Mt. Helena Wildflowers



Celebrating Wildflowers Partners







Celebrating Wildflowers Partners

Helena-Lewis and Clark National Forest,

Montana Native Plant Society—Kelsey Chapter,

Montana Discovery Foundation

About Celebrating Wildflowers

The Celebrating Wildflowers program was created in 1991 by the USDA Forest Service in response to a public request for information about native plants and their conservation. Other agencies soon joined as botanists, interpreters and the public became enthusiastic about the Celebrating Wildflowers program.

The Helena-Lewis and Clark National Forest, the Montana Discovery Foundation and the Kelsey Chapter of the Montana Native Plant Society have been Celebrating Wildflowers for many years. The partners, working with area teachers, encourage 4th grade students to read stories about native flora and then illustrate the stories. The winners from the art competition are displayed in a publication, the overall winner has their art turned into a billboard, and the top three receive prizes designed from their artwork.

Also, participating students join us on a hike on Mt. Helena at the end of May to view firsthand the unique and beautiful range of native plant species found virtually in their backyard. Education stations are also set up to inform students about pollination and botany.

This publication was created to help volunteers guide students on their May Celebrating Wildflowers hike. The Celebrating Wildflower Partners wanted to share this guide with the community and encourage self-guided hikes while the flagged trail is available for the program.

We appreciate the Celebrating Wildflowers volunteers that give their time, energy, and knowledge to fulfill our mission of encouraging everyone to learn more about native plants, their habitat and conservation.

Table of Contents

Photography Credits	3
Leaf Shape and Arrangement	4
Leaf Margins and Venation	5
Flower Anatomy and Shape	6
Blue/Purple Flowers	8-11
Pink Flowers	12-15
Orange/Red Flowers	16
Yellow Flowers	17-25
White Flowers	25-30
Green or Brown Flowers	31
Shrubs	32-37
Trees	38-40

Flower, shrub and tree photography provided by Drake Barton, Samsara Chapman and others.

Although there are notes for medicinal and nutritional uses for many of the plants, please do not allow the students to sample any of the flora while under your supervision.

Plant description and information excerpted from a variety of guide books to assist you in plant identification. For more detailed information see PLANTS OF THE ROCKY MOUNTAIN, WILDFLOWERS OF MONTANA, CENTRAL ROCKY MOUNTAIN WILDFLOWERS, ROCKY MOUNTAIN WILDFLOWERS POCKET GUIDE and additional online resources.

