

## Native Plants that Tolerate Shade Primary Authors: Deborah Lebow Aal and Robert Greer

Gardening in the shade with native plants requires quite a bit of creativity, especially on the Front Range of Colorado. We did not have many native trees on the plains, so there are not many native plants adapted to growing in shade. But, it is possible to get creative and find plants that will tolerate some shade.

There are many initiatives aiming to plant more trees on the Front Range, and we know the benefits of planting trees for the ecosystem are almost incalculable, and the subject of a different article. So, as we are planting more trees, preferably native and near-native tree species, we will have more shade to deal with in our gardens.

Partial shade and full shade are very different. Partial shade will allow more native species to do well. In fact, with our intense Colorado sun, many plant species with labels indicating they need full sun may do just fine in partial shade. Full shade will be more difficult. A really densely shaded area will probably support little, and what it does support will be mostly foliage. Four or more hours of direct or indirect sun a day will allow a much bigger palette of plants. So, assess the amount of shade under or near your tree before planting any of these recommended plants. A good rule of thumb is that plants with broad leaves will do well in the shade here, though there are exceptions like American plum.

In addition to the shade it casts, we do need to remember that a large portion of a tree's biomass is underground. We need to be cognizant of the density of the root structure to know what can happily grow under a tree canopy. If plants are competing with a dense root structure, they obviously will have a more difficult time. And, you may have to water occasionally, as plants under a tree canopy get less rain water or snow than those out in the open. Obviously, not much will survive with no water.

One or two more considerations. If your shade is facing north, the plants that will survive are different than if facing south. The temperature difference can be substantial, so assess that as well before planting. And, consider the edge, or transition zone, from shade to sun, differently than the area completely under a tree. You will have to experiment with these plants, and, as with all plantings, there are no guarantees. Below are a few suggestions from Wild Ones Front Range (WOFR) members Rob Greer, Ayn Schmit, Deb Lebow Aal, and Jan Midgely.

Please feel free to recommend other plants you've had success with in the shade by <u>emailing</u> <u>us</u>. We'll happily expand this list.

Acer glabrum (Rocky mountain maple): This "tree" needs sun but will tolerate shade, and will be more like a shrub in shade.

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Acer negundo (Boxelder maple). A shrub-like, fast-growing, tree, with small yellow-green flowers in early spring. This shrub likes a bit of water, so not appropriate for a non-irrigated landscape. It likes a bit of sun, but can grow as an understory plant.

Amelanchier alnifolia (Saskatoon serviceberry): Likely to be a small-to-medium shrub when grown in substantial shade. Cream flowers in April and tasty purple berries in June. Attractive burgundy-colored winter bark.

Amorpha canescens (leadplant): This one could probably use more sun than others on this list, but Prairie Moon nursery says it can tolerate partial shade, and that's probably especially true in Colorado. Purplish flowers highly attractive to native bees, often used as a Russian sage substitute. Added bonus - this plant fixes nitrogen.

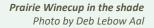
Aquilegia caerulea (Colorado Blue Columbine): Columbine, like many plants from higher elevations, can be more successful on the Front Range if grown in partial shade. Supplemental water will be needed.

Arctostaphylos uva-ursi (manzanita, Kinnickinnick, bearberry): This will happily fruit in the understory of a pretty dense pine canopy. Manzanita is Spanish for "little apple," which these Rosaceae fruits indeed closely resemble, though they are only marginally edible. A thick, evergreen ground cover with petite bell-shaped light-pink flowers in early spring. Although it will grow in shade, it may not flower there. It probably will not do well on the Front Range in any amount of sun other than just a bit of morning sun.

Berberis aquifolium (formerly Mahonia aquifolium, upright Oregon grape): Not native to CO, but a very close relative of *M. repens* with basically identical characteristics just in a shrubbier habit.

Callirhoe involucrata (Prairie winecups): These do very well in sun and are incredibly xeric, but if you plant them on the edge of a tree canopy, in dappled sunlight, they will do just fine. They

may not have as many blooms as in full sun, but often look happier and stay green longer in partial shade.





Campanula rotundifolia (Bluebell bellflower, harebells): This very common wildflower will pretty much grow anywhere if it gets about 6 hours of sun. The little blue flower is lovely. Rob's comment: "I've never grown this, but it seems pretty unfussy in gardens I've seen in part shade." Bunnies do enjoy it, though, so if you have rabbits you might consider protecting (or skipping) it.

