

## PERENNIAL CARE

# top 40 trees custom order

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Large, locally grown tree specimens are now available for you to custom order! Your tree(s) will be available for pick-up at the greenhouse or for local delivery after April 15. Please allow approximately two weeks for in-season orders (May - August).

### Shade Trees

Autumn Blaze® Freeman Maple  
Sienna Glen® Freeman Maple  
Armstrong Freeman Maple  
Fall Fiesta® Sugar Maple  
Kindred Spirit® Oak  
Heritage® Oak  
Swamp White Oak  
Northern Catalpa  
True North™ Coffeetree  
Jefferson Elm  
Princeton Sentry® Ginkgo  
Common Hackberry  
Northern Acclaim® Honeylocust  
Harvest Gold Linden

### Ornamental Trees

Blue Beech (American Hornbeam)  
Dakota Pinnacle® Birch  
Whitespire Birch  
River Birch  
Northern Redbud  
Royal Star Magnolia  
Autumn Brilliance Serviceberry  
Nannyberry Viburnum

### Hydrangea

Limelight Hydrangea Tree  
Berry White® Hydrangea Tree  
Quick Fire® Hydrangea Tree  
Vanilla Strawberry™ Hydrangea Tree

### Lilac

Dwarf Korean Lilac Tree  
Snowcap™ Lilac Tree  
Quick Fire® Hydrangea Tree  
Vanilla Strawberry™ Hydrangea Tree

### Crabapples

Red Barron Crabapple  
Pink Sparkles® Crabapple  
Royal Raindrops® Crabapple  
Starlite® Crabapple  
Firebird® Crabapple

### Fruit Trees

SnowSweet® Apple  
Honeycrisp Apple  
KinderKrisp Apple  
Zestar!® Apple  
Haralred® Apple  
BlackIce® Plum  
Toka Plum

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## PERENNIAL CARE

# salt tolerant perennials and shrubs

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When planning a garden in Minnesota, it's important to consider exposure to road salt. Be sure to select salt tolerant plants when planting in boulevards, along sidewalks and driveways, or other places that may be subjected to salt spray. Practice smart salting and consider using sand as an alternative solution where possible.

### Full Sun (6+ hours direct sun)

*Aronia* (Chokeberry)\*

*Achillea* (Yarrow)

*Alchemilla* (Lady's Mantle)

*Allium* (Ornamental Onion)

*Arctostaphylos* (Kinnikinnick/Bearberry)\*

*Armeria* (Thrift)

*Artemisia* (Wormwood)

*Asclepias* (Milkweed/Butterfly Weed)

*Betula* (Birch)\*

*Bouteloua* (Sideoats Grama)

*Calamagrostis* (Feather Reed Grass)

*Campanula* (Bellflower)

*Ceanothus* (New Jersey Tea/Redroot)\*

*Clethra* (Summersweet)\*

*Cotinus* (Smokebush/Smoketree)\*

*Cotoneaster* (Creeping Cotoneaster)\*

*Dalea* (Prairie Clover)

*Delosperma* (Ice Plant)

*Dianthus* (Pinks)

*Echinops* (Globe Thistle)

*Eragrostis* (Purple Love Grass)

*Eryngium* (Sea Holly)

*Euphorbia* (Cushion Spurge)

*Eutrochium* (Joe Pye Weed)

*Festuca* (Fescue)

*Forsythia* (Goldenbells)\*

*Fragaria virginiana* (Wild Strawberry)

*Gaillardia* (Blanket Flower)

*Ginkgo* (Maidenhair Tree)\*

*Gleditsia* (Honey Locust)\*

*Hamamelis* (Witch Hazel)\*

*Hemerocallis* (Daylily)

*Iberis* (Candytuft)

*Iris* (Bearded/Northern Blue Flag Iris)

*Juniperus spp.* (Juniper)\*

*Lewisia* (Siskiyou Lewisia/Bitterroot)

*Microbiota* (Siberian/Russian Cypress)\*

*Nepeta* (Catmint)

*Opuntia* (Prickly Pear)

*Paeonia* (Peony)

*Panicum* (Switchgrass)

*Penstemon* (Beardtongue)

*Perovskia* (Russian Sage)

*Phlox* (Garden/Creeping Phlox)

*Physotegia* (Obedient Plant)

*Pinus mugo* (Mugo Pine)\*

*Potentilla* (Cinquefoil)\*

*Prunella* (Selfheal/Heal-All)

## Full Sun (6+ hours direct sun) cont.

*Pycnanthemum* (Mountain Mint)  
*Quercus bicolor* (Swamp White Oak)\*  
*Ratibida* (Prairie/Gray-Headed Coneflower)  
*Rudbeckia* (Black-Eyed Susan)  
*Salvia* (Woodland/Meadow Sage)  
*Rhus* (Fragrant/Staghorn Sumac)\*  
*Schizachyrium* (Little Bluestem)  
*Sedum* (Stonecrop)  
*Sempervivum* (Hen and Chicks)  
*Silphium* (Cup Plant)  
*Solidago* (Goldenrod)  
*Sorghastrum* (Yellow Prairie Grass)  
*Spiraea* (Spirea)\*  
*Sporobolus* (Prairie Dropseed)  
*Symphoricarpos* (Snowberry)\*  
*Syringa* (Lilac)\*  
*Thymus* (Creeping Thyme)  
*Ulmus* (Elm)\*  
*Viburnum*\*  
*Vitis* (Grapevine)  
*Yucca* (Adam's Needle)  
*Zizia* (Golden Alexander)

**Note:** Many of these plants will grow in part sun exposure but will bloom best in full sun.

## Part Sun/Shade (0-6 hours direct sun)

*Aquilegia* (Columbine)  
*Astilbe* (False Goatsbeard)  
*Carex* (Sedge)  
*Chasmanthium* (Northern Sea Oats)  
*Diervilla* (Northern Bush Honeysuckle)\*  
*Eurybia* (Large-Leaved Aster)  
*Heuchera* (Coral Bells)  
*Hosta* (Plantain Lily)  
*Parthenocissus quinquefolia* (Virginia Creeper)  
*Taxus* (Yew)\*

**Note:** Many of these plants will grow in shady conditions but will bloom best in part sun.

\*Woody tree or shrub

## PERENNIAL CARE

# 10 tips for pollinator planting

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Pollination is a vital ecological process that involves the transfer of pollen between flowers. Pollinators are insects or animals that aid in pollen transfer including: bees, butterflies, hummingbirds, moths, ants, beetles, flies, wasps, and bats. A garden that is beneficial to pollinators in all life stages helps to sustain populations and provides numerous benefits to both humans and the natural world around us.

**1 Choose plants with staggered bloom times** to provide a reliable nectar source and pollen supply all season long. Strive to have at least three plants in bloom from early spring through late fall.

**2 Vary flower shape and structure** to support a wide range of pollinators.

Composite: Provide a platform for resting, many small blooms close together.

*Echinacea* (Coneflower), *Ratibida* (Prairie/Gray-Headed Coneflower), *Liatris* (Blazing Star), *Symphyotrichum* (Aster), *Solidago* (Goldenrod)

Umbelliferous: Numerous small, shallow flowers and flat landing platform.

*Zizia* (Golden Alexander), *Astrantia* (Masterwort), *Angelica* (Garden Angelica), *Foeniculum* (Fennel), *Anethum* (Dill)

Tubular/Bilabiate: Long tubular flowers, often with a flat lower lip for perching.

*Lobelia* (Cardinal Flower), *Chelone* (Turtlehead), *Monarda* (Bee Balm/Wild Bergamot), *Pycnanthemum* (Mountain Mint), *Penstemon* (Beardtongue)

Nodding: Flowers that nod or hang down with no suitable landing area.

*Allium cernuum* (Nodding Onion), *Thalictrum* (Early Meadow Rue), *Pulsatilla* (Pasqueflower), *Geum* (Prairie Smoke), *Dicentra* (Bleeding Heart)

Complex: Concealed nectar in spurs that can only be reached by visitors with a long tongue or proboscis.

*Aquilegia* (Columbine), *Asclepias* (Milkweed/Butterfly Weed), *Viola* (Violet), *Tropaeolum* (Nasturtium), *Delphinium* (Larkspur)

- 3 Plant large, dense groupings of like flowers.** Large swaths of color are easier for pollinators to locate and provide better forage, with many pollinators only able to travel a short distance each day.
- 4 Plant for all stages of life to support pollinator reproduction.** Provide habitat and forage options. Position larval host plants out of direct sight lines to conceal feeding damage. Provide ground nesting sites and hollow stems or wood bee blocks for native bee populations.
- 5 Plant native plants** as much as possible as they are phenomenal pollen and nectar producers and are easy for pollinators to navigate. Native plants provide the greatest benefit to pollinators in all life stages.
- 6 Provide fresh, clean, shallow water saucers for pollinators.** Sanitize and refill regularly.
- 7 Provide flat stones or pavers for pollinators** to rest and warm up in the sun.
- 8 Avoid and ideally eliminate pesticide and fungicide use entirely.** Biological and cultural control methods should be prioritized and exhausted before considering chemical control methods.
- 9 Delay spring garden cleanup** at least until temperatures are consistently above 50F to preserve habitat and protection for overwintering pollinators, or skip most of the cleanup entirely. Pollinators overwinter in a variety of plant materials, with some nesting in hollow stems, and others choosing to burrow into leaf litter. Leave plants standing through the winter to provide habitat and shelter, as well as winter interest.
- 10 Maintain pollinator plantings** to manage invasive species, weed pressure, and plant health. Successful pollinator plantings can be low maintenance once established, but will still require some degree of regular maintenance to be as beneficial as possible, especially in the first few years after planting.

## PERENNIAL CARE

# deer and rabbit resistant perennials and shrubs

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Wildlife can be kept away from perennials with harmless repellent options that use scent and taste as a deterrent. Options include foliar sprays like Hot Pepper Wax, Liquid Fence, and Repels All; granular options like Shake Away Coyote or Fox Urine; and systemic options like Repellex, available in both tablet and granular formulations. Fencing and other physical barriers are also a foolproof way to keep critters out of the garden. Animal resistant does not always mean animal proof.

### Full Sun (6+ hours direct sun)

<i>Achillea</i> (Yarrow)	<i>Fothergilla</i> (Witch Alder)*
<i>Aconitum</i> (Monkshood)	<i>Gaillardia</i> (Blanket Flower)
<i>Agastache</i> (Anise Hyssop)	<i>Galium</i> (Sweet Woodruff)
<i>Alchemilla</i> (Lady's Mantle)	<i>Geranium</i> (Cranesbill)
<i>Allium</i> (Ornamental Onion)	<i>Geum</i> (Avens/Prairie Smoke)
<i>Amsonia</i> (Bluestar)	Grasses
<i>Anemone</i> (Windflower)	<i>Heliopsis</i> (False Sunflower)
<i>Artemisia</i> (Wormwood)	<i>Hibiscus</i> (Hardy Hibiscus)
<i>Asclepias</i> (Milkweed/Butterfly Weed)	<i>Iberis</i> (Candytuft)
<i>Aspilbe</i> (False Goatsbeard)	<i>Iris</i>
<i>Astrantia</i> (Masterwort)	<i>Juniperus</i> spp. (Juniper)*
<i>Aquilegia</i> (Columbine)	<i>Larix</i> (Larch/Tamarack)*
<i>Baptisia</i> (False Indigo)	<i>Leucanthemum</i> (Shasta Daisy)
<i>Campanula</i> (Bellflower)	<i>Liatris</i> (Blazing Star)
<i>Chrysanthemum</i> (Hardy Mum)	<i>Lobelia</i> (Cardinal Flower/Great Blue)
<i>Clethra</i> (Summersweet)*	<i>Lupinus</i> (Lupine)
<i>Coreopsis</i> (Tickseed)	<i>Microbiota</i> (Siberian/Russian Cypress)
<i>Cotinus</i> (Smokebush/Smoketree)*	<i>Monarda</i> (Bee Balm/Wild Bergamot)
<i>Delphinium</i> (Larkspur)	<i>Mukdenia</i>
<i>Deschampsia</i> (Tufted Hairgrass)	<i>Nepeta</i> (Catmint)
<i>Dianthus</i> (Pinks)	<i>Paeonia</i> (Peony)
<i>Echinops</i> (Globe Thistle)	<i>Papaver</i> (Poppy)
<i>Eryngium</i> (Rattlesnake Master/Sea Holly)	<i>Penstemon</i> (Beardtongue)
<i>Eutrochium</i> (Joe Pye Weed)	<i>Perovskia</i> (Russian Sage)
<i>Forsythia</i> (Goldenbells)*	<i>Philadelphus</i> (Mockorange)*

## Full Sun (6+ hours direct sun) cont.

*Physocarpus* (Ninebark)\*  
*Pinus mugo* (Mugo Pine)\*  
*Platycodon* (Balloon Flower)  
*Polemonium* (Jacob's Ladder)  
*Potentilla* (Cinquefoil)\*  
*Pycnanthemum* (Mountain Mint)  
*Ratibida* (Prairie Coneflower)  
*Rhus* (Sumac)\*  
*Rudbeckia* (Black-Eyed Susan)  
*Salvia* (Meadow/Woodland Sage)  
*Scabiosa* (Pincushion Flower)  
*Sedum* (Stonecrop)  
*Sempervivum* (Hen and Chicks)  
*Solidago* (Goldenrod)

*Stachys* (Lambs' Ears/Betony)  
*Syringa* (Lilac)\*  
*Thymus* (Creeping Thyme)  
*Trollius* (Globe Flower)  
*Veronica* (Speedwell)  
*Viburnum*\*  
*Yucca* (Adam's Needle)

**Note:** Many of these plants will grow in part sun exposure but will bloom best in full sun.

## Part Sun/Shade (0-6 hours direct sun)

*Actaea* (Bugbane/Black Cohosh)  
*Aralia* (Golden Spikenard)  
*Aruncus* (Goatsbeard)  
*Asarum* (Wild Ginger)  
*Bergenia* (Pigsqueak)  
*Brunnera* (Siberian Bugloss)  
*Chelone* (Turtlehead)  
*Dicentra* (Bleeding Heart)  
*Diervilla* (Northern Bush Honeysuckle)\*  
*Epimedium* (Barrenwort)  
*Eurybia* (Large-Leaved Aster)  
Ferns  
*Heuchera* (Coral Bells)  
*Ligularia* (Ragwort)  
*Polygonatum* (Solomon's Seal)  
*Pulmonaria* (Lungwort)  
*Tiarella* (Foamflower)

**Note:** Many of these plants will grow in shady conditions but will bloom best in part sun.

\*Woody tree or shrub

Check out our guide to repelling  
deer and rabbits in the garden here!



## PERENNIAL CARE

# minnesota native perennials for sun and shade

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Native plants are species that occur naturally in certain ecosystems and locations. Plants are considered Minnesota native species if they were observed in Minnesota at the time of the Public Land Survey (1847-1907). Any plant that expands from its historic range into the state without human intervention is also considered native. Native plants are an excellent choice for the home garden as they are best adapted to our local climate and growing conditions. Additionally, native plants are great sources of pollen, nectar, and seeds for native pollinators, birds, and other animals, and also provide great habitat for wildlife. Consider these beautiful Minnesota native plants when searching for your next garden additions!

### Full Sun (6+ hours direct sun)

- |   |  |
|---|--|
| <i>Achillea millefolium</i> (Common Yarrow)                 | <i>Fragaria virginiana</i> (Wild Strawberry)         |
| <i>Acorus americanus</i> (Sweet Flag)                       | <i>Gaillardia aristate</i> (Blanket Flower)          |
| <i>Agastache foeniculum</i> (Anise Hyssop)                  | <i>Gentiana alba</i> (Cream Gentian)                 |
| <i>Allium cernuum</i> (Nodding Onion)                       | <i>Gentiana andrewsii</i> (Bottle Gentian)           |
| <i>Andropogon gerardii</i> (Big Bluestem)                   | <i>Geum triflorum</i> (Prairie Smoke)                |
| <i>Anemone canadensis</i> (Canada Anemone)                  | <i>Helianthus pauciflorus</i> (Stiff Sunflower)      |
| <i>Antennaria neglecta</i> (Field Pussytoes)                | <i>Heliopsis helianthoides</i> (False Sunflower)     |
| <i>Artemisia ludoviciana</i> (White Sage)                   | <i>Liatis aspera</i> (Rough Blazing Star)            |
| <i>Asclepias incarnata</i> (Swamp Milkweed)                 | <i>Liatis cylindracea</i> (Cylindrical Blazing Star) |
| <i>Asclepias speciosa</i> (Showy Milkweed)                  | <i>Liatis ligulistylis</i> (Meadow Blazing Star)     |
| <i>Asclepias syriaca</i> (Common Milkweed)                  | <i>Liatis pycnostachya</i> (Prairie Blazing Star)    |
| <i>Asclepias tuberosa</i> (Butterfly Weed)                  | <i>Lilium michiganense</i> (Michigan Lily)           |
| <i>Baptisia australis</i> (Blue False Indigo)               | <i>Lobelia cardinalis</i> (Cardinal Flower)          |
| <i>Bouteloua curtipendula</i> (Sideoats Grama)              | <i>Lobelia siphilitica</i> (Great Blue Lobelia)      |
| <i>Bouteloua gracilis</i> (Blue Grama)                      | <i>Lupinus perennis</i> (Wild Lupine)                |
| <i>Dalea purpurea</i> (Purple Prairie Clover)               | <i>Lythrum alatum</i> (Winged Loosestrife)           |
| <i>Echinacea angustifolia</i><br>(Narrow-Leaved Coneflower) | <i>Monarda fistulosa</i> (Wild Bergamot)             |
| <i>Eragrostis spectabilis</i> (Purple Love Grass)           | <i>Monarda punctata</i> (Spotted Bee Balm)           |
| <i>Eryngium yuccifolium</i> (Rattlesnake Master)            | <i>Opuntia humifusa</i> (Eastern Prickly Pear)       |
| <i>Eutrochium maculatum</i> (Spotted Joe Pye)               | <i>Penstemon digitalis</i> (Foxglove Beardtongue)    |
| <i>Eutrochium purpureum</i> (Sweet Joe Pye)                 | <i>Penstemon gracilis</i> (Slender Beardtongue)      |
|   | <i>Physostegia virginiana</i> (Obedient Plant)       |



