



### Wildflowers On The Golf Course

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Wildflowers have made a splash in the landscape in the past few years. This year several new wildflower seed mixes are available, and they are being used across the country in highway plantings, in public landscapes, in home lawns, and on golf courses.

What makes wildflowers special? How should they be planted and established? How much maintenance do they require? Do they really bloom year after year? Do they have a place in the rough on your course? The answers to these questions are as varied as the flowers themselves.

#### WHAT IS A WILDFLOWER?

In the most basic sense, a wildflower is a native flowering plant that persists in a location without, or in spite of, human intervention. Many gardeners and landscapers have developed a new awareness of these uniquely beautiful plants. Wildflowers soften the impact of our modern world, reminding us of nature. It can be very satisfying to establish a planting of wildflowers.

There are as many reasons to plant wildflowers as there are gardeners. Generally, wildflowers native to an area are adapted to soils and the natural fertility — they require little fertilization and often withstand drought. They are often disease-resistant and quite tolerant of insect infestations. In many cases they offer food and shelter for wildlife.

#### WILDFLOWER MIXES

In response to the wave of enthusiasm for wildflowers, several companies are marketing wildflower seed mixes. Of course, the wildflowers of one part of the country are different from those of other parts of the country. That brings up an interesting point about the wildflower mixes on the market today.

Many of the new mixes contain species which do not occur together in nature. Many of these new products are regionalized, with different mixes

being recommended for different parts of the country, yet some species are common to several mixes whether or not they are actually native to every area. These non-native flowers may or may not persist over the years. And if they do persist, they may outcompete other species in the mixes.

If you are trying to establish a planting of wildflowers that truly are native to your area, the best approach is probably to consult a naturalist for a plant list. Gather seed from wild plantings in your area and create your own mix.

If your goal is simply to create a planting of beautiful flowers which will naturalize into an area and produce color throughout the season, then one of the wildflower mixes on the market may be what you want.

#### SELECTING A MIX

Some mixes are primarily annual flowers, and several are about half annuals and half perennials. An annual mix produces good color the first year, but only those annuals that produce hardy seed will return the following year. On the other hand, an all-perennial mix would produce very little color the first year, so annuals are generally added. The annuals give color while the perennials are getting established. Starting the second year the perennials provide color which should continue for many years.

When considering a mix, ask for the species list. Find out which plants are actually native perennial wildflowers, and how many are annuals which will not return the second year. Ask for a percentage breakdown of species.

Many companies also sell individual species' seed, so that you can either establish clumps of those individual species within a planting, or make your own mix. This can help you reduce the competition factor.

#### PLANTING AND ESTABLISHING WILDFLOWERS

Wildflowers are native to various

habitats. Some are woodland natives, requiring moist soil and heavy shade. Others are native to sandy regions and require full sun and pool soil to perform best. Most of the wildflower mixes on the market are intended for full-sun locations. They contain several species that are adaptable to several soil types and fertility levels. With this approach, you are assured that some species will do well even though some others may die out. Planting one mix into two locations with different environmental parameters may yield very different end products, because of competition and adaptation.

Consult with a naturalist or ornamental horticulturist who can help you select a seed mix that will succeed in the site you have in mind.

The best time to establish wildflowers is early spring. You can mow an area and either drill or hydroseed the wildflower mix into the grass. Irrigate to promote even germination. This approach requires the least amount of work initially, but it generally offers the poorest results, too. Sod-producing grasses are too competitive for many wildflowers, and many species will not develop at all if you follow this approach.

A second option for planting is to herbicide the existing turf, and rake or harrow the area to expose the soil surface. In this case, you will probably want to add a clump of grass such as sheep fescue to the wildflower seed mix. The grass will help bulk up the mixture, making it easier to apply. Spread and rake in the seed, or drill it in; then irrigate. The grass seed will help in soil stabilization, without unduly competing with the developing wildflowers. And the grass will look attractive all season, covering the fading flowers and unattractive foliage that some of the wildflowers develop in late summer.

#### MAINTENANCE

Wildflower plantings do require maintenance, especially in the first few years. A major concern is weed invasion and competition. Clover, thistle and quackgrass can take over a planting quickly. Spot-treating with herbicide helps, but the planting will require some hand-weeding as well for the first few seasons. An ongoing problem is invasion by woody species. Some people prefer to mow wildflower plantings late in the season, after the plants have flowered, in order to discourage the invasion of woody plants.



Fertilizer is often not necessary, since many wildflowers perform well in soils with moderate fertility. Adding high levels of fertilizer may in fact encourage weed growth. Test the soil, and add fertilizer, only if the soil is very infertile. If you do decide to use a fertilizer, consider adding Milorganite to the seed as sowing time. This will help bulk up the seed mixture, making it easier to spread as well as adding nutrients.

Water the seed to hasten germination, and irrigate the young seedlings to help them establish quickly. Once established, many wildflowers require little or no irrigation beyond rainfall.

### FLOWERING

Wildflowers can provide color throughout the season, year after year. The annuals will produce color within weeks after seeding, but some perennial seeds will not germinate until the second spring, and may not produce flowers until the third season.

Annuals that are often included in wildflower seed mixes for the North include bachelor's buttons, which re-seeds and germinates each spring in most locations; pot marigold, which produces golden yellow flowers during the first season, and which may come back in subsequent years; and California poppy, a golden-yellow annual that generally re-seeds year after year. Annual baby's breath produces small

white flowers.

Perennials found in many mixes include white yarrow, which flowers in early summer, and butter-and-eggs, which produces small snapdragon-like flowers in midsummer. Yellow evening primrose, the white ox-eye daisy and the black-eyed susan flower in midsummer. Coreopsis, which produces golden yellow daisy-type flowers and the purple coneflower both bloom from midsummer to frost.

How colorful a wildflower planting proves to be depends on many factors, as discussed above. If you purchase a mix with twenty-five species in it, it is unrealistic to expect all of them to flower. Some will outcompete others, and over the years a few will become dominant. To ensure a good mix of color, it is advisable to overseed lightly every one or two years.

### ON THE GOLF COURSE

Why not establish a wildflower planting in the rough? Many golf courses in the Upper Midwest have had prairie plantings for years, and many courses around the country are establishing meadows and even whole plantings of single species such as black-eyed susans. Golfers like the splash of color. Even though wildflowers require a good deal of work in the establishment years, they are less work in the long run than more formal annual beds.

### FOR MORE INFORMATION

The National Wildflower Research Center, a nonprofit research and information organization, is located at 2600 FM 973 North, Austin, Texas 78725. NWRC offers a \$25 membership which includes a newsletter and fact sheet about wildflowers.

The New England Wild Flower Society, Garden in the Woods, 180 Hemenway Road, Framingham, Massachusetts 01701, is a source of excellent information about wildflowers. The Society offers several publications about wildflower propagation, production and landscaping.

The Soil Conservation Service has long been concerned with erosion on cropland, along highways and shorelines, and at minespoils. Local SCS offices can supply information about many conservation cultivars of plants, such as 'Golden Jubilee', a reseeding black-eyed Susan which SCS released in 1985. Write to the SCS National Plant Materials Specialist, P.O. Box 2890, Washington, DC 20013, for a list of recommended plant materials which are best suited for growing in Wisconsin.

*Editor's Note: Be sure to read Dr. Stack's excellent article in the March 1988 issue of "Golf Course Management." Readers of THE GRASS ROOTS have been very fortunate to profit from her writing for over two years now. Thanks, Lois!*



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