*Delphinium ramosum* (Mountain Larkspur): This gorgeous flower takes over in Deb's yard, where it gets full sun. Much better in partial shade, where it is better behaved.

*Echinocereus triglochidiatus* (Claret Cup Cactus): Really! Can form sizable clumps in dry shade and can tolerate morning shade with afternoon sun.

*Elymus canadensis* (Canada Wild Rye): This grass is a medium-size clumping grass with gracefully bending inflorescences.

Elymus elymoides (Squirreltail, also a wild rye): This grass grows to about 20 inches in height and can spread over time. The foliage will look a healthier green where it's getting only 5-6 hours of sun, rather than full sun. This is a cool season grasses.

*Elymus glaucus* (Blue Wildrye): This grass tolerates almost full shade. Everything you read about this lovely grass says it needs full sun, but it does quite well in shade here in Colorado.

*Erigeron speciosus* (Aspen fleabane): This plant may prefer sun elsewhere but does best with some shade in Colorado, similar to Rocky Mountain Columbine.

Festuca saximontana (Rocky Mountain Fescue): This is a short clumping grass with narrow leaves that probably needs 4-6 hours of daily sun.

Fragaria virginiana (Wild Strawberry): While everything you read says strawberries need sun, strawberries often do better with partial shade with our intense Colorado sun, especially if planted on a south or west facing area. These produce tiny but very sweet strawberries, and are a nice ground cover in partial shade. If the shade is too deep, they will not fruit, but still a nice ground cover.

Geranium viscosissimum (sticky geranium): A lovely native geranium that has pink to purple flowers and tolerates part to full shade. The flowers are edible.

Holodiscus dumosus (Bush or Rock Spirea): In the rose family, this plant looks nothing like a rose, but has tiny white to pink flowers, and can grow to six feet wide. When you look this plant up, it actually says to plant in partial shade! If the shade is too deep, the shrub can get a bit "stretched."

Juniperus communis (Common Juniper): We know, many people don't like juniper, but it is an important plant for the ecosystem, hosting many caterpillar species. Plus it comes in so many shapes and sizes, almost anyone can find one to appreciate—we've moved beyond Pfitzers! Generally, the ground cover varieties of juniper tolerate shade better. They will have a different growth — more of an open growth in shade, and will do better with some morning sun. Hiking in Colorado, one sees many varieties of juniper growing well in partial shade. They prefer dry conditions, which is another good reason to try them in partial shade. This is NOT a good plant to plant near your house in fire-prone areas. As with many resinous plants, it is quick to catch on fire.

Mahonia repens (creeping Oregon grape): Evergreen groundcover that turns a lovely maroon or purple in cold weather. The color is richer with at least some winter sun. Small bunches of yellow flowers in early spring; berries slightly astringent out of hand but reportedly make good jam. Grows reliably even in dry and quite shady conditions. This plant is one of the best shade-tolerant native plants around. This plant does well anywhere - full sun, partial shade, deep shade, and tolerates quite dry conditions. And, with its three-season interest, is a favorite of Deb's, even though years ago it was overused in the landscape trade. The reasons it was overused are good ones - it's very easy to grow, not fussy at all, and lovely!

Mirabilis multiflora (Colorado four o'clock): Heart-shaped leaves leap from a taproot every spring. Attractive pink/purple flowers bloom late afternoon until dawn from early June often through September. Extremely attractive plant to sphinx moths and hummingbirds (and humans!). Handles part shade but flowers better in full sun.

*Monarda fistulosa* (bee balm): Oregano relative with very similar culinary uses. Broadleaf forb that grows similarly to mint, with tubular purple flowers beloved by hummingbirds and, true to name, hymenoptera. Smells divine. Try to maximize air circulation to minimize powdery mildew.

Nolina microcarpa (Beargrass): A grass-like succulent. It blooms in early summer with tall spikes of tiny white flowers. Quite drought tolerant, it is evergreen, can get to 6 feet tall though in landscapes usually 3 feet or so high and wide. Nurseries typically say it needs full sun, but it is one of the few plants that does equally well in dry shade—Nolina are adapted to growing up in the shade of "nurse shrubs" in their native desert range.

