



WILDFLOWERS OF THE EASTERN SIERRA

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Wildflowers enchant our senses with dazzling displays of color and beauty, adding brilliance to gray granite slopes, sparse forest understories, alpine meadows, and dry deserts. Growing throughout the different habitat types of the Eastern Sierra despite the topographic and climatic extremes, mountain wildflowers can survive harsh conditions, including ice, wind, snow, and drought, but they cannot survive picking and trampling. Please stay on maintained hiking trails and watch your step when traveling cross-country, and respect nature’s dazzling display by leaving wildflowers where they are for others to enjoy.

This section identifies some of the most common flowers in the Eastern Sierra, categorized by color for easy identification. Some flower descriptions contain references to specific plant communities outlined in *Plant Communities of the Eastern Sierra*. For more comprehensive and detailed information, explore *references* at the end of this section.

White Flowers

California corn lily (*Veratrum californicum*)

The long (up to 18 inches), wide (up to six inches), and deeply veined leaves of the California corn lily resemble the leaves of common corn plants. Unlike corn, however, they are poisonous to humans and animals. The leaves are wound about a stout, three to six foot tall stem. Numerous clusters of greenish-white flowers grow on separate stalks and bloom from July through August, although not every year. Corn lilies can be found in wet meadows and along streambanks below 11,000 feet, usually in large masses.



Cow parsnip (*Heracleum lanatum*)



Cow parsnips have stout, hollow stems that can reach up to 10 feet in height, although five to six feet is more common. The leaves are long (six to 16 inches) and wide, resembling maple leaves. The flowerhead is formed by 15 to 30 umbrella-like spokes called an *umbel*, each bearing a cluster of small, white flowers. The entire cluster can be up to one foot wide and blooms from June through July. Cow-parsnips grow in wet meadows or along streambanks up to 9,000 feet in sagebrush scrub, montane forest, and montane riparian woodland communities.

Mariposa lily (*Calochortus leichtlinii*)

“Mariposa” means butterfly in Spanish, an appropriate name for the graceful, silky white petals of the mariposa lily. The 1.5 to 2.5 inch flower is composed of three petals and three *sepals* (flower parts underneath the petals), and the base of each petal has a black-purple spot above thick, stringy yellow hair that covers *nectaries* (a tissue or organ that produces nectar). In the center of the flower are six arrow-shaped, white *anthers* (male flower part that produces pollen) and a creamy, three-branched *stigma* (female part that receives pollen). The stem is eight to 16 inches tall, with slender, grass-like leaves that wither early in the season. Mariposa lilies



grow in dry montane forests and hillsides below 11,000 feet and bloom from June through August.

Prickly poppy (*Argemone munita*)

Heavily armed with spines and prickles, the delicate white flowers of the prickly poppy look “a bit like a helping of fried eggs served on a bed of spiny stems and leaves.”¹ Often found in rocky, dry habitats and along roadcuts, it grows one to four feet high and has deeply lobed, spine-tipped leaves two to six inches long. The seed capsules and stems are prickly and contain toxic alkaloids that cause digestive problems if eaten. The five inch wide flowers consist of six wedge-shaped petals with 150 to 250 bright yellow *stamens* (male reproductive organs) in the center.



White heather (*Cassiope mertensiana*)

Known as one of John Muir’s favorite flowers, white heather grows among rocks and boulders near timberline. The 0.25 inch bell-shaped blossoms are delicate white to light pinkish in color with red *sepals* and a red stem. The plant is a low evergreen shrub four to 12 inches tall, with leathery, overlapping, scale-like leaves. Flowers bloom from July through August.



Yarrow (*Achillea millefolium*)



Yarrow, a European native naturalized throughout North America, grows in open flats and meadows from sagebrush scrub to timberline and blooms from April to September. The one to four foot stem is crowned by a flat-topped, dense cluster of tiny (0.25 inch) flowers, making the cluster appear to be a single blossom.

