Wildflowers on Your Course?

They May Provide a Welcome New Dimension

By JOHN M. KROUSE

If you haven't planted wildflowers on your golf course yet, you'll probably find it hard to resist the temptation much longer. Wildflowers are everywhere! Whether they're planted along highways or in suburbs, low-maintenance wildflowers have become an accepted landscape alternative to turfgrass and gardens across the U.S. And now that wildflower seed is more widely available than ever before, many golf courses have begun to experiment with wildflowers, too.

The popularity of wildflowers isn't difficult to understand. Wildflowers attract birds and butterflies, are colorful, and are usually easy to grow from seed. In many respects, wildflower plantings have all the desirable qualities that people expect from more formal landscape plantings, but unlike any other landscape planting, wildflowers often seem to have the ability

to become part of the landscape. The relaxed way that wildflower plantings fit and blend into a landscape, for instance, may explain more about the reasons for their popularity than their colors or fragrance alone can explain.

It's surprising that the popular acceptance of wildflowers for low-maintenance landscaping has taken so long to develop. There are millions of acres of park and recreational land that fall somewhere into the landscaping middle-ground, that big space that lies between the carefully maintained and the truly wild, and which wildflowers seem so remarkably able to exploit.

Whether wildflowers will someday rank among our most common plantings, or simply become one of the more pleasant ways to mark the transition from the civilized world to the natural world is difficult to say. However, it is certainly clear that there are few landscape materials better suited or more deserving of wider use on America's golf courses than wildflowers.

Like any landscape material, a wildflower planting can't succeed without planning and some provision for its management. The good news is that a few modest wildflower plantings are probably among the most attractive, most cost effective, and most interesting landscaping improvements a golf course can make. And best of all, superintendents overwhelmingly report favorable responses from their membership when they plant wildflowers.

The bad news is that wildflower maintenance is a very new technology and is extremely dependent upon geography and climate. Because of this fact, wildflower plantings often require management skills that most golf course superintendents don't have . . .yet. Sadly, it is also true that many superintendents who were the talk of their clubs when they planted large wildflower areas were once again the subject of conversation when their plantings were overrun with weeds within a few months. Most just didn't understand the need for selecting wildflower species adapted to their area, or the need to destroy weed populations before seeding.

Three Things to Remember

In many ways creating a successful wildflower planting is a complex task, but one which depends upon three fairly simple and universal factors: proper site selection, proper seed mix-(*Continued on Page 24*)



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ture selection, and proper timing.

When appropriate sites are selected to plant wildflowers, the most important step is taken towards guaranteeing the long-term success of the planting. Unfortunately, one of the biggest traps that superintendents fall into remains failing to understand the importance of seeding wildflowers in the sites that are best for the flowers, and not in those problem sites on the course where nothing else really grows well. ground, but their often scraggly off-season appearance is usually not so objectionable.

Wildflowers also differ in one very important aspect from turf. Wildflowers rarely rebound gracefully from foot or vehicular traffic, so it's usually best to keep them out of places where errant balls often land. A ball that goes into the wildflowers is almost certainly a lost ball, but it only takes a few determined players to flatten a (formerly) nice stand of wildflowers. Make sure you plant them safely out of play.

It's important to give the needs of your workers some consideration, too. A wildflower planting will need some mainte (*Continued on Page 25*)

Good Places for Wildflowers

Sunny, open sites with good soil and waterholding ability

Transition areas, out-of-play rough, edges of woods, fencelines, etc.

Sites where seasonal color will add interest to the course.

Easily accessible sites that you can maintain.

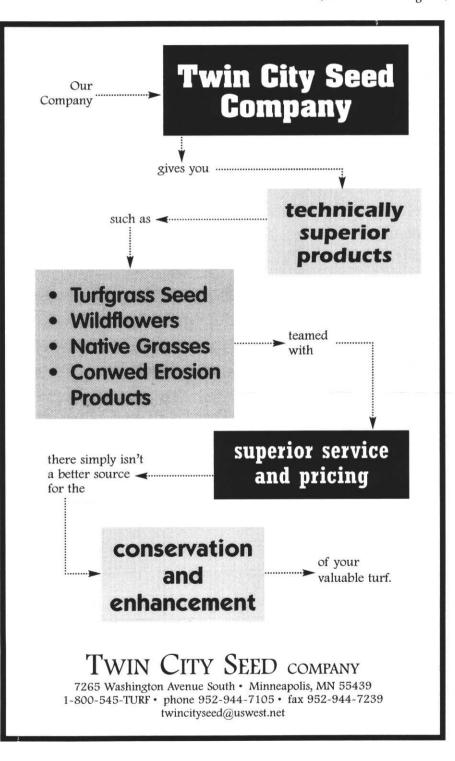
Bad Places for Wildflowers

Small, narrow, or awkwardly shaped sites. Windy or busy sites that collect blowing trash.

Sites with frequent foot or vehicle traffic.

