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Introduction to Herbaceous Perennials

USING PERENNIALS

Enthusiasm for perennials has been on the increase in this country since the late seventies. This is due in part to the wide selection of herbaceous perennials available today, their ornamental appeal and their ability to thrive with minimal care. Fortunately, there are many perennials that are not susceptible to insects and diseases, which is another advantage in their favor. Many perennials offer a wide range of color, texture and form, all of which contribute to the beauty of a landscape. Many are also ideal for fresh cut or dried flowers. Perennials are indeed very appealing. They are best utilized as part of a total design incorporating trees and shrubs. A well-planned perennial border will provide that special seasonal interest that so many landscapes need.

PERENNIAL GARDEN DESIGN

To begin, follow a few basic design principles and add your imagination to create a visually rewarding garden. The following is a description of some basic principles used by professional designers that will help in the creation of a perennial garden with long-lasting seasonal interest. Don't be afraid to copy successful ideas that you like in other people's gardens.

Color and Seasonal Display

The primary reason people grow flowering plants is for the color and beauty of their flowers. Next is for the form and texture of the foliage. Some perennial plants may be selected exclusively for their unique foliage interest. When it comes to color there are different aspects to consider when planning a perennial garden. Consider not only the blossoms but also the color of surrounding features such as the background, other plants, fences, etc. Color can also set moods for the observer. For example, red, yellow and orange are bright, warm and cheery while blue and white are calming and cooling. A romantic old fashioned look is achieved with pastels. Consider a garden backed by evergreens or woodlands which would lose blue and purple colors in the foreground, but would look very striking with yellows, white or silver. If uncertain about choice of a color, use a color wheel. There are basically three successful combinations.

<u>Monochromatic</u> - combines all shades of the same color. <u>Complementary</u> - Includes colors that are exactly opposite such as blue with orange.

A Selection of Perennials for a Succession of Bloom			
Early Spring (February - March)			
Lenten Rose	Helleborus	_	
Late Spring (April-May)		Gas Plant	Dictamnus
Bergenia	Bergenia	Globeflower	Trollius
Barrenwort	Epimedium	Iris	Iris
Bleeding Heart*	Dicentra	Lady's Mantle	Alchemilla
Creeping Buttercup Ranunculus Lungwort			
Candytuft	Iberis	Pulmonaria	
Carnation	Dianthus	Peony	Paeonia
Columbine*	Aquilegia	Poppy	Papaver
Coralbell*	Heuchera	Sea Pink	Armeria
Summer (June-August)			
Japanese Anemone		Coralbell*	Heuchera
Stoke's Aster	Stokesia	Coreopsis*	Coreopsis
Astilbe	Astilbe	Gas Plant	Dictamnus
Baby's Breath	Gypsophila	Goldenrod*	Solidago
Balloon Flower	Platycodon	Ligularia	Ligularia
Butterfly Weed*	-	Lupine	Lupinus
Cardinal Flower*		Garden Phlox*	Phlox
Black-eyed Susan*		Perennial Sunflow	
•	rysanthemum	Yarrow	Achillea
Daylily	Hemerocallis		
Fall (September-Frost)			
Hardy Ageratum	Eupatorium	Coralbell*	Heuchera
Japanese Anemone	Anemone	Lily Turf	Liriope
Aster*	Aster	Mallow	Malva
Chrysanthemum Ch	hrysanthemum	Stonecrop*	Sedum
* native species available			

<u>Analogous</u> - colors that are next to each other on the color wheel such as all the shades of blue plus all the shades of violet, etc.

Two additional hints are helpful: white flowers and grey foliage are considered neutral and always blend easily with any other color; secondly, varying the intensity of different colors will also provide additional vitality. The nice thing about perennials is that even if the finished planting does not turn out exactly as you like, it is usually easy to transplant them to a new spot. Try to select plants that, when combined, will provide a succession of bloom throughout the season. This takes some thought because most perennials have a limited season of bloom. Also, annuals can be successfully integrated into the garden to provide bloom between the times when perennials are not in full bloom.

When developing the garden, avoid putting all of the plants that bloom at the same time in the same place. Instead, spread them out in groups to achieve balance in the garden. Intermixing plants according to their time of bloom may seem complicated, but the job is actually fairly simple if you draw the plan out on paper first. Of course changes can be made from year to year as you see any problems or you find new plants that you want to add.

Form and Texture

Form and texture are characteristics of plants that many gardeners overlook when considering a perennial garden design. In reality, some plants are included in the garden solely for the texture of their foliage. Many of these types of plants include ferns, hostas, sedums and ornamental grasses.

Even blossoms will vary in form and texture, ranging from the delicate blossoms of baby's breath to the heavy coarse blossom of the daylily. By choosing perennials with different forms and texture, the garden can become more interesting. Examples of different plant forms include: low ground hugging forms, tall spike types, arching types and rounded types. Some examples of texture include feathery leaved plants and coarse types with large bold foliage. It is best to contrast foliage forms next to each other for textural interest.

