

Mary's Peak Botany

By Carole Miles

The uniqueness of the botany on the higher elevations of Mary's Peak is worth pausing to take a look at while we are here. In 1989, The Siuslaw National Forest Service designated 924 acres at the top as the 'Mary's Peak Scenic Botanical Interest Area'. The top of the mountain has about 130 acres of grass meadows, a xeric rock garden, and pure stands of noble fir (*Abies procera*) on the peak.

Investigators have hypothesized that during the warm, dry period between 6,000 to 4,000 years ago, a xeric flora advanced from southern and eastern Oregon into more mesic NW Oregon. In time, as the climate became more wet and cool, these xeric species persisted in the thin-soil habitats on mountain tops.

The geology of Mary's Peak creates the environment for these unusual plant communities. Two main soil types are found on Mary's Peak; the Mulkey series and the Maryspeak series. The Mulkey series occupies the open meadows and consists of loamy soils derived from coarse-grained intrusive igneous rock. These soils are rich in organic matter because they developed under grasslands, but contain gravels and cobbles from rocks disintegrating in place (residuum) or sliding downslope (colluvium). The Maryspeak Series is found under forests and the mountain slopes and consists of sandy loams that formed on ancient deposits from sandy colluvium derived from a mixture of sandstone and coarse-grained intrusive igneous rocks.

The nearly pure stand of noble fir at the summit is the most extensive in the coast range. It is about 150 - 200 years old with a few sentinels of about 250 years. Noble fir rarely form the extensive stands we see here and are limited to elevations about 3,500'. Three grass and forb associations can be found in the grass meadows; a fescue/bentgrass/sedge community which dominates most of the bald area and includes tiger lily and western longspur violet, an arrowleaf groundsel community on the north-facing slopes that include the glacier lily (unusual in the Coast Range), and an Oregon iris community which includes wild strawberry and field chickweed.

The grassland meadow has been significantly reduced in size over the past several decades due to the encroachment of noble fir. Fire suppression is one of the causes of this encroachment. The Forest Service and BLM are removing small trees to restore the meadows to what is believed to be its historic size.

The rock garden is host to an interesting collection of subalpine wildflowers. It sits just below the summit on steep slopes that are exposed to direct hot sunlight and steady westerly breezes in summer that produce arid conditions. Vegetation is sparse on the thin, gravelly soils and includes phlox (*Phlox diffusa*), Indian paintbrush (*Castilleja hispida*), scalloped onion (*Allium crenulatum*), cascade desert parsley (*Lomatium martindalei*), and Cardwell's penstemon (*Penstemon cardwellii*).

A lush community of native forbs and grasses thrive in the area around the rock garden, extending to the top of the peak. In late spring and early summer you'll find bluefield gilia (*Gilia capitata*), rough wallflower (*Erysimum capitatum*), Menzies' larkspur (*Delphinium menziesii*), spreading phlox, Douglas' silene (*Silene douglasii*), sickle keeled lupine (*Lupinus albicaulis*), western woolly sunflower (*Eriophyllum lanatum*), western groundsel (*Senecio integerrimus*), Oregon fescue (*Festuca roemerii*), and other species.

In early August you should find Tiger lilies (*Lillium columbianum*) in bloom along with several other wildflowers. Use the app "Oregon Wildflowers" to help with identification. If time allows, walk the Meadow Edge trail — it is an easy/moderate ~2 mile loop that will take you through the almost pure noble fir stand; include the short side trail that leads to the summit to see the rock garden area.



Marys Peak is located 15 miles southwest of Corvallis and about 25 miles from the Pacific Ocean. At the top of the mountain is the Marys Peak Scenic Botanical Special Interest Area. Map prepared by Phillip Hays.

Reference: <https://www.npsoregon.org/kalmiopsis/kalmiopsis19/4maryspeak.pdf>