SHAPE & ARRANGEMENT







Bipinnate leaflets also pinnate



Cordate heart-shaped, stem in cleft



Cuneate wedge shaped, acute base



Deltoid triangular



Digitate with finger-like lobes



Elliptic oval-shaped, small or no point



Falcate hooked or sickle shaped



Flabellate fan shaped





Hastate triangular with basal lobes



Lanceolate pointed at both ends



Linear parallel margins, elongate



deeply indented margins



Obcordate heart-shaped, stem at point



Obovate egg-shaped, narrow at base



Obtuse bluntly tipped



Opposite leaflets in adjacent pairs



Orbicular circular



egg-shaped, wide at base







Palmate resembles a hand



Pedate palmate, divided lateral lobes



Peltate stem attached centrally



Perfoliate stem seeming to pierce leaf



Odd Pinnate leaflets in rows, one at tip



Even Pinnate leaflets in rows, two at tip



Pinnatisect deep, opposite lobing



Reniform kidney-shaped





Rhomboid

Rosette leaflets in tight circular rings



Spatulate spoon-shaped



Spear-shaped pointed, barbed base





Trifoliate/Ternate



Tripinnate leaflets also bipinnate



Truncate squared-off apex



Unifoliate having a single leaf



Whorled rings of three or more leaflets

MARGIN



Ciliate with fine hairs



Denticulate with fine dentition



Lobate indented, but not to midline



Sinuate with wave-like indentations



Crenate with rounded teeth



Doubly Serrate serrate with sub-teeth



Serrate teeth forward-pointing



Spiny with sharp stiff points



Dentate with symmetrical teeth



Entire even, smooth throughout



Serrulate with fine serration



Undulate widely wavy

VENATION



Arcuate secondary veins bending toward apex



Longitudinal veins aligned mostly along long axis of leaf



Pinnate secondary veins paired oppositely



Cross-Venulate small veins connecting secondary veins



Palmate several primary veins diverging from a point



Reticulate smaller veins forming a network



Dichotomous veins branching symmetrically in pairs

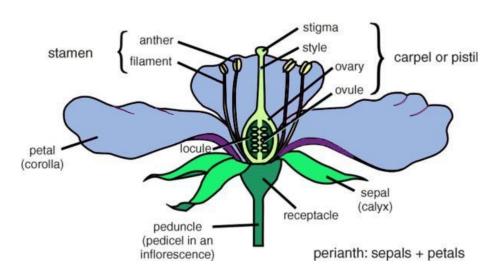


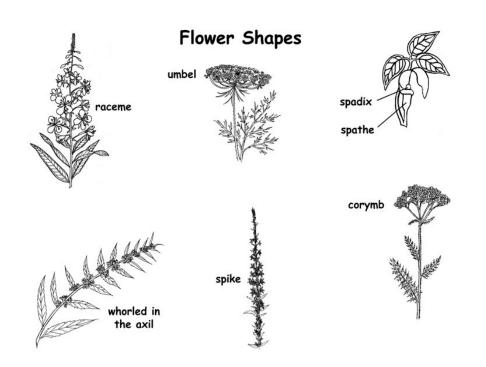
Parallel veins arranged axially, not intersecting



Rotate in peltate leaves, veins radiating

Basic Flower Structure









General: Stands out among the many penstemons because of its wide-open, hairy throat with an extended sterile stamen covered with yellow hairs—the fuzzy tongue. The stems bear hairy narrow leaves that may be toothed. Color varies— pale lavender to deep violet.

Flowers: May to July 3 lower lobes of flower have purple veins serving as guidelines for

pollinators.

Fuzzytongue penstemon—Penstemon eriantherus—Plantaginaceae



General: Numerous faded, alternate and compound, short-stalked, green leaves contain 13 to 27 short, rounded leaflets. The leaflets are arranged featherlike along the axis with one at the tip. Flowers are pale violet to white with a keel petal tinged with purple.

Flowers: April to May

The young, juicy, green pods of this plant are edible and taste like peas.

Ground Plum—Astragalus crassicarpus—Fabaceae



General: Five lavender-blue petals joined into bell shaped blossoms, which hang from the top of a tall thin stem. The leaves are thin, alternate along the stem and occasionally a few oval basal leaves.

Flowers: June- September

Chippewa and Cree traditional uses of this plant include chewing for heart and lung ailments and as an ingredient in ear drops.

Harebell—Campanula rotundifolia—Campanulaceae

General: A low perennial, leaves with long, woolly hairs that form a tuft at the leaf tips. The pale green leaves form a dense cushion or mat. The pale to deep blue flowers, with yellow or white centers, have 5 petals that are fused at the base to form a small tube.

Flowers: June to July



Howard's Alpine Forget-me-not—Eritrichium howardii—Boraginaceae

General: A sky-blue flower with five fragile petals atop a thin, tough stem. There are many narrow, linear leaves alternate along the stem.

Flowers: May to August *Petals drop off after one morning, but another bud will bloom the next day.*



Lewis's Blue Flax—Linum Lewisii—Linaceae

General: Slender, commonly branched, erect stems are topped with reddishlavender flowers in loose coils. Corolla broadly bell-shaped. Leaves narrowly lanceolate, hairy.

Flowers: April-June

Indigenous uses for this plant include a tea prepared to treat colds.



