McHenry County Nursery, Inc.

Nursery News

Glacier Oaks Nursery GONatives!™

SHADE - The Dark Side Of The Landscape

One of the fundamentals of growing plants is sunlight. Take it away and plants die. Yet some plants actually do well in limited light environments. If your landscape is light deficient you do have quite a few options, but you have to be careful when you go onto the dark side.

The Dark Side of Shade

If plants are not adapted to shaded conditions they will become stressed and weak leaving them open to attack. Monsters in the form of fungal opportunists lurk in the darkness of shade and attack weaker plants. Some shaded sites can be too wet or too dry depending on the soils and canopy, creating water stress.

Evolution and Acclimation

Survival depends on ability to adapt to competition for sunlight and changing environmental conditions. Many shrubs evolved in a natural habitat of the forest understory and floor. Natural understory light is .5%- 35% of full sunlight, so these plants had to develop Shade Tolerance, the ability of plants to perform photosynthesis under low light conditions. The whole plant slows down in growth, and also produces less of the extras like flowers.

Available light changes plant morphology by dropping leaves, and producing new shade leaves.

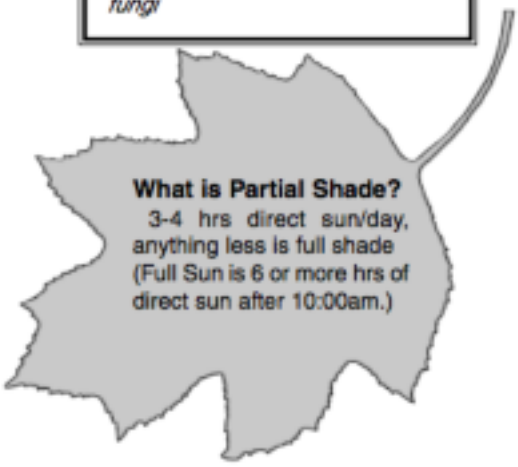
Shade Leaves are larger in size, thinner and less pubescent than sun leaves.

Shade Leaves...

1. *Are not any more efficient than sun leaves; everything is just slower to make up for the lack of light to run photosynthesis*

2. *Respond to short duration "sun flecks" - 5-10 seconds of light that contain half of the total light available to the shaded plant during the day*

3. *Have developed resistance to fungal attacks, necessary because conditions are perfect for fungi*



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The Shady Side Of Landscaping

Benefits of shady sites

When shady sites are properly planted with attractive shade tolerant shrubs and small ornamentals that not only survive, but also thrive, it can turn a difficult site into an attractive oasis. The low light intensity creates a calm, peaceful, and restful feeling. A shady site can be a cool, lush green refuge from the hot summer sun. Plants in shady sites can also be lower maintenance because of not only slower growth, but less irrigation is needed because of decreased evaporation from the sun. Selecting shade tolerant shrubs and small ornamentals from the list provided online (link) offers a shady site the beauty of change-patterns of light and shade, colors, and seasons.

Make the most out of a shady site

Select shade tolerant shrubs or small ornamentals that also will thrive with the other site conditions; including water availability, soil, pollution, pH and site use.

How to deal with shade

1. Planned Replacement- plant whatever you want, replace when they die
2. Cut down all your trees
3. Paint everything white and put mirrors everywhere
4. Install lighting
5. **SELECT SHADE TOLERANT PLANTS!**

Growing Shade Tolerant Plants at Glacier Oaks / McHenry County Nursery

Within any growing field, just like in the landscape, we face a variety of soil types, porosity, pH, organic matter content, fertility levels, air pockets, microclimates, and irrigation issues, as well as sun and shade.

We generally don't, however, have shady fields in which one might assume would be the best place to grow shade tolerant plants. To accommodate the light needs of plants we divide them between the shade loving and the shade tolerant. Shade loving plants are grown in containers in a well-balanced and adequately (not overly) fertilized soil-less medium under filtered shade of large trees in our holding area. The growing regime we use for our containers favors root growth. We check pH and electrical conductivity weekly to make sure we are providing enough for each plant group but not too much, minimizing run-off and waste.

Examples of plants for shade

Clethra alnifolia
Clethra alnifolia 'Hummingbird'
Clethra alnifolia 'Ruby Spice'
Cornus mas
Cornus mas 'Golden Glory'
Fothergilla gardenii
Fothergilla gardenii 'Blue Mist'
Hamamelis virginiana
Hydrangea arborescens 'Annabelle'
Hydrangea quercifolia
Hydrangea quercifolia 'Alice'
Hydrangea quercifolia 'Pee Wee'
Hydrangea quercifolia 'Sike's Dwarf'
Hydrangea quercifolia 'Snow Queen'
Hydrangea quercifolia 'Snowflake'
Itea virginica 'Henry's Garnet'
Lindera benzoin
Viburnum prunifolium