

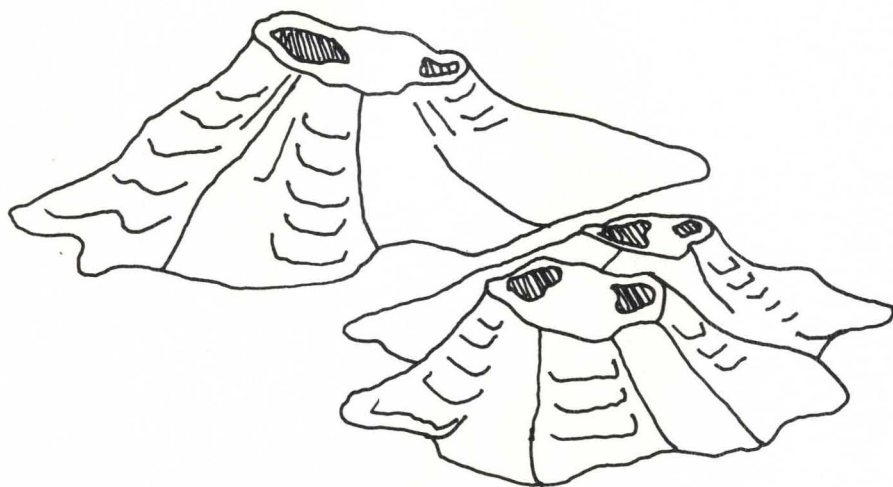
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COMMON PLANTS OF CRATERS OF THE MOON NATIONAL MONUMENT

BY KARL A. URBAN

NPS Photo by David Haskell



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BY KARL A. URBAN

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preservation and interpretation of
the scenic and scientific features
of the Monument.*

ABOUT THIS BOOKLET

NPS Photo by Aaron Gallup

THE AUTHOR, Karl Urban, received an M. S. degree in botany from the University of Idaho in 1968. His first seasonal employment with the National Park Service began at Craters of the Moon National Monument in 1966. A camera enthusiast, Mr. Urban has spent many wonderful hours in photographing the Monument—its volcanic formations, its wildlife, its plant life, and finally, its many moods. The author is particularly interested in issues concerning the environment, the conservation of our natural resources, and the preservation of our natural heritage. At the present time he teaches general botany and general biology courses at Blue Mountain Community College in Pendleton, Oregon.



THIS BOOKLET is designed to answer questions asked by thousands of visitors about the wildflowers of Craters of the Moon.

"What was that little pink flower I saw along the nature trail?"

"What are those little silvery plants all over the cinder cones and did you plant them?"

"What is that yellow-flowered shrub?"

"What is that large yellow wildflower near the highway . . .?"

This publication represents many years of answering those questions and is an attempt to answer future questions regarding the plant life of the Monument as well. While answering many questions, it is also designed to provoke thoughts about Craters of the Moon and its unanswered questions—of which there are many.

CREDITS

The cooperative efforts of many individuals made the publication of this booklet possible. Greatly appreciated was the assistance rendered by Robert Wunner, who completed the Monument's plant collection during the summer of 1967. Valuable criticism and suggestions were offered by Dennis Carter, Park Naturalist, who also coordinated publishing arrangements through the Craters of the Moon Natural History Association.

Most of the photos in this booklet are the author's own and were taken with an Exakta VX1000 35 mm camera fitted with a Domiron 50/2 lens. The film used was Ektachrome. In some cases, photos of superior quality were selected from the NPS photo file. Credits for those photos are listed in the text.

Reference books consulted in writing the text included:

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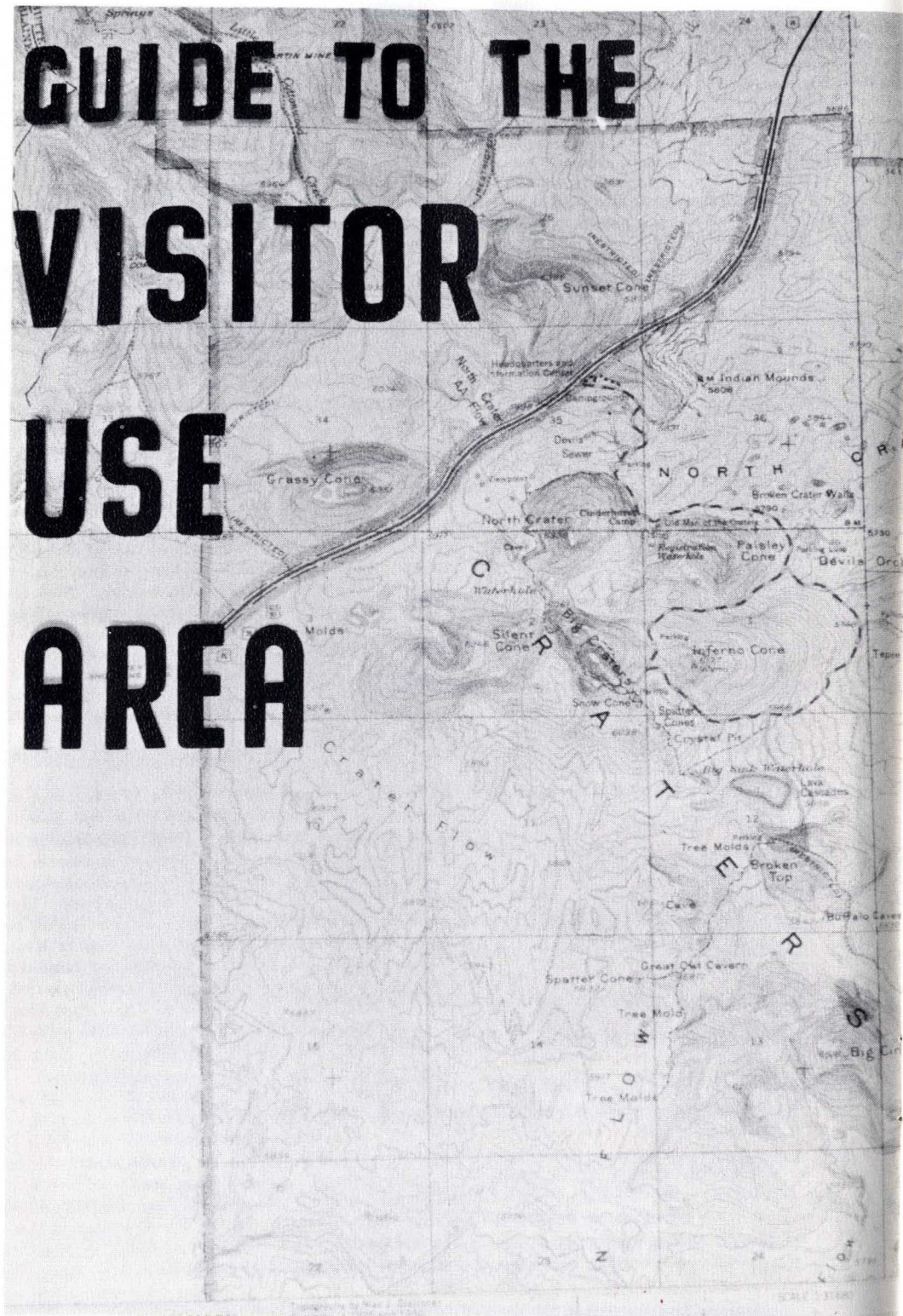
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The broken surface of the lava flows . . . reflects human erosion.

WILDFLOWERS, CONSERVATION, AND YOU

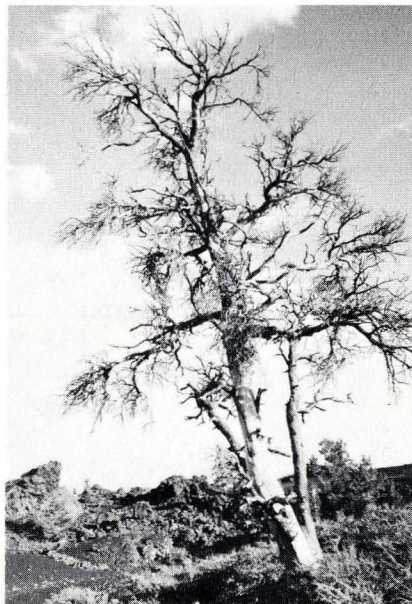
At Craters of the Moon an intricate balance of nature exists. Each rock, crevice, wildflower, and animal is a part of that balance or "system," and any alteration in the components of this delicate system has long-lasting and often irreparable effects.

