



# Taming California's Wildflowers

Left: Visitors from around the world flock to California in early spring to view spectacles such as this luminous display of California poppies in Antelope Valley, located in northern Los Angeles County, California. Above: Douglas meadowfoam (*Limnanthes douglasii*) is native from central California north into Oregon. Its species name honors Scottish plant hunter David Douglas, who explored western North America in the early 19th century.

With a little care, gardeners in different regions of North America can successfully grow some of the West's spectacular native wildflowers.

BY JUDITH LARNER LOWRY

**M**Y ARRIVAL in California one April almost four decades ago just happened to coincide with a good wildflower year. As I explored sunlit fields of sky-blue lupines and golden poppies, with baby blue-eyes, Chinese houses, and gillias in shaded corners, I began my "education by wildflowers."

Through the years, I continued to observe and enjoy the annual wildflower bloom, growing many of these plants for Larner Seeds, the company I founded in 1977. This process taught me, in the most pleasant way possible, the bones of what I needed to learn about my adopted state.

From an ecological standpoint, California is more diverse than the rest of the country. Because of this, some plants are challenging to cultivate outside their natural range and climate, while others are quite adaptable.

The good news is that among the rich diversity of wildflowers native to California and neighboring western states, there are a number of species that can be grown as annuals in other regions of North America. Among these are the plants I am focusing on in this article, drawn from 10 genera of the many I have personal experience with at our nursery

and seed-growing grounds in Bolinas, just up the coast from San Francisco.

## CLIMATE BASICS

In order to grow California's wildflowers, it's helpful to understand the basic template of the state's Mediterranean climate, where cool, wet winters are followed by warm, dry summers.

This pattern is endlessly nuanced every year, with rain starting anytime from September—or not—and continuing either sporadically or uninterrupted through March—or not. It almost never rains in June, July, or August, rarely in May,

and five or six months of uninterrupted drought—as we experienced last year—is not surprising. Rain can be scanty or continuous, varying from southern parts of the state up to and beyond the northern boundaries, where California's ecological zones merge with those of Oregon.

In the wild, California's annual wildflowers begin to germinate with the fall and winter rains, make root growth and early aboveground growth in winter and early spring, starting to bloom as early as January and February. The same holds true for parts of Oregon and Arizona, while in the rest of the country, seeds planted in mid- to late spring will bloom in summer.

**MEADOWFOAM** Some of the toughest and most reliably reseeding wildflowers are in the genus *Limnanthes*, commonly

known as meadowfoam. Most familiar is Douglas meadowfoam (*L. douglasii*), which grows six to eight inches tall with deeply lobed leaves. Its striking five-petaled flowers are bright yellow in the center with white tips. These bloom from February to May on the West Coast.

Other meadowfoams that make good garden subjects include Point Reyes meadowfoam (*L. douglasii* ssp. var. *sulphurea*), which is native slightly north of our nursery and has deep yellow gold blossoms. Ranging even further north is white meadowfoam (*L. alba*), which has pure white flowers.

Meadowfoam is one of several Western wildflowers that favor vernal pools and seasonal wetlands. Vernal pools have a complex ecology that is difficult to reproduce artificially, but meadowfoam will thrive in the tiniest of dips and hollows that collect water,

even a footprint. Two weeks after a faint sprinkle, the sturdy, lobed seedlings appear.

Meadowfoam looks best when grown in masses three feet wide or more. But if you don't have that kind of space, it also thrives in containers, where, if watered regularly, it often reseeds, germinates, and flowers again in a single season.

**BABYBLUE-EYES** Baby blue-eyes (*Nemophila menziesii*) is the star member of a genus of low-growing beauties that reach six inches to a foot tall. Its small flowers, sky blue around white centers, provide a rich contrast to the oranges and yellows of spring composites and the pinks and lavenders of midsummer clarkias. At Larner Seeds, we sow it sequentially, starting as early as October for early spring bloom, and as late as April for bloom in midsummer.

Also prostrate in habit is fivespot (*N. maculata*), native to the Sierra Nevada foothills and south, which has snowy-white flowers tipped with deep purple spots that serve as guides for the solitary bees that pollinate it.

