Shades *of* Shade

Understanding the shifting patterns of shade in your garden is the first step to turning a common landscape problem into a glorious asset.

ARTICLE AND PHOTOGRAPHS BY JENNY ROSE CAREY

SHADE IN A GARDEN changes with the path of the sun and involves so many variables that it is difficult to describe and even harder to comprehend. Learning about the shade patterns in our landscape is a long-term and detailed process, but well worth the effort, because it makes us better gardeners.

Shade is characterized by the absence of light, but the lack of something is rarely so full of potential. My plant-packed shade garden is a constant source of joy to me, with cool, refreshing places to sit away from the heat of the sun and paths that entice visitors to explore. Instead of seeing shaded areas as trouble spots, I encourage you to develop them and enjoy all they have to offer. To get started, you have to be able to recognize the patterns and types of shade in your garden.

Throughout the day, ever-changing shade patterns are cast on a path in the azalea walk at Jenkins Arboretum and Gardens in Devon, Pennsylvania.

TYPES OF SHADE

Shade shifts daily and seasonally. The number of hours of shade, the time of day that it occurs, and the intensity of the light falling on a garden are the major factors used to describe types of shade. Assessing shade levels can be done objectively using light meters, but I prefer to use an observational approach.

Generally, an area in full shade receives fewer than two hours of light, while one in part shade receives between two and six hours of light and is shaded for the rest of the day. For comparison, an area in full sun receives direct sunlight for more than six hours a day.

It is helpful, however, to become familiar with the intricacies of shade conditions, because this knowledge enables us to make the most appropriate plant choices. The following categories can be used to describe garden shade more accurately.

FULL SHADE

Areas of full shade receive little direct sunlight, but some ambient light reaches plants by being reflected off nearby surfaces. Such areas are often found on the darker side of houses or other buildings, under large coniferous trees, and beside dense hedges.

In full shade, plants grow steadily but slowly. Shade-loving plants tend to increase vegetatively, often by runners, developing new patches that gradually spread out from the parent plant. They tend to flower less profusely than they would with more light, but the flowers last longer because temperatures are lower in the shade.

The darkest areas of full shade are described as **deep shade**, and they receive almost no direct sunlight. These areas of low light intensity are often coupled with dry soil, so plants also need to be very drought-tolerant to grow here.

PART SHADE

An area in part shade is shaded for a portion of the day and receives between two and six hours of sunlight. Part shade can occur under or beside trees and shrubs, or next to hedges, walls, fences, and other garden structures. There are many cate-

This article is an adapted excerpt from ***Glorious Shade: Dazzling Plants, Design Ideas, and Proven Techniques for Your Shady Garden*** by Jenny Rose Carey. Published by Timber Press, Portland, Oregon, 2017. Used with permission of the publisher.

Birch branches and leaves filter light in the border of this garden, creating dappled shade for the mixed perennials below.

Magnolias, maples, and other trees block the morning sun in this partly shaded hillside garden.

gories of part shade, which are detailed in the following descriptions:

EDGE SHADE is found on the perimeter of a deciduous woodland around individual trees. This type of shade provides good growing conditions because the light that reaches the plants is sufficient for growth and flowering, but there is enough shade to protect plants from burning during hot summer days.