Man's impact upon the natural features of the Monument is evident everywhere. The broken surface of the lava flows along the trails reflects human erosion; the undesirable non-native plants growing along the roads indicate man's inability to control the chain of altering processes he has initiated; the dead limber pines (evident along the loop drive), which were poisoned in an attempt to control the parasitic dwarf mistletoe, and the absence of limber pine seedlings in the same areas attest to man's inability to imitate nature's remarkable patterns in this most unusual environment.

And so, the scars of human activity remain—a negative memorium now part of America's natural heritage.

Whether your interests lie in the plant life, the animal life, or the volcanic features of the Monument, as you tour Craters of the Moon you become a part of nature's delicate system. Your visit to Craters of the Moon can be enhanced by keeping park rules and regulations in mind. Since future generations, too, have the right to see and enjoy the unique volcanic and biological features of the Monument, THE COLLECTION OF SPECIMENS OF ANY TYPE—PLANTS, ANIMALS, OR ROCKS—IS UNLAWFUL. Observe and obey the signs that have been erected to help preserve the natural features and to protect your safety.

Although it survived centuries of struggle against disease, parasites, and weather, this limber pine now symbolizes man's inability to match nature's delicate balance.



Enjoy your visit to Craters of the Moon by taking time to appreciate the many wonders unique to this area. And during your visit remember that the parks are for the enjoyment and benefit of not only your generation but of future generations as well.

THE CHANGING LANDSCAPE

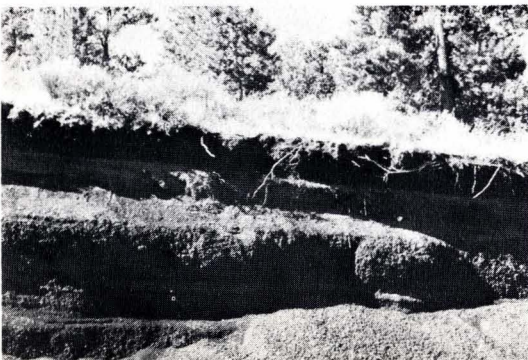
From early May to late September, the wildflowers of Craters of the Moon carpet the seemingly barren lava fields with first one delightful color and then another. Although the "healing" touches of nature become evident from the time the snow melts until the unique volcanic formations are again covered with snow, the most spectacular displays of wildflowers coincide with periods of precipitation. Most of the delicate annual plants bloom during late May and early June, when moisture coming from the melting snow is supplemented with occasional rains. However, as summer progresses and the moisture supply dwindles, only the most drought-resistant species continue to grow and bloom. As the autumn rains begin, only the tiny yellow blossoms of the sagebrush and rabbitbrush remain.

The composition of the plant communities of the Monument is remarkably diverse. Although the terrain clearly illustrates the catastrophic history of the area, species of all stages of the natural successional

sequence are still evident. Pioneer species—those which first invade the lava fields—are found in abundance. Lichens, mosses, and ferns abound in those microhabitats relatively unaltered since the Great Rift last erupted. Where sufficient soil development has occurred, the final or climax vegetative communities cloak the eroded cone slopes and flows with shrubs more typical of the Northern Desert.

A profusion of rabbitbrush blossoms heralds the end of summer and another season of wildflower displays at Craters of the Moon.

Soil layers within the cinder cones provide nutrients for plant life.



Further diversity results from the transition that occurs from the montane and riparian meadows of the Little Cottonwood Creek drainage to the semi-arid lava plains of the central and southern regions of the Monument. Douglas fir (*Pseudotsuga menziesii*) forests and quaking aspen (*Populus tremuloides*) thickets extend down the Little Cottonwood Canyon to the northernmost cinder cones of the lava plain. In this area are found many plants typical of coniferous forest vegetative zones.

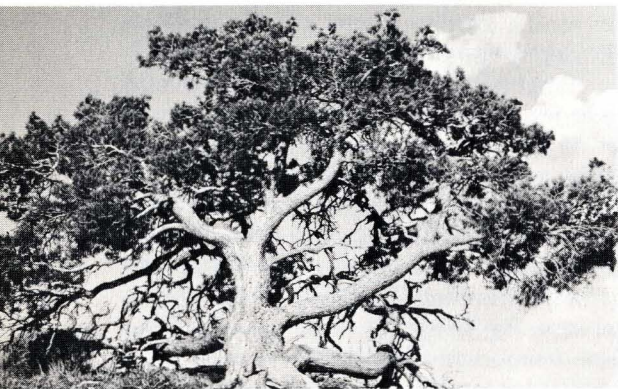
On the lava plain, the cinder garden habitat is most apparent. The open cinder cone slopes are covered with masses of low-growing herbs that add color to the drab scene. Each wildflower species of the cinder gardens exhibits some peculiar adaptation for this hot, dry, wind-swept habitat. Among the most common cinder garden plants are the cushion eriogonum or dwarf buckwheat (*Eriogonum ovalifolium* var. *depressum*), Douglas chaenactis (*Chaenactis douglasii*), scorpion-weed (*Phacelia hastata*), bitterroot lewisia (*Lewisia rediviva*), and dwarf monkeyflower (*Mimulus nanus*). Although most of the cinder garden plants have no adaptations for conserving moisture and complete their life cycles before the middle of summer, the silvery leaf clusters of the dwarf buckwheat persist throughout the season—withstanding even the drought periods of late summer. When sufficient moisture is available in the cinder gardens, the dwarf monkeyflower blankets the black cinder slopes with a profusion of magenta blossoms. By late June, however, the blossoms fade and the colorful display disappears for another year.

The absence of soil and moisture on the barren basaltic flows renders this habitat unsuitable for higher forms of plant life. However, in the cracks, joints, and depressions in which soil has accumulated, plant life is readily evident. Plants of the joint habitat include dwarf goldenweed (*Haplopappus nanus*), and hairy goldaster (*Chrysopsis villosa*). Common in the shallow crevices are scabland penstemon (*Penstemon deustus*), gland cinquefoil (*Potentilla glandulosa*), and fernleaf fleabane (*Erigeron compositus*). Deep crevices, supporting a myriad of species, provide wind protection, soil moisture, and lower temperatures. In the deep crevices grow the Christmas fern (*Polystichum scopulinum*), tansybush or fernbush (*Chamaebatiaria millefolium*), bush rockspirea

Vegetative patterns clearly indicate stream courses in the Little Cottonwood Creek section of the Pioneer Mountains.

In the cinder gardens the silvery leaf clusters of the dwarf buckwheat persist throughout the season.





Limber pine stands grow where moisture conditions are favorable.

If no future volcanic activity occurs at Craters of the Moon, the climax plant communities will replace the more unique communities found today.



(*Holodiscus dumosus*), and Lewis mockorange or syringa (*Philadelphus lewisii*).

2
Slowly the landscape of the lava flows and cinder cones is changing. As organic matter accumulates in the cinder gardens and on the lava flows, other plants invade the habitats previously occupied by the smaller herbaceous forms. On the north-facing slopes of the cinder cones and in other areas where moisture conditions are favorable, the limber pine (*Pinus flexilis*) predominates. As the cones weather and organic material accumulates beneath the trees, the relatively open forest floors of the pine stands close as shrubs begin to invade the spaces between the trees. Similar changes occur in the unique habitats of the lava flows.

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Day by day, year by year, and century by century, the landscape of Craters of the Moon National Monument is altered. Eventually, as the volcanic formations erode and the unique plant habitats disappear to blend imperceptibly with the gray-green mantle of the adjacent Snake River Plain, the region once so drastically altered by the eruptions of the Great Rift will be stabilized again.

