIENNIALS

Ageratum (*Ageratum houstonianum*) - Sun to part sun
Angelonia (*Angelonia hybrids*) - sun
Bacopa - sun
Bidens - sun
Blue Daze (*Evolvulus glomeratus 'Blue Daze'*) - sun
Blue Lobelia (*Lobelia erinus*) - sun to light shade
Blue Salvia (*Salvia farinacea*) - sun
Cape Plumbago - sun to part sun
Celosia - sun
Cigar Plant (*Cuphea ignea*) - sun to part sun
Cleome (*Cleome hasslerana*) - sun
Euryops Daisy - sun
Flowering Tobacco (*Nicotiana spp.*) - sun
Forget-Me-Not (*Myosotis spp.*) - part sun to light shade
Foxglove (*Digitalis spp.*) - part sun to light shade
Fuchsia - part sun to light shade
Heliotrope - morning sun, afternoon shade
Lantana (*Lantana spp. & cvs.*) - sun
Licorice vine (*Helchrysom petiolare*) - sun to part sun
Lobelia (*Lobelia erinus*) - sun to part sun
Marguerite Daisy (*Argyranthemum spp.*) - sun
Marigold (*Tagetes spp.*) - sun
Melampodium (*Melampodium padulosum*) - sun to part sun
Mexican Heather (*Cuphea hyssopifolia*) - sun
Nemesia/Carnival Flower - sun to part sun
Nicotiana/Flowering Tobacco - sun to part sun
Nierembergia/Cup Flower - sun to part sun
Plectranthus - part sun to light shade
Purple Fountain Grass (*Pennisetum setaceum rubrum*) - sun
Scaevola/Fanflower spp. - sun to part sun
Snapdragon (*Antirrhinum majus*) - sun to part sun
Strawflower (*Xerochrysom bracteatum*) - sun
Vinca (*Catharanthus rosea*) - sun to part sun
Zinnia (*Zinnia spp.*) - sun

Blanket Flower (*Gaillardia spp.*) - sun
Bleeding Heart (*Dicentra spectabilis, D. eximia*) - part sun to shade
Bluebeard/Blue Mist (*Caryopteris clandonensis*) - sun
Blue Star Flower (*Amsonia spp.*) - sun
Butterfly Weed (*Asclepias spp.*) - sun to part sun
Canna Lily - sun to part sun
Carolina Lupine (*Thermopsis villosa*) - sun
Catnip/Catmint (*Nepeta spp.*) - sun
Celandine Poppy (*Stylophorum diphyllum*) - part sun, light shade
Chrysanthemum spp. - sun
Columbine (*Aquilegia spp.*) - part sun to light shade
Coreopsis (*Coreopsis spp.*) - sun
Cranesbill (*Geranium spp.*) - sun to part sun
Crocsmia/Montbretia - sun to part sun
Dahlia - sun to part sun
Dianthus spp. (except for Sweet William) - sun
Dusty Miller (*Senecio cineraria*) - sun
Dwarf Plumbago (*Ceratostigma plumbaginoides*) - sun, part sun
Euphorbia spp. - part sun to light shade
Fennel - sun to part sun
Ferns - shade
Gaura (*Gaura lindheimeri*) - sun to part sun
Germander (*Teucrium spp.*) - sun
Geranium (perennial, *G. sanguineum cvs*) - sun to part sun
Goldenrod (*Solidago spp.*) - sun
Hardy Sunflower (*Helianthus spp.*) - sun
Herbs (except basil) - sun to part sun
Ice Plant (*Delosperma spp.*) - sun
Iris spp. (especially *I. sibirica* and *I. germanica*) - sun
Ironweed (*Vernonia*) - sun to part sun
Lamb's Ears (*Stachys byzantina*) - sun
Lamium spp. - part sun to light shade
Lantana 'Ms. Huff', L. 'Ham 'n Eggs', L. 'Chapel Hill Yellow' - sun
Lavender (*Lavandula spp.*) - sun
Lavender Cotton (*Santolina spp.*) - sun
Lenten Rose (*Helleborus spp.*) - part sun to shade
Lily-of-the-Valley (*Convallaria majalis*) - morning sun, pm shade
Lungwort (*Pulmonaria spp.*) - part sun to shade
Ornamental Grasses - sun
Ornamental Onion (*Allium spp.*) - sun

