Nothing is quite as impressive as a bare patch of ground bursting into color with a profusion of flowers.

An increasing number of roadside departments, landscape architects and golf course superintendents are discovering they can provide this color, while saving themselves water and maintenance costs, by planting wildflowers.

A wildflower is a flowering plant that grows uncultivated or wild in an area. If adapted to that area's climate and soils, wildflowers require little or no care. Some people consider only native plants as wildflowers, but some of the most popular species are actually naturalized introductions.

Wildflowers are increasing in use for a variety of reasons on many different sites. They can provide a ground cover that requires no mowing and adds color in non-traffic areas of parks, golf courses and home landscapes. Alone, or in combination with non-aggressive grasses, they can stabilize and beautify roadside cuts, mining sites, and other disturbed areas.

The mixes offered by many companies are designed to provide an ever-changing palette of colors from spring until fall if growing conditions are right. They can add a touch of color to the corner of your yard or create a meadow over large areas.

Planting

It is important to plant wildflower species adapted to your area. Many suppliers have regional or special-use mixes — designed for specific environments, while others include primarily wildflowers that have proven successful over a wide range of environments.

A mix should contain a balance of annual and perennial species. The annuals provide quick cover and color the first year and can usually be depended on to reseed themselves for flowering in subsequent years. Perennials provide flowers from the second year and beyond.

Wildflowers are often mixed with

Don't overlook these hearty, low maintenance, drought-resistant, colorful ground covers.

Wildflowers

by Dr. Leah A. Brilman

Wildflowers are often mixed *to provide a variety of color, wide adaptability, and quick cover with grasses. Photo courtesy of Wildseed Inc.*

Sources for Wildflower Seeds

Company	Product
Applewood Seed Company 5380 Vivian St., Arvada, CO 80002 (303) 431-6283	Specialty and Regional Mixes, Individual Species
Clyde Robin Seed Company P.O. Box 2366, Castro Valley, CA 94546 (415) 785-0425	Regional, Season and Specialty Mixes, Individual Species
Environmental Seed Producers, Inc. P.O. Box 5904, El Monte, CA 91734 (213) 442-3330	Regional Mixes, Individual Species
Jacklin Seed Company W. 5300 Jacklin Ave., Post Falls, ID 83854 (208) 773-7581	Pinto Wildflower Mix, Appar Lewis Flax
Lofts, Inc. P.O. Box 146, Bound Brook, NJ 08805 (800) 526-3890	Pinto Wildflower Mix
Mangelsdorf Seed Company P.O. Box 327, St. Louis, MO 63166 (314) 535-6700	
Mellingers Inc. 2310 W. So. Range, North Lima, OH 44452 (216) 549-9861	
Native Plants Inc. 9180 South Wasatch Blvd., Sandy, UT 84092 (801) 943-3888	Mixtures, Individual Species
Norm Thompson Dept. 45-01, 13700 N.W. Science Park Dr., Portland, OR 97229	Meadow in a Can, Mixtures
George W. Park Seed Co., Inc. P.O. Box 31, Greenwood, SC 29647 (803) 374-3341	Mixtures, Individual Species
Plants of the Southwest 1812 Second Street Sante Fe, NM 87501	Mixtures, Individual Species
S. & S. Seeds 910 Alphonse, Santa Barbara, CA 93103 (805) 965-5243	Mixtures, Individual Species
Sharp Bros. Seed Company P.O. Box 140, Healy, KS 67850 (316) 398-2231	
Vaughan Seed Company 5300 Katrine Ave., Downers Grove, IL 60515 (312) 969-6300	Instant Glamour Mixture

grasses to add soil stabilization and erosion control. It is important that the grasses used are clump types and not overly aggressive or the wildflowers will be crowded out.

In the Northern United States, chewings, sheep or hard fescue are often used with wildflowers, while tall fescue is often used in the Southern United States. Certain native grasses, such as Nezpar Indian ricegrass, sand lovegrass, side oats grama, bluegrama, etc., are sometimes combined with wildflowers, but these often grow slowly and are less useful for soil stabilization, although they can be very attractive.

Wildflowers are increasing in use for a variety of reasons on many different sites.

Grasses that are not suitable for use with wildflowers, unless wildflower islands are created, include many of the turf and forage grasses developed for their aggressive nature such as Kentucky bluegrass, annual or perennial ryegrass, orchardgrass, timothy or smooth brome.