Some plants can provide interest with their uniquely patterned foliage or blossoms. These include spots, stripes or splotches of color on leaves or blossoms. Be careful not to overuse them because too much becomes distracting rather than complimentary to the design.

MAINTENANCE

Most perennials are tolerant of a range of soil types as long as they drain. Some perennials will even tolerate wet soils. Unlike annual or vegetable gardens, perennial gardens are not tilled each year. Once planted they usually are not disturbed except for some routine care. Therefore, the initial work of incorporating liberal amounts of organic matter when the garden is planted will certainly pay off in the long run. Once the garden is established it requires minimal seasonal care. However, it is an important point that all gardens need some maintenance.

Basically, there are four tasks that should be performed on a regular basis throughout the growing season. These are: watering, weeding, fertilizing and removing spent blossoms. Occasionally insect control is needed to protect the aesthetic quality of a plant, although insect pests seldom destroy the entire plant. Every 3 to 8 years most perennials will need dividing because they will have grown too crowded. Perennials that are too crowded have greatly reduced vigor and bloom. Division of perennials is usually done in early spring or fall. Some perennials need to be divided during a specific season. If uncertain

about dividing then check one of the suggested references.

Watering

In the absence of regular rainfall, irrigation will be very important during the first year the garden is established. Infrequent, deep irrigation is better than frequent shallow irrigation, which only encourages shallow roots and will encourage weed growth. To avoid wasting water and spreading foliar diseases, apply the water with a hose or soaker hose directly to the soil in the early morning hours of the day. Dig into the soil to make sure that the soil is wet to a depth of six inches. Mulching will help to conserve soil moisture as well as reduce weed growth.

Weeding

The best method for weed control is the use of an organic mulch, periodic hand pulling and to have the desirable plants shade as much of the ground (soil) as possible. Lay the mulch to a depth of 2 inches soon after planting. Cultivation is not desirable because it cuts many roots and brings dormant weed seeds to the surface. Another alternative for weed control is to apply a pre-emergent herbicide to kill the weeds as they germinate. You can select from different brands on the market. Follow the label instructions for rates of application. This technique should not be used in areas where seeds or very young transplants are grown. Wait until the plants are 4 to 6 inches tall before applying these chemicals.

Fertilizing

General purpose fertilizers are formulated in a combination of three primary nutrients: nitrogen, phosphorus and potassium (N-P-K). N represents the percentage of nitrogen, P the percentage of phosphate and K, the percentage of potash in the fertilizer. Nitrogen promotes leafy green growth; phosphorus encourages root, fruit, and flower development; and potassium promotes overall plant vigor. Fertilizers are helpful to correct nutrient deficiencies in the soil. Always start with a soil test to determine the soil's nutritional and liming needs. Plants consume soil nutrients as they grow and rainfall can deplete nutrients by leaching. To help monitor the changing nutrient levels in a perennial garden a soil test should be performed once every three years. Many perennials are very easy to grow on any average, well-drained soil without additional fertilization, especially if soil is regularly amended with organic mulch. Some perennials, especially natives, actually produce better flowers under lower soil fertility and should not be fertilized regularly. However, certain perennials will grow faster and larger with additional feeding. A fertilizer with a higher source of phosphorus (i.e., 5-10-5) is beneficial for quality color and abundant blossoms, while a higher source of nitrogen (i.e., 10-5-5) will encourage large foliage. Care should be taken when fertilizing; one must consider that any excess fertilizer unused by the plant has the potential to cause damage to our water supply, local streams and rivers, and the Bay.

Fertilizer is available in granular and powdered (diluted in water) form. Select a slow-release granular form, which feeds over a long period of time, to reduce maintenance. Use a powdered form, applied as a foliar treatment, only when an immediate result is desired. As with any fertilizer, apply according to label instructions.

Suggested References:

Clausen, Ruth L.N. Ekseron, *Perennials for American Gardens*, Random House, New York, 1989, 631 pp.

Harper, Pamela & F. McCourney, Perennials, How to Select, Grow and Enjoy, H.P. Books, Los Angeles, 1985, 160 pp.

Time-Life, Perennials, Alexandria, VA 1988, 158 pp.

Brown, Emily, Landscaping With Perennials, Timber Press, Portland, 1986, 304 pp.

Hebb, Robert S., Low Maintenance Perennials, Arnoldia, Vol. 34, No. 5 and Vol. 35, No. 1, Arnold Arboretum of Harvard Univ., Jamacia Plain, MA

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ALWAYS READ THE PESTICIDE LABEL AND FOLLOW ALL DIRECTIONS AND SAFETY PRECAUTIONS.

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Author: Raymond Bosmans, University of Maryland Extension Specialist, Home and Garden Information Center. Revised: Wanda MacLachlan, Extension Educator, Environmental Management, University of Maryland

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