Grizzly Peak
Jackson County, Oregon

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Winter view from Ashland of Grizzly Peak with a thin layer of snow above 3,000 feet. The highest point visible is the extreme southwest corner of the Grizzly Peak plateau, indicated on the map by a solid circle in Block 7. From this point (5,750 feet elev.), there is an equally impressive view of Ashland and the Bear Creek Valley. Photo by Jim Duncan.

As the highest point on the ridge directly across the Bear Creek Valley from Ashland, Grizzly Peak serves as a focal point for the town, inviting both residents and visitors to find a way to its summit. Grizzly Peak is part of a long ridge of the western Cascades that extends another 12 miles northwest through Payne Cliffs and Mt. Baldy to Roxy Ann Peak, just east of Medford. The ridge is flanked by two tributaries of the Rogue River, Antelope Creek on the north and Bear Creek on the south. Grizzly Peak, so the story goes, was named in honor of a well-known grizzly bear that inhabited a large territory around Ashland during the second half of the 19th century and was the last known grizzly in this area. It was called Old Reelfoot as a result of having been crippled by the loss of several toes in a trap. The animal was killed by hunters around 1890, apparently after many failed attempts.

Topography and Geology

The Grizzly Peak plateau is a relatively flat area about a quarter of a square mile. The highest point (5,920 feet) is near the northeast corner, with the plain sloping gently to the south and west. The plateau is shaped somewhat like a "mutton-chop," with the pointed end at the southwest corner. This is the point from which one can look down nearly 4,000 feet into the Bear Creek Valley, and at 5,750 feet this is the part of Grizzly Peak that, from Ashland, appears to be the summit. (This point shows clearly in the photo of the peak as seen from Ashland, and it is marked on the map by the solid circle in Block 7.) The rest of the plateau and the actual peak are out of the line of sight.

Geologically, Grizzly Peak's volcanic formation dates from about 25 million years ago. Among the various kinds of volcanic activity that contributed to its mass were basaltic lava flows known as the Roxy formation (Begnoche 1999). Late in this period of volcanic activity, a large strato-volcano, called Mount Grizzly, formed near the present-day Grizzly Peak. It probably rivaled Mt. McLouglin (9,495 ft.) in size and appearance. The high part of Mount Grizzly has long since eroded away, but a remnant of one of its lava flows survives as the plateau around the summit of Grizzly Peak. Starting about five million years ago, volcanic activity returned to create the current High Cascade Range, which includes Mount McLoughlin. These new eruptions were about twenty miles east of the earlier ones, and their outpourings did not reach Grizzly Peak. Today the peak remains the highest point for a considerable distance, from the Siskiyou (Klamath) Mountains to the south or the High Cascades to the east.

Plant Community Overview

From the northern and eastern edges of the plateau the land slopes down steeply. The dense old growth conifer forest on this slope consists almost entirely of a population of fir that is intermediate between white fir (*Abies concolor*) and grand fir (*Abies grandis*). The two species hybridize here as elsewhere in Oregon, such as in the central Oregon Cascades (Zobel 1973). Great variation exists in this population, ranging from trees that look nearly like pure grand fir to ones that look nearly like pure white fir. Along the west edge of the plateau, the slope is equally steep, but the forest is more open and contains a mixture of conifers and oak (see the list starting on

page 7). In August 2002 this slope, along with the western part of the plateau, burned in a fire that I will discuss further on. On a gentle slope just below the northwest corner of the plateau, a permanent wetland lies in the central part of a large meadow. Some species on the list occur only in this wetland. The best view of the geological composition of the plateau is at its southern edge. There, bedrock that forms the plateau is exposed at the surface, and along much of its length the edge drops off abruptly for ten to twenty feet. Vegetation on the steep slope below this small cliff is a mix of oaks, conifers, shrubs, and open grassland.

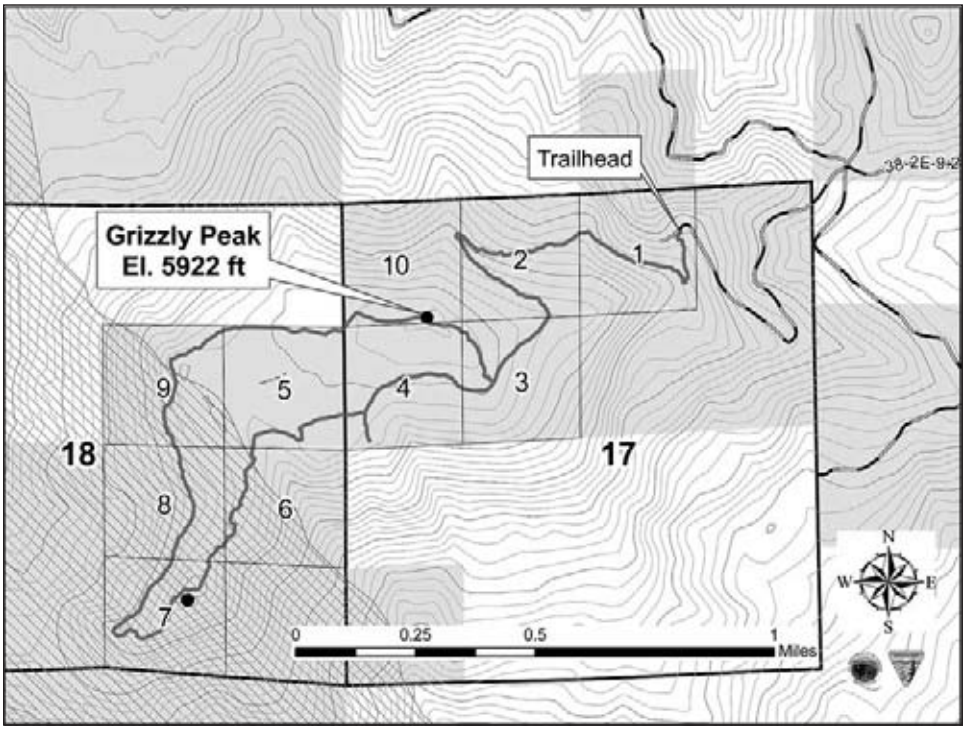
On the plateau the vegetation varies in response to changes in soil depth. Along the southern edge where the soil is mainly very shallow or the rock is directly exposed, plants grow in joints and cracks of the rock, or annuals grow in thin soil that is vernally wet from snow melt. These rocky areas represent about 10% of the plateau and harbor a distinctive mix of perennials and shrubs that varies from east to west along the edge. Similar vegetation grows on other rocky outcrops scattered in the interior of the plateau. Deeper soils support large areas of open grassland or a combination of grass and low shrubs. These grassy openings cover 50 to 60% of the plateau. Mixed conifer forest covers the rest of the area, forming discontinuous patches scattered across the plateau. Presumably these forested regions mark the areas of the deepest soil.

Grizzly Peak Trail

The Grizzly Peak plateau is Federal land administered by the Bureau of Land Management (BLM) out of its Medford District office. The plateau has become a popular hiking area since the BLM constructed a fine access trail in the 1990s. The trail begins on the north slope and winds up through dense fir forest, to the northeast corner of the plateau, where it first enters open, grassy areas (about where the trail crosses the line between Blocks 2 and 3 on the map). The trail then makes a large loop around the plateau and back to the northeast corner. The idea for the trail was conceived and promoted by John Ifft of the BLM during the 1980s. His concept was to build a trail to the far point that overlooks Ashland (the dot in Block 7 on the map) so that people could hike up there to enjoy the view. Ifft retired in 1989, but his efforts finally paid off in 1991 when the trail was built according to his plan. The trail was such an immediate success that in 1995 it was extended to form the loop as we know it today. To get to the trailhead from Ashland, go east from exit 14 of Interstate 5 on State Route 66 for less than a mile and turn left on Dead Indian Memorial Road (Jackson County Road 722). Continue east for 6.8 miles, then turn left on Shale City Road (BLM Road 38-2E-27). Go north on Shale City Road about four miles, and turn west on BLM Road 38-2E-9.2. In a little less than two miles the road ends at a parking area for the trailhead. The elevation there is about 5,200 feet.