## Full Sun (6+ hours direct sun) cont.

<i>Pinus strobus</i> (Eastern White Pine)*	<i>Sporobolus heterolepis</i> (Prairie Dropseed)
<i>Prunella vulgaris</i> (Selfheal/Heal-All)	<i>Symphotrichum leave</i> (Smooth Aster)
<i>Pycnanthemum virginianum</i> (Mtn. Mint)	<i>Symphotrichum novae-angliae</i> (New England Aster)
<i>Ratibida columnifera</i> (Prairie Coneflower)	<i>Symphotrichum oblongifolium</i> (Aromatic Aster)
<i>Ratibida pinnata</i> (Gray-Headed Coneflower)	<i>Symphotrichum oolentangiense</i> (Sky Blue Aster)
<i>Rudbeckia hirta</i> (Black-Eyed Susan)	<i>Tradescantia ohioensis</i> (Ohio Spiderwort)
<i>Rudbeckia triloba</i> (Brown-Eyed Susan)	<i>Verbena hastata</i> (Blue Vervain)
<i>Ruellia humilis</i> (Wild Petunia)	<i>Verbena stricta</i> (Hoary Vervain)
<i>Salix discolor</i> (Pussy Willow)*	<i>Vernonia fasciculata</i> (Common Ironweed)
<i>Schizachyrium scoparium</i> (Little Bluestem)	<i>Veronicastrum virginicum</i> (Culver's Root)
<i>Silphium perfoliatum</i> (Cup Plant)	<i>Zizia aurea</i> (Golden Alexander)
<i>Solidago rigida</i> (Stiff Goldenrod)	
<i>Solidago speciosa</i> (Showy Goldenrod)	
<i>Sorghastrum nutans</i> (Yellow Prairie Grass)	

**Note:** Many of these plants will grow in part sun exposure but will bloom best in full sun.

## Part Sun/Shade (0-6 hours direct sun)

<i>Adiantum pedatum</i> (Northern Maidenhair Fern)	<i>Hydrophyllum virginianum</i> (Virginia Waterleaf)
<i>Aquilegia canadensis</i> (Eastern Red Columbine)	<i>Koeleria macrantha</i> (Junegrass)
<i>Arisaema triphyllum</i> (Jack-in-the-Pulpit)	<i>Matteuccia struthiopteris</i> (Ostrich Fern)
<i>Asarum canadense</i> (Wild Ginger)	<i>Mertensia virginica</i> (Virginia Bluebells)
<i>Carex sprengelii</i> (Long-Beaked Sedge)	<i>Mimulus ringens</i> (Allegheny Monkey Flower)
<i>Carex pensylvanica</i> (Penn. Sedge)	<i>Onoclea sensibilis</i> (Sensitive Fern)
<i>Chelone glabra</i> (White Turtlehead)	<i>Osmunda cinnamomea</i> (Cinnamon Fern)
<i>Diervilla lonicera</i> (Northern Bush Honeysuckle)*	<i>Parthenocissus quinquefolia</i> (Virginia Creeper)
<i>Dodecatheon meadia</i> (Shooting Star)	<i>Phlox divaricata</i> (Woodland Phlox)
<i>Eurybia macrophylla</i> (Large-Leaved Aster)	<i>Solidago flexicaulis</i> (Zigzag Goldenrod)
<i>Geranium maculatum</i> (Wild Geranium)	<i>Thalictrum dioicum</i> (Purple Meadow Rue)
<i>Hepatica acutiloba</i> (Sharp-Lobed Hepatica)	<i>Thalictrum dioicum</i> (Early Meadow Rue)
	<i>Trillium grandiflorum</i> (Great White Trillium)

**Note:** Many of these plants will grow in shady conditions but will bloom best in part sun.

\*Woody tree or shrub

## PERENNIAL CARE

# hydrangea 101

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With elegant blooms and a timeless appearance, hydrangeas are an iconic garden staple perfect in any garden space. Hydrangea are most commonly available as cultivars of three main species: *Hydrangea macrophylla* (Bigleaf Hydrangea), *Hydrangea paniculata* (Panicle Hydrangea), and *Hydrangea arborescens* (Smooth Hydrangea).

### ***Hydrangea macrophylla*, Bigleaf Hydrangea**

*Hydrangea macrophylla* are compact hydrangeas best suited for part-shade. Their colorful, spherical or lacecap blooms surprise and delight. Color-changing cultivars, including the Endless Summer® series, will express blue or pink blooms depending on soil pH. Garden amendments can further influence bloom color in these cultivars. Blooms turn bluer in color with the addition of a soil acidifier, and pinker in color with the addition of garden lime to increase soil alkalinity.

Modern bigleaf hydrangea cultivars flower on new and old growth, so pruning can be done anytime but is usually best performed in the spring. Extensive pruning beyond basic shaping and removing broken or damaged branches is not usually necessary. Fertilize two or three times per season between mid-May and mid-July with a bloom-focused fertilizer. Make sure to avoid nitrogen-heavy fertilizers.

### ***Hydrangea paniculata*, Panicle Hydrangea**

*Hydrangea paniculata* are part to full-sun varieties with long-lasting, large, conical or lacecap panicles borne on new wood (the current season's growth). Prune panicle hydrangea by 30-50% in the late winter or early spring before they begin to leaf out. Fertilize two or three times per season between mid-May and mid-July with an acidic fertilizer such as Miracle Gro Miracid, or a bloom-focused fertilizer such as Espoma Flower Tone or Miracle Gro Bloom Booster.

### ***Hydrangea arborescens*, Smooth Hydrangea**

*Hydrangea arborescens* are part to full shade, moderately sized shrubs with large spherical flowers that bloom only on new wood. Prune smooth hydrangea back in late winter or early spring to a height of one to two feet above ground. This will encourage abundant new growth. Fertilize two or three times per season between mid-May and mid-July with an acidic or bloom-focused fertilizer.

### ***Hydrangea macrophylla* varieties we love:**

Blue Enchantress®  
Endless Summer® 'BloomStruck®'  
Endless Summer® 'Eclipse®'  
Endless Summer® 'Pop Star®'  
Endless Summer® 'Summer Crush®'  
Seaside Serenade® 'Cape Lookout'  
Seaside Serenade® 'Cape May'  
Seaside Serenade® 'Hamptons'  
Seaside Serenade® 'Martha's Vineyard'  
Seaside Serenade® 'Crystal Cove'

### ***Hydrangea paniculata* varieties we love:**

'Berry White'  
'Bobo®'  
'Diamond Rouge®'  
'Early Evolution™'  
'Fire Light®'  
'Fire Light Tidbit®'  
'Little Hottie®'  
'Limelight'  
'Limelight Prime®'  
'Little Lime®'  
'Little Quick Fire®'  
'Pinky Winky®'  
'Quick Fire®'  
'Little Quick Fire®'  
'Strawberry Shake™'

### ***Hydrangea arborescens* varieties we love:**

'Annabelle'  
'Incrediball®'  
Invincibelle® 'Garnetta®'  
Invincibelle® 'Mini Mauvette®'  
Seaside Serenade® 'Bar Harbor'



*Check out our guide to planting trees and shrubs before getting started!*

## PERENNIAL CARE

# common perennial garden diseases

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### powdery mildew

**Description:** Powdery mildew is a fungal disease that appears as a mat of white powdery or web-like growth on the upper side of leaves, stems, and blooms. Powdery mildew spores travel easily through the wind and through physical contact, favoring warm, dry days for spore spread and cool, humid nights for spore production. Infection spreads quickest in shady areas with poor air circulation and high humidity. Though mostly cosmetic, powdery mildew can impact growth and development by limiting photosynthesis in severe infections. Powdery mildew species are largely host-specific, meaning infection will only spread to closely related plants (e.g., powdery mildew on bee balm does not pose a threat to nearby peonies).

**Signs and Symptoms:** White or gray, web-like or powder-like spots on upper leaf surfaces and stems, yellowing leaves, leaf drop, stunted or disfigured tender growth, and bud abortion.

**Management and Treatment:** Remove any leaves showing early signs of infection. Carefully apply copper or sulfur fungicide as a preventative measure on powdery-prone plants or treat plants as soon as possible when signs of disease first appear to help reduce spread. Leave or cut back severe cases; fungicides will not cure well-established infections. Keep plants well-spaced and water only at their base; avoid wetting foliage as much as possible. Thin out overgrown, dense foliage to increase airflow, and prune shrubs annually to maintain an open branch structure. Bag and throw away all diseased foliage. Do not compost infected plant material as the fungus can overwinter.

**Commonly Affected Perennials:** *Monarda* (Bee Balm/Wild Bergamot), *Astilbe* (False Spirea), *Paeonia* (Peony), *Physocarpus* (Ninebark), *Coreopsis* (Tickseed)

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### rust

**Description:** Rust is a fungal disease caused by a diverse group of specialist fungi. Rusts are easily spread by wind, physical contact, and water, initiating infection when a spore contacts a moist leaf surface. Small, yellow, translucent lesions on upper leaf surfaces are followed by rusty yellow, orange, or brown pustules on the lower leaf surface, beneath the lesions.

Rust is rarely fatal, but the orange pustules can be unsightly and in severe cases can impact plant growth and vigor. Like powdery mildew, rusts are highly host specific, only posing a threat to other closely related plant species.

**Signs and Symptoms:** Yellow, orange, red, or brown pustules on the undersides of leaves, yellow translucent spots or streaks on upper leaf surfaces, leaf distortion, leaf drop.

**Management and Treatment:** Remove any leaves showing early signs of infection. Carefully apply a copper or sulfur fungicide as a preventative measure on rust-prone plants or treat plants as soon as possible when signs of disease first appear to help reduce spread. Cut-back severe cases; fungicides will not cure well-established infections. Keep plants well-spaced and water only at the base; avoid wetting foliage as much as possible. Thin out overgrown, dense foliage to increase airflow. Bag and throw away all diseased foliage. Do not compost infected plant material as the fungus can overwinter.