The leaves have a feathery, fern-like appearance and a pungent odor when crushed. The flowers, leaves, and stems have healing properties and were used by American Indians to cure many ailments, including toothaches, headaches,

and stomach pains. The Latin name “Achillea” comes from Achilles, a Greek hero who was said to have healed his wounded soldiers with an ointment made from yarrow leaves.

Yellow Flowers

Cinquefoil, five-finger (*Potentilla gracilis*)

Several species of cinquefoil grow in the Eastern Sierra, but the five-finger is one of the more common. Most cinquefoil flowers are bright yellow with five heart-shaped petals. The leaves of the five-finger cinquefoil are lobed into five (or sometimes six or seven) fingers like the palm of a hand. Cinquefoil generally prefers moist areas in sagebrush scrub, mountain meadows, or montane forests.



Monkey flower (*Mimulus* spp.)



Several species of monkey flower grow in the Eastern Sierra, with flower petals ranging from yellow to red, pink, and purple. Leaf shapes and arrangements vary, but all flowers have five petals united into a two-lipped tube that flares into a wide “face.” The flowers can range from 0.125 to two inches. The common “seep spring monkey flower” (*M. guttatus*) is bright yellow with red-speckled petals and grows near water seeps, wet meadows, and streambanks up to 10,000 feet.

Mule ears (*Wyethia mollis*)

Mule ears are big, showy plants with bright yellow flowerheads up to four inches across and long (up to 1.5 feet), broad leaves covered with fine white hair, giving them a grayish appearance. The leaf bases taper smoothly to the stem and stand vertical. Mule ears are found on dry slopes and open forests between 5,000 and 10,000 feet, often on volcanic soils, and bloom from June through August. It is easily confused with balsamroot (*Balsamorhiza sagittata*), which has heart-shaped leaves oriented horizontally and slightly smaller



flowers (up to three inches) that bloom earlier.

Sulfur flower (*Eriogonum umbellatum*)

Sulfur flower is found throughout all the Eastern Sierra plant communities, from sagebrush scrub to above timberline. At low elevations, it grows as a large shrub several feet tall, while in high alpine environments it survives as a dwarf plant, rising only a few inches above its basal leaves. The tiny, sulfur yellow flowers are clustered into umbels on stems rising above round or oval leaves. The leaves are often covered with soft, fine gray hair on the underside. The flowers bloom from June to August and turn pink or red as they mature.



Western wallflower (*Erysimum capitatum*)



Like the sulfur flower, western wallflower is found throughout all elevations on the eastern slope. It is one of the first flowers to bloom in the spring, adding a splash of color to well-drained slopes and rocky outcroppings. The showy, four-petaled blossoms are 0.75 to one inch wide, and form dense, round-topped clusters at the top of stout, 12 to 24 inch stems. Although typically bright yellow, the flowers range from orange to red to maroon depending on the elevation. The leaves are long and lance-like, with toothed edges. Flowers bloom from April through July. The plains wallflower (*E. asperum*) of the Great Basin is sometimes found in the Eastern Sierra and is considered by some botanists to be the same species as western wallflower.

Red and Pink Flowers

Crimson columbine (*Aquilegia formosa*)



Crimson columbine are typically found in moist, partially shady areas from sagebrush scrub to montane forest and montane riparian woodland communities. The bright red to orange flowers are formed by five long petals that create spurs in the back and flare outwards in the front. The spurs end in sweet tasting nectar sacs, and bright yellow *anthers* protrude from the mouth of the flower to attract pollinators. The entire blossom hangs downward from long, 24 to 48 inch stems until pollinated, after which they rise up to an erect position. An alpine form, Coville's or alpine columbine (*A. pubescens*), has bright white, upright flowers and grows at high elevations around 10,000 feet. Flowers bloom from April through August.