Oenothera biennis (common evening primrose): Biennual forb that starts as a rosette and then grows a long stalk with a once-blooming bright purple flower. Leaves edible as salad greens or potherbs depending on maturity.

Oreocarya virgata (Miner's Candle): This spikey plant needs 6 hours of sun, but can do well in dappled or light shade

Philadelphus microphyllus (Littleleaf mock orange): The Ladybird Johnson Center says it likes full sun, but Kenton Seth (local native plant landscaper extraordinaire) has used it in shade and, as mentioned above, many species that like sun elsewhere are happy to get some shade from our intense Colorado sun.

*Prunus virginiana* (Chokecherry): This is a large bush or small understory tree, with white flowers in the spring followed by red berries. Chokecherry can grow in sun, partial shade or pretty dense shade.

*Pulsatilla patens:* (Pasqueflower): An early spring bloomer, this does well under deciduous trees that leaf out late, as it flowers in early spring. A good candidate for edge planting too.

Rhus glabra (smooth sumac); Rhus trilobata (skunkbush sumac) or Rhus glabra or Rhus trilobata (Smooth or fragrant sumac): These plants tolerate partial shade and create a fair bit of it themselves with their broad leaves. Attractive tropical-looking foliage (related to mangoes and cashews) that turns a stunning uniform bright red color in fall. Rhus trilobata has glossy, long-lasting, quasi-succulent, three-lobed leaves. Fruits are edible as a fruity souring agent, though it may not flower well without sun. Many love the habit of sumacs, and the fact that you can prune them to look like anything you want. The bloom appears on new growth so you can prune them hard at the end of the winter (not too late or you'll cut off the new bloom buds).



**Rhus trilobata in the transition zone**Photo by Deb Lebow Aal

Ribes aureum (golden currant): Edible native currant with fruit ranging from orange or red to purple and black. Often-fragrant small yellow flowers in April (bee favorite) to fruit in July. Could use a little morning sun, and may not flower much in the shade, but it will do fine. Most often seen in the wild on the outer edge of a large tree's canopy shadow.

*Ribes cereum* (wax currant): Pink flowers that attract many small native bees. Red fruits have a pleasant jelly texture but the flavor is a bit insipid. Very cold-hardy and seems to prefer pine shade.

Rosa woodsii (Woods' rose, our native rose): Pink medium-sized roses lead to voluminous rose hips. Spreads fairly aggressively, so you'll want to plant them somewhere where they have room to provide a thicket, which is wonderful for birds. They flower less in the shade than in sun but are perfectly happy in dappled sun (like under a honey locust tree). Don't let the suckering frighten you - maintaining them isn't overwhelming.

Rubus deliciosus (Boulder raspberry): Fruit really are delicious when they're not dry but that's rare. Delightful rose-like flowers, white and ~2" across. Leaves are shaped less like most Rubus and more like a currant's, but larger. This will spread to form a clump too, but is easy to keep managed with judicious annual digging.

Rubus idaeus var. strigosus (American raspberry): Classic raspberry. Small white flowers attractive to bees yield to delicious red raspberries.

Rubus pubescens (dewberry): Rob's comment: "I've never grown this but have seen it fruiting under some of the heaviest overstory I've seen in Colorado."

Rudbeckia hirta (black-eyed Susan): A dry-shade favorite. Sunflower-looking largish yellow flowers.

Rudbeckia laciniata var. ampla (Cutleaf Coneflower): Four hours of sun is enough, although it needs more water than other prairie plants listed here.

*Solidago missouriensis* (goldenrod): Late-blooming yellow flowers that are extremely popular with bees. Tolerates part shade.

*Symphoricarpos occidentalis* (snowberry): Honeysuckle relative that tolerates substantial shade. Berries inedible.

Thelosperma filifoluium (Stiff Greenthread): Little yellow flowers on thread-like foliage (hence the name). Needs 6 hours of sun.

This list of plants is partial. The best way to find more plants that do well in shade is to hike around the foothills to see what grows where, and copy nature.

And, again, this list is from our experience. Remember that Wild Ones is a neighbor-to-neighbor helping organization, and we need to hear from more of you. We are not a scientific organization (although we have many scientists in our midst). So, as always, send us <u>an email</u> with your experience of which native plants do well in shade.