

A Place for Every Plant and a Plant for Every Place

Whether you are planning a new landscape design, or adding to an existing one, it is important that you consider the right plant for the right place. Landscapes reflect many different approaches, such as low maintenance, formal, informal, native, wildlife-attracting, shade, water-wise, container or small space, and specialty.

Well-chosen plantings are necessary to achieve your desired landscape effect. You also need to consider that a garden is an artificial habitat in the sense that it is an accumulation of different plants. In natural circumstances, many of our chosen plants might not ever co-exist. We choose many plants for our gardens because they are unusual, or novel, and others because of fast-growing capabilities.

There are several factors that must be considered when planning our landscape or garden: sunlight, type of soil, temperature zone, and aesthetics. You might also consider such factors as ease of maintenance and whether or not you may sustain damage from wildlife.

Sunlight

Generally, sunlight requirements are broken down into three categories: full sun, partial shade, or shade. A plant that does best in full sun should have unobstructed sunlight all day, except for 1 hour at the beginning or end of a summer day. Partial shade means shade for half the day or at least 3 hours during the afternoon (the hottest part of the day). Shade plants prefer little or no direct sunlight but can sometimes tolerate a little early morning sun (an hour or less).

Be aware that different varieties of a species may have different sunlight tolerances. For instance, a *Rhododendron* 'PJM' will thrive in full sun, whereas a *Rhododendron* 'Sappho' requires partial shade. Also consider that shadows in your garden will vary at different times of the year. The angle of the sun changes and thus shadows cast by structures or larger plants will change. It is useful to observe over the course of the year when certain areas of your yard are shaded.

Overall landscape design should take light exposure into account. Place your shade loving plants on the north side of the house or in a grove of evergreen trees. Site the vegetable garden, fruit trees, and sun-loving ornamentals on southern exposures. Partial shade plants should be located on the east side of structures or larger plantings that will shade them by mid-day.

Soil and Moisture

Most plants require good soil porosity to thrive. This is the ability of the soil to absorb and maintain moisture. The ever-elusive loam soil provides the best porosity. If there is too much clay in your soil, it will hold water for a long time and thus the plant will have soggy roots. Many plants, like raspberries, are prone to root diseases when planted in wet soil. If there is too much sand in your soil, it will dry out too quickly. Therefore, a plant which needs a lot of water to thrive, like most willows, will not do as well in sandy soil. Soil can be amended with some effort.

Organic matter can be mixed in to the native soil to improve porosity, or raised beds can be used. In any case, it is important to know what type of soil your plant needs in order to be healthy. It is also important to regulate watering during dry periods based on the type of soil and the moisture requirements of your plant.

The pH of your soil is very important to most plants. Our soils in the Pacific Northwest are on the acid side (lower than 7). Plants like rhododendrons, hydrangeas, and blueberries thrive in acid soils. Other plants, like lilacs, do much better in alkaline soil (a pH higher than 7). Soil pH can be modified by adding lime to increase pH, or by adding sulfur to decrease pH. These additions may need to be made on a yearly basis to maintain the modified pH.

Temperature

The USDA Plant Hardiness Map is a rating system that has been developed by the US Department of Agriculture. There are eleven zones assigned to North America, with Zone 1 being the coldest. The zones are based on the average annual minimum temperature for each zone, or how cold it gets. Why do we care? Because plants have adapted to certain temperatures below which they will not survive. You are wasting your time and money, not to mention a good plant, if you put one where it has no hope of surviving. Here in Vancouver, Washington, we are in USDA Zone 8.

It is possible, by taking advantage of warm micro-climates and providing some extra protection, to be able to stretch a plant's range one or maybe two zones lower than it is rated. However, don't bother planting a tree in our area if it is listed as hardy only to Zone 11.

USDA Plant Hardiness Zones (in Fahrenheit)

Zone 1	Below -50 degrees F	Zone 7	0 to 10 degrees
Zone 2	-50 to -40 degrees	Zone 8	10 to 20 degrees
Zone 3	-40 to -30 degrees	Zone 9	20 to 30 degrees
Zone 4	-30 to -20 degrees	Zone 10	30 to 40 degrees
Zone 5	-20 to -10 degrees	Zone 11	Above 40 degrees
Zone 6	-10 to 0 degrees		

Keep in mind that factors such as temperature are largely beyond your control, but there are predictable yearly averages. Also, don't confuse hardiness zones with the length of frost-free growing seasons. The two are not related. Your local Cooperative Extension office can provide you with the average frost-free growing season, including the usual date of last frost in spring and first frost in autumn. We are fortunate here to have essentially a maritime climate much of the year. This means that we get much less winter cold and less summer heat than areas east of the Cascades.