Indian paintbrush (*Castilleja miniata*)

Several species of paintbrush grow in the Eastern Sierra throughout all elevations and habitats. Indian paintbrush is one of the largest and most robust species, with stems up to three feet tall and a pale to bright red "brush" up to two inches long. Most of the color is due entirely to *bracts* (modified leaves), but reduced flower petals do contribute some color to the Indian paintbrush. The leaves are smooth and lance-like, although some paintbrush has lobed leaves. Indian paintbrush blooms from June through September.



Mountain pride penstemon (*Penstemon newberryi*)



While many species of penstemon are found throughout the Sierra Nevada, mountain pride is often seen along roadways and cascading down rocky slopes, splashing bright magenta or cherry red across the gray granite. It grows up to 18 inches in low clusters which resemble small shrubs. The flowers are one to 1.5 inch long tubes that flare slightly at the mouth, similar to the shape of domestic snapdragons. The leaves are low to the ground, coarsely toothed, oval, and stiff. Mountain pride prefers dry, gravelly soil in sagebrush scrub to alpine habitat and blooms from June through August.

Pussypaws (*Calyptridium umbellatum*)

This delicate pink, occasionally white, cluster of flowers resembles the soft underside of a cat's paw, leading to its name. The 0.5 to 1.5 inch flowers are borne on one to six inch long stems above shiny,

spoon-shaped leaves that form a low-lying rosette. The flower stems respond to changing temperatures, lying flat on the ground in cold weather and rising up in warmer weather to regulate their temperature. Pussypaws prefer well-drained, sandy, or gravelly rocky slopes or flats up to 14,000 feet.



Red or “mountain” heather (*Phyllodoce breweri*)

This evergreen shrub brightens the granite slopes of alpine country year-round with short, deep green, needle-like leaves and splashes of red-purple flowers from June through August. The thin, six to 12 inch stems support the 0.5 inch, bowl- or saucer-shaped flowers. The plant’s reproductive system includes 10 *stamens* and one *pistil* (female plant part) rising from the center, giving the flower clusters a fuzzy appearance. Visiting insects are dusted with pollen from the protruding stamens, resulting in the cross-pollination of individual plants.

Sierra primrose (*Primula suffretescens*)



Sierra primrose forms beautiful pink to rose-colored mats around rocks in alpine habitats and above treeline, blooming from July through August. Sometimes confused with rock fringe, it has five petals and a yellow bull’s-eye in the center of each flower, with wedge-shaped, toothed leaves lying low to the ground encircling the stem. Sierra primrose tends to grow on cooler north-facing slopes where it receives more moisture from late snowmelt.

Blue and Purple Flowers

Davidson’s penstemon (*Penstemon davidsonii*)

Davidson’s penstemon, also known as alpine penstemon, grows only four to eight inches high, but has large, showy flowers that range in color from violet to blue-purple and pink-purple. The throat and *anthers* of the one to 1.5 inch long tubular flowers are woolly haired. Davidson’s penstemon grows in dry, rocky areas of alpine and timberline habitat, adapted to the harsh climate. The fleshy, oval leaves reduce water loss, while the large blossoms attract infrequent pollinators. Flowers bloom from July through August.



Bull elephant’s head (*Pedicularis groenlandica*)

These pink-purple flowers look like a herd of elephants on a stick, complete with broad, floppy ears and a long, curved trunk. The top of the six to 30 inch stem is usually packed with scores of the 0.5 inch flowers. The upper two petals of the five-petal blossom form the trunk, while the outer two petals form the big ears. The leaves are long (up to 10 inches in length), close to the ground, and fern-like. A close relative, the little elephant’s head (*P. attollens*), is similar in appearance but smaller. Both flowers are pollinated by the same bees, but prevent inter-breeding by storing their respective pollen on different parts of the bees’ body. Both species of elephant’s head prefer wet meadows, streambanks, and boggy areas in alpine habitat and bloom June through August.



Larkspur (*Delphinium* spp.)