Plants of Grizzly Peak

Although my first trip up to the Grizzly Peak plateau was in September 1993, it was not until the fall of 1996 that I began systematically compiling a list of plant species in the area. The impetus was to help the Oregon Flora Project build the database for the Oregon Plant Atlas. As I gradually began to think of Grizzly Peak as a study area, I defined its limits to be the entire Grizzly Peak plateau, the north slope true fir forest (starting at the trailhead), as well as the section of the loop trail that drops below the southwest corner of the plateau and runs north along the slope until it leads back up to the northwest corner of the plateau. All plants on the list occur somewhere within this area, which ranges in elevation from 5,200 to 5,920 feet (trailhead to summit).



Map of the Grizzly Peak area in parts of Sections 17 and 18, Township 38 South, Range 2 East. Shaded blocks are public land; unshaded, private land. The hatched area (lower left) burned in the August 2002 wildfire. The solid line winding through the numbered squares is the trail. The dot in Block 7 marks the viewpoint for Ashland and the Bear Creek Valley. The contour interval is 40 feet. Map prepared by Dennis Glover of the BLM Medford District.

To facilitate recording plant locations, I divided the study area into ten numbered blocks each one-quarter-mile square (see map). Each block is therefore a quarter-quarter section of either Section 17 or Section 18 of Township 38 South and Range 2 East in Jackson County, Oregon. The numbers in the "Location" column of the plant list correspond to the block or blocks where I have found each taxon. (Note: Only those portions of each block that are on the plateau or are close to the trail have been surveyed.)

After eleven years, my list numbers almost three hundred taxa, for

which I have collected voucher specimens of nearly all. Naturally, the list is not yet complete; nearly every visit uncovers additional taxa, and there are other species that occur nearby and should be expected in the study area that I have not yet encountered there. That said, I estimate that I have documented about 90% of the flora of Grizzly Peak as of the end of the 2007 season. The list at the end of this article is preceded by a legend that explains the notations and the terminology. I have followed *The Jepson Manual* (Hickman 1993) for the scientific names, updated as necessary with the Oregon Plant Atlas of the Oregon Flora Project (www.oregonflora.org) or published volumes of the *Flora of North America*.

Analysis of the Flora

Not surprisingly, the flora of Grizzly Peak closely resembles that of the Cascade Range, of which it is a westward extension. It has less in common with the Klamath Range (Siskiyou Mountains) to the southwest. The Cascade-Siskiyou National Monument serves as a bridge between these two regions. A plant species list for the Monument compiled by Frank Lang from numerous sources, including his own work (Lang 2002), contains more than 600 species for an area of approximately 83 mi^2 where the elevation ranges from about 3,000 feet to just over 6,000 feet. The degree of similarity between the floras of the Monument and Grizzly Peak is high: 75% of the species on Grizzly Peak also occur in the Monument. In contrast, differences are greater between the Grizzly Peak flora and that of the high Siskiyou Mountains south and west of Ashland. Species lists I have compiled during the last decade for three areas along the Siskiyou Crest show the following amounts of overlap with the Grizzly Peak list: 1) Mount Ashland to McDonald Peak, 23%; 2) Big Red Mountain, 24%; and 3) Dutchman Peak to Observation Peak to headwaters of Cow Creek, 23%. Curiously, owing to differences in the species mix of these three Siskiyou Crest regions, 38% of the Grizzly Peak plants occur on at least one of these lists. Yet this is still only half the overlap compared to the Cascade Monument list.

One consideration in these comparisons is elevation. The elevation range of the Grizzly Peak study area is completely within that of the Monument. In contrast, elevation of the Siskiyou Crest sites ranges from 6,800 to 7,500 feet. Thus, there is no elevation overlap between the two collection areas: the lowest points of the Siskiyou Crest sites are nearly a thousand feet higher than the highest point of Grizzly Peak. These elevation differences may be partially responsible for differences in the flora, but geological differences are probably of greater importance. Grizzly Peak is of the same volcanic origin as the rest of the Cascade Range, including major parts of the Cascade-Siskiyou National Monument. The Siskiyou Crest sites are different rock and differ from each other in geological origin. Mount Ashland and McDonald Peak are composed mostly of quartz diorites grading to granodiorites, part of a great mass of igneous rock known at the Ashland pluton. Dutchman Peak is a complex mixture of metamorphic rock. Observation Peak and upper Cow Creek consist of a complex conglomeration of old igneous and sedimentary rocks. Big Red Mountain is composed of ultramafic rock. None of these resembles the volcanic rock of Grizzly Peak and the Cascades. These plutons of the Klamath/Siskiyou mountains are closely related to those of the Sierra Nevada. It is widely recognized that geological differences result in floristic differences (Kruckeberg 2006).

Rare and Unusual Species

Grizzly Peak harbors some species that are rare in Jackson County. The two robust populations of *Lomatium hendersonii* on the plateau (one in Block 7 and the other in Block 9) constitute the only report of this species in Jackson County (Duncan 2007). According to the Oregon Plant Atlas, the next closest population is in eastern Klamath County, with all other sites farther east and north of there. Based on the known distribution of this species, the population of *L. hendersonii* on Grizzly Peak appears to be a western "outlier." Its presence is an example of the range of eastern Oregon species extending west of the Cascade crest in southern Oregon. Henderson's lomatium is one of six species of *Lomatium* on Grizzly Peak, and with its large, bulbous root it is one of several such species of *Lomatium* that were valued by Native Americans who harvested the roots for food.

The two robust populations of *Lomatium hendersonii* on Grizzly Peak are the only known populations in Jackson County. A low plant with a large tuberous root, Henderson's lomatium grows in open rocky places. Its clusters of small, golden-yellow flowers open in early May, soon after snow melt. Photo by Elaine Plaisance.

The Grizzly Peak *Calochortus monophyllus* is one of only three populations in the state, all of which are in Jackson County. Bright yellow flowers are borne on stems 4 to 8 inches tall that grow up through cracks in rock outcrops from deep-seated bulbs. It blooms in mid-June, but flowers have not been seen for several years. Photo by Bob Vos.

About 30 plants of Warner Mountains sulphur flower (*Eriogonum umbellatum* var. *glaberrimum*) grow in one location along the southern edge of the plateau. This uncommon variety of *E. umbellatum* was not expected on Grizzly Peak because it was previously known only from Lake County, Oregon, and Modoc County, California. Here, Jim Duncan examines its clusters of small cream-colored flowers in mid-summer. Photo by Connie Battaile.

In 1990 Frank Callahan discovered a small population of *Calochortus monophyllus* on Grizzly Peak, one of only three populations of the species in Oregon. Voucher specimens were deposited in the herbaria at Oregon State University and Southern Oregon University (SOC7830). The other two populations are also in Jackson County, but grow on ultramafic (serpentine-influenced) soil. On Grizzly Peak, I saw the plants in flower once, in mid-June 2000, but I have not seen any sign of them since that time, despite visits to the site at the expected flowering time. Either these plants flower only rarely or something has happened to the population. I continue to look for it and hope that the August 2002 fire, which burned through the site, did not damage the bulbs.