Nemophilas shine in the forefront of a flower border and in containers. Unlike most of the other wildflowers discussed here, they grow best in part shade, especially in warmer regions, and can use a bit of extra moisture during dry spells. In



*Nemophila maculata*

regions with hot, humid summers, sow them as early as possible or sow in late summer for fall bloom. Transplanting requires a bit of extra care because of their somewhat weak stems, so they are more easily grown by sowing the seed in place.

**CLARKIA** Clarkias almost singlehandedly extend California's annual wildflower season into the summer, with numerous species presenting their lavender, pink, rose, and occasionally white blossoms among summer's dry golden grasses. Providing the wildflower season's last flowery moment is farewell-to-spring (*Clarkia amoena*).

An unnamed horticultural form of farewell-to-spring that we sell produces flowers as large as three inches across, in a variety of deep and pale pinks, lavenders, and whites with striking markings. Growing one to two feet tall, it is a true workhorse in the garden, blooming long and reseeding well. Adaptable to a variety of soils, it can be sown in late April



*Clarkia unguiculata*

to bloom well into October in milder climates. The wild form, with smaller, paler markings and smaller flowers, is better suited for those who prefer a more delicate appearance.

Punchbowl godetia (*C. bottae*), offers large pale lavender-pink blossoms with white centers. Ruby chalice clarkia (*C. rubicunda*) is dazzling June through August, with a striking deep red-purple heart at the base of the petals setting off the pale pink of the blossoms. It's hard to pick favorites in this genus, but if I had to, this would be mine.

Mountain garland (*C. unguiculata*), tall and slender with tiny, deeply lobed petals clinging to its elongated flower spikes. In the wild, the single flowers range from white to pink or purple, but hybrids with double flowers and a greater range of pastel colors are available. Growing two to four feet tall, it is ideal for the back of a flower border and makes a good cut flower.

**GILIA** Two species in the genus *Gilia* are frequently used in gardens. Both are sturdy and adaptable, but they offer a contrast in habit and appearance.

Bird's-eye gilia (*Gilia tricolor*), adaptable to sun or part-shade, has one- to two-foot stems. The most common form of this variable species has exquisitely tinted flowers only a half-inch across, with deep lavender-purple at the edges shading to white, the purple-black inner base sets off the blue pollen on the stamens, a characteristic of the genus. These flowers have an unusually long bloom period and can be used to unify a planting or a bouquet.



*Gilia tricolor*

Globe gilia (*G. capitata*) bears tight heads of dusty, medium blue flowers. Its upright, almost bushy stems, covered with bluish-green leaves, usually grow one to two feet tall in lean soil.

**MOUNTAIN PHLOX** Growing 12 to 18 inches tall with a tendency to sprawl, mountain phlox (*Leptosiphon grandiflorus*, syn. *Linanthus grandiflorus*) has tiny, needlelike dark green leaves and fragrant pale pink or white flowers with a yellow center that serve as a foil to the hot pinks of clarkias. Native to northern California, it blooms in mid-season, but with supplemental moisture will keep going into the summer.

Smaller *Leptosiphon* species are dainty, with exquisitely simple, intensely-colored magenta flowers. Mountain phlox is good in containers or planted in clusters by itself, but it can be overpowered in a wildflower mix containing taller species. Enjoy the fragrant flowers in a bouquet.

LEFT: MICHAEL S. THOMPSON; RIGHT: SAXON HOLT.

LEFT: JERRY PAVIA; RIGHT: PETER SMITH.

## WAYS TO GROW WILDFLOWERS

Here are some guidelines for how to use these annual wildflowers in your garden. The keys to success are to keep plantings free from weeds, protect them from birds, slugs, and snails, and provide sufficient water for germination and early growth.

**BEDS AND BORDERS** Seeds can be directly sown onto prepared ground by broadcasting, or for more controlled kinds of plantings, you may choose to start them in four-inch pots to allow for design. For example, if you are planting your wildflowers in standard flower beds, the main consideration is height. Plant the tallest species, such as tansyleaf phacelia, mountain garland, and globe gilia, in the back. Mid-size species include Chinese houses, tidy tips, and ruby chalice clarkia. And low-growers such as baby blue-eyes and Douglas meadowfoam should be in the front.