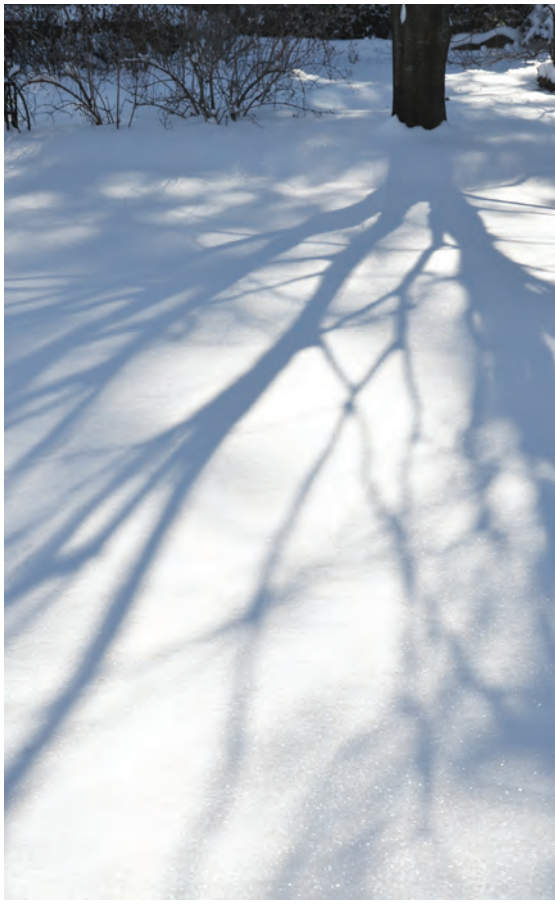
DAPPLED SHADE is provided by trees, especially deciduous ones. The size of the leaves and the height and extent of the canopy influence the amount of light that reaches the ground. Trees with a higher canopy or smaller leaves allow more light to reach the ground below, while a low canopy and large leaves provide a more dense shade. As tree branches and leaves shift in the wind and the sun passes overhead, the "puddles" of light move and change in shape. Plants in this type of shade can receive significant light but it is unpredictable and highly seasonal.

BRIGHT SHADE is found in areas near surfaces that reflect light, such as lakes, ponds, windows, and white or light-colored walls. The amount of light here may vary considerably according to the time of day and the season. A wide range of plants can be grown in bright shade.

MORNING AND AFTERNOON SHADE identifies the time of day an area receives shade. Planting areas that are to the west of an object casting shade are in morning shade. These areas stay cool in the mornings but heat up in the hot rays of afternoon sun.

Plants that benefit from morning shade bloom early in the year—such as rhododendrons, magnolias, and fruit trees—because their delicate flower buds need to warm up gradually after a frosty night. In summer, these west-facing plants receive the hottest sun of the day, so choose tough, drought-tolerant plants that can cope with the afternoon heat.

A planting bed situated to the east of a shade producer will receive morning sun and afternoon shade. Late-day sun can scorch leaves and flowers, so site plants that need protection from heat as well as sun—such as hostas, astilbes, and clem-



Deciduous trees play an important part in the seasonal changes of a garden's shade pattern. Above: In summer, their dense leaf canopies cast deep shadows on the ground below. Right: In winter, after the leaves have fallen, their bare branches cast open shadows.

atis—in areas with afternoon shade. In general, the hotter your climate, the better afternoon shade is for your plants.

HOW SHADE SHIFTS THROUGHOUT THE YEAR

In all gardens, except those at the equator, there is a predictable progression of seasonal shade that affects plants. The closer to the earth's poles that you garden, the greater the difference will be between the shade patterns of summer and winter. At the equator, day length is consistent throughout the year, and seasonal change is minimal. We all know that the shaded areas in our gardens change from month to month, but we may not realize how much.

During winter, the weather is cooler or cold, depending on where you live. There is more shade, as the sun is only up for a short time and its path across the sky is low. Some areas of the garden are in full shade for days or weeks at a time. Plants slow their rate of growth or retreat into dormancy.

In spring, the days lengthen and there are fewer hours of shade. The sun is higher in the sky, the days become longer, and the patterns of shade change. Plants emerge from dormancy and begin to grow.

By the summer solstice, the day is at its longest. The path of the sun is high, allowing light to filter into unexpected places. The plants need the extra light because they are in active growth. As summer progresses, the days get shorter again but the sun is at its strongest intensity and temperatures are at their highest.

Autumn brings shorter days and a decrease in shade as the deciduous trees drop their leaves. The colder weather brings on dormancy in most plants, so the change in shade level does not impact their growth.

The key to successful shade gardening is being aware of the changing daily and seasonal shade patterns. By carefully noting the levels of shade in every part of your garden throughout the year, you'll have the information you need to expand your plant palette and maximize enjoyment of your landscape.

Jenny Rose Carey is senior director of the Pennsylvania Horticultural Society's Meadowbrook Farm in Jenkintown, Pennsylvania.