Several species of larkspur grow in the Eastern Sierra, ranging from pale blue to a deep blue-purple color. The colorful, showy flower parts are actually composed of the *sepals* instead of the petals, which are smaller in size and cradled within the *sepals*. The *sepals* form a long, curved nectar spur in the back of the flower, reminiscent of the spur on the back toe of a lark. The Latin name *Delphinium* means “dolphin,” referring to the overall shape of the blossom. The largest larkspur species, glaucous (or towering) larkspur (*D. glaucum*), can grow up to six feet in height and prefers wet areas in montane forest communities. All species are poisonous and are a main cause of livestock poisoning throughout grazing areas.

Lupine (*Lupinus* spp.)



Many species of lupine grow in the Eastern Sierra at all elevations and habitats, including desert flats, sagebrush scrub, montane forests and meadows, and subalpine and alpine habitats. All species have distinctive, palm-shaped leaves and spikes of pea-like flowers. The flowers are blue to violet with a splash of white or yellow, or occasionally red or purple. The Latin name *Lupinus*, meaning “wolf,” is a misnomer given because these plants were believed to “wolf up” nutrients from the soil. On the contrary, lupines are members of the pea family, which fix nitrogen and enrich the soil. Specialized nodules in the roots host bacteria that trap and absorb airborne nitrogen, eventually making the nitrogen available to the plant and the soil. The bacteria, in turn, receive nutrients from the host lupine, a mutual dependency called “symbiosis.”

Shooting star (*Dodecatheon jeffreyi*)

The shooting star heralds spring with a burst of color in moist areas along hillsides, meadows, and streambanks. This delicate 0.5 to one inch flower hangs down from long stems, with royal pink petals folded back to expose the black-purple “nose” that encloses the reproductive parts. Bright yellow and white bands encircle the bottom of the up-turned petals. The oval leaves are three to 20 inches long and lie along the ground. An alpine (*D. alpinum*) and bog (*D. redolens*) species also grow in the Eastern Sierra. The Latin name *Dodecatheon* means “12 gods,” suggesting 12 Greek gods took special care of this beautiful flower. Flowers bloom May through July.



Sierra penstemon (*Penstemon heterodoxus*)



The tubular, blue or purple-blue flowers of Sierra penstemon are arranged in whorls, or wheel-like clusters, around the top of the two to eight inch stem, differentiating it from most other penstemon species. Each stem usually has only one whorl composed of 10 to 30 flowers, although it may have a second whorl beneath the first. The flowers are slender and short (0.5 inches), often with a reddish tinge along the tube. Sierra penstemon is found in alpine meadows and rocky slopes up to 13,000 feet and blooms from July through September.

Glossary

Anther: The pollen bearing portion of the male reproductive organ (stamen).

Bract: A small leaf or leaflike structure at the base of a flower, usually below the sepals.

Nectary: A tissue or organ which produces nectar, a sugary, sticky fluid that often attracts various pollinators.

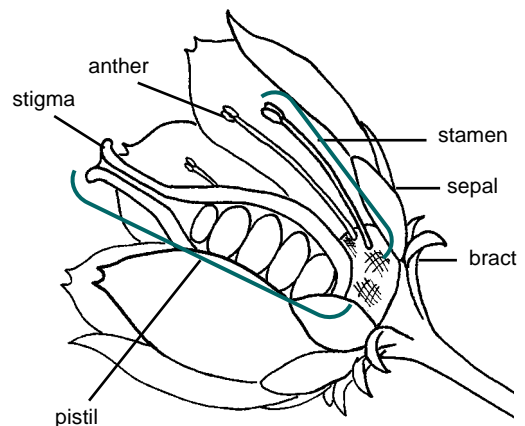
Pistil: The female reproductive organ of a flower, usually consisting of a stigma, style (narrow portion of the pistil that connects the stigma to the ovary), and ovary.

Sepal: Flower parts beneath the petals, sometimes resembling leaves.

Stamen: Male reproductive organ, consisting of an anther and filament (the stalk that supports the anther).

Stigma: The portion of the female reproductive organ (pistil) that is receptive to pollen.

Umbel: A dense flower cluster formed by individual flowers arising from a common point, like the struts of an umbrella.



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