

SELECT, INSTALL AND MAINTAIN TO PRESERVE DESIGN IMPACT

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Annuals are becoming more and more important in the groundskeeping industry. Industrial parks with limited outdoor space can use them to add color to the perimeter efficiently. If they have more space, they can work the annuals into patterns that are very eye catching.

Annuals are a disposable flower. Every year you can create a completely new garden with them. Every year you can develop a whole new motif. For instance, in 1976, gardeners all over the United States created designs that resembled flags, or banners. Red, white, and blue flowers were worked into many different designs, and some gardeners developed some very unique patterns.

Unlike the perennials, the annual flowers constantly all season. Of all our plants annuals have the greatest potential for a one hundred percent display of color. And there are annuals for virtually every color of the visible light spectrum. Some of the annuals have colors which are actually beyond our senses, but are visible to bees and butterflies.

A good annual bed can be made in almost any sunny location. A shaded area is going to limit the number of annuals you will be able to work with as most of them flower best in the bright sun.

Designs

You will find yourself working with three basic types of designs. The simplest is the zonal design, where your colors are clearly limited to specific areas of the bed. This may be a yellow marigold rectangle within a larger blue ageratum rectangle. Or it could be broad bands of flowers next to each other. For instance bands of red, white, and blue were often used in 1976.

The second, somewhat more advanced design, is linear. For this your background is a solid color and you draw your design in with lines of flowers. An example of this would be a background of red begonias with lines of white begonias. Or you could use a background of bronze coleus with an outline of green coleous.

The third, and by far the most complex pattern to work with is the combination of zonal and linear designs. In this you would have the color zones with linear drawings cutting through them. This last type of design takes careful planning on paper and a lot of attention to accuracy when planting. But if it is done right it can be very stunning.

Breaking designs down into area or line patterns can be done in most visual arts. You can see it in modern painting or renaissance architecture. The aesthetics involved are the same for you as for them and you will find that as you think in terms of area and line the pattern you make will be very artistic.

Setting

Look at your planting space in relation to it's surroundings, and try to see any factors that are going to influence the designs. In some cases the way the



Golden Celosia withstands full sun and wind and is an annual recommended for exposed locations. (Photo by T.A. Fretz)

beds are situated will make a difference in their viewing. In one park where I was the head gardener we had raised annual beds set in concrete forms. The first year we planted the beds with flowers of about the same height. They all grew well but the flowers on the outside blocked the view to those on the inside. By midsummer the pattern was lost to anyone walking near the beds. The second year we used a little more height in the center of the flower beds.

Height is a very important factor in planning your designs. You have two methods to choose from when varying the height within the bed. First you can use flowers of the same height and simply raise the soil level where you want additional height. The major drawback with this is that in time erosion may alter the soil contour. If you pack the soil firmly, and the flowers are planted relatively close together, the hills and valleys you create will probably last the season. However, if there is an excess of rain, or the soil is loosely packed, you may find your display sagging or becoming distorted.

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The second way to vary the height is to leave the soil level and choose plants which grow at varying heights. There are also drawbacks to this course of action. Most of these problems however, result from mistakes in plant care. For instance, if the initial fertilizing of the soil prior to planting is done unevenly you will have some plants shooting up taller than others in the same line. The same effect may also develop from uneven spread of lime.

You will almost always want the highest point to be at the back or the middle of the bed. If the bed is going to be seen from only one side you can have it sloping upwards from the front, the highest point being the back. If the bed is to be viewed from all sides, you obviously will have to slant it upwards from all angles toward the middle. Rarely will this vary. When the bed is viewed from above, the bed can have a slight slope downwards toward the center. That is, the bed could be made concave rather than convex. This situation does not develop often. The obvious problem with a concave planting is that if the drainage is not adequate than a pool will develop at the bottom.

Symmetry

Now that we've considered the surrounding factors, let's look at the shape of the bed itself. The shape of the bed is going to be the first governing factor in your design. If the bed is symmetrical you

may find it much simpler to work with. For example you can do a lot more with a square bed than one shaped like a horse shoe. If the asymmetrical bed is not extreme you may be able to fill in some of the odd corners with foliage plants or neutral colored flowers and create a symmetric shape within their borders in which you can develop a design.

On paper

Drawing the design out on paper is no problem when you are using a square or rectangular bed. Use graph paper and designate each little square as a space six inches by six inches square. This represents one plant. An eight by eight foot bed would be a square of graph paper sixteen spaces by sixteen spaces. Draw in your pattern and you have an accurate count of flowers. This works well only with the straight designs. Other than this try to keep to scale, using six inches as the space for each plant. By the way, most begonia sized plants spread easily to fill a space that size.