HOW TO USE THIS BOOK

The wildflowers pictured in this publication are arranged according to flower color. Thus, this booklet can be used easily when the wildflowers you wish to identify are blooming. Section one includes white-, cream-, and beige-colored flowers; section two includes yellow-flowered species; pink-flowered species may be found in section three; red flowers in section four; and purple and blue flowers in section five.

In reading the brief descriptions of the wildflowers, you will notice an enlargement index adjacent to the scientific name of the wildflower. This guide number indicates the magnification of the flower shown in the photograph in comparison with the actual size of the flower. Thus, " $(1/2 \text{ X})$ " next to the scientific name of the dwarf monkeyflower, *Mimulus nanus*, indicates that the size of the monkeyflower shown in the photo is approximately one-half the actual size of the wildflower.

By carefully reading the simplified descriptions given in this booklet, you will be able to identify wildflowers not in bloom. A comparison of descriptions between and among shrubby species should enable you to correctly identify the specimen in question.

As you discover the fascinating world of the wildflowers of Craters of the Moon, remember that the plants are protected by law and NO COLLECTION IS PERMITTED. The plants, animals, and volcanic features are a part of America's great natural heritage which is being protected and preserved for future generations by your National Park Service.

Happy botanizing!

Arco, Idaho
August 1970

SEGOLILY MARIPOSA White

▷ *Calochortus nuttallii* ($\frac{1}{2}$ X)
Lily Family

This plant, the state flower of Utah, has an edible bulb. It is a common wildflower of sagebrush zones.

Flowers: usually one per stem; about $1\frac{1}{2}$ inches in diameter

Flowering Period: late June to early July

Plants: leaves grass-like; flowering stalk slender

Habitat: crevices of older lava flows; sagebrush zones of older cinder cones



▽
LEWIS MOCKORANGE White

Philadelphus lewisii ($\frac{1}{5}$ X)
Hydrangea Family

The mockorange, or syringa, is the state flower of Idaho. Its flowers are very fragrant.

Flowers: commonly 4 petals per flower; flowers 1 inch in diameter

Flowering Period: early July

Plants: shrubs with gray-brown bark; usually less than 4 feet tall; leaves bright green, oval in shape, and borne opposite each other on the branches

Habitat: found in the deep crevices of the more recent flows; particularly abundant along the North Crater Flow Trail



BITTERROOT White

Lewisia rediviva ($\frac{1}{3}$ X)
Purslane Family

The stout taproot of the bitterroot was boiled, stripped of bark, and eaten by the Northern Shoshoni Indians.

This plant is the state flower of Montana, but in that state the flowers are usually pink. It is possible that differences in soils account for the variable flower color.

Flowers: circular; consisting of about 15 petals, each about 1 inch long; stamens numerous

Flowering Period: mid-June to early July; open during the daytime

▷ *Plants:* growing appressed to the cinders; stems reddish, weak, less than 1 inch long; leaves gray-green, fleshy, and withering before the flowers bloom

Habitat: open slopes of cinder cones; North Crater, Paisley and Inferno Cones, Trench Mortar Flat

BUSH ROCKSPIREA

Beige

- ▷ *Holodiscus dumosus* ($\frac{1}{6}$ X)
Rose Family

Flowers: about $\frac{1}{8}$ inch in diameter; borne in dense terminal clusters which persist for several months; petals usually 5

Flowering Period: late June to early July

Plants: shrubs with grayish-red bark; usually about 2 feet tall; leaves wedge-shaped and about $\frac{3}{4}$ inch long

Habitat: deep crevices of pahoehoe flows; campground area



TANSY BUSH

White

Chamaebatiaria millefolium
($\frac{1}{5}$ X)
Rose Family

The leaves of the tansy bush resemble the fronds (leaves) of ferns. When this shrub blooms in mid-July, the lava flows are bathed in its peculiar fragrance. The Indians rubbed the aromatic leaves of this plant over their bodies to repel certain insects.

Flowers: about $\frac{1}{2}$ inch in diameter; in cone-shaped clusters at the ends of the branches; petals 5; stamens numerous

Flowering Period: mid-July to mid-August

Plants: shrubs with pinnately-dissected leaves; generally less than 4 feet tall

Habitat: deep crevices of the pahoehoe flows and along margins at the bases of the cinder cones



DESERT

White to Pink

EVENING PRIMROSE

Oenothera caespitosa ($\frac{1}{6}$ X)
Evening Primrose Family

Flowers: large, diameter approximately 3 inches; petals 4, each with a single shallow notch on the margin; stamens 8; pistil with 4 prominent stigma lobes

Flowering Period: early to mid-June

Habitat: along access road to group camping site on Sunset Cone



▼ **WESTERN or SASKATOON SERVICEBERRY** White

Amelanchier alnifolia ($\frac{1}{3}$ X)
Rose Family

The tasty fruits of the serviceberry are shaped like small apples but are deep purple when ripe (usually in late July). This shrub is so heavily browsed by the mule deer of the Monument that it rarely bears fruits.

Flowers: 1 to $1\frac{1}{2}$ inches in diameter; petals usually 5, very lax

Flowering Period: late May to early June

Fruits: apple-shaped; dark purple when ripe (late July); $\frac{1}{2}$ to $\frac{3}{4}$ inch in diameter

Plants: shrubs with brown bark; usually less than eight feet tall

Habitat: occasional in limber pine stands and sagebrush zones of the cinder cones; east edge of the Visitor Center



▼ **WESTERN YARROW** White

Achillea millefolium
spp. *lanulosa* ($\frac{1}{6}$ X)
Sunflower Family

Flowers: in small heads with 3 to 5 rays per head; heads aggregated in flat-topped clusters

Flowering Period: late July to early August

Plants: with fern-like leaves; usually less than 2 feet tall

Habitat: disturbed sites on cinder cone slopes; Visitor Center area



▽
SQUAW CURRANT Beige
to Pink

Ribes cereum ($\frac{1}{4}$ X)
Gooseberry Family

The fruit of the squaw currant is edible and is an important food for the birds of the Monument. This shrub usually grows in habitats that are rich in acidic organic material supplied by the decomposition of limber pine needles.

The Indians dried the fruits of the squaw currant, crushed them, and mixed them with dried meats in making pemmican.

Flowers: tubular; in dense axillary clusters

Fruits: mature in mid-July; bright red at maturity; edible

Flowering Period: early June

Plants: shrubs usually less than 3 feet tall; leaves orbicular, lobed, gray-green, and sticky

Habitat: growing in association with limber pines on the slopes of cinder cones

NPS Photo by Edgar Menning



▽
SCABLAND PENSTEMON White
to Pink
Penstemon deustus ($\frac{1}{7}$ X)
Snapdragon Family

This wildflower is one of the most abundant plants of the shallow crevice habitat of the pahoehoe lava flows. The odor of the flower is particularly displeasing on warm days.

Fowers: bilabiate (2-lipped); rarely exceeding $\frac{3}{4}$ inch in length; stamens 4

Flowering Period: mid-June to mid-July

Habitat: widely distributed in the shallow crevices of the pahoehoe lava flows



NPS Photo by Edgar Menning

▽ LAVA PHLOX

Beige

Leptodactylon pungens (1/2 X)
Phlox Family

Although the flowers of the lava phlox appear wilted during the day, their fragrant flowers are open during the evening hours.

Flowers: funnel-shaped with 5 lobes

Flowering Period: late June

Plants: small shrubs (usually less than 10 inches tall) with spine-like leaves and woody stems

Habitat: slopes of older cinder cones and along flow margins

COYOTE TOBACCO

White

Nicotiana attenuata (1/5 X)
Nightshade Family

The foliage of this plant was dried, crushed, and smoked by the Indians who early discovered its more pleasurable qualities.