A substantial population of *Eriogonum sphaerocephalum* var. *halimioides* grows along the western edge of the plateau in an open rocky corridor, mainly in Block 8, but extending into Blocks 7 and 9. It is known from only two other sites in Jackson County, both in the Cascade-Siskiyou National Monument. *Eriogonum umbellatum* var. *modocense* grows abundantly on the plateau, as it does elsewhere in the county. This is a new name (Reveal 2005) for a common plant, which formerly keyed to variety *polyanthum*. An uncommon variety of *E. umbellatum*, variety *glaberrimum*, also occurs at one site on the Grizzly Peak plateau, along the rocky southern edge in Block 5 (Duncan 2007). This variety is known mainly from the Warner Mountains of Modoc County, California, and Lake County, Oregon, and this is the only report of it in Jackson County. The nearest sites reported in the Oregon Plant Atlas are all in Lake County. Here is another example of an outlier population of an eastside species in Jackson County.

Eriogonum sphaerocephalum variety *halimioides*, a small shrub superficially similar to Warner Mountains sulphur flower, but clearly different upon close inspection. The flowers of this round-headed wild buckwheat are the same cream color, and the two species bloom at the same time; but in this species the leaves are much narrower, and the whole plant is very hairy, particularly the flowers and leaves. In contrast, the Warner Mountains wild buckwheat is quite glabrous, and the leaves are broad and shiny. Photo by Connie Battaile.

Two other uncommon species are worth mentioning for their presence on Grizzly Peak. When I began inventorying plants there, wild hollyhock or globe mallow, *Iliamna bakeri*, occurred at one small site in Block 7. Since the wildfire in 2002, new stands have appeared at several sites in the burned forest. Although uncommon in Jackson County, tall bugbane (*Cimicifuga elata*) grows in a robust and well known population in the dense fir forest on the north slope of Grizzly Peak, a site very close to the southern limit of its distribution. Recently, this Jackson County population was described as variety *alpestris* (Lee and Park 2004), while the plants farther north are assigned to variety *elata*. Thus, the Grizzly Peak bugbane has been recognized as taxonomically distinct.

Wildfire!

On a very hot day in mid-August 2002, sagging high voltage power lines shorted against each other in the wind creating sparks that started a fire in the upper Antelope Creek Valley. The fire burned vigorously uphill through oak savanna and open coniferous woodland on the west slope of Grizzly Peak. The fire continued up onto the plateau, completely burning the forest stands interspersed with open grasslands and rocky outcrops on the western 10 to 15% of the plateau. The burned area is shown on the map. The fire

Wildfire rages up the southern flank of Grizzly Peak, August 2002. Photo by Diane Fassler Chasmar.

burned all of Blocks 7 and 8, about 75% of Block 9, about half of Block 6 and a small portion of the southwest corner of Block 5. The photo above shows the fire in progress as seen from high in the hills of Ashland. The photo below, taken just three weeks after the fire, illustrates some of its effects. In the five years since the fire, I have been observing the regrowth in the burned areas.

During the first season after the fire (2003) growth of herbaceous perennials in the open grassland and rocky areas was typical of pre-fire years. Although the above-ground part of many shrubs had burned completely, some of these species, such as Brewer's white oak, bittercherry, western chokecherry, and mountain maple were resprouting from their roots. In contrast, growth was sparse throughout the burned forest areas, where the fire presumably burned hotter. The trees had all been killed. The few perennial herbs that appeared, mainly *Pseudostellaria jamesiana*, *Hydrophyllum fendleri*, and *Claytonia sibirica*, had been present before the fire. Large areas of bare ground suggested that heat from the fire had either killed some perennial roots or so damaged them that they failed to grow the first season. Surviving plants grew large and sprawling, taking advantage of reduced competition and abundant mineral nutrients in the ash-covered soil. A few annuals appeared, also widely scattered but vigorous, especially *Agoseris heterophylla*, *Cryptantha* species and *Gilia capitata*. A surprise to me was finding several large patches of rough-leaved aster (*Eurybia radulina*) in abundant flower in mid-August at the edges of a few burned forest areas (see photo). I had never previously seen the species up there. Clearly these rhizomatous plants were present before the fire, but in the denser plant mass of pre-fire years they may have mainly grown vegetatively and rarely flowered. In the burned forest I found several tiny seedlings of *Ceanothus velutinus*, easily recognizable by their distinctive leaves. Although this species had not been present in the ten years before the fire, its emergence was clear evidence of its presence in the soil seed bank, awaiting a fire to trigger germination. As a result, there are now many healthy young *Ceanothus velutinus* plants in the burned forest (see photo of one taken in 2007).

The view in the southeast corner of Block 8, looking northeast at burned trees in Block 6, three weeks after the fire (September 2002). Note the trail, lower right, and the remains of a large greenleaf manzanita in the center-left foreground. This shrub was killed by the heat, even though parts of it did not burn and appeared to be still alive shortly after the fire. None of the burned Grizzly Peak plants of this species resprouted from roots after the fire. This is consistent with the Cascade form of the species. The form in the Siskiyou Mountains and south into California typically has a burl and resprouts after fire. Photo by Jim Duncan.

Rough leaved aster (*Eurybia radulina*) flowered abundantly, exactly one year after the fire, in an otherwise barren area near the edge of burned forest. Although I had not seen these asters on the plateau before, the rhizomes must have been there all along. Photo by Jim Duncan.

During the 2004 season vigorous herbaceous growth was more general in the burned forests. This included about eight weedy alien species which had been absent or less abundant before the fire. These non-native species are indicated on the plant list. Some of them, especially the grasses, may have come from the seed mix broadcast by the BLM after the fire to help reduce erosion. Additional native species also appeared in the burn area in 2004: *Hazardia whitneyi*, *Calystegia occidentalis*, *Mentzelia dispersa*, *Chamerion angustifolia,* and *Iliamna bakeri*, of which there is now a huge population in the southeast corner of Block 8 as well as some smaller groups elsewhere in Blocks 6-8 (see photos). Baker's globe mallow is well known for germinating after fire, so clearly there was a large seed bank of it in parts of the now-burned forest near the western edge of the Grizzly Peak plateau.

Five years after the fire, vegetation is abundant in the burned forest. In additional to the conifers planted by the BLM soon after the fire, many young conifer seedlings are growing vigor-

ously throughout the area. These latter must represent natural regeneration from local native species. Native shrubs are appearing, especially species of *Ribes* and *Rubus*, but also *Symphoricarpos* and *Arctostaphylos*. Weeds are distressing, especially bull thistle (*Cirsium vulgare*), prickly lettuce (*Lactuca serriola*), and woolly mullein (*Verbascum thapsus*) that seem to be taking over some areas. But these are short-lived, early seral species, that represent a part of the way that ecological systems work. Change is continuous, and it will be interesting to follow the further changes in the coming years.

New seedlings of snowbrush (*Ceanothus velutinus*) appeared in the burned forest along with scattered herbaceous plants the first year after the fire. This seedling was several years old at the time of the photograph in July 2007. This species is heavily browsed by deer and elk. Photo by Connie Battaile.

Baker's globe mallow or wild hollyhock (*Iliamna bakeri*) appeared in several places among the burned trees during the second growing season after the fire. By mid-September, as seen in this photo, most of the flowers had already gone to seed. Photo by Jim Duncan.

Acknowledgements

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References

Begnoche D. 1999. Siskiyou Sundays: A Tour of Southwest Oregon. Tour 2. Ashland to Hyatt Lake and Tour 3. Ashland to Observation Peak. pp. 15-36. Ashland (OR), privately printed.

Duncan JT. 2007. Noteworthy collections, Oregon. Madroño 54:208.

Hickman JC, ed. 1993. The Jepson Manual: Higher Plants of California. Berkeley (CA): University of California Press.

Kruckeberg AR. 2006. Introduction to California Soils and Plants: Serpentine, Vernal Pools, and Other Geobotanical Wonders. California Natural History Guides 86. Berkeley (CA): University of California Press. 280 p.

