

Wildflowers for Mississippi Meadows and Gardens

Those uncultivated flowers found growing naturally along roadsides, in meadows and fields, and in forests throughout an area are called wildflowers. Wildflowers include a wide variety of plant types, including reseeding flowering annuals and hardy perennials, selected vines and small shrubs, ferns, and even showy native grasses. Many are well-suited for use in home gardens and landscapes because they are adapted to the general climate and soils of an area. With a little planning, you can easily plant and enjoy them for years.

Some wildflowers are perfectly useful in formal plantings and gardens where neatness is important; however, most are better suited for use in informal, meadow-like masses, or interspersed as companion landscape plants. Others make fine accents or are better adapted to extreme growing conditions, such as hot, dry hills or low, wet areas. Remember that what may be a beautiful wildflower meadow to one gardener may be seen as a weed patch to a neighbor. The inclusion of landscape materials, such as fences, benches, or marked paths, may make a difference in neighborhood relations.

Many enthusiasts consider only native plants to be true wildflowers. However, a great many "naturalized" flowering plants have been introduced either deliberately or accidentally from other areas or countries, or have escaped from garden cultivation.

Regardless of the origin of a plant, wildflowers offer many advantages in the garden. Their wide range of seasonal color often attracts butterflies and seed-eating birds. Most require little water, fertilizer, or pest control measures. They return, year after year, either as reseeding annuals

or as true perennials from bulbs, corms, roots, stems, or rhizomes.

There are no "maintenance-free" gardens. Because wildflowers have a natural ability to spread vigorously, many may become rampant invaders requiring some control. Many weedy, less desirable plants also appear in wildflower gardens and require removal, making even wildflowers "low-maintenance" at best. Winter mowing of wildflower meadows, regular pruning of faded foliage and dead seed stalks, careful use of selected herbicides, and other general gardening techniques are necessary to ensure success and enjoyment from the use of wildflowers in the landscape.

Site Selection

Success with wildflowers depends mostly on the conditions of the site. Many wildflowers have become staples in cultivated gardens, but some do not tolerate conditions normally considered ideal. In fact, many are actually better adapted to harsh conditions, such as hot, dry slopes or wet, boggy areas. It is best to select wildflower types that grow naturally in local and similar conditions, rather than try to change the site to suit the plants. Check the proposed planting area for soil type, moisture conditions, and exposure to sun or shade before choosing wildflower species.

Planting Times

Sow seeds of most wildflowers, especially spring and early summer bloomers, in the fall from September through November. They are naturally adapted to and benefit from fall rains and cold winter soils. They often grow stronger and bloom better than those sown in the late winter or early spring. Wildflower seeds sown in the

early spring are susceptible to loss from heavy rains as well as from prolonged dry spells and require closer attention to mulching and water needs. Research shows that spring-sown perennial wildflowers generally do not bloom until the following season.

Plant transplants and hardy perennials in the fall or very early spring when possible. However, you may set them out any time you can work the soil if water is available. Divide existing plants when they are not actively growing or in bloom.

Soil Preparation and Planting

Even with low fertility and moisture, many roadside and meadow wildflowers grow well and thrive in poor soils. They are best planted from seed with a minimum of soil preparation. Deep tilling brings many weed seeds to the surface and is not recommended. Instead, lightly cultivate or break the soil. If an area is seriously infested with weeds, you can apply certain herbicides before soil preparation (see "Weed Control"). Erosion-prone areas may be best left with some sod intact.

Fertilizers are generally not necessary for wildflower establishment. Many Mississippi soils are acidic, and only a soil test can show whether soils need lime. Soil tests, performed through your county Extension office, may also identify serious deficiencies of phosphorous and potash, which are easily added either during soil preparation or after plants are established. Avoid high-nitrogen fertilizers as they may cause rank growth, weak roots, and poor flower displays. After an area is successfully established, annually broadcast a light application of an all-purpose garden fertilizer in the winter when most wildflowers begin to grow actively.