**Commonly Affected Perennials:** *Hemerocallis* (Daylily), *Alcea* (Hollyhock), *Malus* (Apple/Crabapple), *Calamagrostis* (Feather Reed Grass), *Rosa* (Rose)

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## aster yellows

**Description:** Aster Yellows is a type of phytoplasma, a single-celled bacteria with a single cell membrane that requires an insect vector (in this case the Aster Leafhopper, *Acrosteles quadrilineatus*) for transmission. Leafhoppers spread Aster Yellows by first feeding on infected plant material and processing the infected phloem for around two weeks. Infection is then passed on to other plants in future feedings. Plant material may begin to show symptoms of infection as soon as seven days after introduction, however symptom development can often take weeks or months following the initial infection. Over 300 plant species are vulnerable to infection, including food crops such as garlic and tomatoes, as well as various other annual and perennial ornamentals.

**Signs and Symptoms:** Small, malformed, green flowers; pale green, yellow, or white leaves; stunted growth, reduced plant vigor.

**Management and Treatment:** Infected plant material cannot be treated and must be discarded immediately to prevent further spread. Material may be composted but should be buried in the pile to prevent leafhoppers from feeding on diseased material. Keep area free of weeds to avoid overwintering of the phytoplasma in root and crown tissues.

**Commonly Affected Perennials:** *Echinacea* (Coneflower), *Symphotrichum* (Aster), *Leucanthemum* (Shasta Daisy), *Chrysanthemum* (Hardy Mum), *Rudbeckia* (Black-Eyed Susan)

## PERENNIAL CARE

# rose 101

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Roses are an iconic perennial garden staple that can provide wonderful color and structure throughout the entire gardening season. Though their care may seem daunting, a few simple maintenance tips and a little extra effort will provide roses with what they need to put on fantastic blooming displays for many years to come.

### Water

- Keep new plantings well-watered in their first season of establishment.
- Established plantings should receive about 1" of water per week.
- Provide supplemental water to established plants during hot, dry periods.
- Water at the base with a garden or soaker hose.
- Avoid wetting the foliage; do not water overhead or with a sprinkler.
- Keep roses watered through fall until the ground freezes solid.

### Fertilizer

- Begin fertilizing after the threat of frost has passed in early May.
- Fertilize about every four to six weeks through the end of July.
- Use a bloom-focused fertilizer like Espoma Rose Tone.
- Stop fertilizing by early August to begin preparing for dormancy.

### Fall and Winter Care

- Prune tall canes back in late fall to prepare for winter coverage. Remove all pruning scraps from garden beds.
- As near-freezing temperatures approach, mulch in roses well to prevent winter kill and also to keep roses dormant during any early winter thaws.
  - Mound soil around the base of roses and apply a chunky layer of marsh hay or leaves, at least six inches thick, around the base of the plant to protect the graft union.
  - Consider caging with fencing and fill with winter mulch to insulate and protect the entire plant from winter kill and rabbit feeding.
- For large climbing roses, bundle canes together and wrap in straw or lay the bundle along the ground and mulch in well for protection.

## The Minnesota Tip Method

The best protection option, and a **must** for tender or non-hardy roses

- Apply dormant oil spray to plants in early October.
- Tie canes together in mid-October with twine after pruning.
- Dig a trench next to the bush that can accommodate the entire plant.
- Gently loosen the soil around the roots and pull soil away from the crown.
- Gently insert a spading fork behind the root ball and push into trench.
- Cover the rose plant with two to three inches of soil.
- When the ground is frozen, apply 6-12" of winter mulch.
- Fence around the plant or lay caging over the mounded winter mulch

## Spring Care and Pruning

The goal of spring pruning is to create an open plant structure to promote light penetration and air movement throughout the plant. Pruning will also encourage fresh spring growth of strong, bud-bearing branches.

- 1 Begin removing winter covering in early April, continuing to remove mulch as it thaws. In mid-April, check if the soil is thawed, if so, tip the bush back upright if tipped. Water regularly until new growth emerges.
- 2 Once buds are formed and actively growing, use a sanitized knife or pruners to cut any dead branches (not green inside when cut) back to the base of the plant. Always make angled cuts to prevent water from pooling in freshly cut stems.
- 3 Remove any spindly, insignificant growth—generally anything smaller than a pencil in diameter.
- 4 Remove any branches that are rubbing or growing into each other, as this dense growth can impact new growth and create open wounds where disease and insects may enter.
- 5 Once only healthy, strong branches remain, cut back to the next furthest node until you begin to see green in each stem. Keep overall shape in mind, aiming for an open upright vase-like shape, though desired appearance will vary slightly by rose type. Cut back each stalk to about a quarter of an inch above a bud eye (somewhere by a node where there is a slight growth protruding), prioritizing cuts above outward facing buds.
- 6 When you are finished, make sure to eliminate all loose plant material from the bed and admire your work!

## PERENNIAL CARE

# clematis 101

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*Clematis* are unmatched in their versatility and beauty, offering a variety of well over 250 species, including the North American native *Clematis virginiana*, as well as hundreds of cultivars that appeal to the casual gardener and avid collector alike.

Vining *Clematis* are grouped by bloom time to help simplify their care. Group 1 (spring bloomers), Group 2 (repeat bloomers), and Group 3 (summer or fall bloomers). Though *Clematis* should be left standing through the winter to protect their crown and provide winter interest, annual spring pruning will promote better blooming performance and healthier, more attractive plants.

### Group 1

Early flowering, sets buds on old wood (the previous season's growth), and blooms in the spring on mature stems. Little pruning is required, and any pruning should be conducted immediately after flowering in mid-summer. Prune no later than the end of July to avoid interfering with bud set for next season. Not regularly offered at Tonkadale.

### Group 2

Early, large-flowered hybrids, blooming twice: first in late spring through early summer on old wood, and again in mid-summer to fall on new wood (the current season's growth). Prune in late winter or early spring, completely removing any dead or weak stems. Cut back remaining stems by about a 1/3 to just above a pair of strong, swollen buds. If desired, additional pruning should be conducted immediately after the first flush of late spring blooms to help encourage rebloom.

### Group 3

Late flowering, blooming from mid-summer to fall on new wood. Includes the first modern large-flowered hybrid, *Clematis* 'Jackmanii,' and the fall-blooming *C. paniculata* 'Sweet Autumn.' Prune in late winter or early spring one to two feet up from the base of the plant, leaving at least two bud pairs per stem.



## Planting

- *Clematis* prefer moist, well-drained soils in full sun but will tolerate part sun, and are intolerant of high soil temperatures.
- More shade tolerant cultivars include: 'Abilene,' 'Bernadine,' 'Candy Stripe,' 'Claire de Lune,' 'Corrine,' 'Jackmanii,' 'Nelly Moser,' 'Samaritan Jo,' 'Sarah Elizabeth,' 'Silver Moon,' and 'Tranquilite.'
- Before planting, cut stems with a sterile blade back to 12" tall above a pair of low buds to encourage branching, and promote the formation of additional shoots.
- Dig a hole twice as wide and slightly deeper than the root ball. New *Clematis* should be planted one to two inches deeper than they were grown in their container to help protect the crown.
- Mulch plants well to cool the root zone and provide additional winter protection, taking care to leave four to six inches of space between stems and mulch to allow for adequate airflow.
- Position companion plantings to help keep *Clematis* roots shaded and cool while their blooms soak up the sun.
- Avoid disturbing the root zone or moving *Clematis* after planting, and allow new plantings a minimum of three years to establish and begin producing significant vine growth.

## Care

- Support *Clematis* by planting about 12" from a trellis, tripod, or other structure to allow their twining leaf petioles to climb.
- Carefully help plants to start twining around new supports.
- Fertilize one to two times per season in mid-spring and mid-summer with a bloom-focused fertilizer such as Espoma Flower Tone or a standard all-purpose fertilizer like Osmocote.

## Clematis Wilt

Avoid stem breakage when tying up or handling plants to help prevent Clematis Wilt, a localized fungal disease introduced through wounds. Mostly affecting younger, large-flowered hybrid *Clematis*, this fungus causes sudden stem collapse, often just before buds open. Stems and leaves then turn black and die-off above lesions within a few days. Careful handling and sanitation are the best means of prevention. Diseased stems should be cut to the ground with a sterile blade and thrown away immediately, not composted. Apply a fungicide to protect from further disease spread.

## PERENNIAL CARE

# planting for continuous color

Along with their beautiful foliage interest, textured bark, and ornamental berries, perennials produce stunning blooming displays with fantastic color year after year. Keep bloom time and bloom progression in mind when designing your space, incorporating Early, Mid, and Late season bloomers in the garden to keep things colorful all year long!