Linear-leaved Phacelia—Phacelia linearis—Hydrophyllaceae



General: Deep blue flowers with 5 showy sepals, one forming a conspicuous rear spur. Flowers are loosely clustered on a smooth stem. The leaves are deeply palmately divided into narrow leaflets with a long stem, mostly basal.

Flowers: May to July
Larkspur contain poisonous alkaloids and is toxic to cattle and

sheep.

Little Larkspur—Delphinium bicolor—Ranunculaceae



General: Has pinnately compound leaves with oval, dark-green leaflets on spreading stems. The 4 flowers are showy, purplish-blue pea-like flowers. Plants in northern states have fewer flowers per cluster than southern states. The fruit is short, fat, fuzzy pod.

Flowers: April to June

Missouri Milkvetch—Astragalus missouriensis—Fabaceae





General: A round cup formed by six hairy, light blue to mauve sepals and many bright yellow stamens, nestled in a cluster of furry bracts. Basal leaves are narrowly divided which appear after the flower appears.

Flowers: March to June

These are among the first flowers to bloom in the spring. Blackfeet uses include a tea to speed delivery in child birth.

Pasqueflower—Anemone patens—Ranunculaceae

General: An unmistakable blue-purple flower, with three erect petals and three drooping orange-streaked sepals. The leaves are basal, narrow, tough and pointed, nearly as tall as the flower stalk.

Flowers: May to July.

This is the only native iris in the Central Rocky Mountains.



Rocky Mountain Iris—Iris Missouriensis—Iridaceae

General: Flowers vary in color from blue-purple to pink, yellow or white. There are 5 stamens: 4 fertile ones bearing pollen, plus a sterile one. The anthers of the fertile stamens are hairless and split open full length upon maturity. The end of the sterile stamen is covered with yellow hair that can be seen just inside the mouth of the petal tube.

Flowers: June to August.





Sulphur Penstemon—Penstemon attenuates—Plantaginaceae

General: Gray-hairy, cushion -like, perennial herb; stems absent from ranched crowns of well-developed taproots. Flowers: White/purple with 15-30 white ray florets around a yellow button disc florets.

Flowers: March to June
Traditional uses of this plant
include chewing or rubbing on
abdomen to ease labor.



Hooker's Townsendia—Townsendia hookeri—Asteraceae



General: Each large flower has 12 -16 rose, pink, or white, rounded or pointed petals. The short, narrow, fleshy leaves appear in fall in a basal rosette, renew growth in early spring, and then wither when the flowers bloom.

Flowers: May to July

Montana state flower. This is an incredibly important cultural and food plant for Salish and many other Indigenous peoples of Montana—roots can be boiled and eaten.

Bitterroot—Lewisia rediviva—Portulaceae



General: The basal leaves are divided into several elliptical leaflets. A whorl of leaves is found at midstem. The leaf blades are not completely ternate. The flowers are actually 5-9 white to purplish, occasionally yellow, orange or red sepals. The numerous yellow stamens and greenish pistils are centrally located.

Cliff Anemone—Anemone multifida—Ranunculaceae



General: A low, spreading cushion plant with small lance-shaped leaves that are tightly grouped into mats. Each stem that arises from the mat supports a single bright pink to violet, wheelshaped flower, a funnel-shaped tube with five lobes.

Flowers: June to August

The lack of a conspicuous stamen distinguishes this plant from Moss Campion and members of the phlox family.

Douglasia—Douglasia montana—Primulaceae

General: A forest ground-cover; leaves are leathery green and have smooth margins (no teeth), flowers are pink with petals that are fused into an urn shape. The red berries persist throughout winter.

Flowers: April to June

Kinnikinnick has many edible and medicinal uses—it can be eaten raw or cooked at some times of year. It can be useful for treating kidney and urinary tract ailments.



Kinnikinnick—Arctostaphlos uva-ursi—Ericaceae

General: Low-mat-forming perennial; leaves are gray, equally woolly-hairy on both surfaces and spatula-shaped. Surrounding flower heads are several series of overlapping bracts. The color of bracts varies from white to rosy red.