Flowers: funnel-shaped; about 1 1/2 inches long

Flowering Period: mid- to late-August

Habitat: cinder cone slopes; Sunset Cone; Broken Top



NPS Photo by Edgar Menning

▽ CRYPTANTHA

White

Cryptantha torreyana (1/5 X)
Borage Family

Flowers: cup-shaped with 5 prominent lobes; diameter 1/8 inch; aggregated in dense terminal curved clusters

Flowering Period: late June

Plants: usually less than 6 inches tall; foliage grayish-green and covered with short spiny hairs

Habitat: cinder cones; Devil's Orchard and the Spatter Cones area

**ARROW-LEAVED
BALSAMROOT**

Yellow

Balsamorhiza sagittata ($\frac{1}{10}$ X)
Sunflower Family

Nearly all parts of the balsamroot were used for food by the Northern Shoshoni Indians. The leaves, stems, and roots were either eaten raw or boiled. The seeds were roasted or were occasionally ground into meal.

Flowers: aggregated in sunflower-like heads about 3 inches in diameter; borne on leafless stalks rising 1 to 2 feet above the arrow-shaped leaves

Flowering Period: late May to early June

Habitat: commonly associated with climax communities of sagebrush and rabbitbrush; slopes of Sunset Cone; Pioneer Mountain section of the Monument

**BLAZINGSTAR
MENTZELIA**

Yellow

Mentzelia laevicaulis ($\frac{1}{4}$ X)
Loasa Family

This night-blooming wildflower grows from a rather coarse rosette of basal leaves which have a waxy texture. The flowers are probably pollinated by nocturnal moths.

Flowers: large (diameter about 4 inches); nocturnal; with 5 petals and 5 petal-like stamens; regular stamens numerous

Plants: $2\frac{1}{2}$ feet tall at maturity; leaves oblong and lobed, about 3 inches long

Flowering Period: night and early morning hours, early July through August

Habitat: cinder cones and flats; road cuts of Highway 20 near the Visitor Center; Trench Mortar Flat



▽

SALSIFY

Yellow

Tragopogon dubius ($\frac{1}{2}$ X)
Sunflower Family

The huge "seed head" of the salsify resembles a gigantic dandelion. This plant has edible roots which were boiled by the Indians in making soups.

Flowers: usually in single heads; consisting entirely of ray flowers

Flowering Period: July

Plants: less than 2 feet high with linear leaves and milky stems

Habitat: cinder cone slopes



BIG SAGEBRUSH

Yellow

Artemisia tridentata ($\frac{1}{12}$ X)
Sunflower Family

This shrub is one of the most common plants of the Snake River Plain. As aging of the lava flows and cinder cones occurs, this shrub increases in abundance. It will eventually dominate the landscape of the Monument. Big sagebrush is aromatic and it flowers in September.

Flowers: inconspicuous; in dense terminal, elongated clusters

Plants: shrubs; 3 to 6 feet in height

Leaves: wedge-shaped with 3 prominent teeth at the end; overall length about $1\frac{1}{2}$ inches; grayish-green in color

Habitat: slopes of older cinder cones and on older lava flows

RUBBER

Yellow

RABBITBRUSH

Chrysothamnus nauseosus ($\frac{1}{7}$ X)
Sunflower Family

This plant is host for numerous insects. The rubbery stem was chewed by the Indians for the purpose of quenching thirst.

Flowers: small; in flaring clusters at the tips of the branches

Flowering Period: mid-August through September

Plants: shrubs with gray-green linear leaves; usually less than 2 feet tall within the Monument

Habitat: generally associated with sagebrush on the slopes of the older cinder cones; cinder flats of Inferno Cone and Devil's Orchard



ANTELOPE

Yellow

BITTERBRUSH

Purshia tridentata ($\frac{1}{2}$ X)
Rose Family

This shrub is a preferred browse species of the mule deer that roam the lava flows during the summer months. During June the fragrant odor of this shrub envelopes the lava flows of the Monument.

Flowers: about $\frac{1}{4}$ inch in diameter; 5 petals

Flowering Period: early June

Habitat: abundant on the slopes of the cinder cones; occasional on pahoehoe flows





▽
DWARF BUCKWHEAT Pale Yellow to Red

Eriogonum ovalifolium
variety *depressum* ($\frac{1}{8}$ X)
Buckwheat Family

Because the dwarf buckwheat plants appear to be regularly spaced, many park visitors think that these wildflowers have been planted by park personnel. Actually, the regular spacing of the plants is natural and probably results from competition for the moisture supply of the cinder garden.

Flower Shape: flower clusters are pom-pom shaped

Flowering Period: early June; some blossoms persisting until late July

Plants: closely appressed to the cinder slopes, forming small mats of silvery leaf clusters

SULFUR BUCKWHEAT Yellow

Eriogonum umbellatum ($\frac{1}{10}$ X)
Buckwheat Family

Flowers: flower clusters flat-topped above a whorl of bracts; flowering stalks usually less than 10 inches tall

Flowering Period: Late June to August

Plants: somewhat shrubby; forming mats of red and green leaves

△



▽
CUSHION ERIOGONUM Yellow

Eriogonum ovalifolium ($\frac{1}{10}$ X)
Buckwheat Family

Flowers: flower clusters pom-pom shaped; clusters $\frac{3}{4}$ to 1 inch in diameter; flowering stalks about 10 inches long

Flowering Period: mid-July

Plants: forming mats of silvery leaves; leaves usually more than $\frac{1}{2}$ inch long



**GLAND
CINQUEFOIL**

Pale Yellow

Potentilla glandulosa ($\frac{1}{10}$ X)
Rose Family

Flowers: with numerous stamens;
petals 5, about $\frac{1}{2}$ inch long

Flowering Period: early- to mid-
June

Plants: with leaves that look like
strawberry plants; producing
flowering stalks between 6
inches and 12 inches in height

Habitat: shallow crevices of pa-
hoehoe lava flows



**DWARF
MISTLETOE**

Greenish Yellow

Arceuthobium campylopodum
forma cyanocarpum ($\frac{1}{3}$ X)
Mistletoe Family

This parasitic plant obtains both photosynthates (sugars) and water from its host tree, the limber pine. Although the dwarf mistletoe rarely kills the limber pine, it sometimes causes abnormal growth responses which may result in the stunting of the tree or in the production of huge clumps of branches called witches' brooms.

In late August the berries of this plant begin to swell and eventually eject the sticky seeds which adhere to the needles of adjacent trees. This perpetuates the dwarf mistletoe infection.

Flowers: inconspicuous; male and female

Flowering Period: late June to early July

Fruiting Period: August

Plants: appearing as small, jointed yellowish shoots emerging from the limbs of limber pines

Habitat: distributed with the limber pine



FLANNEL MULLEIN Yellow

Verbascum thapsus ($\frac{1}{5}$ X)
Snapdragon Family

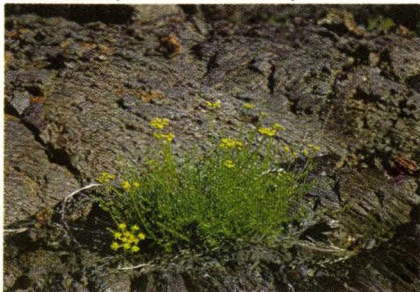
Flowers: 5-lobed; about $\frac{1}{2}$ inch in diameter; borne in dense spike-like clusters

Flowering Period: August

Plants: biennial; 4 to 6 feet high; dead stalks persisting for several years

Habitat: disturbed sites on cinder cones; Broken Top; common along roadsides and in disturbed places

NPS Photo by Warren Van Camp



▽
DESERT PARSLEY Yellow

Cymopterus terebinthinus ($\frac{1}{6}$ X)
Carrot Family

Because the leaves of the desert parsley contain considerable quantities of aromatic oils which taste somewhat like dill, the foliage of this plant was used as a salad green by the Indians.

Flowers: borne in umbels about 3 inches above the finely dissected leaves; very small

Flowering Period: early June

Plants: with stout taproots; about 4 inches tall

Habitat: widely distributed in shallow crevices of pahoehoe flows; sparsely distributed on the slopes of cinder cones



▽
GOLDEN CURRANT Yellow

Ribes aureum ($\frac{1}{2}$ X)
Gooseberry Family

Like its relative the squaw currant, the golden currant is edible. This shrub is usually found growing in pressure ridges and crevices of older pahoehoe flows.