### Color for Part Sun/Shade (0-6 hours direct sun)

GENUS	COMMON NAME	SPRING			SUMMER			FALL
		E	M	L	E	M	L	
<i>Aquilegia</i>	Columbine	Light Purple	Light Purple	Light Purple				
<i>Bergenia</i>	Pigsqueak	Light Purple	Light Purple	Light Purple				
<i>Pulmonaria</i>	Lungwort	Light Purple	Light Purple	Light Purple				
<i>Dicentra</i>	Bleeding Heart		Light Purple	Light Purple	Light Purple			
<i>Epimedium</i>	Barrenwort		Light Purple	Light Purple	Light Purple			
<i>Polemonium</i>	Jacob's Ladder		Light Purple	Light Purple	Light Purple			
* <i>Rhododendron</i>			Light Purple	Light Purple	Light Purple			
<i>Tiarella</i>	Foamflower		Light Purple	Light Purple	Light Purple			
<i>Aruncus</i>	Goatsbeard			Light Purple	Light Purple			
<i>Galium</i>	Sweet Woodruff			Light Purple	Light Purple			
<i>Astilbe</i>	False Goatsbeard			Light Purple	Light Purple	Light Purple		
<i>Geranium</i>	Cranesbill			Light Purple	Light Purple	Light Purple	Light Purple	
<i>Heuchera</i>	Coral Bells			Light Purple	Light Purple	Light Purple	Light Purple	
<i>Hosta</i>	Plantain Lily				Light Purple	Light Purple	Light Purple	
<i>Hydrangea</i>					Light Purple	Light Purple	Light Purple	Light Purple
* <i>Clethra</i>	Summersweet					Light Purple	Light Purple	
<i>Aconitum</i>	Monkshood						Light Purple	Light Purple
<i>Actaea</i>	Bugbane						Light Purple	Light Purple
<i>Chelone</i>	Turtlehead						Light Purple	Light Purple
<i>Ligularia</i>	Ragwort						Light Purple	Light Purple

\*Woody tree or shrub

## Color for Full/Part Sun (4-6+ hours direct sun)

GENUS	COMMON NAME	SPRING			SUMMER			FALL
		E	M	L	E	M	L	
* <i>Forsythia</i>	Goldenbells	Yellow	Yellow					
<i>Pulsatilla</i>	Pasqueflower	Purple	Purple					
* <i>Rhododendron</i>	Azalea	Orange	Orange	Orange				
* <i>Fothergilla</i>	Witch Alder	Yellow	Yellow	Yellow				
* <i>Cercis</i>	MN Strain Redbud		Pink	Pink	Pink			
* <i>Magnolia</i>			Pink	Pink	Pink			
* <i>Malus</i>	Crabapple		Pink	Pink	Pink			
<i>Amsonia</i>	Bluestar			Blue	Blue			
<i>Baptisia</i>	False Indigo			Blue	Blue			
<i>Paeonia</i>	Peony			Orange	Orange			
* <i>Syringa</i>	Lilac			Purple	Purple			
<i>Trollius</i>	Globe Flower			Orange	Orange			
* <i>Weigela</i>			Red	Red	Red		Red	
<i>Penstemon</i>	Beardtongue			Purple	Purple	Purple		
<i>Dianthus</i>	Pinks			Pink	Pink	Pink	Pink	
<i>Salvia</i>	Meadow Sage			Purple	Purple	Purple	Purple	
<i>Nepeta</i>	Catmint				Blue	Blue		
<i>Delphinium</i>	Larkspur				Blue	Blue	Blue	
<i>Gaillardia</i>	Blanket Flower				Red	Red	Red	
<i>Platycodon</i>	Balloon Flower				Purple	Purple	Purple	
<i>Echinacea</i>	Coneflower				Orange	Orange	Orange	Orange
<i>Allium</i>	Ornamental Onion					Pink	Pink	
<i>Liatris</i>	Blazing Star					Pink	Pink	
<i>Lilium</i>	Lily					Orange	Orange	
<i>Monarda</i>	Bee Balm					Pink	Pink	
<i>Campanula</i>	Bellflower					Purple	Purple	Purple
<i>Coreopsis</i>	Tickseed					Yellow	Yellow	Yellow
<i>Eutrochium</i>	Joe Pye Weed					Purple	Purple	Purple
<i>Perovskia</i>	Russian Sage					Blue	Blue	Blue
<i>Phlox paniculata</i>	Garden Phlox					Pink	Pink	Pink
<i>Sedum</i>	Stonecrop					Purple	Purple	Purple
<i>Symphotrichum</i>	Aster					Purple	Purple	Purple
<i>Chrysanthemum</i>	Hardy Mum					Orange	Orange	Orange
<i>Hibiscus</i>	Hardy Hibiscus					Red	Red	Red
<i>Rudbeckia</i>	Black-Eyed Susan					Yellow	Yellow	Yellow
<i>Solidago</i>	Goldenrod					Yellow	Yellow	Yellow

\*Woody tree or shrub

## PERENNIAL CARE

# shrub spotlight

Adding shrubs into your landscape design is an excellent way to provide structure, frame buildings, anchor designs, and create year-round interest in your space. Check out some of these beautiful selections to find the perfect shrub for your garden.

### Full/Part Sun Shrubs (4-6+ hours direct sun)

GENUS	COMMON NAME	SIZE	BLOOM TIME	BLOOM COLOR	TOLERATES*	ANIMAL RESISTANT	PRUNING TIME	OTHER INTEREST
<i>Arctostaphylos</i>	Kinnikinnick	1' H 3-4' W	Late Spring to Early Summer	Pink/White	D/S	Resistant	Early Summer	Evergreen Red Berries
<i>Ceanothus</i>	New Jersey Tea	2-3' H 2-3' W	Late Spring to Mid-Summer	White	D/S/BW	Resistant	Late Winter	High wildlife value
<i>Cotinus</i>	Smokebush	4-15' H 4-10' W	Mid-Summer to Fall	Pink/Purple	D/S	Resistant	Late Winter	Colorful foliage Showy seedheads
<i>Hypericum</i>	St. John's Wort	2-3' H 4-5' W	Mid-Summer to Late Summer	Yellow	BW	Resistant	Late Winter	Red/orange fall color Exfoliating bark
<i>Ilex</i>	Winterberry	4-5' H 4-5' W	Late Spring to Early Summer	White	W/BW	Resistant	Late Winter	Red berries on pollinated females
<i>Philadelphus</i>	Mockorange	3-6' H 3-6' W	Late Spring to Early Summer	White	D	Resistant	Early Summer	Fragrant blooms
<i>Potentilla</i>	Cinquefoil	2-3' H 3-4' W	Early Summer to Fall	Many Colors	D/S	Resistant	Late Winter	Reblooming
<i>Sambucus</i>	Elderberry	4-8' H 4-8' W	Late Spring to Early Summer	White/Pink	D	Resistant	Late Winter	Colorful foliage Edible black berries
<i>Symphoricarpos</i>	Snowberry	3-4' H 3-4' W	Early Summer to Mid-Summer	White/Pink	D/S/BW	Resistant	Late Winter	Pink or white ornamental berries
<i>Weigela</i>	Weigela	3-6' H 3-6' W	Late Spring to Early Summer	Many Colors	D	Resistant	Early Summer	Light rebloom in late summer

\*Drought/Wet/Salt/Black Walnut Tolerant

### Part Sun/Shade Tolerant Shrubs (0-6 hours direct sun)

GENUS	COMMON NAME	SIZE RANGE	BLOOM TIME	BLOOM COLOR	TOLERATES*	ANIMAL RESISTANT	PRUNING TIME	OTHER INTEREST
<i>Aronia</i>	Black Chokeberry	2-6' H 2-6' W	Mid-Spring to Late Spring	White	W/S/BW		Early Summer	Black edible berries Red fall color
<i>Clethra</i>	Summersweet	4-6' H 3-5' W	Mid-Summer to Late Summer	White/ Pink	W/S	Resistant	Late Winter	Fragrant blooms Golden fall color
<i>Cornus</i>	Dogwood	3-6' H 3-6' W	Late Spring to Early Summer	White	W/BW	Resistant	Early Summer	Red or yellow twigs Ornamental berries
<i>Diervilla</i>	Northern Bush Honeysuckle	2-3' H 3-4' W	Mid-Summer to Late Summer	Yellow/ Orange	D/S/BW	Resistant	Late Winter	Bronze foliage Red/orange fall color
<i>Fothergilla</i>	Witch Alder	4-5' H 4-5' W	Early Spring to Late Spring	White		Resistant	Early Summer	Fragrant blooms Red/orange fall color
<i>Physocarpus</i>	Ninebark	4-8' H 4-8' W	Late Spring to Early Summer	White/ Pink	D/W/BW	Resistant	Early Summer	Colorful foliage Exfoliating bark
<i>Tsuga</i>	Hemlock	3-8'+ H 3-8'+ W	N/A Conifer	N/A	BW		Winter/ Spring	Evergreen Yellow/silver cultivars

\*Drought/Wet/Salt/Black Walnut Tolerant

## PERENNIAL CARE

# drought and wet tolerant perennials and shrubs

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### Drought Tolerant

Full Sun (6+ hours direct sun)

*Achillea* (Yarrow)  
*Agastache* (Anise Hyssop)  
*Allium* (Ornamental Onion)  
*Andropogon* (Big Bluestem)  
*Antennaria* (Field Pussytoes)  
*Arctostaphylos* (Kinnikinnick/Bearberry)\*  
*Armeria* (Thrift)  
*Asclepias* (*Milkweed/Butterfly Weed*)  
*Baptisia* (False Indigo)  
*Bouteloua* (Sideoats Grama)  
*Ceanothus* (New Jersey Tea/Redroot)\*  
*Cotinus* (Smokebush/Smoketree)\*  
*Dalea* (Prairie Clover)  
*Delosperma* (Ice Plant)  
*Dianthus* (Pinks)  
*Echinacea* (Coneflower)  
*Echinops* (Globe Thistle)  
*Eryngium* (Rattlesnake Master/Sea Holly)  
*Euphorbia* (Cushion Spurge)  
*Festuca* (Fescue)  
*Forsythia* (Goldenbells)\*  
*Fragaria virginiana* (Wild Strawberry)  
*Gaillardia* (Blanket Flower)  
*Geum* (Avens/Prairie Smoke)  
*Ginkgo* (Maidenhair Tree)\*  
*Heliopsis* (False Sunflower)  
*Hemerocallis* (Daylily)  
*Iberis* (Candytuft)  
*Iris germanica* (Bearded Iris)  
*Juniperus spp.* (Juniper)\*  
*Liatris* (Blazing Star)  
*Microbiota* (Siberian/Russian Cypress)  
*Nepeta* (Catmint)  
*Panicum* (Switch Grass)

