

# Flowers on the Golf Course: A Formula for Success in 1987 

In recent years there has been a tremendous increase in the use of annual flowers on golf courses. It started with a few impatiens near the parking lot and some hanging baskets near the club house, and eventually expanded to flower beds on the course itself. Now that flowers are a standard feature of so many golf courses, it's time to develop a formula for success. There will always be room for experimentation, but your experiments will turn into triumphs more often if you develop a systematic approach.

What is the formula for success with annual flowers? It's a combination of (1) proper plant selection and (2) an appropriate input of labor.

## Plant Selection

Many factors must be considered in selecting flowers. First, before looking at the plants themselves, evaluate the environment. You will have more success with any plant if you choose an environment that can meet the needs of the plant, rather than trying to modify the existing environment to meet those needs.

After you look at the soil, water, exposure, etc., of the environment, draw up a list of plants that might be suitable. For inspiration, consider all sources: your own experience, gardening publications and seed catalogs, suggestions from colleagues, and flowers you've seen on other golf courses, in public gardens and at trial gardens.

Next, eliminate any plants from your list that pose difficult insect, disease or cultural problems. For example, if you have had problems with powdery mildew on zinnias in the past, you can probably expect to have the same problem again.

Be sure to consider the maintenance requirements of flowers. Flowers should add beauty to the golf course without adding a maintenance problem for your grounds crew. Geraniums can be quite spectacular, but only if dead flowers are removed on a regular basis to promote rebloom. Vinca, on the
other hand, blooms all season without such maintenance. Other labor required for annuals includes pruning, staking and application of pesticides.

One of the advantages of annual flowers (as opposed to other flowering plants like perennials and shrubs) is that annuals can provide spectacular color for the entire season. But not all annuals have that quality. Pansies stop flowering in the heat of midsummer, sweet alyssum produces its best flowers in the coolness of spring and fall, and dahlias don't start to flower until midsummer. On the other hand, marigolds, geraniums and vinca will produce flowers from early summer until frost. Don't limit your expectation of quality to the flowers; consider the entire plant. Zinnias may have beautiful flowers all season, but in late summer the foliage may detract from the beauty of the flowers if infested with powdery mildew.

Consider the uniformity of annuals - uniformity of size, form, color and overall quality. Individual plants of some strains of French marigolds are virtually identical. Individual plants of Kochia, however, may vary in size at maturity by more than 100\%.

One last consideration in plant selection is availability. If you have a greenhouse where you can grow your own bedding plants, this is rarely a problem. One seed company or another will carry the cultivar you want. If you contract with a greenhouse operator to supply your annuals, availability is a minor problem. If given enough advance notice, most growers will try to supply the cultivars you want.

Availability can, however, be a major problem if you wait until the spring bedding plant season to select annuals. Greenhouse growers produce a rather limited number of cultivars, mostly those with shorter production times and longer shelf life during the spring sales period. Those may or may not be the cultivars that would give the best season-long performance on the golf course. In addition, some annuals
do not sell well for one reason or another (they may be expensive, or they may have limited appeal to the general public), and are therefore grown by few bedding plant producers. You may plan a garden around the castor bean plant, but not be able to find it in the spring.

Some annuals pass through stages of popularity. Creeping zinnia, for example, is an outstanding heat-tolerant annual that produces masses of yellow flowers all summer. Because it is leggy and unattractive as a seedling, it has low sales potential and is generally not seen at bedding plant operations. But a recently introduced cultivar was named an AAS winner for 1987, and creeping zinnia will no doubt become more widely known and available.

## The Labor Consideration

An important first task is to make wise plant selections. Choosing annuals with high performance potential can greatly reduce the amount of labor needed for maintenance all summer.

Before planting, take a soil test, add organic matter and fertilize if needed, and work the soil well to a depth of $6-8^{\prime \prime}$. This is critical in providing an environment where young seedlings can develop good root systems. Preemergent herbicides like Treflan are easier to apply and perhaps more effective when incorporated into the soil before planting. Rake the granules in lightly, and plant the young annuals through the layer of soil containing the herbicide. If the root balls of the flowers reach below the soil layer containing herbicide granules, new roots will develop faster.

Allow flower seedlings to "harden off" or become acclimated to the environment outside the greenhouse, before planting. Keep them well-watered. Plant on a cool, overcast day if possible, in the morning. This will minimize the stress caused by the change in environment to the seedlings. Water the plants well and check them at least once a day during the first week to see that they have enough water. After the plants have established new roots (1-2 weeks), mulch the beds if desired.

The labor needed to maintain annual flowers during the season depends on the flowers you select and the environment in which you plant them. Even though you might expect a flower garden to require very little maintenance, you should check it weekly to pull occasional weeds, clip leggy branches, and check for moisture.

One task which should not be overlooked at the end of the season is evaluation. Your past experiences with plants should be your best guide for the future. Make notes of plants that performed exceptionally well, as well as those that proved unsuccessful. Compare your notes with those of your colleagues, and keep notes from past years.

## Some Successful Formulas

Success comes with a combination of recommendations from others, past experience, willingness to work and openness to change. As a starting point, here are some suggestions for annual flower beds with proven track records.
Each of these recommended gardens contains one tall, one medium and one low-growing annual. In a freestanding flower bed, plant the tallest flower in the center, and surround it with the other two. Be creative! In a flower border planted against a backdrop (building, wall or fence), plant the
tallest plants in the background, the lowest plants in the foreground, and the others in between.

1. Canna - Geranium - Dusty Miller Older canna cultivars are 3-5' tall, newer ones are $11 / 2-3$ ' tall. Select canna and geranium cultivars that match in color. The dusty miller's silvery leaves will compliment the red, pink, orange or coral flowers of the cannas and geraniums.

After planting, this garden should require no maintenance except watering and removal of dead geranium flowers. 2. Blue Salvia - Dusty Miller - Creep ing Zinnia
The blue flowers of the salvia and the yellow flowers of the low-growing creeping zinnia will be complimented by the dusty miller. This garden is very low-maintenance. Cut off dead salvia flowers weekly. All three plant types will remain in excellent condition until hard frost.
3. Blue Salvia - Geranium - Dusty Miller

Choose a salmon-colored geranium for this garden. During the summer, remove old salvia and geranium flowers.
4. Cleome - Blue Salvia - French Marigold

Cleome, or Spider Flower, will produce white or pink flowers all summer and will reach a height of $4-5$ '. Surround the cleome with blue salvia and yellow French marigolds for a very colorful garden. The cleome will need no maintenance during the summer, but remove old flowers from the salvia and marigold.
5. Fountain Grass - Red Salvia Sweet Alyssum

Fountain grass is a perennial clump grass, but it is often offered by bedding plant growers. Surround the grass with a bright red salvia and edge the garden with white sweet alyssum.

Remove old flower stalks from the red salvia on a weekly schedule. If the white sweet alyssum stops flowering in midsummer, cut it back to promote more flowers in the fall.

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