If you are new at annual beds stick to straight lines as opposed to curves and circles. They are easier to plan and plant. You can build squares within squares, or employ triangles. Remember to think ahead to what the beds are going to look like. Think in terms of line and area.

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Begonia semperflorens (photo courtesy Agricultural Technical Institute, Wooster, OH).



Gazania (ATI)



Hemerocallis 'Bicolor' (ATI)



Achillea (ATI)

While planning, do not add plants that will cause weak lines. For instance pink begonias against red ones tend to be mute. Separating the two with a row of white begonias makes the colors stand out, and your design will stand out as well.

If you feel that you would like to work with curves and circles in your patterns remember to keep your drawings to scale. And order a few extra plants to compensate for any unforeseen difficulties.

Soil Prep

Preparation of the soil prior to planting should include a thorough soil test. There are many test kits on the market that are self-explanatory, or you may choose to send samples to your local extension service. Many gardeners prefer to turn in the lime a week or two before the fertilizer. The proponents of this practice say that when the lime and fertilizer are added together the lime causes the fertilizer to release its nutrients too quickly and they are leached from the soil within a few weeks.

Remember that a soil that tends to be alkaline, has excess lime, will often be a good base for weeds. So do not over lime your soil. On the other hand, when applying phosphorous or superphosphate, keep in mind that flower production requires alot of this mineral, don't cut yourself short.

Almost any soil needs additional organic material. While peat moss is most often used in parks, manure or leaf mould is often better as well as cheaper.

Once you have spread the soil additives evenly, turn them thoroughly into the soil. A thoroughly prepared soil mixture is extremely important to your flower production.

Ordering

When selecting plants for your beds specify to your grower that you want plants that are in, "bud and bloom". That is, they will not only have flowers when they are delivered, but they will have buds ready to burst as soon as the first flowers have gone by.

Many of the annuals will be in 3-½ inch pots or smaller. A few plants, such as geraniums may do better if you order them in the four inch pot size. Many growers will now deliver the flowers in peat moss cups or cubes. This eliminates the need for the flower pots which many of us have become accustomed.

Most plants that look unhealthy are unhealthy. Don't accept them. The most important part of your annual bed's appearance depends on how healthy your plants are.

Even the most experienced groundskeeper run into snags during the growing season. An animal running through your flower bed in July, a dog burying a bone in your display during August, will destroy plants. In the later part of the season it will be almost impossible to locate a source of plants that will be the same type, variety, and color as the others in your flower bed. So buy extras, and plant them where they will have about the same amount of sun as the main bed. Then if you need some extras later you will have them.

Planting

When it comes time to transfer the plans into the real thing organization is going to be a concern. The less experienced your staff is, the more exact you will have to be as supervisor. There are several ideas that I have seen used. One fellow cut a 2x4 board to the width of his flower bed and set half inch diameter dowels into the 2x4 every six inches. This looked like a giant grass rake. He would press the rake into the ground, and the holes left by the dowels would mark the location for each annual in the row. This seemed to be a successful method.

Another gardener I know simply sets each annual on the ground exactly where it is supposed to go. The laborers then are supposed to plant them exactly as they find them. If the help are inexperienced, this method could end in a disaster. I've seen many plants stepped on, and patterns dissolve into disarray, without seasoned gardeners trying to follow these steps.

The best way I've tried is to first plant the boundary, leaving one end open for the laborers to come in and out of. Then mark the second row with a string, running it from the boundary plants. Have your laborers plant along the string lining each flower up with the one in front of it. This method seems to cause the least confusion and at the same time the work progresses at a reasonable speed.

Care

After planting you will find it necessary to fertilize occasionally to keep the plants producing at a healthy rate. Many gardeners prefer to add fertilizer that can be dissolved in water and sprayed onto the plants. This is much safer than spreading granular fertilizer directly onto the plants. Granular fertilizer will burn the leaves and flowers of any plant it is dropped onto if it becomes all wet. If you followed the directions of the extension service carefully in the original soil preparation you should not have to add any fertilizer until thirty days after planting.

Watering should be done in the morning, as opposed to the afternoon or evening. When possible the ground should be watered, rather than the plants. These two precautions will keep the fungus growth at a minimum.

Frequency of watering is going to depend alot on the heat and wind and humidity of your local. Generally let the bed become dry on the surface, but not underneath, before you water.

Pinching back a few stems on each plant will cause the plant to grow in fuller. What happens is that the buds near the break each send out new shoots. Often as many as four at each break. Thus where you had one stem before pinching you will have several afterwards. Care should be taken that you do not take too much off a plant on each pinch. This would make it look "scalped". Also individual leaves and blossoms should be pinched off after they have passed their prime.

Annual beds can be colorful and full. They can add a unique touch to a shopping mall or park. With a little experimenting your designs can be extremely creative supplements to the total effect of your landscape.

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