*Perovskia* (Russian Sage)  
*Phlox subulata* (Creeping Phlox)  
*Potentilla* (Cinquefoil)\*  
*Pulsatilla* (Eastern Pasqueflower)  
*Ratibida* (Prairie/Gray-Headed Coneflower)  
*Rhus* (Sumac)\*  
*Salvia* (Woodland/Meadow Sage)  
*Scabiosa* (Pincushion Flower)  
*Schizachyrium* (Little Bluestem)  
*Sedum* (Stonecrop)  
*Sempervivum* (Hen and Chicks)  
*Solidago* (Goldenrod)  
*Sorghastrum* (Yellow Prairie Grass)  
*Sporobolus* (Prairie Dropseed)  
*Syringa* (Lilac)\*  
*Weigela*\*  
*Yucca* (Adam's Needle)

**Note:** Many of these plants will grow in part sun exposure but will bloom best in full sun.

Part Sun/Shade (0-6 Hours Direct Sun)

*Carex* (Sedge)  
*Diervilla* (Northern Bush Honeysuckle)\*  
*Epimedium* (Barrenwort)  
*Eurybia* (Large-Leaved Aster)  
*Pachysandra* (Japanese Spurge)  
*Polygonatum* (Solomon's Seal)  
*Polystichum* (Christmas Fern)

**Note:** Many of these plants will grow in shady conditions but will bloom best in part sun.

\* *Woody tree or shrub*

## Wet Tolerant

### Full Sun (6+ hours direct sun)

*Acorus* (Sweet Flag)  
*Anemone* (Windflower)  
*Aronia* (Black Chokeberry)\*  
*Asclepias incarnata* (Swamp Milkweed)  
*Astrantia* (Masterwort)  
*Betula nigra* (River Birch)\*  
*Cephalanthus* (Buttonbush)\*  
*Clethra* (Summersweet)\*  
*Cornus* (Dogwood)\*  
*Deschampsia* (Tufted Hairgrass)  
*Eutrochium* (Joe Pye Weed)  
*Filipendula rubra* (Queen of the Prairie)  
*Hibiscus* (Hardy Hibiscus)  
*Ilex* (Winterberry/Holly)\*  
*Iris ensata* (Japanese Water Iris)  
*Iris versicolor* (Northern Blue Flag Iris)  
*Lobelia* (Cardinal Flower/Great Blue)  
*Physocarpus* (Ninebark)\*  
*Physotegia* (Obedient Plant)  
*Quercus bicolor* (Swamp White Oak)\*  
*Salix* (Willow)\*  
*Sanguisorba* (Burnet)  
*Tradescantia* (Spiderwort)  
*Trollius* (Globe Flower)  
*Vernonia* (Common Ironweed)  
*Veronicastrum* (Culver's Root)  
*Zizia* (Golden Alexander)

**Note:** Many of these plants will grow in part sun exposure but will bloom best in full sun.

\*Woody tree or shrub

### Part Sun/Shade (0-6 hours direct sun)

*Adiantum* (Northern Maidenhair Fern)  
*Arisaema* (Jack-in-the-Pulpit)  
*Aruncus* (Goatsbeard)  
*Asarum* (Wild Ginger)  
*Astilbe* (False Goatsbeard)  
*Athyrium* (Lady/Painted Fern)  
*Brunnera* (Siberian Bugloss)  
*Chasmanthium* (Northern Sea Oats)  
*Chelone* (Turtlehead)  
*Dicentra* (Bleeding Heart)  
*Dryopteris* (Autumn/Male Fern)  
*Ligularia* (Ragwort)  
*Matteuccia* (Ostrich Fern)  
*Onoclea* (Sensitive Fern)  
*Osmunda* (Cinnamon/Royal Fern)

**Note:** Many of these plants will grow in shady conditions but will bloom best in part sun.

## PERENNIAL CARE

# common perennial garden pests

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## aphids

**Description:** 1/16" to 1/8" long, pear-shaped, soft-bodied insects that use needle-like mouthparts to feed on plant phloem. Yellow, red, brown, black, gray, or green in color. Aphids gather on new tender growth including unopened flower buds, young leaves, and developing stems.

**Signs and Symptoms:** Presence of honeydew, a sticky, shiny waste secretion on leaf surfaces where aphids are feeding, usually accompanied by twisted and curled leaves and disfigured young growth.

**Management and Treatment:** Aphids are generally more of a cosmetic issue than a plant health concern. Spraying off plants with a strong stream of water to remove aphids and wash off honeydew is usually sufficient. New growth tips or blooms can also be removed to significantly reduce populations. For severe infections, judicious application of insecticidal soap or horticultural oil can help, but is rarely necessary.

**Commonly Affected Perennials:** *Salix* (Willow), *Sedum* (Stonecrop), *Brunnera* (Siberian Bugloss), *Heliopsis* (False Sunflower), *Asclepias* (Milkweed)

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## two-spotted spider mite

**Description:** A small arachnid pest that uses piercing-sucking mouthparts to feed on plant phloem on the undersides of leaves. Spider mites are at their most active in especially hot (over 90F) and dry conditions, able to cause extensive damage, especially when plants are stressed (e.g., drought). Spider mites colonize the undersides of leaves and produce webbing along the leaf surface where they nest and feed.

**Signs and Symptoms:** Very small, slender, yellow-orange pests present in large numbers, often alongside very fine webbing on the undersides of leaves. Feeding causes white or yellow mottling on leaves, and eventually yellowing leaves and leaf drop.



**Management and Treatment:** Avoiding stress is one of the best ways to help manage spider mites, especially through consistent watering in times of drought. If infestations begin to impact plant health and vigor, targeted applications of insecticidal soap or horticultural oil can help to manage populations.

**Commonly Affected Perennials:** *Hemerocallis* (Daylily), *Penstemon* (Beardtongue), *Salvia* (Meadow Sage), *Scabiosa* (Pincushion Flower), *Weigela*

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## japanese beetles

**Description:** An invasive species of beetle in the United States, 1/3" to 1/2" long with a metallic green head and thorax and metallic copper-brown wing covers. Feeds on the leaves, flowers, and fruit of over 300 plant species. Population numbers fluctuate from year to year, with beetles feeding for six to eight weeks beginning in mid to late June. Adults can fly up to several miles between feedings and are most actively feeding in July and August. Damaged leaves emit feeding-induced odors which attract other beetles, as do their potent pheromones, often resulting in large clusters of beetles on some plants while neighboring plants are only lightly infested.

**Signs and Symptoms:** Skeletonized leaves with intact veins, holes in flower petals, stunted plant growth, clusters of brown, dry patches on leaves.

**Management and Treatment:** Drop large populations of beetles into a cup of warm soapy water to eliminate adult populations. Particularly high value or tender plants may need to be covered in netting to prevent extensive damage. *Beetle pheromone traps are not recommended.*

**Commonly Affected Perennials:** *Rosa* (Rose), *Hibiscus* (Hardy Hibiscus), *Alcea* (Hollyhock), *Hydrangea*, *Malus* (Apple/Crabapple)



*Read more about pest and diseases  
in the perennial garden here!*

## PERENNIAL CARE

# juglone tolerant perennials and shrubs

(compatible with black walnut and hickory trees)

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Juglone is an allelopathic chemical produced by all plants in the *Juglandaceae* or walnut plant family. This chemical may inhibit the growth of nearby juglone-sensitive plant species. Plants suffering from juglone toxicity may appear stunted, yellow/brown in color, disfigured, or wilted. Juglone is present in all parts of the tree, as well as the root zone and associated soil. The highest soil concentration of juglone occurs within the dripline, generally a radius of about fifty to eighty feet surrounding the trunk of a mature tree. Fortunately, there are many tolerant perennial species, including a wide variety of native species adapted to grow alongside these excellent Minnesota native *Juglandaceae* trees.

### Full Sun (6+ hours direct sun)

*Amelanchier* (Serviceberry/Juneberry)\*  
*Andropogon* (Big Bluestem)  
*Aronia* (Black Chokeberry)\*  
*Bouteloua* (Sideoats Grama)  
*Campanula* (Bellflower)  
*Ceanothus* (New Jersey Tea)\*  
*Cercis* (MN Strain Redbud)\*  
*Cornus* (Dogwood)\*  
*Deschampsia* (Tufted Hairgrass)  
*Festuca* (Fescue)  
*Fragaria virginiana* (Wild Strawberry)  
*Geranium* (Cranesbill)  
*Hamamelis* (Witch Hazel)\*  
*Hemerocallis* (Daylily)  
*Hypericum* (St. John's Wort)\*  
*Ilex* (Winterberry/Holly)\*  
*Iris versicolor* (Northern Blue Flag Iris)  
*Monarda* (Wild Bergamot/Bee Balm)  
*Panicum* (Switchgrass)  
*Physocarpus* (Ninebark)\*  
*Prunella* (Heal-All)

*Pycnanthemum* (Mountain Mint)  
*Rhus* (Sumac)\*  
*Salix* (Willow)\*  
*Schizachyrium* (Little Bluestem)  
*Solidago* (Goldenrod)  
*Sorghastrum* (Yellow Prairie Grass)  
*Sporobolus* (Prairie Dropseed)  
*Symphoricarpos* (Snowberry)\*  
*Thuja* (Arborvitae/White Cedar)\*  
*Tradescantia* (Spiderwort)  
*Veronicastrum* (Culver's Root)  
*Vitis* (Grapevine)  
*Zizia* (Golden Alexander)