Flowers: tubular; in axillary clusters

Fruits: ripe in late July; orange at maturity; edible

Flowering Period: early June

Plants: leaves shiny, deep green, palmately 3-5 lobed; shrubs, usually less than 3 feet high

Habitat: pressure ridges and deep crevices of older flows; Devil's Orchard, Sunset Cone, Camp-ground

HAIRY GOLDASTER Yellow

Chrysopsis villosa ($\frac{1}{5}$ X)
Sunflower Family

Flowers: in heads about 1 inch in diameter; heads numerous

Flowering Period: early August

Plants: perennial from a deep taproot; leaves spatula-shaped

Habitat: crevices of North Crater Flow and Buffalo Caves Flow

Δ



▽
**COMMON
SUNFLOWER** Yellow

Helianthus annuus ($\frac{1}{2}$ X)
Sunflower Family

Flowers: in heads about $2\frac{1}{2}$ inches in diameter; heads usually solitary on the stems

Flowering Period: August-September

Plants: usually from 2 feet to 4 feet in height; foliage deep green with black sticky hairs; leaves approximately heart-shaped

Habitat: common along roadsides and other disturbed areas



▽
**PRICKLY
PEAR CACTUS** Yellow, Orange,
Red

Opuntia polyacantha ($\frac{1}{4}$ X)
Cactus Family

Despite its covering of spine-like leaves, the prickly pear is an important food for many desert animals. The fruits of this plant were a favorite food of the Indians.

Flowers: about 4 inches in diameter; petals about 1 inch long, numerous

Flowering Period: late June

Habitat: older pahoehoe flows; slopes of Sunset Cone

**DOUGLAS
CHAENACTIS or
DUSTY MAIDEN**

Pink

Chaenactis douglasii (1/3 X)
Sunflower Family

During its first year of growth, this wildflower looks like an intricate rosette of leaves closely appressed to the cinder cone slopes. This "snowflake-like" rosette grows into a rather coarse plant during its second year.

Flowers: aggregated in a head-type inflorescence; disk flowers tubular and rarely exceeding 1/2 inch in length

Flowering Period: early July to mid-August

Plants: with finely dissected leaves; usually less than 6 inches tall

Habitat: distributed throughout the Monument on the slopes of the cinder cones

WIRE LETTUCE

Pink

Stephanomeria tenuifolia (1/6 X)
Sunflower Family

This unusual wildflower resembles a clump of fragile dead stems during most of the growing season. However, it seems to come to life when its delicate pink flowers open in late July.

Flowers: in heads of 5 delicate, pink, ray flowers

Flowering Period: late July

Plants: much branched, with fragile stems, usually about 6 inches high; leaves reduced, thread-like

Habitat: shallow crevices of pahoehoe flows; occasional on slopes of cinder cones; Cave Area Trail



▽ NPS Photo by Edgar Menning

WILD ONION

Pink to
White

Allium tolmiei (1/3 X)
Lily Family

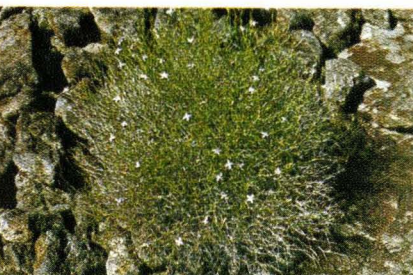
Like many other members of the lily family, the bulb of the wild onion is edible.

Flowers: clustered in an umbel-type inflorescence; flower cluster closely appressed to the cinders

Flowering Period: late April to mid-May; rarely blooms in June

Plants: with deep green linear leaves 3 to 6 inches in length; leaves surrounding the flower cluster

Habitat: open slopes of cinder cones as far south as Big Cinder Butte





▽
**DWARF
MONKEYFLOWER**

Magenta

Mimulus nanus ($\frac{1}{2}$ X)
Snapdragon Family

After periods of heavy spring or summer precipitation, this unusual little wildflower carpets the slopes of the cinder cones with its delightful magenta blossoms.

Flowers: bilabiate with 5 lobes; about $\frac{1}{2}$ inch wide and $\frac{1}{2}$ to $\frac{3}{4}$ inch long; stamens 4

Plants: small; rarely exceeding 2 inches in height

Habitat: cinder cone slopes; North Crater Trail, Great Owl Cavern Trail, fire access road on Broken Top, Loop Drive—especially near drainage troughs

**INDIAN
PAINTBRUSH**

Orange to Red

Castilleja chromosa ($\frac{1}{3}$ X)
Snapdragon Family

Highly colored modified leaves (bracts) give the paintbrush its name. The flower is actually quite inconspicuous, spike-like, and yellowish-green.

Flowering Period: mid-June to early July

Habitat: shallow crevices; North Crater Flow, Cave Area Trail, Great Owl Cavern Trail



▽
**DESERT
GLOBE MALLOW**

Orange to
Scarlet

Sphaeralcea munroana ($\frac{1}{3}$ X)
Mallow Family

Flowers: about 1 inch in diameter; with 5 petals surrounding a column of stamens

Flowering Period: July

Habitat: disturbed sites near the Visitor Center; Sunset Cone; older lava flows

ANDERSON Blue to Purple
LARKSPUR

Delphinium andersonii ($\frac{1}{3}$ X)
 Buttercup Family

This spring wildflower is poisonous when eaten.

Flowers: irregularly-shaped with a long spur; flowers usually about $\frac{3}{4}$ inch in diameter; borne in sparse terminal clusters; stamens numerous

Flowering Period: early June through early July

Habitat: cinder cone slopes; Sunset Cone, Broken Top, Trench Mortar Flat, Devil's Orchard, and along the Great Owl Cavern Trail



▽ **RUSSIAN THISTLE** Red to
(TUMBLEWEED) Beige
Salsola kali variety *tenuifolia*
 ($\frac{1}{8}$ X)
 Goosefoot Family

This common spiny plant of the Northern Desert is considered to be a noxious weed. Tumbleweed plants grow to maturity in a single season, then twist off at the base, and are blown for miles by the autumn and winter winds.

Flowers: small; surrounded by spiny bracts

Flowering Period: July

Plants: branching at the base; covered with numerous spines; stems reddish and usually less than 1 foot in length

Habitat: disturbed sites along highway



△ **BLUE PENSTEMON** Blue

Penstemon cyaneus ($\frac{1}{3}$ X)
 Snapdragon Family

Flowers: irregularly-shaped with 5 lobes; about $\frac{3}{4}$ inch wide at the end of the whitish throat; aggregated in dense elongated clusters

Flowering Period: late June to early July

Habitat: slopes of cinder cones and cinder flats; particularly abundant along the Great Owl Cavern Trail and on Trench Mortar Flat

HOARY ASTER

Purple

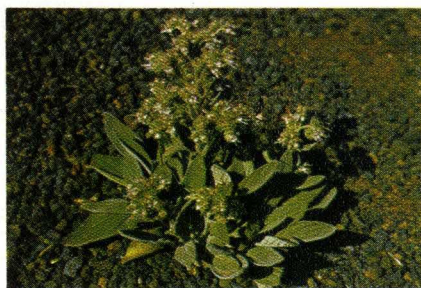
Aster canescens ($\frac{1}{7}$ X)
Sunflower Family

Flowers: in heads about 1 inch in diameter with purple ray flowers surrounding yellow disk flowers

Flowering Period: August

Habitat: cinder cone slopes; North Crater, Inferno Cone; roadsides throughout the Monument

Δ



▽
SCORPIONWEED Lavender

Phacelia hastata ($\frac{1}{5}$ X)
Waterleaf Family

The scorpionweed gets its common name from its curved flowering stalks which are similar in shape to the tail of a scorpion.

