



## GROWING PLANTS IN SHADE

### TYPES OF SHADE

- Light or Dappled Shade - Shade produced by high or open-branched deciduous trees or under a lath roof.
- Open Shade - Shaded most of the time but surrounded by bright light. This could be under high-branched trees or where light-colored buildings reflect the light.
- Half Shade - Areas receiving direct sunlight during the morning or afternoon but in shade the rest of the day. Morning sun is preferred as afternoon sun can be extremely hot and drying. Many sun-loving plants will flower with just 4 hours of direct sun a day.
- Medium Shade - Can be described as an open area that has no direct sunlight due to clustered tall trees with a heavy canopy of leaves high off the ground or overhanging branches of trees adding shade to the north sides of buildings, walls or fences.
- Full/Deep Shade - Constant shade under trees with heavy foliage or narrow side yards shaded by high fences or structures.

### SOILS

Spokane soils vary from sandy to clay. Most lack natural organic matter. Sandy soils are low in plant nutrients. Clay soils contain most elements necessary for plant growth. Both types are improved by adding organic matter such as leaf mold, compost, peat moss, dried steer manure, etc.

Most shade plants will respond to soils prepared with a 3-inch layer of organic matter incorporated into the soil to a depth of 6 inches.

Use a mild fertilizer such as 5-10-5 or 10-10-10 in early spring and as needed up to the first of July or use a slow-release fertilizer early in the spring.

Rhododendrons, azaleas, flowering dogwoods, and several woodland flowers and ferns require acid soil. Add peat moss or leaf mold from oak leaves and use a fertilizer labeled for azaleas or rhododendrons. Follow the label carefully.

Visit our website at <https://extension.wsu.edu/spokane/master-gardener-program/home-lawn-and-garden/>  
e-mail your garden questions to: [mastergardener@spokanecounty.org](mailto:mastergardener@spokanecounty.org)

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## **WATERING**

- Shaded plants stay damp longer, which can lead to rot, mildew, fungus diseases and moss. The general rule is to water deeply and then allow the surface to dry slightly before watering again.
- Don't neglect plants under heavily foliated trees or wide overhangs of buildings. You can't rely on moisture from rainfall - you must do additional watering, especially during the late fall.

## **GROWING UNDER EXISTING TREES AND IN OLD ESTABLISHED YARDS**

- New plantings of trees and shrubs can be hard to establish in yards with mature trees because of root competition. Evaluate which trees and shrubs you wish to keep and remove the rest. Apply water and fertilizer consistently and control insects and diseases.
- Choose perennials or groundcovers that can compete with dense shade and existing tree roots. Recommended plantings are bulbs, Lily of the Valley, Epimedium, Ferns, Ivy, Hosta, Solomon's Seal, and Vinca minor.
- When possible, thin out branches of trees and shrubs to allow more light and better air circulation to plants below. Removing lower branches of a tree may raise the canopy enough to allow an underplanting. It is almost impossible to grow plants under mature Beech, Norway maple, Red maple, Silver maple and Sycamore trees.

## **CREATING A SHADE GARDEN BY ADDING NEW TREES**

- Plants that are suitable for shade gardens need a rich soil that has good drainage but still retains moisture. Prepare the entire site by incorporating several inches of peat moss, compost, rotted sawdust, or bagged steer manure into the soil up to 24 inches deep. This will be your last opportunity for long range soil improvement in shrub and tree beds.
- Create shade with Black Oak, Cherry, Crabapple, Hawthorn, Honey Locust, Red Oak, and White Oak. These trees are deep rooted so other plants can survive around them without competing for nutrition and moisture.