**Note:** Many of these plants will grow in part sun exposure but will bloom best in full sun.

\*Woody tree or shrub

## Part Sun/Shade (0-6 hours direct sun)

*Adiantum* (Northern Maidenhair Fern)  
*Ajuga* (Bugleweed)  
*Arisaema* (Jack-in-the-Pulpit)  
*Astilbe* (False Goatsbeard)  
*Athyrium* (Lady/Painted Fern)  
*Carex* (Sedge)  
*Cornus alternifolia* (Pagoda Dogwood)  
*Chasmanthium* (Northern Sea Oats)  
*Chelone* (Turtlehead)  
*Diervilla* (Northern Bush Honeysuckle)\*  
*Dryopteris* (Autumn/Male Fern)  
*Eurybia* (Large-Leaved Aster)  
*Galium* (Sweet Woodruff)  
*Hakonechloa* (Forest/Hakone Grass)  
*Heuchera* (Coral Bells)  
*Hosta* (Plantain Lily)  
*Hydrangea arborescens* (Smooth Hydrangea)\*  
*Matteuccia* (Ostrich Fern)  
*Mertensia* (Virginia Bluebells)  
*Onoclea* (Sensitive Fern)  
*Osmunda* (Cinnamon/Royal Fern)  
*Pachysandra* (Japanese Spurge)  
*Parthenocissus quinquefolia* (Virginia Creeper)  
*Phlox divaricata* (Woodland Phlox)  
*Polemonium* (Jacob's Ladder)  
*Polystichum* (Christmas Fern)  
*Pulmonaria* (Lungwort)  
*Thalictrum* (Early Meadow Rue)  
*Tiarella* (Foamflower)  
*Tsuga* (Eastern Hemlock)\*

**Note:** Many of these plants will grow in shady conditions but will bloom best in part sun.

\*Woody tree or shrub

## PERENNIAL CARE

# how to plant trees & shrubs

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Secure your investment in newly purchased trees and shrubs by taking extra care when planting. A little extra love upfront will ensure a happy, healthy, and carefree plants for many years to come

### 1 Prepare your site

- Plant in the morning, evening, or on a cloudy day. Avoid the heat of the day.
- Dig a hole as deep as the root ball and twice as wide. The root ball should be even or slightly above the ground when planted, never below.
- Fill the hole with water and let it drain completely. This will eliminate air pockets and provide needed moisture. *Note: If the hole does not drain within 24 hours, your site may be too wet for planting most varieties of trees.*
- Remove plant from the container and gently release the roots. Use a garden knife or root saw to shallowly trim around the entire circumference of the root ball to free up roots and ensure they are growing outward, not inward or circling the plant.

### 2 Put it in the ground

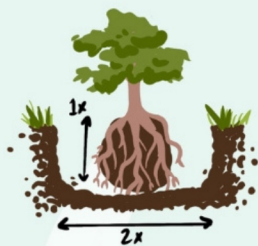
- Place root ball in the hole. Evenly spread out the roots so they are straight, not bent or doubled over.
- Make sure trees are situated with their root flare just above the soil line before backfilling. *Remember, when in doubt go shallow, not deep!*
- Backfill with a mixture of one part compost or planting mix, two parts native soil (the soil dug out of the hole), and a starter fertilizer like Espoma Biotone to provide a light feeding for new growth.
- Lightly tamp down the soil to remove air pockets
- Water in thoroughly.

### 3 Take care!

- *Water, water, water!* New trees and shrubs need thorough, regular watering to establish strong, deep root systems. Keep new planting moist, watering with a garden or soaker hose to penetrate deep into the soil. A sprinkler alone will not water deeply enough. Keep watering until the ground freezes solid in the fall.
- Mulch with a high-quality, shredded mulch using the 3:3:3 rule—mulch 3 feet in diameter, 3 inches deep, and at least 3 inches away from the trunk.
- Fertilize once or twice annually in early spring and early to mid-summer.
- Protect trunks of tender trees and shrubs with hard plastic tubing or fencing to prevent winter feeding damage and sunscald.
- Consider wrapping new evergreen plantings in burlap for the winter, especially young Boxwood and Arborvitae plants.

# HOW TO PLANT TREES & SHRUBS

our tips for success



Dig a hole as deep & twice as wide as the rootball



Fill hole with water & let drain to provide moisture & check for proper drainage



Mulch, but leave 3in. gap between mulch & trunk



Make sure root flare is above the soil line



Water thoroughly & regularly until the ground freezes solid



Loosen the root ball & trim lightly to encourage root growth

Backfill the soil with :

1 part planting mix or compost

2 parts native soil



Starter Fertilizer (like Espoma Bio-Tone)

## PERENNIAL CARE

# zone 2 and 3 hardy perennials and shrubs

Depending on your location, the Twin Cities area is considered Zone 5a (-20F to -15F) or Zone 4b (-25F to -20F). Zone 3 begins in the northern 1/3 of MN and continues to the Canadian border. At Tonkadale we stock plants that are Zone 4 or hardier, down to Zone 2. Zone 3 and Zone 2 hardy plants are especially good for exposed areas, and to ensure plants are ready for winter with little preparation. These lists are based off the latest guidance from the Minnesota Department of Agriculture (February 2024) and are subject to change. Visit [mda.state.mn.us](http://mda.state.mn.us) for more information.

### Zone 3 (-40F to -30F Annual Minimum Temperature)

Full Sun (6+ hours direct sun)

***Acer saccharum*** (Sugar Maple)\*

***Achillea*** 'Moonshine, Strawberry Seduction'  
(Yarrow)

***Alchemilla*** 'Gold Strike' (Lady's Mantle)

***Amelanchier*** 'Autumn Brilliance' (Serviceberry)\*

***Andropogon*** (Big Bluestem)

***Artemisia*** 'Silver Mound'

***Arctostaphylos*** 'Massachusetts' (Kinnikinnick)\*

***Aronia*** (Black Chokeberry)\*

***Asclepias*** (Milkweed/Butterfly Weed)

***Baptisia*** (Blue False Indigo)

***Betula*** 'Dakota Pinnacle, Parkland Pillar' (Birch)\*

***Bouteloua*** (Side Oats Grama)

***Calamagrostis*** 'Karl Foerster'

***Cornus*** 'Ivory Halo' (Dogwood)\*

***Chrysanthemum*** Mammoth Series (Hardy Mum)

***Coreopsis*** 'Moonbeam' (Tickseed)

***Dianthus*** 'Arctic Fire' (Pinks)

***Echinacea*** 'Magnus, PowWow Series' (Coneflower)

***Festuca*** 'Elijah Blue' (Fescue)

***Gaillardia*** 'Arizona Red' (Blanket Flower)

***Geum triflorum*** (Prairie Smoke)

***Hemerocallis*** [many inc. 'Stella d'Oro'] (Daylily)

***Hydrangea paniculata*** (Panicle Hydrangea)\*

***Iris versicolor*** (Northern Blue Flag Iris)

***Juniperus*** 'Star Power®' (Upright Juniper)\*

***Liatis*** 'Floristan White/Violet, Kobold'  
(Blazing Star)

***Lilium*** 'Lily Looks' Series (Asiatic Lily)

***Lobelia*** (Cardinal Flower/Great Blue)

***Nepeta*** 'Walker's Low' (Catmint)

***Paeonia*** 'Sarah Bernhardt, Kansas, Duchesse de Nemours' (Peony)

***Panicum*** (Switchgrass)

***Penstemon*** 'Dark Towers, Husker Red'  
(Beardtongue)

***Phlox paniculata*** 'Flame Series, Laura'

***Rosa*** 'Campfire, William Baffin,  
Winnipeg Parks' (Rose)\*

***Rhus aromatica*** 'Gro-Low' (Fragrant Sumac)\*

***Rudbeckia*** 'Goldsturm' (Black-Eyed Susan)

***Salix purpurea*** 'Nana' (Dwarf Arctic Willow)\*

***Schizachyrium scoparium*** (Little Bluestem)

***Sedum*** 'Angelina, Autumn Joy, Neon'

***Sorghastrum*** (Yellow Prairie Grass)

***Spiraea*** 'Renaissance' (Bridalwreath Spirea)\*

***Sporobolus*** (Prairie Dropseed)

***Symphotrichum novae-angliae***

(New England Aster)

***Symphotrichum x dumosus*** 'Wood's Series'  
(Bushy Aster)

***Syringa meyeri*** (Dwarf Korean Lilac)\*

***Syringa*** 'Miss Kim' (Korean Lilac)\*

***Thuja occidentalis*** 'Holmstrup, Techny,  
Degroot's Spire, North Pole' (Arborvitae)\*

***Vaccinium*** 'Northcountry, Northblue'  
(Blueberry)\*

***Viburnum dentatum*** 'Blue Muffin'  
(Arrowwood Viburnum)\*

***Viburnum opulus*** (Common  
Snowball Viburnum)\*

**Note:** Many of these plants will grow in part sun exposure but will bloom best in full sun.

### Zone 3 (-40F to -30F Annual Minimum Temperature)

Part Sun/Shade (0-6 hours direct sun)

**Anemone canadensis** (Canada Anemone)  
**Aquilegia canadensis** (Eastern Columbine)  
**Aralia cordata** 'Sun King' (Golden Spikenard)  
**Arancus** (Goatsbeard)  
**Asarum canadense** (Wild Ginger)  
**Astilbe x arendsii** 'Fanal'  
**Astilbe chinensis** 'Mighty Chocolate Cherry,  
Vision in Pink/Red/White'  
**Astilbe japonica** 'Rheinland, 'Deutschland'  
**Bergenia** 'Winterglow' (Pigsqueak)  
**Brunnera** 'Jack Frost' (Siberian Bugloss)  
**Carex** (Sedge)  
**Cornus alternifolia** (Pagoda Dogwood)\*  
**Chelone** (Turtlehead)  
**Dicentra** (Bleeding Heart)  
**Diervilla lonicera** (Northern Bush  
Honeysuckle)\*