Flowers: June to August

This is a mild astringent herb, useful in quieting simple intestinal and liver inflammations.



Rosy Pussytoes—Antennaria microphylla—Asteraceae

General: The leaves are hairy, fernlike, mostly basal. There are usually 3 bell-shaped flowers per stem, each with light yellow or rosy petals that are nearly hidden by the pink or reddish sepals. Five bracts curve outward after fertilization and display feathery styles that aid in wind seed dispersal.

Flowers: April to August Also called "Old Man's Whiskers."





Prairie Smoke—Geum triflorum—Rosacea



General: A low, tufted plant with leafless, hairy stems and basal leaves that are also densely covered with fine silky hairs. Pinnately compound leaves are shorter than the flowers and have 7-15 oval leaflets. The pea-like flowers are blue to purple and are arranged in crowded racemes at the top of a leafless stalk.

Flowers: May to June

Rabbitfoot Crazyweed—Oxytropis lagopus—Fabaceae



General: The leaves are a basal rosette with erect stem. The leaves are lanceolate to spatulate, usually several times longer than wide, with entire margins and a smooth surface. The 1-10 flowers have floral parts in fives. The tube at the base of the petals is yellowish with a wrinkled red ring. The reflexed petals are purplish. Flowers: April to June

Slimpod Shooting Star—Dodecatheon conjugens—Primulaceae



General: Slightly hairy multiple stems of sticky geranium bears mostly basal palmate leaves that are deeply divided into 5-7 segments having sharp irregular teeth along the edges. The brilliant flowers have five broad petals, hairy on the inner surface, varying from pinkish lavender to violet or purple and having dark reddish-purple veins.

Flowers: May to August

Sticky Geranium—Geranium viscosissimum—Geraniaceae

General: Large, showy, rosepurple flower heads. Leaves and stems are whitish gray because of a covering of wooly hairs. Sharp yellow spines project from the leaves of the flower heads and wavy leaf margins. **Flowers:** May-September *Thistledown is relished by*

birds for food and nest linings.



Wavyleaf Thistle—Cirsium undulatum—Asteraceae

General: Egg-shaped basal leaves on long petioles and small, finely toothed stem leaves that are stalkless and alternate. The small flowers are arranged in a dense spike at the top of the single stem. The flowers have no petals but have two hairy sepals and two long stamens with reddish purple filaments that give the prominent color.

Flowers: May to July



Wyoming Kittentails—Besseya wyomingensis—Plantaginaceae



General: A barrel-shaped stem growing singly or in mounds. The spines are in clusters; 3-10 spines in the center are colored on the tip and surrounded by 12-40 shorter, white ones. The bright reddish purple, waxy flowers have many short, pointed petals.

Flowers: May to June

Adapted to survive in areas where there is little moisture.

Missouri Ball Cactus—Coryphantha missouriensis—Cactaceae



General: A low, spreading perennial, it often forms patches of flowers. It has small leaves, yellowish green above and gray below. Saucer-shaped, short-stalked flowers, vary from orange to brick red. The flower has 5 broad petals that have small notches at their tips.

Flowers: May to August

Scarlet Globemallow—Sphaeralcea coccinea—Malvaceae



General: The leaves and stem s are yellow to gray-green in the early life of the plant, turning somewhat purplish as plant ages. Leaves are linear and may be lobed. The plants are hemiparasitic—they produce their own nutrition, they also get nutrients from roots of other plants.

Flowers: May to August Various species can be used for dyes and decorations.

Wyoming Paintbrush—Castilleja linarifolia—Orobanchaeceae

General: A low, dense, tufted perennial, it is covered with star-shaped hairs. The many stems bear narrow, silver basal leaves. The small, four-petaled, yellow flowers arise from the center of the leafy mat.