Lang FA. 2002. Plant Species in CSNM. Cascade-Siskiyou National Monument: Draft Resource Management Plan/Environmental Impact Statement, Volume 2 – Maps and Appendices, Appendix E. pp. 67-81. Medford (OR): USDI Bureau of Land Management, Medford District Office.

Lee HW, Park CW. 2004. New Taxa of *Cimicifuga* (Ranunculaceae) from Korea and the United States. Novon 14:180-184.

Reveal JL. 2005. *Eriogonum*. Flora of North America North of Mexico, Volume 5, pp. 221-430. New York (NY): Oxford University Press.

Zobel DB. 1973. Local variation in intergrading *Abies grandis* – *A. concolor* populations in the central Oregon Cascades: needle morphology and periderm color. Botanical Gazette 134: 209-220.

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Close view of flowers of *Iliamna bakeri*. The pink flowers, up to 2½ inches in diameter, resemble hollyhock and create quite a sight when encountered en masse among blackened trees. Photo by Connie Battaile.

Legend for Plant List

A solid circle ● preceding a plant name indicates a non-native, introduced species.

LOCATION: The numbers in this column correspond to the one-quarter-mile square numbered blocks outlined on the map of the Grizzly Peak area. The set of numbers for each species therefore indicates the extent and pattern of its distribution in the study area.

HABITAT: The seven terms explained below represent the habitats I designated in the Grizzly Peak area to describe the environment(s) where I found each species.

FOR: Forest. In all cases the forest is almost entirely coniferous, and its density can range from a completely closed canopy (dense) to less than 50% crown cover (open). The north slope from the trailhead up to the edge of the plateau is the most continuously forested part of the study area, and this forest is mostly dense. There are also substantial patches of forest scattered on the plateau itself, both dense and open.

FOR edge: This term indicates sites at the interface between forest and open herbaceous areas.

Burnt FOR: This term refers to forested areas that burned in the August 2002 fire. (Approximately the western ten to fifteen percent of the plateau, as well as the western slope below, burned.) This term highlights species that I had not seen in the burned area prior to the fire, or in a few cases, found in greater abundance and/or at new sites after the fire.

HRB: Herbland. The herbaceous habitat is the most common one on the Grizzly Peak plateau. There are extensive open grassy areas as well as smaller openings within forested areas. In some cases there are shrubs scattered in these areas. The soil is generally shallow in the herbaceous areas, and bedrock is exposed in some places. (See "Rock") Some parts of this habitat can be very wet in the spring, and it includes a wetland just below the northwest edge of the plateau.

SAV: Savanna. This habitat occurs in only a small part of the study area, down slope from the far southwest point of the plateau and below its western edge. The scattered trees are a mixture of oak and conifer with abundant open grassy or shrubby areas between.

SHR: Shrubland. Regions that are predominantly shrubby are uncommon in the study area. Some parts of rocky outcrop areas are dominated by shrubs, and occasionally a sort of "lawn" of low shrubs covers an area that at first seems to be herbland. There is a substantial understory of shrubs in parts of the forest, but this is not counted as shrubland.

Rock: These are places where areas of bedrock are exposed at the surface and where soil is nearly absent except in joints between rocks or in shallow pans. Such sites are common along the southern edge of the Grizzly Peak plateau where the old lava rock substrate forms a ledge with an abrupt edge. Rocky outcrops also occur scattered in the interior of the plateau. The highest point of the plateau, the actual Grizzly Peak, is such a site.

DATES SEEN IN FLOWER: The pairs of dates given show the earliest and latest dates I have seen the species in flower on a visit to the study area. If only one date is given, then I have recorded flowering only on that date. If no date is given, I have not seen it in flower but have identified the species vegetatively. No dates are offered for ferns or conifers. In two cases only seedlings of woody perennials have been seen, and they are so marked. If "fruit" is offered before the date, then the species has not been seen in flower but only in fruit.

Family: Genus and Species	Family: A Common Name	Location	Habitat	Dates Seen in Flower
FERNS				
Dryopteridaceae	**Wood Fern Family**			
Cystopteris fragilis	Fragile Fern	9	Rock	
Polystichum munitum	Western Sword Fern	1, 2	FOR	
Pteridaceae	**Brake Fern Family**			
Cheilanthes gracillima	Lace Fern	4, 5, 9	Rock	
CONIFERS				
Cupressaceae	**Cypress Family**			
Calocedrus decurrens	Incense Cedar	2, 4, 6, 7, 8, 9	FOR	
Juniperus occidentalis var. *occidentalis*	Western Juniper	7	SAV	
Pinaceae	**Pine Family**			
Abies concolor x *A. grandis*	White Fir / Grand Fir hybrid	1, 2, 3, 4, 9, 10	FOR	
Pinus ponderosa	Ponderosa Pine	4, 5, 6, 7, 9	FOR	
Pseudotsuga menziesii	Douglas Fir	1, 4, 5, 6, 7	FOR	
FLOWERING PLANTS: DICOTS				
Aceraceae	**Maple Family**			
Acer glabrum var. *torreyi*	Mountain Maple	1, 2, 7, 10	FOR, SAV	8 Jun - 18 Jun
Acer macrophyllum	Big-leaf Maple	1	FOR	(seedling only)
Apiaceae	**Carrot Family**			
Angelica arguta	Angelica	1, 9	FOR	1 Aug
●*Conium maculatum*	Poison Hemlock	1	SHR	23 Jul
Heracleum lanatum	Cow Parsnip	1, 2, 5	FOR	12 Jul - 26 Jul
Lomatium dissectum var. *dissectum*	Fern-leaved Lomatium	6, 7, 8, 9	FOR edge, HRB	8 Jun - 14 Jun
Lomatium hendersonii	Henderson's Lomatium	7, 9	Rock, HRB	11 May - 14 Jun
Lomatium macrocarpum	Gray Lomatium	4, 5, 6, 7, 8, 9	Rock, HRB	18 May - 11 Jun
Lomatium nudicaule	Pestle Lomatium	7	Rock, HRB	27 Jun
Lomatium piperi	Piper's Lomatium	4, 8	HRB	10 May - 11 May
Lomatium utriculatum	Foothill Lomatium	4, 7	HRB	31 May - 27 Jun
Orogenia fusiformis	Mountain Orogenia	3, 4, 5	HRB, SHR	11 May - 18 May
Osmorhiza berteroi (*O. chilensis*)	Mountain Sweet Cicely	1, 2, 4	FOR	11 May - 18 May
Osmorhiza occidentalis	Western Sweet Cicely	1, 2, 4, 5, 6	FOR	11 May - 11 Jun
Perideridia bolanderi	Bolander's Yampah	4, 9	HRB, FOR	2 Jul - 30 Aug
Perideridia gairdneri ssp. *borealis*	Common Yampah	1, 2, 5, 9	HRB, FOR edge	1 Aug - 10 Sept
Sanicula graveolens	Sierra Snakeroot	4, 5, 6	HRB, FOR	11 May - 11 Jun
Aristolochiaceae	**Pipevine Family**			
Asarum caudatum	Long-tailed Wild Ginger	1, 2	FOR	18 Jun - 3 Jul
Asteraceae	**Sunflower Family**			
Achillea millefolium	Yarrow	4, 5, 6, 7, 8, 9	HRB, FOR	2 Jun - 1 Aug
Adenocaulon bicolor	Trailplant	1, 2, 3, 4	FOR	8 Jul - 26 Jul
Agoseris grandiflora	Large-flowered Agoseris	1, 4, 8	HRB	2 Jul - 30 Aug
Agoseris heterophylla	Annual Agoseris	4, 5, 6, 7	Rock, burnt FOR	2 Jul - 1 Aug
Agoseris parviflora (*A. glauca* var. *laciniata*)	Sagebrush Agoseris	6	HRB	2 Jul
Arnica latifolia	Broad-leaved Arnica	1	FOR	11 Jun - 2 Jul
Balsamorhiza deltoidea	Deltoid Balsamroot	7	SAV	8 Jul
●*Cirsium vulgare*	Bull Thistle	6, 7, 8, 9	FOR, burnt FOR	13 Aug - 30 Aug
Crepis bakeri	Baker's Hawksbeard	1, 4	FOR, HRB	18 Jun
Crepis occidentalis	Western Hawksbeard	4	HRB	2 Jul
●*Crepis pulchra*	Small-flowered Hawksbeard	6, 7, 8	Rock, FOR	18 Jun - 2 Jul
Ericameria nauseosa var. *speciosa*	Rubber Rabbitbrush	7	Rock	30 Aug - 14 Sept