Aesthetics

Now that you have selected a plant that will thrive in your landscape because the ideal physical conditions for it have been met, you still need to consider some other factors. Even if you don't have a formal landscape design

on paper, you probably have a general design concept or preference, space limitations (or requirements), available time for maintenance, and pre-existing wildlife or the desire to attract wildlife.

Design Concept

Consider whether our overall design is formal or informal and how the proposed plant will fit in. An unruly looking plant, while fascinating in an informal landscape may look comical in a formal landscape. Also consider the various textures of other plants in your landscape and determine how this plant's texture will augment the landscape. It is generally good to have some variations in texture in order to keep the landscape interesting. Also consider the form of the mature plant. Is it low and spreading, columnar, rounded, pyramidal, or weeping? How will that form look in the existing landscape?

It is also important to consider seasonal interest in the plant. Is everything in your landscape interesting only in the spring and fall? Then perhaps adding something with interest during another time of the year would improve your landscape. For example, consider trees or shrubs with different bark color or berries for winter interest.

Space

You must consider the mature size of the plants that you select for your landscape or garden. It is not uncommon to find that you have selected plants that become too large for their location. Excessive pruning can harm the plants, and add to the maintenance of your landscape. Some trees and shrubs may dominate so that they block light from desirable plants that need light. Plants need to be properly sited so when they are mature, they complement rather than stress each other.

Hand in hand with knowledge of a plant's ultimate size should go the realization of how fast it will get there. Some of the most desirable plants exhibit slow growth, so place those where their slowness will not be a detriment to your landscape plans. Other plants can be found that will grow rapidly to a satisfying size and beauty, but will pass into a less attractive old age. You would be wise to take advantage of both. While the slower shrubs are building their bulk and character, the faster but less permanent ones can be filling in the blank spaces with their own form and colors. Then when the faster maturing ones are entering their decline, the slower growers will be well on their way to playing their intended roles.

Climatic-plantings can act as a windbreak, and protect against noise and sun. For example, Arborvitae planted in a row along property lines, after a few years will develop into a very nice, shady windbreak.

Maintenance

The first word of caution here is to **be realistic**. Consider how much time you have to spend on yard maintenance and select plants accordingly. If you spend five days a week at work, Saturday at soccer games and Sunday at Grandma's, then you want to aim for the kinds of plants you can pretty much plant and forget. Generally, native plants will meet this need. If you are retired and love puttering in the yard, then by all means buy those plants that need lots of tender loving care.

There are some overall design strategies to reduce maintenance requirements. Keep your design simple. Limit the size of the lawn. Use groundcovers (plants, bark, or gravel) to help control weeds. Install automatic irrigation.

Plant native plants. Choose plants which are disease resistant (less spraying), drought tolerant (less watering), and naturally compact (less pruning).

Wildlife

Consider your area and the wildlife you may have to contend with. Deer are probably the biggest problem in the outlying areas of Clark County. And they really do believe that you plant those roses just for them to eat. There are some plants that deer will not eat so you can have an attractive landscape and live in harmony with the critters. Start with published lists of deer resistant plants and then do some experimentation on your own. Remember that deer tastes change from region to region and year to year, so what may be true in one time and place may not be true in another. If you have deer in your neighborhood it does you no good to plant a shrub that they are well known to devour unless you put it in a fenced area. Another tactic is to install a wire basket round the young tree until it grows large enough that the deer cannot reach it.

While some may be planning their landscape to tolerate wildlife, others may be trying to attract wildlife. Birds are attracted to trees and shrubs that produce berries. Butterflies are attracted to certain types of plants. If your goal is to have lots of butterflies in your yard, then put the right plant there to attract them.

Now you know some factors to consider when choosing a plant for your landscape. Now you can choose wisely. Just always remember: right plant in the right place!

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