Mix seeds with sand before broadcasting to help spread them easily and uniformly; then lightly rake, tamp, or roll the area to ensure good seed contact with the soil. Never plant wildflower seeds deep.

Before watering or leaving seeds for rainfall to germinate, mulch lightly with pine needles, straw, or weed-free hay to prevent the soil from crusting. Irrigation may be necessary to help get seedlings started. Be prepared to water during prolonged dry spells to prevent tender young plants from drying out and to help plants reach flowering and seeding maturity.

Perennial wildflower species naturally found growing in woods and rich soils benefit greatly from the same soil preparation given to cultivated garden flowers. Heavy clay and sandy soils may be improved by adding organic matter, such as peat, finely-ground bark, leaf mold, or a combination. A 1- or 2-inch layer, tilled about 6 inches deep, helps seedlings and transplants develop strong, deep roots.

When setting out wildflower transplants, use surface mulches, such as straw or leaves, an inch or two

deep. This helps conserve moisture, slows weed seed germination, and also keeps soils loose and cool for fast root growth.

Digging flowering plants or collecting seed from the wild is often unsuccessful. There is a growing awareness that natural stands of wildflowers must be preserved for the survival of endangered plants and for future enjoyment. Many showy wildflowers have disappeared from the natural landscape because of habitat destruction and over-collection by gardeners. Some are now protected by law. Commercial production of many endangered and rare plants is on the increase. Many nurseries and mail-order firms now carry a large assortment of perennial wildflower plants. Seed companies are producing field-grown wildflower seed and packaging them both as individual species or in mixes custom-blended for various regions of the country.

Seed Mixes and Planting Rates

Several seed mixes often containing a dozen or more species are available for home gardeners. It is important to understand that such seed mixtures are not designed to be perfectly suited to all sites. They usually contain enough variety for at least a few species to survive in nearly any habitat. Most contain some seed best planted in the fall, mixed with other seed best sown in the spring. Research shows that such mixes rarely give optimum results. For example, recent Mississippi trials replicated across the state showed that after a complex mix was sown, most species did not survive beyond the first flowering season. Two years after sowing, the plantings were dominated by coreopsis, blackeyed Susan, oxeye daisy, and gaillardia.

For best results, it is generally more satisfactory to sow single species of wildflowers adapted to an area, or mix several recommended ones together for a specific effect. Such a personalized mix should contain several annuals for fast color and several perennials for a longer-lasting effect. Follow recommended seeding rates. Doubling seeding rates of mixes will not generally affect the final flower density.

Weed Control

Permanent wildflower meadows are not natural in Mississippi. They are an early part of natural plant succession, usually occurring when an old field is abandoned by farmers or a forest is cleared or burned. Wildflowers appear early but are soon overtaken by tall grasses, then shrubs, and eventually trees. Some wildflowers even tend to be so aggressive that they hinder other, less competitive species. Invasive plants must be continually thinned, pulled, mowed, or sprayed. Burning may be used under certain situations to control tall grasses, shrubs, and small trees.

Certain nonaggressive grasses and native weeds can be tolerated as long as they do not compete with or dominate the wildflowers. Many – dock and dandelion, for example – are actually attractive when left alone in low numbers. However, most Mississippi wildflower gardens need weeding sooner or later, especially during the first couple of years.

It is easy to pull weeds by hand in small gardens. Larger plantings usually benefit from mowing in the early summer after spring wildflowers have had time for seed maturation, or in the late fall or winter when perennial plants are dormant. Mow high to prevent damage to newly-emerged seedlings of winter annuals.

Treat hard-to-kill, undesirable weeds by spot-treating during periods of active growth with glyphosate (Roundup, Kleenup), which does not leave harmful residues in the soil. Seeds may even be sown directly over areas treated with glyphosate. Since glyphosate is nonselective, do not apply to the foliage of desirable plants. Without harm to wildflowers, even during the growing season, control true grasses such as Johnsongrass, Bermudagrass, and crabgrass with grass-specific herbicides such as sethoxydim (Poast, Grass-Be-Gon). Follow all label directions. For more information, contact your county Extension office.

Summary

From the hundreds of wildflower species available, including both native and naturalized species, there are only a few dozen dependable or showy enough for use in Mississippi wildflower meadows. Some may take more than one attempt to get started successfully; others can quickly take over an area and crowd out competitors.

Whether developed from seeds or transplants, most wildflowers are grown much like other garden flowers. By following the basics of good gardening practices, and by taking the time and effort to do it

right the first time, your results will be rewarding and long-lasting. Given a little help in getting started, kept alive through their first flowering cycle, and kept reasonably weed-free, self-seeding annual and perennial wildflowers usually can survive and proliferate on their own.

Consult your local source of wildflower seed or information on seed packages for more specific instructions. Lists of plants suitable for your site as well as general guidelines for planting and maintenance are available from The National Wildflower Research Center, 2600 FM973 North, Austin, Texas 78725. Several good books on growing wildflowers are available through bookstores, including *The Wildflower Meadow Book*, by Laura Martin (East Woods Press, 1986), and *Growing and Propagating Wildflowers*, by Harry Phillips (University of North Carolina Press, 1985).

Seeding Summary

- Sow seeds in the fall, or be prepared to water in the summer.
- Avoid weed problems by cultivating soils only lightly.
- For best results, avoid complicated, ambitious seed mixes; sow single species, or mix your own.
- Seed/soil contact is crucial. Rake or tamp seeded areas.
- Lightly mulch seeded soils to prevent crusting and erosion.
- Water seedlings to prevent loss of plants.
- Control invasive weeds or woody plants as needed.
- Do not mow until after seeds have had time to mature.

A Selection of Perennial Wildflowers for Sunny Meadows

The following list contains suggestions only and certainly does not contain all the possible wildflowers. Perennials may take a year or two from seed to blooming maturity. Once established, many will self-seed into surrounding areas.

Common Name	Scientific Name	Common Name	Scientific Name
Bear grass	<i>Yucca flaccida</i>	Moth mullein	<i>Verbascum blattaria</i>
Bitter sneezeweed	<i>Helenium sp.</i>	Mullein	<i>Verbascum thapsus</i>
Blackeyed Susan	<i>Rudbeckia hirta</i>	Narrow-leaf sunflower	<i>Helianthus angustifolium</i>
Blazing star, gayfeather	<i>Liatris sp.</i>	New England aster	<i>Aster novae-angliae</i>
Blue-eyed grass	<i>Sisyrinchium sp.</i>	Obedience	<i>Physostegia sp.</i>
Boltonia	<i>Boltonia diffusa</i>	Oxalis	<i>Oxalis crassipes</i>
Buttercups	<i>Ranunculus sp.</i>	Oxeye Daisy	<i>Chrysanthemum leucanthemum</i>
Butterfly weed	<i>Asclepias tuberosa</i>	Prairie phlox	<i>Phlox pilosa</i>
Coral bean	<i>Erythrina sp.</i>	Prickly pear cactus	<i>Opuntia humifusa</i>
Coreopsis	<i>Coreopsis lanceolata</i>	Purple coneflower	<i>Echinacea purpurea</i>
Dog fennel	<i>Eupatorium capillifolium</i>	Showy evening primrose	<i>Oenothera speciosa</i>
Four o'clocks	<i>Mirabilis sp.</i>	Soapwort, bouncing bet	<i>Saponaria officinalis</i>
Goldenrod	<i>Solidago sp.</i>	Spiderwort	<i>Tradescantia sp.</i>
Heal-all	<i>Prunella vulgaris</i>	Stoke's aster	<i>Stokesia laevis</i>
Indian blanket (perennial)	<i>Gaillardia grandiflora</i>	Summer phlox	<i>Phlox paniculata</i>
Ironweed	<i>Vernonia sp.</i>	Sundrops	<i>Oenothera fruticosa</i>
Jonquil	<i>Narcissus jonquilla</i>	Tawny daylily	<i>Hemerocallis fulva</i>
Maypop, passion flower	<i>Passiflora incarnata</i>	Verbena	<i>Verbena rigida</i>
Meadow phlox	<i>Phlox maculata</i>	White indigo	<i>Baptisia leucantha</i>
Mexican hat	<i>Ratibida columnaris</i>	Wild ageratum, mist flower	<i>Eupatorium coelestinum</i>
Moss verbena	<i>Verbena tenuisecta</i>	Yarrow	<i>Achillea millefolium</i>