Flowers: in dense, elongated, curved clusters; petals 5

Flowering Period: mid-June to mid-July

Leaves: silvery; with prominent divergent veins; about 2 inches long

Habitat: slopes of cinder cones; Devil's Orchard and North Crater Trail; roadsides throughout the Monument



▽
FERNLEAF FLEABANE Lavender

Erigeron compositus ($\frac{1}{10}$ X)
Sunflower Family

Flowers: in heads about $1\frac{1}{2}$ inches in diameter; purple ray flowers surrounding yellow centers of disk flowers

Flowering Period: early June

Plants: rarely exceeding 5 inches in height; leaves coarsely dissected

Habitat: shallow crevices of pahoehoe flows; North Crater Flow Trail

NPS Photo by Peter G. Sanchez

GIANT WILD RYE

Elymus cinereus ($\frac{1}{24}$ X)
Grass Family

Plants: coarse, tall bunchgrass;
rarely exceeding 4 feet in
height

Flowers: borne in dense terminal
spikes; groups of spikelets op-
posite each other in the spike

Flowering Period: early July

Habitat: abundant in the sage-
brush zones of older cinder
cones

Δ



▽
TAILCUP LUPINE Lavender

Lupinus caudatus ($\frac{1}{12}$ X)
Legume Family

Flowers: irregular; borne in dense
terminal clusters

Flowering Period: July

Plants: consisting of numerous
basal leaves, each with 7 to 9
leaflets radiating out from the
tip of the leaf stalk

Habitat: cinder cone slopes;
along Highway 20 and on
Trench Mortar Flat



▽
**BOTTLEBRUSH
SQUIRRELTAIL**

Sitanion hystrix ($\frac{1}{5}$ X)
Grass Family

Plants: low grasses; usually less
than 8 inches tall; annuals;
bushy in appearance with
spreading awns

Habitat: common in cinder
gardens and along roads;
Devil's Orchard, Great Owl
Cavern Trail, North Crater Trail (21)

BRITTLE BLADDER FERN

Cystopteris fragilis ($\frac{1}{8}$ X)
Fern Family

*Fron*ds (leaves): about 4 inches long; with 10 to 12 segments; withering by mid-summer

Habitat: shaded crevices; widely distributed throughout the Monument

Δ



▽

MALE FERN

Dryopteris felix-mas ($\frac{1}{12}$ X)
Fern Family

*Fron*ds (leaves): usually longer than 12 inches; twice segmented

Habitat: reported from deep crevices in two locations; North Crater Flow east of headquarters and Needle Cave Flow

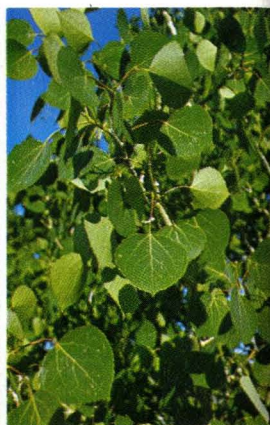
CHRISTMAS FERN

Polystichum scopulinum ($\frac{1}{10}$ X)
Fern Family

*Fron*ds (leaves): 10 to 12 inches long; with numerous segments

Habitat: deep crevices of pahoehoe flows; Cave Area Trail, Big Sink Waterhole area, and Black Flow east of Broken Top

Δ



▽

QUAKING ASPEN

Populus tremuloides ($\frac{1}{4}$ X)
Willow Family

The quaking aspen gets its name from its extremely thin leaves which shimmer constantly in the summer breeze. The aspen thickets of Little Cottonwood Creek are particularly colorful in the autumn.

Plants: deciduous trees with whitish bark

Leaves: oval-shaped; deep green above, silvery beneath; brilliantly colored in autumn

Habitat: Little Cottonwood Creek drainage of the Pioneer Mountains; northeast slope of Big Cinder Butte; plantings around the Visitor Center



▽
LIMBER PINE

Pinus flexilis ($\frac{1}{4}$ X)
Pine Family

The most common tree of the Monument gets its name from its flexible branches. The limber pine is a very important plant of this volcanic area since many of the animals of Craters of the Moon are in some way dependent upon it. Most of the limber pines of the Monument are between 250 and 350 years old, although a few of the trees are considerably older. Many of the trees are infected with dwarfmistletoe.

Needles: bright green; about $1\frac{1}{2}$ inches long; borne in clusters of 5

Cones: green and resinous during the first year of development, but turning light brown and woody as the seeds mature in the second year; about 4 inches long

Habitat: open slopes of the most recent cinder cones and on the sparsely vegetated lava flows; fails to reforest the slopes of heavily vegetated cones



▽
DOUGLAS FIR

Pseudotsuga menziesii ($\frac{1}{2}$ X)
Pine Family

Although the Douglas fir is primarily a montane species, isolated stands are found on the northeastern slopes of several of the cinder cones. The trees are much taller and more symmetrical than the limber pines, and the cones are easily distinguished by the three-pronged bracts that project between the cone scales.

Needles: deep green; about 1 inch long; borne single on the branches

Cones: brown, about 2 inches long; scales subtended by three-pronged bracts

Habitat: most abundant along Little Cottonwood Creek in the Pioneer Mountains; northeast slopes of Grassy and Silent Cones; isolated trees on Paisley Cone and Big Cinder Butte

A CHECKLIST OF PLANTS

The following checklist of 308 plant species is based primarily on A Flora of Craters of the Moon National Monument by Robert C. Wunner.

Equisetaceae	
<i>Equisetum hiemale</i>	Scouring Rush
Polypodiaceae	
<i>Cystopteris fragilis</i>	Brittle Bladder Fern
<i>Dryopteris felix-mas</i>	Male Fern
<i>Polystichum scopulinum</i>	Eaton's Shield Fern
Cupressaceae	
<i>Juniperus scopulorum</i>	Rocky Mountain Juniper
Pinaceae	
<i>Pinus flexilis</i>	Limber Pine
<i>Pseudotsuga menziesii</i> v. <i>glauca</i>	Douglas Fir
Cyperaceae	
<i>Carex filifolia</i>	Threadleaf Sedge
<i>Carex scoparia</i>	Broom Sedge
Gramineae	
<i>Agropyron cristatum</i>	Crested Wheatgrass
<i>Agropyron inerme</i>	Beardless Bluebunch Wheatgrass
<i>Agropyron pauciflorum</i>	
<i>Agropyron riparium</i>	Streambank Wheatgrass
<i>Agropyron smithii</i>	Bluestem Wheatgrass
<i>Agropyron spicatum</i>	Bearded Bluebunch Wheatgrass
<i>Agrostis exarata</i>	Spike Bentgrass
<i>Agrostis scabra</i>	
<i>Bromus carinatus</i>	Mountain Brome
<i>Bromus tectorum</i>	Cheatgrass Brome
<i>Calamagrostis koelerioides</i>	Fire Reedgrass
<i>Dactylis glomerata</i>	Orchardgrass
<i>Deschampsia danthonioides</i>	Annual Hairgrass
<i>Deschampsia elongata</i>	Slender Hairgrass
<i>Elymus cinereus</i>	Giant Wild Rye
<i>Festuca scabrella</i>	Rough Fescue
<i>Festuca idahoensis</i>	Idaho Fescue
<i>Glyceria striata</i>	Fowl Mannagrass
<i>Hordeum jubatum</i>	Foxtail Barley
<i>Koeleria cristata</i>	Prairie Junegrass
<i>Melica bulbosa</i>	Oniongrass
<i>Oryzopsis bloomeri</i>	Bloomer's Ricegrass
<i>Oryzopsis hymenoides</i>	Indian Ricegrass
<i>Phalaris arundinaceae</i>	Reed Canarygrass
<i>Poa bulbosa</i>	Bulbous Bluegrass
<i>Poa palustris</i>	Fowl Bluegrass
<i>Poa pratensis</i>	Kentucky Bluegrass
<i>Poa secunda</i>	Sandberg Bluegrass
<i>Sitanion hystrix</i>	Bottlebrush Squirreltail
<i>Stipa columbiana</i>	Subalpine Needlegrass
<i>Stipa comata</i>	Needle and Thread
<i>Stipa occidentalis</i>	Western Needelgrass
<i>Stipa pinetorum</i>	Pinewoods Needlegrass
<i>Stipa thurberiana</i>	Thurber Needlegrass
Juncaceae	
<i>Juncus ensifolius</i>	
Liliaceae	
<i>Allium nevadense</i>	Nevada Onion
<i>Allium tolmiei</i>	Tolmie Onion
<i>Calochortus macrocarpus</i>	Sagebrush Mariposa
<i>Calochortus nitidus</i>	

<i>Calochortus nuttallii</i>	Segolily Mariposa
<i>Camassia quamash</i>	Common Camas
<i>Fritillaria atropurpurea</i>	Purplespot Fritillary
<i>Fritillaria lanceolata</i>	Riceroor Fritillary
<i>Fritillaria pudica</i>	Yellow Fritillary
<i>Smilacina racemosa</i>	Feather Solomonplume
<i>Smilacina stellata</i>	Starry Solomonplume
<i>Zigadenus paniculatus</i>	Foothill Deathcamas
Orchidaceae	
<i>Corallorhiza maculata</i>	Coral Root
Aceraceae	
<i>Acer glabrum</i>	Rocky Mountain Maple
Amaranthaceae	
<i>Amaranthus graecizans</i>	Tumbleweed Amaranth
Apocynaceae	
<i>Apocynum androsaemifolium</i>	Spreading Dogbane
Betulaceae	
<i>Alnus incana</i>	Speckled Alder
<i>Betula glandulosa</i>	Bog Birch
Boraginaceae	
<i>Amsinckia retrorsa</i>	Fiddleneck
<i>Cryptantha circumscissa</i>	
<i>Cryptantha interrupta</i>	
<i>Cryptantha torreyana</i>	
<i>Cryptantha watsonii</i>	
<i>Hackelia floribunda</i>	Stickseed
<i>Hackelia patens</i>	Stickseed
<i>Lappula redowskii</i>	
<i>Lappula echinata</i>	
<i>Lithospermum ruderae</i>	Wayside Gromwell
<i>Mertensia campanulata</i>	
<i>Mertensia oblongifolia</i>	Oblongleaf Bluebell
Cactaceae	
<i>Opuntia polyacantha</i>	Plains Pricklypear
Campanulaceae	
<i>Campanula rotundifolia</i>	Bluebell
Caprifoliaceae	
<i>Symphoricarpos oreophilus</i>	Mountain Snowberry
Caryophyllaceae	
<i>Arenaria aculeata</i>	Sandwort
<i>Cerastium viscosum</i>	Sticky Cerastium
<i>Silene douglasii</i>	
<i>Silene menziesii</i>	
Chenopodiaceae	
<i>Atriplex confertifolia</i>	Shadscale Saltbush
<i>Chenopodium album</i>	Lambsquarter Goosefoot
<i>Chenopodium fremontii</i>	Fremont Goosefoot
<i>Chenopodium leptophyllum</i>	Slimleaf Goosefoot
<i>Chenopodium rubrum</i>	Red Goosefoot
<i>Grayia spinosa</i>	Spiny Hopsage
<i>Salsola kali</i> v. <i>tenuifolia</i>	Russian Thistle
Compositae	
<i>Achillea millefolium</i> v. <i>lanulosa</i>	Common Yarrow
<i>Agoseris aurantiaca</i>	Orange Agoseris
<i>Agoseris glauca</i>	Pale Agoseris
<i>Agoseris retrorsa</i>	
<i>Anaphalis margaritacea</i>	Common Pearleverlasting
<i>Antennaria dimorpha</i>	Low Pussytoes
<i>Antennaria rosea</i>	Rose Pussytoes
<i>Antennaria stenophylla</i>	

Arnica cordifolia
Arnica sororia
Artemisia arbuscula
Artemisia dracunculus
Artemisia ludoviciana
Artemisia tridentata
Artemisia tripartita
Aster canescens
Aster eatonii
Aster occidentalis
Aster scopulorum
Balsamorhiza sagittata
Brickellia grandiflora
Chaenactis douglasii
Chrysopsis villosa
Chrysothamnus nauseosus
Chrysothamnus viscidiflorus
Cirsium canescens
Cirsium canovirens
Cirsium subniveum
Cirsium utahense
Cirsium undulatum
Cirsium vulgare
Crepis acuminata
Crepis modocensis
Erigeron compositus
Erigeron pumilus
Erigeron speciosus
Eriophyllum lanatum
Eupatorium occidentale
Grindelia squarrosa
Haplopappus nanus
Helianthella uniflora
Helianthus annuus
Hieracium cynoglossoides
Iva axillaris
Lactuca serriola
Lygodesmia spinosa
Madia gracilis
Matricaria maritima
Microseris nutans
Rudbeckia occidentalis
Senecio canus
Senecio integerrimus v. exaltatus
Senecio serra
Solidago gigantea
Stephanomeria tenuifolia v. myrioclada
Tanacetum vulgare
Tetradymia canescens
Tragopogon dubius
Xanthium strumarium
 Cornaceae
 Cornus stolonifera
 Crassulaceae
 Sedum stenopetalum
 Cruciferae
 Alyssum desertorum
 Arabidopsis salsuginea
 Arabis holboellii

Heartleaf Arnica
 Low Sagebrush
 Tarragon
 Louisiana Sagebrush
 Big Sagebrush
 Threetip Sagebrush
 Hoary Aster
 Eaton's Aster
 Western Aster
 Arrowleaf Balsamroot
 Tasselflower Brickellia
 Douglas Chaenactis
 Hairy Goldaster
 Rubber Rabbitbrush
 Douglas Rabbitbrush
 Wavyleaf Thistle
 Tapertip Hawksbeard
 Fernleaf Fleabane
 Low Fleabane
 Oregon Fleabane
 Woolly Eriophyllum
 Western Eupatorium
 Curlycup Gumweed
 Dwarf Goldenweed
 Oneflower Helianthella
 Common Sunflower
 Hound's Tongue Hawkweed
 Poverty Sumpweed
 Prickly Lettuce
 Thorn Skeletonplant
 Nodding Microseris
 Niggerhead
 Woolly Groundsel
 Lambstongue Groundsel
 Butterweed Groundsel
 Giant Goldenrod
 Wirelettuce
 Common Tansy
 Gray Horsebrush
 Salsify
 Cocklebur
 Redosier Dogwood
 Stonecrop
 Holboell Rockcress

<i>Arabis sparsiflora</i>	Erectpod Wintercress
<i>Barbarea orthoceras</i>	Shepherd's Purse
<i>Capsella bursa-pastoris</i>	Pinnate Tansymustard
<i>Descurainia pinnata</i>	Richardson Tansymustard
<i>Descurainia richardsonii</i>	Flixweed Tansymustard
<i>Descurainia sophia</i>	Plains Erysimum
<i>Erysimum asperum</i>	Wallflower <i>Phoenicautis</i>
<i>Phoenicautis cheiranthoides</i>	Watercress
<i>Rorippa nasturtium-aquaticum</i>	Tumblemustard
<i>Sisymbrium altissimum</i>	
<i>Thelypodium sagittatum</i>	
<i>Thlaspi arvense</i>	Field Pennycress
Fumariaceae	
<i>Dicentra uniflora</i>	Steershead Bleedingheart
Geraniaceae	
<i>Geranium viscosissimum</i> v. <i>nervosum</i>	Sticky Geranium
Grossulariaceae	
<i>Ribes aureum</i>	Golden Currant
<i>Ribes cereum</i>	Wax Currant
<i>Ribes hudsonianum</i>	Hudson Bay Currant
Hydrangeaceae	
<i>Philadelphus lewisii</i>	Lewis' Mockorange
Hydrophyllaceae	
<i>Hydrophyllum capitatum</i>	Ballhead Waterleaf
<i>Nama densum</i>	
<i>Phacelia hastata</i>	
<i>Phacelia heterophylla</i>	Varileaf Phacelia
Labiatae	
<i>Agastache urticifolia</i>	Nettleleaf Giant Hyssop
<i>Marrubium vulgare</i>	Common Hoarhound
<i>Mentha arvensis</i>	Field Mint
<i>Scutellaria antirrhinoides</i>	Skullcap
Leguminosae	
<i>Astragalus canadensis</i>	Canada Milkvetch
<i>Astragalus convallarium</i>	
<i>Astragalus dasyglottis</i>	
<i>Astragalus stenophyllus</i>	
<i>Lupinus argenteus</i>	Silvery Lupine
<i>Lupinus caudatus</i>	Tailcup Lupine
<i>Lupinus leucophyllus</i>	Velvet Lupine
<i>Melilotus officinalis</i>	Yellow Sweetclover
<i>Oxytropis lagopus</i>	Haresfoot Crazyweed
<i>Trifolium pratense</i>	Red Clover
<i>Trifolium repens</i>	White Clover
Loasaceae	
<i>Mentzelia albicaulis</i>	Whitestem Mentzelia
<i>Mentzelia dispersa</i>	
<i>Mentzelia laevicaulis</i>	Blazingstar Mentzelia
Loranthaceae	
<i>Arceuthobium campylopodum</i> f. <i>cyanocarpum</i>	Dwarf Mistletoe
Malvaceae	
<i>Iliaena rivularis</i>	Mountain Hollyhock
<i>Sphaeralcea munroana</i>	Globemallow
Onagraceae	
<i>Circaea alpina</i>	Enchanter's Nightshade
<i>Epilobium alpinum</i>	Alpine Willow Weed
<i>Epilobium angustifolium</i>	Fireweed
<i>Epilobium glandulosum</i> v. <i>glandulosum</i>	Glandular Willow Weed
<i>Epilobium paniculatum</i>	Autumn Willow Weed

<i>Gayophytum nuttallii</i>	Groundsmoke
<i>Gayophytum racemosum</i>	Groundsmoke
<i>Gayophytum ramosissimum</i>	Groundsmoke
<i>Oenothera caespitosa</i>	Tufted Eveningprimrose
<i>Oenothera heterantha</i>	
Orobanchaceae	
<i>Orobanche californica</i>	Broomrape
<i>Orobanche fasciculata</i>	Broomrape
Polemoniaceae	
<i>Collomia linearis</i>	
<i>Collomia tenella</i>	
<i>Collomia tinctoria</i>	
<i>Eriastrum sparsiflorum</i>	
<i>Gilia aggregata</i>	Skyrocket Gilia
<i>Gilia leptomeria</i>	
<i>Leptodactylon pungens</i>	(Lava Phlox)
<i>Microsteris gracilis</i>	
<i>Navarretia breweri</i>	
<i>Phlox hoodii</i>	Hood's Phlox
<i>Phlox longifolia</i>	Longleaf Phlox
Polygonaceae	
<i>Eriogonum caespitosum</i>	Mat Eriogonum
<i>Eriogonum cernuum</i>	Nodding Eriogonum
<i>Eriogonum heraceloides</i>	Wyeth Eriogonum
<i>Eriogonum microthecum</i>	Slenderbush Eriogonum
<i>Eriogonum ovalifolium</i>	Cushion Eriogonum
<i>Eriogonum ovalifolium</i> v. <i>depressum</i>	(Dwarf Buckwheat)
<i>Eriogonum umbellatum</i>	Sulfur Eriogonum
<i>Eriogonum vimineum</i>	Broom Eriogonum
<i>Polygonum aviculare</i>	Prostrate Knotweed
<i>Polygonum douglasii</i>	Douglas Knotweed
<i>Polygonum triandrus</i>	
<i>Rumex salicifolius</i> v. <i>montigenitus</i>	Willow Dock
Portulacaceae	
<i>Calyptridium roseum</i>	
<i>Lewisia rediviva</i>	Bitterroot Lewisia
Ranunculaceae	
<i>Actaea rubra</i>	Red Baneberry
<i>Aquilegia formosa</i>	Sitka Columbine
<i>Delphinium andersonii</i>	Anderson Larkspur
<i>Delphinium nuttallianum</i>	Nuttall Larkspur
<i>Ranunculus andersonii</i>	Anderson Buttercup
<i>Ranunculus glaberrimus</i>	Sagebrush Buttercup
<i>Thalictrum occidentale</i>	Western Meadowrue
Rhamnaceae	
<i>Ceanothus velutinus</i>	Snowbrush Ceanothus
Rosaceae	
<i>Amelanchier alnifolia</i>	Saskatoon Serviceberry
<i>Chamaebatiaria millefolium</i>	Tansybush
<i>Geum macrophyllum</i>	Largeleaf Avens
<i>Holodiscus discolor</i>	Creambush Rockspirea
<i>Holodiscus dumosus</i>	Bush Rockspirea
<i>Potentilla arguta</i>	
<i>Potentilla biennis</i>	Biennial Cinquefoil
<i>Potentilla glandulosa</i>	Gland Cinquefoil
<i>Potentilla rivalis</i>	Brook Cinquefoil
<i>Prunus virginiana</i>	Common Chokecherry
<i>Purshia tridentata</i>	Antelope Bitterbrush
<i>Rosa woodsii</i>	Woods Rose

<i>Rubus idaeus</i>	Red Raspberry
<i>Rubus parviflorus</i>	Western Thimbleberry
Rubiaceae	
<i>Galium aparine</i>	Catchweed Bedstraw
<i>Galium boreale</i>	Northern Bedstraw
<i>Galium multiflorum</i>	Shrubby Bedstraw
<i>Galium triflorum</i>	Sweet Scented Bedstraw
Salicaceae	
<i>Populus tremuloides</i>	Quaking Aspen
<i>Populus trichocarpa</i>	California Poplar
<i>Salix exigua</i>	Coyote Willow
<i>Salix scouleriana</i>	Scouler Willow
Saxifragaceae	
<i>Heuchera cylindrica</i>	Roundleaf Alumroot
<i>Lithophragma bulbifera</i>	
<i>Lithophragma tenella</i>	Slender Woodlandstar
<i>Saxifraga occidentalis</i>	Alberta Saxifrage
Scrophulariaceae	
<i>Castilleja angustifolia</i>	Northwestern Paintedcup
<i>Castilleja chromosa</i>	(Indian Paintbrush)
<i>Castilleja flava</i>	Yellow Paintedcup
<i>Castilleja miniata</i>	Scarlet Paintedcup
<i>Collinsia parviflora</i>	Littleflower Collinsia
<i>Cordylanthus ramosus</i>	Bushy Birdbeak
<i>Mimetanthe pilosa</i>	
<i>Mimulus floribundus</i>	
<i>Mimulus guttatus</i>	Common Mimulus
<i>Mimulus lewisii</i>	Lewis Monkeyflower
<i>Mimulus nanus</i>	Dwarf Monkeyflower
<i>Mimulus suksdorfii</i>	
<i>Penstemon cusickii</i>	
<i>Penstemon cyaneus</i>	(Blue Penstemon)
<i>Penstemon deustus</i>	Scabland Penstemon
<i>Penstemon laxus</i>	Idaho Penstemon
<i>Penstemon speciosus</i>	
<i>Verbascum thapsus</i>	Flannel Mullein
<i>Veronica americana</i>	American Speedwell
Solanaceae	
<i>Nicotiana attenuata</i>	Coyote Tobacco
Umbelliferae	
<i>Angelica pinnata</i>	Small-leaved Angelica
<i>Cymopterus terebinthinus</i>	(Desert Parsley)
<i>Heracleum lanatum</i>	Common Cowparsnip
<i>Lomatium dissectum</i>	
<i>Lomatium foenicaulaceum</i>	
<i>Lomatium gormanii</i>	
<i>Lomatium triternatum</i>	Nineleaf Lomatium
<i>Osmorhiza chilensis</i>	
<i>Osmorhiza occidentalis</i>	Sweetanise
<i>Perideridia gairdneri</i>	
Urticaceae	
<i>Urtica dioica</i>	Bigsting Nettle
Valerianaceae	
<i>Valeriana acutiloba</i>	Sharpleaf Valerian
Violaceae	
<i>Viola beckwithii</i>	Beckwith Violet
<i>Viola nuttallii</i>	Nuttall Violet
<i>Viola purpurea</i> v. <i>venosa</i>	Goosefoot Violet
<i>Viola vallicola</i>	

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