PERENNIALS

Amsonia/Blue Star - sun
Anise Hyssop (*Agastache spp.*) - sun
Aster spp. - sun
Astilbe spp. - morning sun to light shade

Peony - sun to part sun
Poppy (*Papaver* spp.) - sun to part sun
Purple Heart (*Setcreasea purpurea*) - sun to part sun
Red Hot Poker (*Kniphofia uvaria*) - sun
Rose Champion (*Lychnis coronaria*) - sun to part sun
Russian Sage (*Perovskia atriplicifolia*) - sun
Sedum spp. (except *S. telephium* & *S. spectabile*) - sun to part sun
Sedge grass (*Carex* spp.) - shade
Sage (*Salvia* spp. especially *Salvia officinalis*) - sun
Shasta Daisy (*Leucanthemum*) - sun
Society Garlic (*Tulbaghia violacea*) - sun
Veronica spp. - sun to part sun
Wormwood (*Artemisia* spp.) - sun
Yarrow (*Achillea* spp.) - sun
Yucca spp. - sun

SHRUBS

Abelia (*Abelia* spp. and cvs.) - sun to part sun
American Holly (*Ilex opaca*) - sun to part sun
Anise-shrub (*Illicium* spp.) - part sun to shade
Bamboo (*Bambusa*, *Fargesia*, etc.) - part sun
Barberry (*Berberis* spp.) - sun
Beautyberry (*Callicarpa*) - sun to part sun
Beautybush (*Kolkwitzia amabilis*) - sun to part sun
Boxleaf Honeysuckle (*Lonicera nitida*) - sun to part sun
Boxwood (*Buxus* spp.) - sun to part sun
Butterfly Bush (*Buddleia davidii*) - sun
Carolina Cherrylaurel (*Prunus caroliniana*) - sun to part sun
Chinese Fringe Bush (*Loropetalum chinense*) - sun to light shade
Daphne spp. - part sun to light shade
Deutzia spp. - sun to part sun
Elaeagnus spp. - sun to part sun
False Cypress (*Chamaecyparis pisifera*, *C. obtusa*) - sun
Gardenia (*G. jasminoides*, *G. radicans*) - sun to part sun
Golden Paperbush (*Edgeworthia* spp.) - part sun to light shade
Inkberry (*Ilex glabra*) - sun to part sun
Japanese Holly (*Ilex crenata*) - sun to light shade (may be browsed in winter)
Juniper (*Juniperus* spp.) - sun
Lilac (*Syringa* spp.) - sun
Ligustrum/Privet (*Ligustrum* spp.) - sun to light shade
Mahonia spp. - part sun to shade
Mountain Laurel (*Kalmia latifolia*) - part sun to shade
Nandina spp. - sun or shade
Oleander (*Nerium oleander*) - sun
Pieris (*Pieris japonica*) - part sun to light shade
Plum Yew (*Cephalotaxus* spp.) - part sun to shade
Poet's Laurel (*Danae racemosa*) - part sun to shade
Rosemary (*Rosmarinus officinalis*) - sun
St. John's Wort (*Hypericum* spp.)
Spirea (*Spiraea* spp.) - sun to part sun
Summersweet (*Clethra alnifolia*) - part sun to light shade
Sweet Box (*Sarcococca hookeriana*) - part sun to light shade
Sweet Shrub/Sweet Betsy (*Calycanthus*) - sun to part sun
Tea Olive/False Holly (*Osmanthus* spp.) sun to part sun
Viburnum spp. (*V. tinus* may be browsed in winter) - sun, partsun
Wax Myrtle (*Myrica cerifera*) - sun to part sun
Yaupon Holly (*Ilex vomitoria*) - sun to part sun

TREES

Arizona Cypress (*Cupressus arizonica*) - sun
Bald Cypress (*Taxodium distichum*) - sun

Birch (*Betula* spp.) - sun to part sun
Carolina Cherrylaurel (*Prunus caroliniana*) - sun to part shade
Chastetree (*Vitex agnus-castus*) - sun
Colorado Spruce (*Picea pungens*) - sun to part sun
Crepemyrtle (*Lagerstroemia hybrids*) - sun
Deodar Cedar (*Cedrus deodara*) - sun
Dogwood (EXCEPT *Cornus mas* & *C. alternifolia*) part sun/light shade
Eastern Redcedar (*Juniperus virginiana*) - sun
Flowering Apricot (*Prunus mume*) - sun
Ginkgo (*Ginkgo biloba*) - sun
Goldenraintree (*Koelreuteria* spp.) - sun
Japanese Cedar (*Cryptomeria japonica*) - sun
Japanese Snowbell (*Styrax japonica*) - sun to part sun
Leyland Cypress (*Cupressocyparis leylandii*) - sun
Live Oak (*Quercus virginiana*) - sun
Magnolia spp. (deciduous & evergreen types) - sun to part sun
Palm (*Trachycarpus*, *Butia*, *Sabal*, *Rhapidophyllum*, *Chaemerops* spp.) - sun
Pine (*Pinus* spp.) - sun
Red Buckeye (*Aesculus pavia*) - part sun
Smoke Tree (*Cotinus* spp.) - sun
Spruce (*Picea* spp.) - sun to part sun

VINES

Carolina Jessamine (*Gelsemium* spp.) - sun to light shade
China Blue Sausage Vine (*Hoelboellia coriacea*) - shade
Crossvine (*Bignonia capreolata*) - sun to part sun
Goldflame Honeysuckle (*Lonicera x heckrottii*) - sun to light shade
Japanese Wisteria (*Wisteria floribunda*) - sun to part sun
Passionflower vine (*Passiflora* spp.) - sun
Star Jasmine (*Trachelospermum jasminoides*) - light shade, part sun

GROUNDCOVERS

Asiatic Jasmine (*Trachelospermum asiaticum*) - part sun, light shade
Candytuft (*Iberis* spp.) - sun
Carpet Bugleweed (*Ajuga reptans*) - part sun to light shade
Creeping Jenny (*Lysimachia nummularia*) - sun to light shade
Creeping Juniper (*Juniperus* spp.) - full sun
Creeping Rosemary (*Rosmarinus* off. var. *prostratus*) - sun
Dwarf Plumbago (*Ceratostigma plumbaginoides*) - sun, part sun
Epimedium spp. - part sun to light shade
Ice Plant (*Delosperma* spp.) - sun
Pachysandra spp. - part sun to light shade
Lamb's Ears (*Stachys byzantina*) - sun
Lamium spp. - part sun to light shade
Mondo Grass (*Ophiopogon japonicus*)
St. John's Wort (*Hypericum calycinum*)
Thyme (*Thymus* spp.) - sun to part sun
Trumpet Vine (*Campsis radicans*) - sun
Vinca Vine/Periwinkle - part sun to light shade

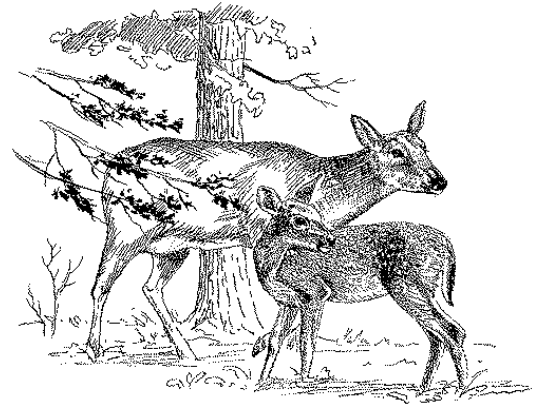
BULBS

Amarcrinum spp.	Iris (<i>I. sibirica</i> & <i>I. germanica</i>)
Amaryllis spp.	Hurricane Lily (<i>Lycoris</i>)
Autumn Crocus (<i>Colchicum</i>)	Hyacinth (<i>Hyacinthus</i>)
Bluebell (<i>Scilla</i>)	Narcissus spp.
Daffodil (<i>Narcissus</i>)	Ornamental Onion (<i>Allium</i> spp.)
Fritillaria spp.	Snowdrop (<i>Galanthus</i>)
Gladiolus spp.	Snowflake (<i>Leucojum</i>)
Glory-of-the-Snow	Star Lily/Spring Starflower (<i>Ipheion</i>)
(<i>Chionodoxa</i>)	Star of Bethlehem (<i>Ornithogalum</i>)
Grape Hyacinth (<i>Muscari</i>)	Winter Aconite (<i>Eranthis</i>)

Plants That Deer Often Eat

Azalea
Apple (and other fruit trees)
Aucuba
Beans
Blackberry
Broccoli
Cauliflower
Clematis
Corneliancherry Dogwood
Crabapple
Daylilies
Eastern Redbud
English Ivy
Euonymus
Fatsia
Geum
Hollyhocks
Hosta

Heuchera/Coral Bells
Hydrangea
Indian Hawthorn
Japanese Anemone
Korean Lilac
Lettuce
Liriope
Lobelia
Phlox
Rhododendron
Roses
Strawberry
Sweet Corn
Trillium
Tulip
Violet
Yew (*Taxus* spp., but Japanese Plum Yew, *Cephalotaxus*, is resistant & very similar.)



Good Companion Plants That Repel By Smell

Deer generally don't like the scents of the following plants. By interplanting them with plants that deer *do* like, you can help to repel deer from eating plants that you both consider desirable.

Anise Hyssop (*Agastache foeniculum*) - Upright perennial with minty-licorice scent and blue flowers in late summer. Use with day-lilies and roses. May deter Japanese beetles as well. Plant in sun to part shade.

Anise shrub (*Illicium* spp.) - Rounded, evergreen shrub for shade with licorice scented leaves. May help protect azaleas and rhododendrons. Plant in part shade to shade.

Bear's Claw Hellebore (*Helleborus foetidus*) - Evergreen, palm-like leaves have skunky scent all year but especially when in flower. Plant shade or part shade.

Catmint (*Nepeta faassenii*, *C. mussinii*) - Sagey-mint scent is said to repel mosquitoes as well as deer. Blue flowers in midsummer.

Corsican Hellebore (*Helleborus argutifolius*) - Shade-loving evergreen perennial has bold holly-like leaves with a skunky odor. Bright chartreuse flowers in spring. Good azalea defenders!

Curry Plant (*Helichrysum italicum*) - Small, cool-season annual used for winter interest. Silver leaves have intense curry fragrance. Use with pansies and winter crops for "scentsational" display.

English Boxwood (*Buxus sempervirens*) - This famous hedge plant that has a sort of burnt mushroom smell (though some say cat pee is more like it). Plant in sun or shade.

Fritillaria (most varieties) - Spring blooming bulbs colonize into nice masses. Grassy leaves have oniony smell. Great for interplanting with tulips. Plant in sun to part shade.

Lavender Cotton (*Santolina chamaecyparissus*) - Textural silver sub-shrub has strong musky, hyssop odor and yellow button flowers in summer. Looks nice with perennials, annuals, or shrubs. Plant in sun.

Oregano (*Origanum* spp.) - Spicy leaves are semi-evergreen and tidy. Plant in sun.

Rosemary (*Rosmarinus officinalis*) - Creeping or shrubby culinary evergreen herb with light blue flowers in spring. Creeping form offers excellent pansy protection.

Sage (*Salvia* - all species) - All have semi-evergreen, pungent foliage and showy flowers. Mix with roses, phlox, anemones, tulips, daylilies.

Spider Flower (*Cleome hasslerana*) - Tall annual with lacy flowers and musky, thorny foliage and stems. Great for interplanting with roses.

Star Lily (*Ipheon uniflora*) - Small, spring-blooming bulbs colonize into nice masses. Grassy leaves have onion scent. Blue, star-shaped flower. Plant in sun or shade.

Wax Myrtle (*Myrica* spp.) - Native evergreen shrub with a bay leaf scent. Use for barriers, hedges, or shaped accent. Good foil for roses! Plant sun or part shade.

Wormwood (*Artemisia* spp.) - Many varieties of lacy, silver-leaved perennials that emit a bitter-herb scent. Good with roses, Indian hawthorn, veggie crops, etc. Plant in sun to part shade.

Lantana 'Ms. Huff' - Shrubby perennial with lemon-mint foliage. Orange and yellow flowers. Use with daylilies, tall phlox, and roses.

Thyme (*Thymus* spp.) - Most types make excellent low barriers to mask other plants.

