Growing Wildflowers from Seed By Sherry Fuller, Horticulturist



The term wildflower is frequently used to mean any easy-to-grow flower. Technically, though, the wildflowers are only native, showy, herbaceous plants. Also consider where any specific wildflower is native. A plant native to the southwest or New England might not be easy or desirable to grow here in Colorado. Even plants native to our area might need special growing conditions to thrive in our yards.

You might be tempted by seed companies' pictures of fields of flowers and think throwing a packet of wildflowers into your weed patch will magically transform it. Unfortunately that won't work. Very few plants can compete with established weeds, so they should be removed first. Then the soil should be tilled or at least roughed up a bit with a rake. Appropriate seeds should be spread, raked in and watered thoroughly. You will always get better results, even with drought tolerant varieties, if you can water them regularly their first summer.

Choose the right varieties for your location. Do you have sun or shade? Poor, dry soil or a little shade that retains some moisture?

Collecting: To collect your own seed, be sure the seed is ripe. Collect the seed into paper bags for further drying. Clean and store the seed in a cool area with low humidity. Be sure to label your seed at each stage of the process.

When to plant: The best time to sow your wildflower seed depends on where and how you intend to plant it. Annual wildflowers are best planted directly where you want them to grow in the spring. Perennial wildflowers are a little trickier since they can be slow to germinate and grow. Many varieties can also be successfully planted in the ground in the spring. Other varieties need a cold treatment (stratification – see list below) before they will germinate. These can be seeded in the ground in the fall so they are naturally stratified over the winter and germinate with springtime moisture.

Growing in containers: Growing perennials in containers is a good way to produce larger plants that can be transplanted wherever you want. Sow varieties that need stratification in January and store them outside in a shady location, preferably covered with snow. They will germinate in the spring. Varieties that don't need this treatment can be sown in mid to late summer, will germinate fairly quickly and can be transplanted into larger pots to overwinter outside or be planted in the fall.

Growing wildflowers in containers gives you more control over their growing conditions, but they need excellent light and close attention to water. Growing directly in the ground is best for large areas and takes less time and effort.





To sow in containers, use small pots filled with good quality potting soil. Add sand for dryland varieties. Press the seed onto the soil surface and cover lightly. Use perlite or tiny gravel for drought tolerant varieties and vermiculite for others. Water well and keep moist until most plants have germinated. As the roots fill the containers, pot the plants up into larger pots. They can be planted out in early fall or overwintered in the shade outdoors, covered with frost blanket.

Dormancy issues: Many plants have built in seed dormancies to keep them from germinating at an inhospitable time. These might be as simple as a physiological dormancy that only requires the seed to dry completely. Some varieties, notably legumes, have very hard seed coats that prevent water entering and these need to be scarified by cracking or abrading the seed. Other seeds need to be soaked to soften the seed coat or to remove a germination inhibitor.

One of the most common forms of seed dormancy requires stratification. Typically these seeds need a period (6 to 8 weeks is common) of moist, cold treatment. Follow the directions above or mix your seed with a small amount of moist potting soil in a sealed bag and store in the freezer for the specified amount of time. Then spread pinches of this soil/seed mix over your pots and proceed as above.

Check your species at nativeplantnetwork.org or wildflower.org if they are not listed below or for more detailed information.

GERMINATION REQUIREMENTS FOR SELECTED WILDFLOWER VARIETIES

Easy - no specific treatments necessary

Plains

Evening primrose, *Oenothera macrocarpa* Butterfly weed, *Asclepias tuberosa* Mex. hat coneflower, *Ratibida columnifera* Blanket flower, *Gaillardia aristata* Liatris, *Liatris punctata* Sunflower, *Helianthus sp.*

Foothills / Mountains

Harebell, *Campanula rotundifolia* Columbine, *Aquilegia sp.* Penstemon, many species Jacob's Ladder, *Polemonium sp*, Wallflower, *Erysimum capitatum* Scarlet gilia, *Ipomopsis aggregate* Aspen daisy, *Erigeron speciosus* Silky scorpionweed, *Phacelia sericea*

Drylands

Penstemon, many species Desert marigold, *Baileya radiate* Bluestar, *Amsonia jonesii* Native four o'clock, *Mirabilis multiflora* Hummingbird hyssop, *Agastache sp.* Goldpoppy, *Escholtzia sp.* Sacred datura, *Datura metelloides* Prince's plume, *Stanleya pinnata*

Violet, *Viola sp.* Blue-eyed grass, *Sisrynchium sp.* Pasque flower, *Pulsatilla patens* Blue flax, *Linum lewisii* Coneflower, *Rudbeckia laciniata* Ball cactus, *Escobaria vivipara* Sulfur buckwheat, *Eriogonum umbellatum* Gentian, *Gentiana parryi*

Need scarification

Golden pea, Thermopsis sp. – soak in boiling water for 12 hours Bluestar, Amsonia sp. – Scarify, soak overnight Lupine, Lupinus sp. – Scarify Globemallow, Spaeralcea sp. – Scarify Poppy mallow, Callirhoe involucrate - Scarify

Need stratification

Bluebells, Mertensia sp. – Cold moist 6 weeks Purple coneflower, Echinacea sp. – Cold moist 4 weeks or sow fresh seed Rocky Mountain beeplant, Cleome serrulata – Cold moist 4-6 weeks Iris, Iris missouriensis – Cold moist 4-6 weeks, but some germination with no treatment Heart-leaved arnica, Arnica cordifolia – Cold moist 60 days Shooting star, Dodecatheon pulchellum – Cold moist outdoor 6 months Fireweed, Epilobium sp. – Some species easy, some cold moist 45 days Mule's ear, Wyethia amplexicaulis – Cold moist 45 days Gayfeather, Liatris punctate – Cold moist 60 days Delphinium sp. – Extended cold moist 2 years outside

ADDITIONAL RESOURCES

Lady Bird Johnson Wildflower Center – Native plant database with propagation information and more, wildflower.org

Native Plant Network – Provides growing and propagation protocols, nativeplantnetwork.org

Northern Colorado Native Plant Society – Local meetings, online bookstore, conps.org

City of Fort Collins Natural Areas – Fort Collins native plants guide, fcgov.com/natural areas

Rocky Mountain Flora by James Ells, CMC Press, \$22.95

Plants of the Rocky Mountains by Kershaw, MacKinnon and Pojar, Lone Pine, \$22.95

Rocky Mountain Flora by William A. Weber, Colorado Associated University Press