Flowers: May to July



Alpine Bladderpod—Physaria curvipes—Brassicaceae

General: Soft-hairy, perennial herb; stems several from a branching base, from a stout, woody, aromatic taproot.

Flowers: April to July

An important source of food for many Indigenous peoples. Young leavers can be eaten raw or steamed, immature flower stems peeled and eaten raw, and the tough roots can be roasted or steamed then dried.



Arrowleaf Balsamroot—Balsamorhiza sagittata—Asteraceae

General: A stemless sunflower—has no true stem, leafless flower stalk supports each solitary flower. Bright yellow flower head includes ray flowers, with 3-toothed tips, and many yellow disk flowers. Linear basal leaves form a snarled cluster, are covered with woolly, silky, gray hairs. Flowers: July to August



Butte Marigold—Tetraneuris acaulis—Asteraceae



Clustered Broomrape—Orobanche fasciculata—

General: This strange parasitic plant is often overlooked. The stout main stems appear much shorter because about 2/3 of its length is buried.

Flowers: April to August

The plants are root parasites, attaching themselves to the roots of various species—especially sagebrush.



General: Low, mat-forming cushion plant with a single, bright yellow flower head on an apparently leafless stem. The plant has a few small leaves on flower stem.

Flowers: May to August.

Cushion goldenweed often grows with cushion milkvetch and other mat plants.

Cushion Goldenweed—Stenotus acaulis —Asteraceae



General: Has a heavy rootcrown that branches from a thick perennial taproot. First appears as a one-inch tall tuft of hairy leaves that are silvery on one side and greenish on the other. Each leaf is composed of five leaflets. A few short stems bearing several flowers form a few days later. The five petals are lemon yellow.

Flowers: May to June

Early Cinquefoil—Potentilla concinna—Rosaceae

General: Six species of yellow-flowered cushion *Drabas* grow in alpine sites in Montana. These species have numerous bright yellow flowers growing in a loose to tight, matted cushion on rocky and windswept sites. ID of individual *Draba* species requires knowledge of the types of hairs on the leaves and characteristics of the fruit.

Flowers: June to July



Few-seeded Draba—Draba oligosperma—Brassicaceae

General: Yellow flower heads are composed of ray flowers only. Outer rays are long—inner ones are short with brown styles. Long, green bracts extend beyond the outer rays. Flower matures into a round white seed head like a huge dandelion.

Flowers: May to July

Flowers close tightly at noon earning them the name of "Jackgo-to-bed-at noon."

Not native to MT. Salsify (Goat's Beard)—Tragopogon dubius—Asteraceae

General: Perennial herb, sparsely white-hairy; densely white-hairy just below flower head; from slender, widely spreading rhizomes.

Flowers: June to August

Indigenous uses of this plant include preparing the roots to relieve toothaches, sore throats, cuts, and bruises.



Heartleaf Arnica—Arnica cordifolia—Asteraceae



Lance-leaf Stonecrop—Sedum lanceolatum—Crassulaceae



Flowers: June to August



General: Grows from a thickened taproot. Stems branching in pairs. Leaves are basal, deep green and deeply divide, lobes again divided into smaller rounded lobe segments. Small, bright yel-

Flowers: May to June

topped clusters.

low flowers gather in flat

Leafy Musineon—Musineon divaricatum—Apiaceae



General: Smells like parsley, the leaves are mainly basal, divided 2-3 times into long, linear segments, usually finely hairy. Flowers are yellow; tiny, in compact, twicedivided, flat-topped clusters (umbels) with several slender bracts at base.

Flowers: May to June

Blackfeet uses include preparing the roots to make a medicinal tea to treat coughs.

Nine-leaf Lomatium—Lomatium triternatum—Apiaceae

General: Low shrub with distinctive holly-like evergreen leaves. Bright yellow flowers give way to a grapelike cluster of purple berries with a whitish coating. In fall, some of the leaves turn bright red. Flowers: April to June

The tart berries make a refreshing lemonade-like drink and fine jelly or wine. Indigenous uses include making a yellow dye from the inner bark and as medicine with many applications.



Oregon Grape—Berberis repens—Berberidaceae

General: A native forb, the stems arise from a simple or branched caudex. The leaves are linear, pinnate at the stem base and becoming entire up the stem. The inflorescence is a raceme of 4-petaled flowers.

Flowers: May to July

It reproduces by seed and by resprouting from the rhizome. The latter helps it recover quickly from wildfire.



Plains Mustard—Schoenocrambe linifolia—Brassicaceae

General: The succulent, jointed, flat stems grow in a mound and spread out. The needle-sharp spines grow in bundles of about 10 from woolly nodes on the stem. The flowers vary from lemon yellow to peach.

Flowers: May to June Widely used for food, either raw or dried for storage.



Prickly Pear Cactus—Opuntia polyacantha—Cactaceae



General: Yellow, saucer shaped flowers with 5 showy, waxy petals and 5 smaller purplish sepals (soon dropped); the leaves are mainly basal, egg -shaped to round.

Flowers: March to June One of the first flowers to bloom in spring—just as the snow cover begins to disappear.

Sagebrush Buttercup—Ranunculus glaberrimus—



General: Grows in dense tufts of basal leaves from a woody taproot. The leaves are pinnately compound, with 5-10 pairs of leaflets attached to the main leaf axis. Soft, silky hairs cover the surface of the leaflets, giving them a grayish appearance. 10-30 flowers are arranged in a raceme on the end of a leafless stem. Color varies from yellow to white. Flowers: May to July

Silky Crazyweed—Oxytropus sericea—Fabaceae



General: Elongating clusters of stalked flowers at the ends of stems arising from leaf axils in the upper plant and at top of stem—yellow with 4 rounded petals/6 stamens. Leaves are linear, toothless, or with a few widely-spaced teeth.

Flowers: May to August

Small Wallflower—Erysimum inconspicuum—Brassicaceae

General: A bushy plant, with many unbranched, hairy stems that bear many narrow, stalkless, hairy, dark green leaves but are smaller near the base of the stem. The tiny, pale yellow flowers grow in small clusters.

Flowers: April to July

Puccoon, another common name, is an Algonquian word referring to a plant that contains a dye.



Western Gromwell—Lithospermum ruderale—Boraginaceae

General: The narrow, alternate, dark green leaves have entire margins, and small hairs on the surface. The bright yellow, trumpetshaped flowers emerge from the axils of the upper leaves.

Flowers: April to July

The stems, leaves, and roots have been used to make teas with stimulating effects.



Yellow Gromwell—Lithospermum incisum—Boraginacea

General: Silvery-gray, woolly-hairy, perennial herb; stems clumped from a branched base, sometimes tap rooted. Flowers are a deep yellow with few ray florets around a rounded, yellow button of disc florets.

Flowers: May to August

Common name derived from the Anglo-Saxon for "groundswallowing" because of the rapid spread.



Wooly Groundsel—Senecio canus-Asteraceae



Yellow Bell—Fritillaria pudica—Liliaceae

General: Has long, linear leaves, in pairs or sometimes a whorl of 3, either basal or located midway up the unbranched stem. A single nodding, bell-shaped flower has 3 petals and 3 petal-like sepals, which are bright yellow to orange.

Flowers: April to May

This plant is edible—Indigenous uses included collecting and boiling them to eat alone or with bitterroot, which is ready to harvest at the same time.



Yellow Prairie Violet—Viola nuttallii—Violaceae

General: The leaves are conspicuously veined, slightly toothed and are oval to lance-or heartshaped, and have long petioles. The lower three of the five bright yellow petals have purplish veins on their inner surface, and the upper petals are tinged with red on the back.

Flowers: May to August Violets are nutritious, edible herbs, high in vitamins A and C.



General: Unbranched stems covered with stiff short hairs bearing narrow, lance-shaped leave with mostly entire margins. The bracts are yellowish to greenish.

Flowers: June to August

The dense flower clusters of these plants resemble paintbrushes that have been dipped in pots of paint --red, purple or yellow, depending on species.

Yellowish Paintbrush—Castilleja lutescens—Scrophulariaceae

General: Forms dense, low cushions of silvery gray leaves, each with 3 leaflets. The plants are stemless. The long, white flowers are erect, facing upward from thin, translucent stipules at the base of the leaves. The keel petal is normally white with a lilac tip, but it may be purple or blue.

Flowers: April to May



Cushion/Plains Milkvetch—Astragalus gilviflorus—Fabaceae

General: The basal leaves of this daisy consist of many branching segments. The few leaves on the stems are small and often unbranched.

Flowers: May to August

Compositus is a Latin word meaning "compound," of many parts, referring to the many-divided leaves. The leaves are the distinguishing feature of this species.



Cutleaf Fleabane/Daisy—Erigeron compositus—Asteraceae

General: Erect, unbranched stems about 2' tall with numerous leaves that clasp the stem. Eggshaped, mostly oblong leaves have pointed tip. Numerous tiny flowers are arranged in a branching panicle that is upright on the end o branches. Fruit is red berry.

Flowers: April-July



False Solomon's Seal—Smiacina racemosa—Liliaceae



General: Has an unbranched, leafy stem. The lance-shaped, stemless leaves have prominent parallel veins and alternate on the stem. 5-10 star-like flowers are arranged in an unbranched inflorescence at the top of the stem.

Flowers: May to July

The fruit is a red berry flecked with purple becoming uniformly red.

Starry Solomon's Seal—Smilacina stellata—Liliaceae



General: Slender leaves are arranged opposite on the stems, often with clusters of secondary leaves crowded in the axils of the larger, primary leaves. White flowers have 5 deeply notched petals.

Flowers: April to August

Plants of this genus were/are common feed for chickens, goslings and caged birds, especially if the birds were ill.

 $Field\ Chickweed--Cerastium\ arvense--Caryophyllaceae$



General: Leaves are bluegreen compound; finely divided into many small narrow segments. Old leaf stalks from previous years are persistent. Leafless stems with several clusters of white flowers arranged in compound umbels on the end.

Flowers: May to July

Hayden's Cymopterus—Cymopterus nivalis—Apiaceae

General: The leaves are alternate and basal, lance shaped with fine, freely branching hairs, often felted; basal leaves taper to stalks. The flowers are white to pinkish-purple, cross-shaped with 4 petals. Flowers: May to August

All rockcresses are edible, with the typical sharp flavor of the plants in the mustard family.



Holboell's Rockcress—Arabis holboellii—Brassicaceae

General: This is somewhat shorter than many rock-cresses, with small stem leaves and a rosette of basal leaves covered sparsely with long, stiff hairs. 5-20 white, 4-petaled flowers are arranged in a somewhat open inflorescence.

Flowers: May to July



Nuttall's Rockcress—Arabis nutallii—Brassicaceae

General: Tiny, narrow, needle-like wooly leaves cover the stems. Flowers are pink or bluish to white, with 5 broad, flat spreading lobes at the tip of a slender tube. Flowers: April to June

Blackfeet uses include preparing a laxative tea or to relieve chest pains. A yellow dye can be prepared from this plant.



Hood's Phlox—Phlox hoodii—Polemoniaceae



General: A star-shaped blossom formed by six pointed, creamy-white sepals, each with a green spot at its base. Flowers are loosely distributed near the top of the stem. The leaves are long, linear, basal, sparse. **Flowers:** June to August

Contains an alkaloid that is extremely toxic and has been responsible for the death of cattle, sheep and humans.

Meadow Death Camas—Zigadenus venenosus—Lilliaceae



General: Numerous small, fivepetaled, white flowers spread along a tall, hairy, strong stem. