

# Shade Gardening



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**Our Mission** – Ohio Master Gardener Volunteers are Ohio State University trained volunteers empowered to educate others with timely, research-based gardening information..

**Our Vision** – The OSU Extension Master Gardener Program is a premier statewide network of volunteer education and leadership development; as well as a consumer horticulture education delivery system that maximizes human, material, and natural resources, and values teamwork and excellence in educational programming.

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**[www.cuyahogamg.org](http://www.cuyahogamg.org)**



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# Hostas, Hostas and More Hostas!



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# Color, Texture, and Interest



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# Characteristics of a Shade Garden

- Limited sunlight (less than 4-6 hours)
- Plants grow at slower rate
- Tree roots compete with plants for water and nutrients
- Cooler temperatures
- Higher humidity
- Fewer weeds!



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# Don't be afraid of the shade!

## Keys to Success

- Analyze your site
  - Light
  - Soil
  - Moisture
- Match plants to site conditions
- Take proper care of plants
- Be willing to make changes if necessary



# Analyze the Light

Intensity + Duration = Amount of Sunlight

## Light Shade

- 4-6 hrs. sunlight
- Exists on south and west **under light tree canopy**
- Plants may be labeled part sun

## Part Shade

- 2-4 hrs. light (temporary/moving)
- East side of house (a.m.sun) under trees w/ low branches

## Full Shade

- Less than 2 hrs. sunlight
- North side of building or under dense canopy
- Receives no direct sunlight



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# Monitor the Light

Listen to what your plants are telling you!

- Not enough Sunlight
  - Stems elongate and stretch toward sunlight
  - Weak, spindly growth
  - Variegated foliage reverts to green
  - Pests and diseases

- Too much Light
  - Scorched or curled leaves
  - Wilting, stunted growth
  - Pale, bleached color





# Analyze Your Soil

- Test soil every 3 years [Soiltest.umass.edu](http://Soiltest.umass.edu)
- Shade plants prefer acidic soil (pH of 5.5 to 6.5)
- If  $\text{pH} > 7$ , soil is alkaline. Add sulphur, iron sulfate or aluminum sulfate to soil to make it more acidic. (in Fall)
- Acids make roots more porous and more capable of absorbing nutrients.



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# Analyze your Soil Structure

- **Clay soil? Tight pores**  
...Loosen up by adding a blend of leaf mold, peat moss, compost, manure
- **Sandy soil? Loose structure**  
...Add leaf mold and peat moss to improve retention
- Add 1-2" **organic material** on top of soil and work in w/ spade



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# Assess Moisture Conditions

- **Dry Shade**
  - Wind
  - Sunlight intensity and duration
  - Slope
- **Wet Shade**
  - Under tree canopies
  - Drainage or low areas
  - Near ponds



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# Meeting Moisture Needs

- Water 1” per week to 2” per week near trees (rain gauge?)
- Watch for **wilted plants** to assess moisture needs
- Water early in day to prevent fungal diseases
- Use drip irrigation or soaker hoses to deliver water directly to plant roots where it is needed
- Damp soil at all times best in shade





# Additional Care for Shade Plants

- **Mulch** – 2” layer helps retain moisture
- Suppresses weed growth
- Adds nutrients
- Chopped leaf mold best mulch for woodland shade garden

- Add **slow release fertilizer** in Spring once growth begins
- Monitor plants throughout season
- Don't overfertilize! Plants grow more slowly in shade.



# Match plants to site conditions



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**The right plant in the right place is  
the key to success!**

# SHADE PLANTS



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# European Wild Ginger

## Asarum Europaeum



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# Hellebore

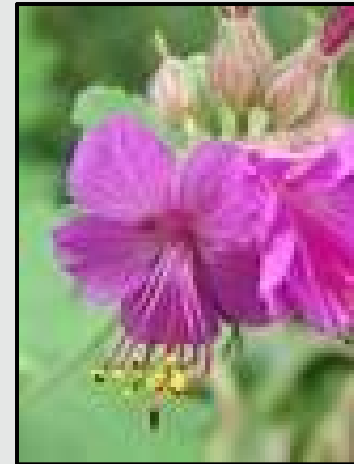
## Helleborus



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# 'Karmina' Woodland Geranium (Geranium Cantabrigiense)



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# Coral Bells

## Heuchera



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# Leopard Plant

Ligularia Britt-Marie Crawford



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# Rodgersia



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# Variegated Solomon Seal

## *Polygonatum Odoratum*



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# Oakleaf Hydrangea

*Hydrangea quercifolia* 'SNOW QUEEN'



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# Bottlebrush Buckeye

*Aesculus parviflora*



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# Sweet Woodruff

## *Galium Odoratum*



# Ghost or Japanese Painted Fern

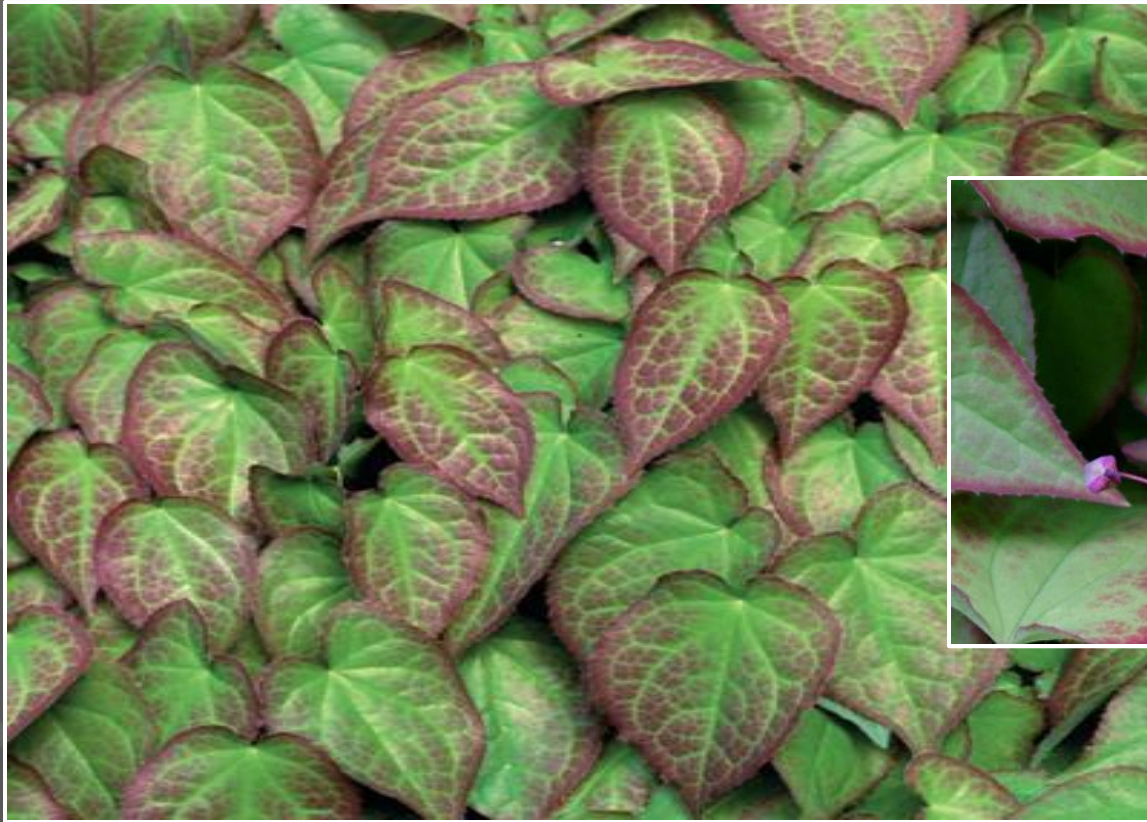
## Athyrium





# Bishop's Hat

*Epimedium rubrum*





# Toad Lily

## Tricyrtis



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# Goat's Beard

Aruncus Dioicus



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# Fringed and Gold Heart Bleeding Heart Dicentra



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# Boxwood

## Buxus



foliage



groomed



natural





# Cardinal Flower

*Lobelia Cardinalis*



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# Golden Hakone Grass

## *Hakonechloa Macra*





# Japanese Maple

## Acer Palmatum





# Serviceberry

## Amalanchier







# Design in the Shade Garden



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# Consider the View from the Inside





# Outside View/Layering





# Form





# Texture



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# Contrast





# Echoing



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# Height in the Garden

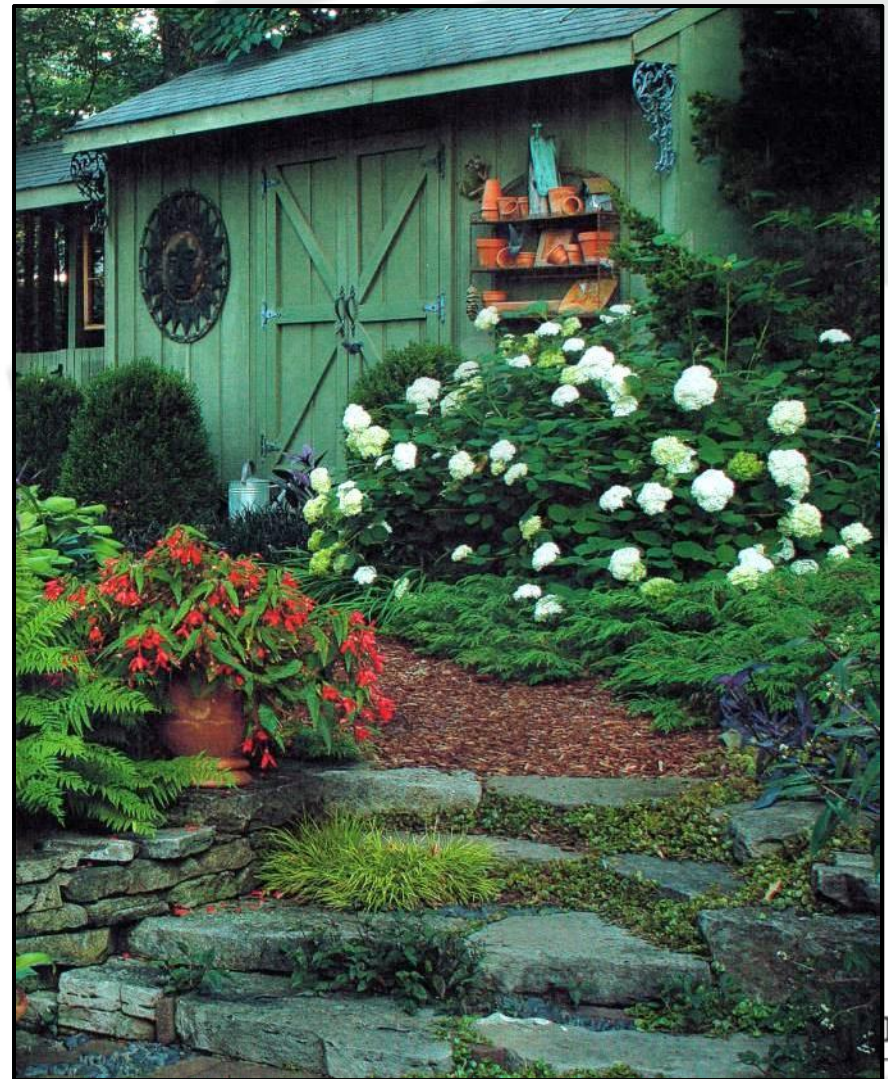
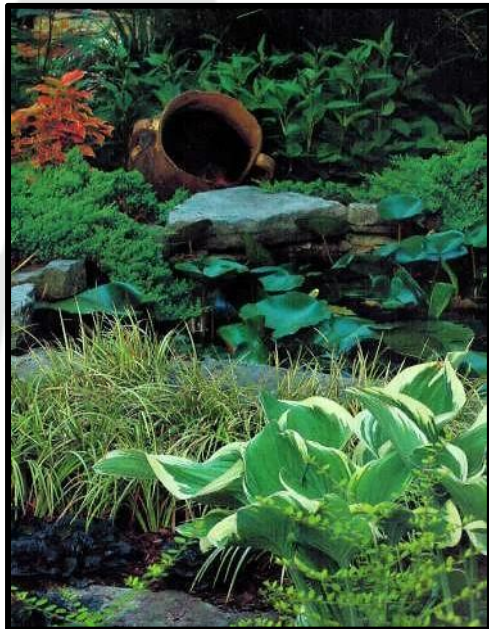


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# Hardscape





# Create a Garden Path



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# make design changes when necessary





# It is your Garden: You Rule!





# Success with Shade Gardening: Don't Be Afraid of the Shade!

## Characteristics of Shade Garden

- Less **direct** sunlight than sun garden
- Plants grow and photosynthesize at a slower rate
- Cooler temperatures than sun garden
- Higher humidity
- Many microclimates possible (sunlight, soil, drainage, slopes, wind, etc.)
- Fewer weeds!

## Recipe for Success in Shade Garden

- Analyze light, soil, moisture
- Match plants to your conditions
- Create an effective design
- Take proper care of plants

## Analyze Light

- **Intensity - brightness and directness** ...Shade plants need relief from direct afternoon sun
- **Duration - amount of time plant receives light**
- Light shade (4-6 hours sun/day)
- Part shade (2-4 hours/day) temporary and moving; morning sun
- Full shade (Less than 2 hours/day)
- **Monitor plants for clues to happiness**

## Assess your Soil

- **Soil test every three years** ([soiltest.umass.edu](http://soiltest.umass.edu))
- pH - **acid soil is best** in shade garden (pH 5.5-6.5)
- Peat moss, leaf mold, compost will add acids, as will iron sulfate, magnesium sulfate
- Texture: Clay soil? (tight pores) Sandy? (loosely structured) Add peat, compost, leaf mold to improve

## Analyze Moisture

- 1" per week (2" under trees)
- "Always damp" is best in shade
- Mulch! Monitor!

## Fertilize with Slow-release Fertilizer in Spring. Monitor

## Choose Right Plant for Right Place! (see chart )

## Design

- **Layering**
- **Form**
- **Texture**
- **Contrast/Color**
- **Echoing**
- **Hardscape**
- **Individuality**

## Shade Plant Table

### Coarse Textured or Broad Textured Flowers

Plant	Type of Shade	Plant Height	Tolerances	Uses	Watering Needs	Bloom time
European Wild Ginger	Part shade to full shade	.7 feet	Deer, black walnut	Ground cover	Medium to wet	April to May
Hellebore	Part shade to full shade	1 - 1.5 feet	Deer, dry soil, shallow rocky soil	Naturalize, winter interest	Medium	April
'Karmina' Woodland Geranium	Full sun to part shade	0.5 - 1 feet	Rabbit	Attracts butterflies; groundcover	Medium	May to September
Coral Bells (Heuchera)	Full sun to part shade	0.75 - 1.5 feet	Hot sun and humid summers	Groundcover or grouping, edging	Medium	June to July
Leopard Plant (Ligularia 'Britt-Marie Crawford')	Light shade to Full Shade	3 – 4 feet	Heavy shade, deer, wet soil	Rain Garden, woodland garden, attracts butterflies	Medium to wet	June to July
Rodgersia	Part shade	3 - 5 feet	Wet soil, deer, heavy shade	Rain Garden, woodland garden	Medium to wet	June to August
Variegated Solomon's Seal	Part shade to full shade	2 - 3 feet	heavy shade, erosion, dry soil, wet soil	Naturalize, rain garden	Medium to wet	April to May
Oakleaf Hydrangea	Full sun to partial shade	6 - 8 feet		Mixed shrub border	Medium	May to July
Bottle Brush Buckeye	Part shade to full shade	6 – 12 feet	Heavy shade, deer, wet soil	Rain garden, attracts butterflies	Medium to wet	June to July

See Fine Textured Plants below



## Shade Plant Table

### Fine Textured

Plant	Type of Shade	Plant Height	Tolerances	Uses	Watering Needs	Bloom time
Sweet Woodruff	Full sun to part shade	1 - 2 feet	Deer	Ground cover, under trees, woodlands	Medium	May to frost
Ghost fern/ Jap. Painted fern	Part shade to full shade	1 - 1.5 feet	Rabbit, Heavy Shade	shade gardens or shaded border fronts	Medium	Non-flowering
Epimedium rubrum	Part shade to full shade	0.5 - 1 feet	Rabbit, Drought, Heavy Shade, Dry Soil, Shallow-Rocky Soil	Ground cover or edger for shady areas.	Dry to medium	April
Toad lily – many varieties	Part shade to full shade	1.5 - 2 feet	Deer tolerant	Borders, woodland gardens, naturalized areas	Medium to wet	August to October
Goats Beard	Part shade	4 - 6 feet	Rabbit, wet soil	Rain Garden, woodland gardens	Medium to wet	April to May
Fringed /Gold Bleeding Heart	Part shade	1 - 1.5 feet	Rabbit	Naturalized area	Medium	April to July
Boxwood	Full sun to part shade	2 - 3 feet	Rabbit, Deer	Winter Interest	Medium	April
Lobelia Cardinal flower	Full sun to full shade	3 – 4 feet	Rabbit, Deer, Wet Soil	Rain Garden, attracts hummingbirds	Medium to wet	July to September
Golden Hakone Grass	Part shade	1 - 1.5 feet	Black Walnut, Air Pollution	Naturalize	Medium	July to August
Japanese Maple	Full sun to part shade	10 - 25 feet	Rabbit, Black Walnut	Attractive foliage and shape	Medium	April
Amalanchier	Full sun to part shade	15 - 25 feet	Wide range of soils	Attracts birds	Medium	April