For this type of controlled planting, at our nursery we grow seedlings in four-inch pots in an unheated greenhouse, beginning in October. In cooler regions, such as the East and Midwest, seeds should be sown in March.

We sow four to 10 seeds per pot, cover them lightly and keep them evenly moist. Once they germinate, you may choose to pluck out all but one of the seedlings, or leave them growing closely, as they do in nature. Expect germination within two weeks at temperatures above 60 degrees Fahrenheit, somewhat slower in colder situations.

Transplant them outdoors a couple of weeks after your local frost-free date.

**WILDFLOWER MIXES** Sowing wildflower mixes directly where they are to grow provides a sampler of many species, and a succession of bloom, from the earliest spring bloomers to those flowering from late summer to early fall. One thing to be aware of is that when a large number of species is included, the taller and more vigorous tend to eliminate the shorter. Avoid packaged mixes that include weedy or non-native species.

**SWATHE PLANTING** If you have a fairly large area to work with, you can create a dramatic effect by sowing three or four species in large masses that overlap slightly. This kind of composition is frequently seen in nature, as shown below in the photograph taken at the Carrizo Plain National Monument in south-central California.



**CONTAINERS** You can sow seeds of native wildflowers directly in containers, barely covering them with a layer of soil. Keep the soil evenly moist. Lower-growing species work better in containers than taller ones. Shallow pots, eight inches to a foot deep, are good for nemophilas, Chinese houses, punchbowl clarkia, and others. The potential combinations, whether inspired by nature or by the gardener's creative process, are endless.

—J.L.L.

**CHINESE HOUSES** Chinese houses (*Collinsia heterophylla*, syn. *C. bicolor*) is one of some 20 species in the genus *Collinsia*, mainly native to the western United States. Related to snapdragons, it is aptly named, with regularly spaced, pagodalike tiers of two-lipped pale pink or white and pink-purple blossoms circling 16- to 18-inch-tall stems.

While in bloom, the plants glow from within shady and semi-shady nooks or on north-facing slopes. Chinese houses is not heat tolerant, so should be sown as early as possible in regions with warm summers and planted to receive some protection from the heat of the day. However, it is quite capable of handling full sun in milder climates.

**TIDYTIPS** The daisylike flowers of tidytips (*Layia platyglossa*) mirror the color pattern

of meadowfoam, with pure yellow flower centers sharply defined by creamy white petal tips. It grows on sturdy one- to two-foot stems bearing finely dissected foliage. Relatives in different parts of the state share its daisylike appearance, with some having all white and others all yellow flowers.

Tidy tips seems to handle a wide range of soil types, including clay soil that by the time of its bloom in April is already drying into a pattern of cracks like a jigsaw puzzle. Sow seeds where you want them to grow, because tidy tips doesn't transplant well.

**TARWEED** Tarweeds include a number of different genera that have in common daisylike flowers in yellow or white. The common name stems from a sticky substance that exudes from foliage and stems and can rub off



*Layia platyglossa*

on hands and feet. It has a pungent, fresh smell beloved by some.

Growing from one to two feet tall, Hayfield tarweed (*Hemizonia congesta* ssp. *luzula*) is a too rarely grown annual that provides welcome golden flowers in late summer. Its insect-attracting qualities are an added benefit in the garden, where it thrives with lean soil and full sun. Hayfield tarweed reseeds well in cultivation, yet has not fared as well in its native range in recent years. Once a fairly common species, it is now thought to be threatened in some areas.

**CALIFORNIA POPPY** Undoubtedly the most widely recognized California wildflower, California poppy (*Eschscholzia californica*) has a graceful habit and flower shape that has inspired architectural features, ceramics, paintings, and a plethora of songs and poems touting its beauty. Spanish explorers and settlers, who were early appreciators of California's wildflowers, called it *copa de ora*, or cup of gold. The Spanish were not the first, of course. Flower festivals were important spring ceremonials for many of the West's indigenous tribes.