Most likely, the species that will be selected for a typical wildflower planting will be the ones that need a lot of sunshine and that require a soil of at least average fertility and water-holding ability The reasons why are easy to understand: flowering takes energy and nutrients. Without sun, water, and a good supply of soil minerals, the wild flower plants just can't make the growth necessary for good flowering. In general, if the site is too shady, infertile, or droughty to support a good cover of grass, then it is probably a site where wildflowers won't grow well either.

So where to put them? Hopefully, at least some of the sites with good sun and soil will also be among the places most easily seen and appreciated by golfers. Most courses have plenty of transitional spots - those places between fairways, at the edges of woods, and at the borders of the property that everyone can see, but which no one ordinarily notices. Wildflowers work well where the line between deep rough and woods is a bit fuzzy, or where roadways and neighboring fields come within view, but aren't really a desirable part of the scenery. Ironically, wildflowers often look better in the middle ground, the viewing space between 25 and 100 feet, than at closer or farther distances. The vivid colors of wildflowers are easily noticed in the middle



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nance over the years, and usually more than most superintendents suspect. A typical wildflower planting may only be mowed once per year, but most will require at least a few hours of weeding a few times through the year.

Eventually, maybe in three to seven years, most wildflower plantings will require major renovation and reseeding. The one thing you don't want to do is plant your wildflowers in a site where any of these tasks will be difficult or impossible to do.

Wildflowers cannot be squeezed into small spaces. Even worse are long, thin, or oddly shaped island beds or borders that are close to walkways, clubhouses, or parking lots. Naturalized plantings rarely look right in such tight quarters, and under such circumstances the wildflowers invariably behave poorly. They grow tall and flop over, get in the way of lawn mowers and pedestrians, or end up collecting litter. Whenever a wildflower planting is put into a tight or carefully laid-out spot, you can almost bet that the planting is probably also in a highly visible location in the viewing foreground (less than 25 feet away). In the winter it will look shabby and collect blowing leaves, and in the summer it will look too wild for its site and accumulate paper and other debris.

Wildflower Seed Mixes to Look For

Include a variety of perennials for permanent groundcover. Many of the species are native to your geographic area.

Annuals are included at low seeding rates for non-competitive first-year color.

Color display changes through-out the growing season.

Wildflower Seed Mixes to Avoid

Mixes that contain predominantly Eurasian annual species. Inexpensive mass-marketed mixes; "meadow-cans."

Mixes that include the seed of tall-growing or weedy species.

Mixes with inert filler or grass seed included.

Proper seed mix selection is very important. The key is learning the names of the best adapted species for seeding in your area. Depending upon your region, there may be many native species to choose from or only a few. If your golf course is in the Midwest, for instance, there's probably a wide variety of native prairie species for you to choose from. On the other hand, if you are in the East, there are only a few dependable native species, but also some very good introduced species. As

a rule, however, native species are usually the best adapted when planted in their area of origin, and a seed mix that features locally grown native species is the best bet in many areas of the country.

Check with your local cooperative extension service, state highway administration, and local naturalist organizations for their recommendations. The seed for an acre of wildflowers usually costs between \$300 and \$800. Compared with many club expenses, it's not a fortune, but it's money that you must spend wisely if you want good results. There are literally hundreds of wildflower seed companies in business today; it's no longer difficult to get good quality wildflower seed. If you don't wish to use a seed mixture that your local seed company offers, many mail order companies will custom mix seed to your specifications, usually at no extra charge.

The biggest problem with establishing permanent wildflower plantings is weed invasion. Most of the time when weeds are a problem, the site was not adequately prepared in advance of seeding, i.e., the perennial weeds and grasses were not killed, and when the area was seeded, the weeds rapidly re-established themselves. Usually, if time and care are taken, the vegetative parts of colonial perennial weeds can be destroyed before the area is seeded, but this usually requires a minimum of two to three months lead time.

Proper Timing Pays Off

Order your seed mixes well in advance; supplies sometimes run out!

Allow several months to complete the necessary soil preparations.

Kill all perennial weeds before seeding.

Plant seed when annual weeds will be least competitive.

Haste Makes Weeds

Hastily purchased seed mixes waste time and manpower. Improper soil preparation allows the rapid return of weeds. Seeding at the wrong time of year invariably promotes weeds.

Over the long term, it is usually perennial weeds that are most troublesome in a permanent wildflower planting. Annual weeds are usually a problem in the first year of a planting, and sometimes the second year of the planting as well. Unfortunately, however, many wildflower plantings are ruined after only a few months when aggressive annual weeds are a problem in the first year; there may be no second year.

Once again, check with your local authorities for tips about reducing annual weed seed in the soil, or planning your seeding to avoid the prime germination periods of the most troublesome annual weeds. In certain regions of the U.S., particularly in the Southern Plains, no-till seeding methods can significantly reduce weed infestation. Unfortunately, no-till seeders designed for use with wildflower seed are very costly.

(Editor's Note: This article was reprinted with permission from the USGA Green Section Record. 1996 March/April Vol 34(2): 8-11. John M. Krouse teaches and does research in the Department of Agronomy at the University of Maryland in College Park, Maryland.)

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