**Eutrochium maculatum** (Spotted Joe  
Pye Weed)  
**Geranium maculatum** (Wild Geranium)  
**Geranium sanguineum** 'Max Frei'  
(Bloody Cranesbill)  
**Heuchera** 'Northern Exposure  
Red/Amber/Black' (Coral Bells)  
**Hosta** [most common varieties] (Plantain Lily)  
**Hydrangea arborescens**  
(Smooth Hydrangea)\*  
**Polygonatum falcatum** 'Variegatum'  
(Variegated Solomon's Seal)  
**Pulmonaria** (Lungwort)

*Note: Many of these plants will grow in shady conditions but will bloom best in part sun.*

### Zone 2 (-50F to -40F Annual Minimum Temperature)

All Plants Full/Part Sun (4-6+ hours direct sun)

**Antennaria neglecta** (Field Pussytoes)  
**Artemisia stelleriana** 'Silver Mound' (Wormwood)  
**Cornus stolonifera** 'Arctic Fire' (Red/Yellow Twig Dogwood)\*  
**Larix laricina** (American Larch/Tamarack)\*  
**Malus** 'Pink Sparkles' (Crabapple)\*  
**Phlox subulata** 'Candy Stripe, Emerald Blue/Pink' (Creeping Phlox)  
**Physocarpus** 'Amber Jubilee' (Ninebark)\*  
**Picea glauca** (White Spruce)\*  
**Pinus mugo** (Mugo Pine)\*  
**Potentilla** 'Pink Beauty, Mandarin Tango' (Cinquefoil)\*  
**Salix discolor** (Pussy Willow)\*  
**Salix candida** 'Iceberg Alley' (Sageleaf Willow)\*  
**Sorbus decora** (Showy Mountain Ash)\*  
**Syringa vulgaris** (Common Lilac)\*  
**Syringa x prestoniae** 'Pinktini' (Preston Lilac)\*  
**Viburnum trilobum** 'Bailey Compact' (American Cranberrybush)\*

\*Woody tree or shrub



Scan qr code to discover your  
USDA hardiness zone.

## CONTAINER CARE

# how to care for container gardens and hanging baskets

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## light

- Shade:** 4 hours or less of direct, morning sun, dappled light, or intermittent light throughout the day. Usually in a covered area or the North side of the house. Indirect light.
  - Part Sun:** 4-6 hours of morning sun, or late day sun. Not the heat of the day. Usually the East side of the house.
  - Full Sun:** 6+ hours of direct sun. Usually in an exposed area or the West and South sides of the house.
- 

## watering

Check pots, window boxes, and hanging baskets daily until you are comfortable with the rate at which they dry out.

Water when the top 1-2 inches of soil are dry or if plants show wilt.

Planters, boxes, and baskets in the shade will require less water while those in the sun will require more.

Wind can be very drying. Do not count on a rain event to give good watering coverage. Best practice is to water long and deep to provide adequate moisture.

Extreme heat will increase watering needed. Check twice daily during the heat of the summer.



## fertilizing

Fertilize your pots, window boxes, and hanging baskets at least 1x per week to encourage robust blooms and green growth. Combination planters in deep shade will require dramatically less fertilizer.

At Tonkadale, we recommend an all purpose liquid fertilizer like Miracle-Grow. For containers planted with petunias, calibrachoa, hibiscus, and mandevilla, use an acidic fertilizer such as Mir-Acid. For containers that are difficult to reach, use a slow release fertilizer such as Osmocote.

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## pruning and dead-heading

Your containers, window boxes, and hanging baskets will enjoy some extra love and care. Make sure to dead-head spent blooms, pinching back all the way to the stem - petunias, calibrachoa, geraniums, and begonias. Prune and pinch foliage of vining plants to encourage fullness and a shapely appearance - vinca vine, sweet potato vine, ivies. Pinch back taller plant such as coleus to keep their height in check and to create a fuller plant.

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## outdoors in

Many of the containers planted at Tonkadale include what are traditionally used as indoor plants. These can be re-potted and enjoyed in the home when the season is over. Simply wash clean, cut back if needed, and treat with insecticidal soap to avoid possible insect populations.

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## share your success

Send us photos (or tag us on social media) of your containers when they are at their peak. **[design@tonkadale.com](mailto:design@tonkadale.com)**, **[@tonkadale](https://www.instagram.com/tonkadale)**

Enjoy! See you this fall for mums and kale, then in winter for spruce top pots!

*Your Tonkadale Design Team*

## LEARN TO PLANT

# bulbs 101

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Fall is the time to start planning next year's garden and your opportunity to plant spring flowering bulbs. It's thrilling to see those first green shoots pop out of the ground in spring - a delightful pop of color after all you see is white.

### What is a bulb?

A bulb is a modified stem, an underground storage unit containing all of the elements required for growth including leaves, stems, and flower buds. The whole life cycle of the plant, along with energy and nutrients, is stored within this underground structure during its resting stage.

Bulbs are classified as either major or minor, and the difference is pretty much in size. Major bulbs include tulips, daffodils, and hyacinths which aren't reliably hardy and sometimes need to be replaced each year. Minor bulbs include gallanthus, crocus, and muscari. These bulbs are smaller in size and produce smaller flowers. They are extremely hardy, will naturalize in an area, and look best planted in mass.

### How to plant bulbs.

- Choose a full-sun location with rich, well drained soil
- Amend soil with compost, 1 cu. ft. per 10 square feet of garden
- Dig a hole 2-3 x the height of the bulb for correct planting depth,
- its a great idea to group multiple bulbs in a wider hole
- Add Bulb Tone or Bone Meal to your hole to support healthy root development
- Plant with the pointy side up, or root side down in the case of flatter bulbs
- Cover with soil and lightly tamp down
- Water in well
- Apply a granule animal repellent such as Liquid Fence
- or Repels All to keep our furry friends away
- Sit back, relax, and enjoy the show next spring!



*Read more about planting spring  
flowering bulbs on our blog!*

# HOW TO PLANT BULBS

prepping your garden for spring, in the fall!



Protect with a physical barrier & animal repellent.



Choose a sunny location.



Water thoroughly.



Sit back & enjoy the show in Spring!



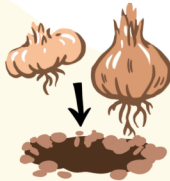
amend soil with compost.



cover with soil & tamp down lightly.



dig a hole 2-3x the height of the bulb



plant pointy-side up, root-side down.



add Bulb-tone to support root development.

## LEARN TO PLANT

# how to plant amaryllis & paperwhite bulbs

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There is something magical about forcing bulbs to bloom indoors especially during the holiday season. Two types of bulbs are typically planted indoors this time of year. Amaryllis and paperwhites. Amaryllis comes from the Greek word, amarysso which means to sparkle.

Paperwhites, or *Narcissus papyraceus* are closely related to Daffodils.

Named for Narcissus, a handsome young nymph in Greek mythology, who pined at his reflection in a crystal-clear lake until he slipped to his death – a narcissist if you will.

## amaryllis

### Planting in Soil or Pebbles

- Amaryllis like to be tight in their container, choose a container about 1"-2" larger in diameter than the bulb. Make sure your container has a drainage hole for best results!
- Fill your container halfway with all purpose potting soil or pebbles of your choice.
- Place bulb on top of media allowing for the top 1/3 of the bulb to be exposed.
- Fill in with potting soil or pebbles, tamping down gently, making sure 1/3 of the bulb is still exposed.
- Water in thoroughly and allow to drain.

### Planting in Water

- Choose a watertight container.
- Fill container 1/3 full of pebbles.
- Place bulb on top of pebbles.
- Fill in with pebbles until secure.
- Add water to 1" below the bulb. Don't let the bulb sit in water or it will rot and become stinky.
- Change out water weekly.
- A clear bulb vase is also an option, no rocks or pebbles needed!

# paperwhites

## Planting in Soil or Pebbles

- Fill container 1/3 full of potting soil or pebbles.
- Arrange bulbs in groups of 3-5 atop your chosen media.
- Sink them in, just the tops should show.
- Add additional soil media and snug them in tight.
- Water potting soil until damp or fill with water up to the bottom of the bulb.
- Add supports now such as a bamboo stake or piece of dogwood. Make it pretty!

## Planting in Water

- Choose any watertight container that will accommodate your paperwhites.
- Fill container 1/3 full of pebbles, stone, gravel, or marbles.
- Hold the bulb in place and fill in with more pebbles.
- Nestle bulbs into the stones.
- Add water until it just barely touches the bottom of the bulb.
- A clear bulb vase is also an option, no rocks or pebbles needed!

## caring for your bulbs

- Place in a sunny spot.
- Do not place bulbs near a heat source or draft.
- There is no need to fertilize during forcing/blooming.
- Continue watering when potting mix is dry to the touch or water is more than 1 inch below the base of the bulb if planted in water.
- Growth will begin a few weeks after planting.
- Expect to see amaryllis blooms within 6-8 weeks of planting, paperwhites within 3-4 weeks.
- The bigger the bulb, the more bloom stalks emerge.

## amaryllis will bloom again

If you'd like, you can save your amaryllis bulb to re-bloom next year!



Read more about  
it on the blog!