Family: Genus and Species	Family: A Common Name	Location	Habitat	Dates Seen in Flower
Erigeron aliceae	Alice Eastwood's Fleabane	1, 2, 4, 5, 9	FOR, HRB	31 May - 30 Aug
Erigeron bloomeri var. *bloomeri*	Scabland Fleabane	5, 6	Rock	2 Jun - 27 Jun
Erigeron eatonii var. *villosus*	Eaton's Fleabane	1, 4	FOR, HRB	18 Jun - 12 Jul
Eriophyllum lanatum var. *achillaeoides*	Yarrow-leaved Oregon Sunshine	3, 4, 5, 6, 7, 8	Rock, HRB	18 Jun - 30 Aug
Eurybia radulina (Aster radulinus)	Rough-leaved Aster	8, 9	burnt FOR	1 Aug - 30 Aug
Hazardia whitneyi var. *discoidea*	Whitney's Bristleweed	9	burnt FOR	1 Aug
Hieracium albiflorum	White-flowered Hawkweed	1, 2	FOR	23 Jul
●*Hypochaeris radicata*	Rough Cat's Ear	1, 2	FOR	26 Jul - 30 Aug
●*Lactuca serriola*	Prickly Lettuce	6, 7, 8	burnt FOR	13 Aug - 14 Sept
Madia glomerata	Stinking Tarweed	5	Rock	12 Jul
Madia gracilis	Slender Tarweed	4, 6, 7, 9	Rock, HRB	11 Jun - 10 Sept
Madia minima	Least Tarweed	4, 7	Rock, HRB	11 Jun - 2 Jul
Microseris nutans	Nodding Microseris	4, 5, 6, 8, 9	HRB	22 May - 11 Jun
Pseudognaphalium thermal (Gnaphalium canescens ssp. *ther.)*	Slender Cudweed	9	HRB	11 Sept
Rudbeckia occidentalis var. *occidentalis*	Western Coneflower	9	HRB	1 Aug - 30 Aug
Senecio integerrimus var. *exaltatus*	Tall Western Groundsel	1, 4, 6	FOR, HRB	11 Jun - 2 Jul
●*Senecio vulgaris*	Common Groundsel	8	burnt FOR	31 May
Symphyotrichum foliaceum var. *parryi (Aster foliaceus* var. *parryi)*	Parry's Aster	9	HRB	30 Aug
●*Taraxacum officinale*	Common Dandelion	1, 2, 4, 5	FOR, HRB	11 Jun - 1 Aug
●*Tragopogon dubius*	Yellow Salsify	1, 2, 6, 7	HRB	2 Jul - 30 Aug
Wyethia angustifolia	Narrow-leaved Mule's Ears	8	HRB	27 Jun - 8 Jul
Berberidaceae	**Barberry Family**			
Berberis aquifolium	Oregon Grape	5	FOR	11 Jun
Berberis nervosa	Long-leaved Oregon Grape	1	FOR	31 May
Vancouveria hexandra	Inside-out Flower	1, 2, 3	FOR	18 Jun - 2 Jul
Boraginaceae	**Borage Family**			
Cryptantha intermedia	Common Cryptantha	8	HRB	8 Jul
Cryptantha simulans	Pine Woods Cryptantha	5	FOR edge	12 Jul
Cryptantha torreyana	Torrey's Cryptantha	5, 8	FOR edge, HRB	12 Jul - 23 Jul
Cynoglossum grande	Great Hound's Tongue	1	FOR	16 May - 4 Jun
Hackelia micrantha	Jessica's Stickseed	1, 2, 4, 5, 6, 8	FOR edge, HRB	11 Jun - 3 Jul
Brassicaceae	**Mustard Family**			
●*Alyssum alyssoides*	Small Alyssum	7	HRB	2 Jul
●*Arabidopsis thaliana*	Mouse-ear Cress	4, 7	HRB, burnt FOR	2 Jun - 18 Jun
Arabis glabra var. *glabra*	Tower Mustard	4, 5, 8	HRB	11 Jun - 2 Jul
Arabis holboellii var. *retrofracta*	Holboell's Rock Cress	8	HRB	2 Jul
Athysanus pusillus	Sandweed	8	HRB	13 May
Barbarea orthoceras	American Winter Cress	9	HRB	11 Jun
Cardamine californica var. *integrifolia*	Milk Maids	5, 9	FOR	16 May - 4 Jun
Cardamine nuttallii var. *dissecta*	Nuttall's Bitter Cress	4, 5	HRB, FOR edge	11 May - 8 Jun
Descurainia incisa ssp. *incisa*	Mountain Tansy Mustard	5, 9	FOR edge	2 Jul - 12 Jul
Descurainia pinnata ssp. *intermedia*	Western Tansy Mustard	7	Rock	18 Jun
Draba verna	Vernal Whitlow-grass	8	HRB	18 May
Erysimum capitatum ssp. *capitatum*	Western Wall Flower	8, 9	HRB, burnt FOR	27 Jun – 1 Aug
Noccaea fendleri ssp. *glauca (Thlaspi montanum* var. *montanum)*	Rock Penny Cress	4, 5	HRB	4 Jun – 18 Jun
●*Sisymbrium altissimum*	Jim Hill Mustard	7	SAV, burnt FOR	1 Aug - 14 Sept
Campanulaceae	**Bellflower Family**			
Campanula scouleri	Scouler's Harebell	2	FOR	12 Jul - 23 Jul