## **PESTS and DISEASES**

Information can be found at: [WSU Hortsense](#)

### ANNUALS TO GROW IN SHADE

<u>Plant Names</u>	<u>Shade Preference</u>	<u>Soil Needs</u>
<i>Ageratum</i>	full sun or half shade	moist, well drained
<i>Begonia sempiflorens</i> (wax)	open shade	moist, well drained
<i>Begonia</i> (tuberous)	open shade	moist, well drained
<i>Browallia</i>	open shade	moist, well drained
<i>Coleus blumei</i> (Coleus)	sun to light shade	moist, well drained
<i>Fuchsia hybrida</i>	light shade	moist, high organic
<i>Impatiens</i>	light to medium shade	moist, fertilize once a month
<i>Mimulus</i>	light to dense shade	constant moisture, rich soil
<i>Nicotiana</i>	full sun to medium shade	moist, fertile, well drained
<i>Petunia hybrida</i>	half shade	light, well drained soil
<i>Salvia splendens</i>	full sun to light shade	moist, rich, well drained
<i>Viola wittrockiana</i> (Pansy)	sun to half shade	moist, well drained

### GROUNDCOVERS TO GROW IN SHADE

<u>Plant Names</u>	<u>Shade Preference</u>	<u>Soil Needs</u>
<i>Ajuga</i>	open to deep shade	moist to wet
<i>Asarum</i> (Wild Ginger)	light to deep shade	moist, high in humus
<i>Epimedium</i> (Bishop's Hat)	light to deep shade	moist in summer, rich
<i>Ferns</i>	open to deep shade	moist, rich
<i>Festuca</i> (ornamental grass)	sun to light shade	well drained
<i>Lamium spp.</i>	half shade	good garden soil
<i>Hedera helix</i> (English Ivy)		
<i>Convallaria majalis</i> (Lily-of-the-Valley)	half to full shade	add organic matter yearly
<i>Pachysandra</i>	light to deep shade	moist, loamy
<i>Galium odoratum</i> (Woodruff)	half to full shade	moist, well drained
<i>Vinca minor</i> (Periwinkle)	any shade	moist, rich, well drained

## FERNS TO GROW IN SHADE

<u>Plant Names</u>	<u>Shade Preference</u>	<u>Soil Needs</u>	<u>Size</u>
<i>Adiantum pedatum</i> (Maidenhair fern)	all shade	moist, acid	18 inches
<i>Athyrium Felix-femina</i> (Lady fern)	medium, full	neutral, wet	1 1/2 feet
<i>Athyrium goeringtanum Pictum</i> (Japanese painted fern)	medium, full	neutral, wet	12 inches
<i>Dryopteris Felix-mas</i> (Male fern)	all shade	neutral, do not allow to dry out	2-4 feet
<i>Dryopteris marginalis</i> (Marginal shield fern)	medium, full shade	neutral	2-3 feet
<i>Matteuccia struthiopteris</i> (Ostrich fern)	light, medium, full	neutral to acid, moist	3-5 feet
<i>Osmunda cinnamomea</i> (Cinnamon fern)	light	acid, wet	4-6 feet
<i>Polypodium virginianum</i> (Polypody fern)	light, medium	neutral	6-8 inches
<i>Polystichum munitum</i> (Sword fern)	medium, full, deep	neutral	3 feet

## UNDERSTORY TREES TO GROW IN SHADE

(Trees to grow under or among larger trees)

<u>Plant Names</u>	<u>Shade Preference</u>	<u>Soil Needs</u>	<u>Size</u>
<i>Acer palmatum</i> (Japanese maple)	open shade	moist, well drained	2 ft.-20 ft.
<i>Acer circinatum</i> (Vine maple)	open shade	moist, well drained	up to 15 ft.
<i>Amelanchier</i> (Serviceberry)	open shade	moist, well drained	10-15 ft.
<i>Cercis</i> (Red bud)	open shade	well drained	10-30 feet
<i>Cornus florida</i> (Flowering dogwood)	open shade	moist, well drained, acid, protect with mulch	15-30 feet
<i>Hamamelis virginia</i> (Common witch hazel)	light shade	moist, rich soil	15-20 feet
<i>Tsuga canadensis</i> (evergreen) (Canada hemlock)	open to deep shade	acid, moist well drained	up to 60 ft.