Establishment

The key to obtaining a good wildflower stand is proper establishment. Nature may depend on just scattering the seeds on the ground, but you should not risk a thin stand.

The first step to obtaining a good stand is soil preparation. The soil should be tilled using a plow, rototiller or hoe depending on the size of the area. If needed, soil amendments such as peat moss may be added to improve moisture and air-holding capacity of the soil.

The seed may be broadcast sown over the prepared area by hand or with a broadcast seeder if the area is small. For larger areas it is recommended to drill the seed in to a maximum of 1/4-inch or employ hydroseeding/hydromulching. If the seed is broadcast sown, it should be covered with a light layer (maximum 1/8-inch) of peat moss for mulch or lightly raked in. (Some seed will show.)

The most critical period for establishment is the next 4 to 6 weeks when the seeds must receive adequate moisture for germination and early growth. If irrigation is not available, it is best to plant the seeds before periods of natural rainfall. In California and many of the southern states the

best time to seed is the fall. The fall (8 to 9 weeks before frost) or early spring is the best time for northern states. The temperature and light regimes during these periods are also usually optimal for germination and growth because these are the natural germination times for wildflowers.

If a dry period occurs or the seeds are planted during a less optimal period, supplemental irrigation is recommended for satisfactory performance.

Wildflowers are often mixed with grasses to add soil stabilization and erosion control.

Fertilization is not recommended for wildflowers unless the soil is extremely sterile. Fertilization primarily encourages weed growth. If weeds are a problem, till the soil and water to encourage weed germination, then spray with a non-selective contact herbicide such as "Roundup" at least one week prior to planting.

Try not to disturb the soil again because this will just bring more weed seeds to the surface. Ample moisture and high germination of your wildflowers is your best tool against weeds.

Seeding rate

A minimum seeding rate is 4 to 8 pounds per acre or 1 ounce per 250 square feet depending on the mix used. This will provide 40 to 72 seeds per square foot. If a denser stand is desired, especially for more color the first year or in a smaller area, it is recommended to at least double this seeding rate.

You must also have patience with wildflowers. Although some will bloom within 6 to 8 weeks of planting, many must mature much longer before they can flower. This is especially true of the perennials which may require a few years before an optimum stand is achieved. After establishment wildflowers require minimal care.

For optimal growth and flowering under drought conditions, supplemental irrigation is recommended. Even under these conditions, if no irrigation is available, they will persist and bloom when natural rainfall is available. Often they have more extensive root systems than many traditional flowers so they will perform with much less water.

Many landscapers and highway departments will mow wildflowers once a year in July, after the seeds have set, to improve the appearance and scatter the seeds for reseeding. Wildflowers will tolerate additional mowings, but should not be mowed after March or bloom will be reduced. Mowing, however, is not necessary!

As interest in wildflowers has increased so has the research. In 1983, Mrs. Lyndon B. Johnson and associates founded the non-profit National Wildflower Research Center in Austin, TX, to investigate and promote research on wildflowers. (See related story, this issue.)

The states of Texas and Massachusetts have both performed extensive studies on establishment of wildflowers on roadsides. Massachusetts has even experimented with utilizing wildflower sods for steep slopes.

Some of the perennials may require a few years before an optimum stand is achieved.

Seed companies have been researching improved establishment procedures, as well as improved methods of growing and harvesting the seed to increase the supply and reduce the costs of the seed. In addition they hope to make additional varieties of wildflowers available.

If you are only going to seed a small area with wildflowers, you can buy small packets of mixtures or single species from your local garden center. However, for larger areas it is recommended you contact one of the companies listed on the preceeding page for larger seed quantities (this list is not intended to show all companies that may market wildflowers).

Most of these companies market wildflower mixtures adapted to certain regions or conditions in quantities of one pound or greater for $20 to $48 per pound. Quantities greater than one pound are often sold at a discount. A few of the companies sell as little as one ounce for $5 to $6. It is recommended you write or call the companies that have products that interest you.

Whatever the cost, wildflowers will bring a profit to you—first due to decreased maintenance cost, and second from the pleasure they bring to others. **WT&T**

Dr. Leah A. Brilman is research director, Jacklin Seed Co.