Family: Genus and Species	Family: A Common Name	Location	Habitat	Dates Seen in Flower
Caprifoliaceae	**Honeysuckle Family**			
Sambucus mexicana	Blue Elderberry	4, 5, 6	FOR edge	27 Jun - 8 Jul
Symphoricarpos albus var. *laevigatus*	Snowberry	4, 5, 6	SHR, burnt FOR	11 Jun - 30 Aug
Symphoricarpos mollis	Trip Vine	5	FOR	
Symphoricarpos rotundifolius var. *rotundifolius*	Round-leaved Snowberry	6, 9	SHR, FOR	2 Jul - 8 Jul
Caryophyllaceae	**Pink Family**			
●*Arenaria serpyllifolia* ssp. *serpyllifolia*	Thyme-leaved Sandwort	7, 8	Rock, HRB	11 Jun - 18 Jun
●*Cerastium fontanum* ssp. *vulgare*	Common Chickweed	9	HRB	2 Jul
Eremogone congesta var. *congesta* *(Arenaria congesta* var. *congesta)*	Ball-headed Sandwort	4, 6, 8	Rock	11 Jun – 18 Jun
Moehringia macrophylla	Large-leaved Sandwort	4, 6, 7	HRB, burnt FOR	16 May - 11 Jun
Pseudostellaria jamesiana	Sticky Chickweed	1, 3, 4, 5, 8	FOR, HRB	11 Jun - 2 Jul
Silene campanulata ssp. *glandulosa*	Red Mountain Catchfly	8	FOR	2 Jul
●*Spergularia rubra*	Red Sand Spurry	5	FOR edge	12 Jul
Stellaria obtusa	Clustered Mountain Starwort	1	FOR	
Convolvulaceae	**Morning Glory Family**			
Calystegia occidentalis ssp. *occidentalis*	Western Morning Glory	6	burnt FOR	8 Jul - 1 Aug
Crassulaceae	**Stonecrop Family**			
Sedum oregonense	Creamy Stonecrop	4, 5, 7, 8, 10	Rock	11 Jun - 2 Jul
Sedum stenopetalum	Narrow-petaled Stonecrop	4, 5, 6, 7	Rock	27 Jun - 23 Jul
Cucurbitaceae	**Gourd Family**			
Marah oreganus	Oregon Wild Cucumber	1	FOR	12 Jul
Ericaceae	**Heath Family**			
Arctostaphylos patula	Greenleaf Manzanita	1, 4, 5, 6, 7, 8, 9	SHR, FOR edge	11 May - 8 Jun
Pyrola picta	White-veined Wintergreen	3	FOR	1 Aug
Fabaceae	**Pea Family**			
●*Lathyrus latifolius*	Perennial Sweet Pea	1	SHR	23 Jul - 30 Aug
Lathyrus nevadensis ssp. *nevadensis*	Sierra Nevada Wild Pea	4, 5	HRB	18 Jun
Lupinus albicaulis	Sickle-keeled Lupine	3, 5	HRB, FOR edge	12 Jul - 23 Jul
Lupinus lepidus var. *lobbii*	Dwarf Lupine	4, 5, 6, 7, 8	Rock	11 Jun - 18 Jun
Trifolium cyathiferum	Wide-collared Clover	9	HRB	23 Jul
●*Trifolium pratense*	Red Clover	2	FOR	23 Jul
●*Trifolium repens*	White Clover	5	FOR edge	12 Jul
Vicia americana var. *americana*	American Vetch	1, 2, 3, 4	FOR	11 Jun - 2 Jul
Fagaceae	**Oak Family**			
Chrysolepis sempervirens	Bush Chinquapin	5	SHR	(no flower date offered)
Quercus garryana var. *breweri*	Brewer's Oak	1, 4, 6, 7	FOR, Rock	
Quercus garryana var. *garryana*	Oregon White Oak	4, 7, 9	FOR, SAV	
Geraniaceae	**Geranium Family**			
Geranium oreganum	Oregon Geranium	8	FOR edge	27 Jun - 26 Jul
Grossulariaceae	**Gooseberry Family**			
Ribes binominatum	Trailing Gooseberry	1, 2, 3, 6, 10	FOR, Rock	18 Jun - 2 Jul
Ribes lacustre	Prickly Currant	1	FOR	18 May - 2 Jun
Ribes lobbii	Gummy Gooseberry	2	FOR	18 Jun
Ribes sanguineum var. *sanguineum*	Red Flowering Currant	1	FOR	18 May - 24 May
Ribes viscosissimum	Sticky Currant	2, 9, 10	SHR, FOR edge	18 May - 31 May
Hydrophyllaceae	**Waterleaf Family**			
Hesperochiron pumilus	Dwarf Hesperochiron	4, 8, 9	HRB	18 May - 4 Jun
Hydrophyllum capitatum var. *alpinum*	Dwarf Waterleaf	1, 7	FOR, Rock	11 May - 13 May
Hydrophyllum fendleri var. *albifrons*	Fendler's Waterleaf	1, 2, 4, 5, 6, 8, 9, 10	FOR	11 Jun - 2 Jul
Nemophila menziesii var. *menziesii*	Baby Blue-eyes	5	HRB	4 Jun

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Nemophila parviflora var. *austinae*	Small-flowered Nemophila	1, 4, 5	FOR, HRB	11 Jun - 12 Jul
Phacelia humilis var. *humilis*	Low Phacelia	8	HRB	18 Jun
Phacelia mutabilis	Variable Phacelia	2, 3, 4, 7	FOR, Rock	2 Jul
Phacelia peckii	Peck's Phacelia	4	Rock	2 Jul
Hypericaceae	**St. John's Wort Family**			
●*Hypericum perforatum*	Klamath-weed	3	HRB	23 Jul
Lamiaceae	**Mint Family**			
Agastache urticifolia	Nettleleaf Horsemint	1, 2, 9	FOR edge	2 Jul
Monardella odoratissima ssp. *odoratissima*	Coyote Mint	9	FOR edge	2 Jul
Scutellaria antirrhinoides	Snapdragon Skullcap	4, 5, 7, 8	HRB	27 Jun - 27 Aug
Stachys rigida	Rigid Hedge Nettle	9	HRB	1 Aug - 10 Sept
Trichostema oblongum	Downy Bluecurls	8	HRB	12 Jul
Limnanthaceae	**Meadowfoam Family**			
Floerkea proserpinacoides	Floerkea	8	HRB	18 Jun
Linaceae	**Flax Family**			
Linum lewisii var. *lewisii*	Western Blue Flax	4, 5, 10	HRB	18 Jun - 8 Jul
Loasaceae	**Loas Family**			
Mentzelia dispersa	Nevada Stickleaf	6	burnt FOR	14 Sept
Malvaceae	**Mallow Family**			
Iliamna bakeri	Baker's Globe Mallow	6, 7, 8	SAV, burnt FOR	26 Jul - 1 Aug
Sidalcea oregana ssp. *spicata*	Mountain Checkerbloom	5, 9	HRB	12 Jul - 1 Aug
Onagraceae	**Evening Primrose Family**			
Chamerion angustifolia	Fireweed	5, 7, 8, 9	HRB, burnt FOR	1 Aug - 30 Aug
Circaea alpina ssp. *pacifica*	Enchanter's Nightshade	2, 3, 4, 5	FOR	23 Jul - 13 Aug
Clarkia rhomboidea	Common Clarkia	3, 4, 7	HRB, FOR edge	27 Jun - 27 Aug
Epilobium brachycarpum	Tall Annual Willow Herb	1, 2	FOR	23 Jul - 30 Aug
Epilobium ciliatum ssp. *ciliatum*	Common Western Willow Herb	1, 5, 9	HRB, FOR edge	12 Jul - 30 Aug
Epilobium densiflorum	Densely-flowered Boisduvalia	8	HRB	23 Jul - 30 Aug
Epilobium minutum	Small-flowered Willow Herb	1, 2, 4	Rock, FOR edge	18 Jun - 30 Aug
Gayophytum diffusum ssp. *parviflorum*	Spreading Gayophytum	3, 4, 6	Rock, burnt FOR	2 Jul - 30 Aug
Gayophytum humile	Dwarf Gayophytum	4	Rock	2 Jul
Orobanchaceae	**Broomrape Family**			
Orobanche uniflora	Naked Broomrape	5, 6	Rock	11 Jun
Papaveraceae	**Poppy Family**			
Dicentra uniflora	Steer's Head	5, 9	Rock	10 May - 18 May
Plantaginaceae	**Plantain Family**			
●*Plantago lanceolata*	English Plantain	1	FOR	27 Jun
●*Plantago major*	Common Plantain	1	FOR	27 Jun
Polemoniaceae	**Phlox Family**			
Collomia grandiflora	Grand Collomia	9	HRB	2 Jul
Collomia tinctoria	Staining Collomia	8	HRB	27 Jun
Gilia capitata ssp. *capitata*	Blue-headed Gilia	4, 5, 6, 7, 8	HRB	8 Jun - 1 Aug
Ipomopsis aggregata ssp. *formosissima*	Scarlet Gilia	4, 5	HRB	26 Jul - 14 Sept
Leptosiphon harknessii *Linanthus harknessii)*	Harkness' Flaxflower	4, 5, 8, 9	HRB, FOR edge	27 Jun - 12 Jul
Navarretia divaricata ssp. *divaricata*	Mountain Navarretia	4	Rock	27 Jun
Navarretia intertexta ssp. *intertexta*	Needle-leaved Navarretia	8	HRB	12 Jul
Navarretia sinistra ssp. *sinistra* *(Gilia sinistra* ssp. *sinistra)*	Smooth-leaved Gilia	8	HRB	12 Jul
Phlox gracilis	Pink Annual Phlox	4, 5, 6, 7, 8	Rock, HRB	10 May - 2 Jul
Polemonium carneum	Royal Polemonium	1, 2, 4	FOR	18 May - 18 Jun

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Polygonaceae	**Buckwheat Family**			
Eriogonum compositum var. *compositum*	Arrowleaf Wild Buckwheat	1, 6	FOR, Rock	12 Jul - 23 Jul
Eriogonum nudum var. *oblongifolium*	Naked Wild Buckwheat	7, 8, 9	Rock	2 Jul - 13 Aug
Eriogonum sphaerocephalum var. *halimioides*	Round-headed Wild Buckwheat	7, 8, 9	Rock	2 Jul - 1 Aug
Eriogonum umbellatum var. *glaberrimum*	Warner Mountains Sulphur Flower	5	Rock	1 Aug - 30 Aug
Eriogonum umbellatum var. *modocensis*	Modoc Sulphur Flower	3, 4, 6, 7, 8, 9	HRB, Rock	11 Jun - 30 Aug
Polygonum douglasii ssp. *douglasii*	Douglas' Knotweed	4, 7	Rock, burnt FOR	2 Jul - 14 Sept
Polygonum douglasii ssp. *spergulariiforme*	Fall Knotweed	4, 7	Rock	30 Aug - 14 Sept
Polygonum minimum	Leafy Knotweed	4, 6	Rock	27 Jun - 1 Aug
Polygonum polygaloides ssp. *kelloggii*	White-margined Knotweed	9	HRB	2 Jul
●*Rumex acetosella*	Sheep Sorrel	2, 4, 5	HRB, FOR edge	12 Jul
●*Rumex crispus*	Curly Dock	9	HRB	1 Aug
Portulacaceae	**Purslane Family**			
Claytonia perfoliata ssp. *perfoliata*	Miner's Lettuce	1, 2	FOR	11 Jun - 3 Jul
Claytonia rubra ssp. *rubra*	Red Miner's Lettuce	4, 5	Rock, HRB	10 May - 14 Jun
Claytonia sibirica	Candy Flower	1, 2, 4, 6, 7, 8	FOR, burnt FOR	11 Jun – 20 Sept
Lewisia nevadensis	Nevada Lewisia	5, 9	Rock	24 May - 14 Jun
Lewisia triphylla	Three-leaved Lewisia	4, 8, 9	Rock, HRB	31 May - 18 Jun
Montia chamissoi	Toad Lily	9	HRB	11 Jun
Ranunculaceae	**Buttercup Family**			
Actaea rubra	Baneberry	1, 2, 4	FOR	31May - 27 Jun
Anemone deltoidea	Western White Anemone	1, 2	FOR	2 Jun - 18 Jun
Anemone lyallii	Little Mountain Anemone	1, 2, 3, 4	FOR	10 May - 14 Jun
Aquilegia formosa	Western Columbine	1, 2, 3, 4, 5	FOR, HRB	8 Jun – 23 Jul
Cimicifuga elata var. *alpestris*	Tall Bugbane	1, 2	FOR	3 Jul - 30 Aug
Delphinium glaucum	Tower Delphinium	1, 2	FOR	23 Jul - 14 Sept
Delphinium nuttallianum	Two-lobe Larkspur	1, 2, 3, 4, 5, 6, 7	FOR, HRB	10 May - 18 Jun
Ranunculus occidentalis	Western Buttercup	9	HRB	11 Jun
Ranunculus orthorhynchus var. *orthorhynchus*	Birdfoot Buttercup	9	HRB	11 Jun
Ranunculus uncinatus	Little Buttercup	1	FOR	18 May
Thalictrum fendleri var. *fendleri*	Fendler's Meadow Rue	2, 4, 5	FOR	11 Jun
Rhamnaceae	**Buckthorn Family**			
Ceanothus velutinus	Snowbrush	6, 7, 8	burnt FOR	(seedlings only)
Rhamnus purshiana	Cascara	1	FOR	
Rosaceae	**Rose Family**			
Amelanchier alnifolia var. *semiintegrifolia*	Western Serviceberry	1, 2, 3, 4, 5	FOR, SHR	11 Jun - 18 Jun
Cercocarpus betuloides var. *betuloides*	Birch-leaf Mountain-mahogany	6	FOR edge	18 May
Fragaria vesca	Wood Strawberry	1, 2, 3	FOR	11 Jun - 3 Jul
Geum macrophyllum	Large-leaved Avens	2, 5	FOR edge	12 Jul
Holodiscus discolor	Oceanspray	1, 4, 5, 6, 7, 8	Rock, SHR	2 Jul - 13 Aug
Holodiscus microphyllus var. *microphyllus*	Rock Spiraea	4, 9	Rock, SHR	26 Jul - 13 Aug
Potentilla glandulosa ssp. *reflexa*	Sticky Cinquefoil	9	HRB	2 Jul
Potentilla gracilis var. *fastigiata*	Slender Cinquefoil	9	HRB	1 Aug
Prunus emarginata	Bitter Cherry	5, 7, 8	Rock, FOR edge	11 Jun
Prunus virginiana var. *demissa*	Western Choke Cherry	5, 8	SHR, FOR edge	11 Jun - 18 Jun
Rosa bridgesii	Bridge's Wild Rose	4, 9	FOR, HRB	2 Jul - 12 Jul

Family: Genus and Species	Family: A Common Name	Location	Habitat	Dates Seen in Flower
Rosa gymnocarpa	Wood Rose	1, 2, 3, 4, 5	FOR	2 Jul
Rubus leucodermis	Blackcap Raspberry	1	FOR	(fruit) 4 Aug
Rubus parviflorus	Thimbleberry	1, 7	FOR, burnt FOR	3 Jul - 23 Jul
Sanguisorba occidentalis	Annual Burnet	1, 8, 9	FOR, HRB	12 Jul
Rubiaceae	**Madder Family**			
Galium aparine	Goose Grass	6, 7	FOR	2 Jul
Galium triflorum	Sweet-scented Bedstraw	1, 5	FOR edge	12 Jul
Saxifragaceae	**Saxifrage Family**			
Heuchera cylindrica var. *alpina*	Lava Heuchera	4, 5, 7	Rock	11 Jun - 2 Jul
Lithophragma campanulatum	Hill Star	1, 4, 5, 8	FOR, HRB	11 Jun - 2 Jul
Lithophragma glabrum	Bulblet Woodland Star	5, 9	Rock, HRB	18 May
Lithophragma parviflorum var. *parviflorum*	Small-flowered Woodland Star	1, 2, 5, 6	FOR, HRB	11 Jun - 18 Jun
Mitella diversifolia	Angle-leaved Mitrewort	1	FOR	11 Jun
Mitella trifida	Three-toothed Mitrewort	1, 2, 4	FOR	11 Jun - 18 Jun
Saxifraga aprica	Sierra Saxifrage	5	HRB	11 Jun
Tellima grandiflora	Large Fringe Cups	1, 2	FOR	18 Jun
Scrophulariaceae	**Snapdragon Family**			
Castilleja pruinosa	Frosty Paintbrush	4, 6, 7	Rock, FOR edge	11 Jun - 2 Jul
Castilleja tenuis	Hairy Owl Clover	9	HRB	2 Jul
Collinsia linearis	Narrow-leaved Collinsia	4, 6, 7, 8	HRB, FOR edge	11 Jun - 2 Jul
Collinsia parviflora	Small-flowered Collinsia	1, 2, 4, 5, 6, 8	FOR, HRB	10 May - 18 Jun
Mimulus breweri	Brewer's Monkey Flower	4	Rock	18 Jun
Mimulus guttatus	Seep-spring Monkey Flower	8, 9	HRB	11 Jun - 2 Jul
Orthocarpus imbricatus	Mountain Owl Clover	4, 5, 8, 9, 10	HRB	31 May - 30 Aug
Penstemon deustus var. *pedicellatus*	Hot Rock Penstemon	7, 8	Rock	11 Jun - 8 Jul
Synthyris reniformis	Snow Queen	1	FOR	24 May - 8 Jun
●*Verbascum thapsus*	Woolly Mullein	6, 7	SAV, burnt FOR	1 Aug - 30 Aug
Veronica americana	American Speedwell	1, 9	HRB	11 Jun - 1 Aug
Veronica serpyllifolia ssp. *humifusa*	Thyme-leaved Speedwell	5	FOR edge	12 Jul
Valerianaceae	**Valerian Family**			
Plectritis congesta	Rosy Plectritis	4, 5, 6	Rock, HRB	11 Jun - 2 Jul
Valeriana sitchensis ssp. *sitchensis*	Mountain Valerian	1, 4	FOR, HRB	18 Jun - 2 Jul
Violaceae	**Violet Family**			
Viola adunca	Western Dog Violet	1	FOR	18 Jun
Viola bakeri	Baker's Violet	4, 5	HRB, FOR edge	8 Jun
Viola glabella	Stream Violet	1, 2, 3, 4	FOR	8 Jun - 11 Jun
Viola sheltonii	Shelton's Violet	5, 6	FOR	10 May - 18 Jun
FLOWERING PLANTS: MONOCOTS				
Cyperaceae	**Sedge Family**			
Carex hoodii	Hood's Sedge	3, 4, 5, 9	HRB	23 Jul
Carex pachystachya	Chamisso Sedge	9	HRB	(fruit) 30 Aug
Scirpus microcarpus	Small-fruited Bulrush	9	HRB	2 Jul
Juncaceae	**Rush Family**			
Juncus ensifolius	Dagger-leaved Rush	9	HRB	23 Jul
Liliaceae	**Lily Family**			
Allium falcifolium	Sickle-leaved Wild Onion	1	FOR	27 Jun
Allium siskiyouense	Siskiyou Wild Onion	4, 5, 6, 7	Rock	18 Jun - 27 Jun
Calochortus monophyllus	Yellow Star Tulip	8	Rock	18 Jun
Calochortus tolmiei	Pussy Ears	7	SAV	8 Jun
Camassia quamash ssp. *breviflora*	Small-flowered Common Camas	4, 5, 8, 9	Rock, HRB	31 May - 18 Jun
Clintonia uniflora	Queen Cup	2	FOR	8 Jul
Dichelostemma capitatum ssp. *capitatum*	Blue Dicks	7	SAV	8 Jun

Family: Genus and Species	Family: A Common Name	Location	Habitat	Dates Seen in Flower
Dichelostemma congestum	Oocow	6, 7	HRB	18 Jun
Erythronium klamathense	Klamath Fawn Lily	2, 4, 5, 8, 9, 10	HRB, FOR, rock	10 May - 18 Jun
Fritillaria affinis var. *affinis*	Checker Lily	3, 4, 6, 7	HRB, FOR	2 Jun - 18 Jun
Fritillaria atropurpurea	Spotted Mountain Bells	4, 5	HRB	2 Jun - 18 Jun
Fritillaria pudica	Yellow Bells	4, 5, 6	HRB, Rock	10 May - 8 Jun
Lilium washingtonianum ssp. *purpurascens*	Washington Lily	1, 4, 9	FOR	(fruit) 30 Aug
Maianthemum racemosum ssp. *amplexicaule* (*Smilacina racemos.*)	Feathery False Solomon's Seal	1, 2, 3, 4, 5, 6, 7, 10	FOR	13 May - 18 Jun
Maianthemum stellatum (*Smilacina stellatum*)	Star False Solomon's Seal	1, 2, 3, 4, 5, 6, 7, 10	FOR	13 May - 18 Jun
Prosartes hookeri (*Disporum h.*)	Hooker's Fairy Bells	1, 2, 3, 10	FOR	18 Jun
Trillium ovatum ssp. *ovatum*	Western Trillium	1, 2, 3, 4, 10	FOR	8 Jun - 18 Jun
Trillium albidum	Giant Trillium	5	HRB	31 May
Triteleia hyacinthina	White Brodiaea	4, 7	Rock, SAV	8 Jun - 18 Jun
Toxicoscordion venenosum var. *venenosum* (*Zigadenus v.* var. *v.*)	Death Camas	8	HRB	2 Jul
Veratrum californicum var. *californicum*	California Corn Lily	9	HRB	12 Jul
Orchidaceae	**Orchid Family**			
Calypso bulbosa	Calypso Orchid	1	FOR	18 May
Cephalanthera austinae	Phantom Orchid	1, 3	FOR	12 Jul
Corallorhiza striata	Striped Coral Root	1, 2, 3	FOR	18 Jun
Piperia unalascensis	Short-spurred Rein Orchid	1, 4	FOR	12 Jul
Platanthera leucostachys	White-flowered Bog Orchid	9	HRB	12 Jul
Poaceae	**Grass Family**			
Achnatherum lemmonii	Lemmon's Needlegrass	4	Rock	8 Jun
Agrostis exarata	Western Bent-grass	8, 9	HRB	12 Jul - 23 Jul
●*Agrostis stolonifera*	Creeping Bent	1	FOR	(fruit) 1 Aug
●*Arrhenatherum elatius*	Tall Oat Grass	6, 7, 9	HRB, burnt FOR	12 Jul - 1 Aug
●*Bromus briziformis*	Rattlesnake Brome	6	burnt FOR	8 Jul
Bromus carinatus var. *carinatus*	California Brome	1, 4, 5, 7, 8	FOR, HRB	2 Jul
●*Bromus tectorum*	Cheat Grass	6, 7	HRB	2 Jul
●*Cynosurus echinatus*	Hedgehog Dogtail	8	HRB	2 Jul
Deschampsia danthonioides	Annual Hairgrass	4, 5	FOR	2 Jul
Deschampsia elongata	Slender Hairgrass	1, 5	HRB, FOR edge	12 Jul
Elymus elymoides ssp. *californicus*	Squirreltail	1	FOR	12 Jul
Elymus elymoides ssp. *elymoides*	Squirreltail	4	HRB	2 Jul
Elymus glaucus ssp. *glaucus*	Western Ryegrass	5, 9	HRB, FOR edge	12 Jul
Festuca californica	California Fescue	1	FOR	12 Jul
Festuca subulata	Bearded Fescue	1, 2, 5	HRB, FOR edge	2 Jul - 12 Jul
Glyceria elata	Fowl Mannagrass	9	HRB	13 Aug
Melica aristata	Bearded Melicgrass	7	burnt FOR	(fruit) 1 Aug
Melica fugax	Small Oniongrass	9	HRB	18 May
Melica subulata	Alaska Oniongrass	1, 2	FOR	18 Jun - 2 Jul
●*Phleum pratense*	Cultivated Timothy	9	HRB	13 Aug
●*Poa pratensis* ssp. *pratensis*	Kentucky Bluegrass	5, 9	HRB, FOR edge	12 Jul
Poa secunda ssp. *secunda*	One-sided Bluegrass	4, 5	HRB, FOR edge	2 Jul
●*Thinopyrum intermedium* (*Agropyron intermedium*)	Intermediate Wheatgrass	1	HRB	(fruit) 14 Sept
●*Triticum aestivum*	Wheat	8	burnt SAV	(fruit) 14 Sept