Yarrow (*Achillea* spp.) - Low, ferny-leaved perennial has musky-onion scent and flowers ranging from yellow to reddish-purple. Good with vegetable crops as flowers attract beneficial insects.

DEFEATING DEER: TIPS & TECHNIQUES

THE LOGIC:

1. If you have a deer problem, it is very likely that you are being visited by the same deer every night.
2. Your deer have already learned what plants they like best and will continue to eat them until they are gone at which time they will start trying everything else in the garden.
3. Fawns learn which plants are “preferred” from their mothers. We can teach the fawns to prefer the garden down the street by using deterrents with the proper timing. This may break the “generational curse”.

CHEMICAL DETERRENTS:

Sprays

1. Deer Off™, Liquid Fence™, No Deer Zone™, and imustgarden Deer Repellent™ - Begin spraying the whole garden in late March to discourage Mom from bringing Jr. around. In late April, spray only susceptible plants in order to teach Jr. that these plants taste terrible. He'll remember and avoid them next time. Rotate products every so often to prevent deer from acclimating to them.

2. Home remedy - You can also try blending 2 eggs, 2 Tbsp. ground hot pepper, 1 Tbsp. chopped or dried rosemary, and 1/2 clove garlic in 1 quart of water. Blend for 1 minute on high speed and let stand overnight at room temperature. Pour through a fine mesh strainer or cheese cloth into an old milk jug. Use at a rate of 1/4 cup concentrated mix to 1 quart water. Add a few drops of scented dish soap or a tsp. of insecticidal soap to make the product stick to and stay on leaves. Remaining concentrate can be refrigerated for up to one week.

Solid Spreadables

Blood Meal, Mothballs, Milorganite™, Bar Soap - In late spring, sprinkle, spread, or place around plants that need extra protection. Milorganite™ and blood meal are nitrogen based fertilizers and should not be used later than August in planted areas. Instead, spread them around garden perimeters. Begin a fall spray or barrier program in late September to remind deer not to dine at your restaurant (because the food *really* stinks!)

PHYSICAL DETERRENTS:

Electric Fencing - The general recommendation for electric deer fencing is four lines at 2, 4, 6, and 8 foot levels. It is important to attach 1 foot long white plastic or cloth strips to the wire that is at the 4 foot level. Space the strips 8 to 12 feet apart so that the deer can perceive the barrier and not injure or cut themselves on the wire. Consider cost, appearance, terrain, and zoning laws before starting out.

Poly Mesh/Wire Fencing - This involves using polypropylene mesh or woven wire that can be attached to trees, fence posts, or both. The fencing should be installed so it is 8 feet high. It will last longer if reinforced with high-tensile wire strung along the bottom, middle, and top. The bottom of the fence should be staked to the ground to keep fawns from getting under.

Double Fencing - If a tall fence is undesirable, you can install double-fencing which can be around 4 feet tall with another 4 foot tall fence about 3-4 feet away from the first. This is 3D fencing and the thinking is that deer dislike trying to gauge the distance needed to jump it. The fences can be of different materials from each other or the same. You can do fence posts with high tension wire, baling twine, rope, etc. attached, or picket fences, or polypropylene fences. The key features are that the fences are about the same height as each other and about 3-4 feet apart. You can even plant in between the fences. (Deer-resistant plants, of course!)

Nylon or Filament Netting - Place netting over susceptible shrubs. Best used on shrubs from fall to spring but should be removed by late spring as new growth begins. Cons: wildlife can get caught in it sometimes.

Ornamental Grasses - Some research indicates that not only do deer not eat ornamental grasses but also don't like to be around them. Consider a dense planting around problem areas.

Sonic Devices - These devices produce an ultrasonic noise disliked by deer (and people under the age of 30, apparently) and help repel them away from areas near the device. Some have motion sensors so that they are activated by movement as well as strobe lights as further deterrents.

Motion Sensors - There are many creative possibilities from hooking up holiday chaser lights, to loud radios, to automatic sprinklers. There is a specially designed device called the Scarecrow that hooks up to a hose. When the motion sensor is activated, it shoots water in the direction of the motion. Remember that radios and other electronic devices should be properly housed and grounded for safety.

Wind Chimes - Unpredictable movement and odd sounds frighten deer. Mid-tone or mid-range chimes seem to be more effective than those in the high-range.