**SHRUBS TO GROW IN SHADE**

<u>Plant Names</u>	<u>Shade Preference</u>	<u>Soil Needs</u>	<u>Size</u>
<i>Azalea mollis</i>	half shade	moist, peaty, acid	varies
<i>Azalea exbury</i>	half shade	moist, peaty, acid	varies
<i>Cornus mas</i> (Cornelian cherry)	half shade	moist, good garden soil	shrub or small tree
<i>Cornus stolonifera</i> (Red osier dogwood)	light shade	constant moisture	shrub up to 6 ft.
<i>Euonymus fortunei</i> (Wintercreeper)	light to medium shade	good garden soil	varies
<i>Hydrangea spp.</i>	open to medium shade	moist, acid	3-6 feet
<i>Kerria japonica</i>	light to deep shade	moist, well drained	4-6 feet
<i>Mahonia</i> (Oregon grape)	light to medium shade	acid soil best	6-8 feet
<i>Pachistima canbyi</i> (Pachistima)	open shade	moist, acid, well drained	1 foot
<i>Rhododendron spp.</i>	light to half shade	moist, acid, well drained	varies
<i>Rhodotypos tetrapetal</i> (Jet bead)	light shade	good garden soil	to 7 feet
<i>Taxus spp.</i> (Yew)	light to deep shade	moist, acid, well drained	varies
<i>Viburnum spp.</i>	light to deep shade	good garden soil	Varies

**PERENNIALS TO GROW IN SHADE**

<u>Plant Names</u>	<u>Shade Preference</u>	<u>Soil Needs</u>	<u>Size</u>
<i>Aconitum henryi</i> (Monkshood, autumn)	Part Sun	average, dislikes wet	3-6 feet
<i>Cimicifuga Racemosa</i> (Black Snakeroot)	Sun, Part Sun	moist, well drained	4-6 feet
<i>Aruncus Dioicus</i> (Goat's Beard)	Part Sun to Shade	moist	4-6 feet
<i>Astilbe Biternata</i> (False Spirea)	Part Sun to Shade	moist, acidic woodland	2-6 feet
<i>Centranthus Ruber</i> (Jupiter's Beard)	Sun, Part Sun	Average to Moist	2-3 feet

**PERENNIALS TO GROW IN SHADE** (continued)

<u>Plant Names</u>	<u>Shade Preference</u>	<u>Soil Needs</u>	<u>Size</u>
<i>Corydalis</i>	Part Sun	Moist, well drained	1 foot
<i>Dicentra Spectabilis</i> (Bleeding Heart)	Sun, Part Sun	Tolerant of boggy	3 feet
<i>Digitalis Purpurea</i> (Foxglove)	Sun, Part Sun	Moist, well drained	2-5 feet
<i>Eupatorium Maculatum</i> (Joe Pye weed)	Sun, Part Sun	Average	3-6 feet
<i>Hakonechloa macra</i> (Japanese Forest Grass)	Partial Sun to Deep Shade	Rich, well-draining	1-2 feet
<i>Helleborus</i> (Hellebore)	Part Sun, Shade	Rich, well-draining	1-4 feet
<i>Heuchera</i> (Coral Bells)	Part Sun	Moist, well drained	1-3 feet
<i>Hosta</i> spp.	Part Sun, Shade	Moist, well drained	1-3 feet
<i>Lamium</i> (Deadnettle)	Partial to Full Shade	Well-amended soil	3 in to 2 feet
<i>Ligularia Dentata</i> (Big LeafLigularia)	Part Sun	alkaline, moist	4 feet
<i>Primula</i> spp (Primrose)	Part Sun to deep Shade	Rich, well-draining	3 in to 4 feet
<i>Pulmonaria</i> (Lungwort)	Part Sun to deep Shade	Tolerant of boggy	6-12 inches
<i>Rodgersia</i> (Rodgers plant)	Part Sun	Moist	3-6 feet
<i>Tiarella</i> (Foam Flower)	Dappled Sun to Deep Shade	Moist, acidic woodland	8-12 inches
<i>Veronicastrum Virginicum</i> (Culver's Root)	Sun, Part Sun, Shade	Rich, moist	3-6 feet