The first poppy to be collected by Europeans was the coastal form of the California poppy (*E. californica* ssp. *californica*), a perennial form that produces yellow blossoms with orange centers for as long as six months. Its finely-dissected, gray-green mounding foliage makes it useful as a groundcover, or as a filler among other low-growing plants.

Many subspecies of the California poppy have been recognized, and horticultural selections in a wide variety of flower colors are also now available.



*Collinsia heterophylla*



*Hemizonia congesta* ssp. *luzula*

From an ecological standpoint, it is best for California gardeners to avoid contaminating gene pools by sowing seed that's not native to their region. For gardeners living in other parts of the country, this is not a concern.

Sow seeds in very early spring, or in late summer in mild-winter climates. Free draining sandy or loamy soil is ideal. California poppies have a long taproot, so if you plan to start them in pots, transplant them into the garden before the taproot reaches the bottom of the pot.

**PHACELIA** The genus *Phacelia* provides some of the most intense blues in the flower kingdom. Desert bluebells (*Phacelia campanularia*), one of the shorter members of the genus at eight to 16 inches tall, has velvety dark blue flowers. It



*Phacelia campanularia*

## Resources

**California Native Plants for the Garden** by Carol Bornstein, David Fross, and Bart O'Brien. Cachuma Press, Los Olivos, CA, 2005.

**Gardener's Guide to California Wildflowers** by Kevin Connelly. Theodore Payne Foundation, Sun Valley, CA, 1991.

## Sources

**Annie's Annuals & Perennials**, Richmond, CA. (888) 266-4370. [www.anniesannuals.com](http://www.anniesannuals.com).

**The Fragrant Path**, Fort Calhoun, NE. [www.fragrantpathseeds.com](http://www.fragrantpathseeds.com).

**J.L. Hudson, Seedsman**, La Honda, CA. [www.jlhudsonseeds.com](http://www.jlhudsonseeds.com).

**Larner Seeds**, Bolinas, CA. (415) 868-9407. [www.larnerseeds.com](http://www.larnerseeds.com).

**Nichols Garden Nursery**, Albany, OR. (541) 928-9280. [www.nicholsgardennursery.com](http://www.nicholsgardennursery.com).

is found in the Mojave Desert cuddling up to yuccas and Joshua trees. Adapted to full sun and lean soils in the wild, its bloom time is extended in moister, richer gardens soils.

Tansyleaf phacelia (*P. tanacetifolia*) is one of the tallest annual wildflowers, growing two to four feet tall with large curling lilac flowerheads that emit

a musky fragrance at day's end. Well known for attracting beneficial insects, it is often grown with row crops. It tolerates sun or part shade and is a vigorous re-seeder. Grow it with other tall species like *Clarkia unguiculata*, as it will crowd out lower-growing nemophilas or collinsias.

## A PLACE FOR WILDFLOWERS

The natural spectacle created by California's annual wildflowers is threatened by a variety of factors, primarily competition with weeds. Accordingly, anything that controls the weedy species—including hand-weeding, sheet mulching, controlled grazing, and even extreme events like fires and floods—can be good for the wildflowers. As colonizer plants, sun-loving native wildflowers like open ground and aren't fussy how they get it.

Agriculture can go hand in hand with wildflowers, or be antithetical to it. A case in point is the farm field where I first admired meadowfoam seed. This field had many seeps running through it and an extensive soil seed bank of many other wildflowers as well. The original rancher cut the field for silage for many years without endangering the meadowfoam.

When the field changed hands, so did agricultural practices. The field was drained, plowed, and sown with pasture grasses and wild mustard, which quickly outcompeted and eventually overcame the meadowfoam.

Before that happened, I harvested a handful of meadowfoam seed, which provided the start for our seed grow-outs. Sowings we have made in nearby private gardens now return every year. Giving native species places to grow—even if they are not native to your region—offers them refuge and the potential for return.

In the tersely written 1,400-page flora of California called *The Jepson Manual*, only six out of 27 species of clarkias are said to be "in cultivation." Another 11 are marked "TRY." With similar numbers of as-yet-untested species available in other genera of American wildflowers, an abundance of possibilities awaits intrepid gardeners and horticulturists.

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