A Selection of Reseeding Annuals for Sunny Meadow Gardens

The following list contains suggestions only and certainly does not contain all the possible wildflowers. Though annuals usually bloom quickly from seed, they require the same care in getting established as other garden seedlings. Try a few at a time.

Common Name	Scientific Name	Common Name	Scientific Name
Butterweed, groundsel	<i>Senecio glabellus</i>	Henbit	<i>Lamium sp.</i>
Calliopsis	<i>Coreopsis tinctoria</i>	Indian Blanket (annual)	<i>Gaillardia pulchella</i>
Catchfly	<i>Silene armeria</i>	Larkspur	<i>Delphinium sp.</i>
Chickory	<i>Cichorium sp.</i>	Mallow (annual)	<i>Lavatera sp.</i>
Coneflower	<i>Ratibida sp.</i>	Maltese Cross	<i>Lychnis chalcedonica</i>
Corn poppy	<i>Papaver rhoeas</i>	Partridge Pea	<i>Cassia chamaecrista</i>
Cornflower, bachelor buttons	<i>Centaurea sp.</i>	Phlox (annual)	<i>Phlox drummondii</i>
Cosmos	<i>Cosmos bipinnatus</i>	Queen Anne's lace	<i>Daucus sp.</i>
Crimson clover	<i>Trifolium incarnatum</i>	Rattlebox	<i>Crotalaria sp.</i>
Cypress vine	<i>Ipomoea sp.</i>	Scarlet sage	<i>Salvia coccinea</i>
Daisy fleabane	<i>Erigeron sp.</i>	Spiderflower	<i>Cleome sp.</i>
Flax	<i>Linum sp.</i>	Sunflower	<i>Helianthus annuus</i>
Hairy vetch	<i>Vicia villosa</i>	Touch-me-not	<i>Impatiens capensis</i>

A Selection of Wildflowers for Sunny Wet Areas and Ditches

Common Name	Scientific Name	Common Name	Scientific Name
Blazing star, gayfeather	<i>Liatris sp.</i>	Mallows	<i>Hibiscus militaris,</i> <i>others</i>
Bluestar	<i>Amsonia sp.</i>	Plumegrass	<i>Erianthus sp.</i>
Broomsedge	<i>Andropogon sp.</i>	Rushes	<i>Juncus sp.</i>
Butterweed, groundsel	<i>Senecio glabellus</i>	St. John's wort	<i>Hypericum sp.</i>
Bullrush	<i>Scirpus sp.</i>	Sedges	<i>Cyperus sp.</i>
Cardinal flower	<i>Lobelia cardinalis</i>	Swamp lily	<i>Crinum americanum</i>
Cattails	<i>Typhas sp.</i>	Swamp sunflower	<i>Helianthus angustifolius</i>
Horse tail	<i>Equisetum sp.</i>	Stokes aster	<i>Stokesia laevis</i>
Indian pink	<i>Spigelia sp.</i>	Swamp milkweed	<i>Asclepias incarnata</i>
Joe Pye weed	<i>Eupatorium fistulosum</i>	Tickseed sunflower	<i>Bidens sp.</i>
Ironweed	<i>Vernonia sp.</i>	Turk's cap lily	<i>Lilium superbum</i>
Loosestrife	<i>Lythrum sp.</i>	Water hemlock	<i>Cicuta maculata</i>
Louisiana iris	<i>Iris virginica</i>	White spider lily	<i>Hymenocallis sp.</i>

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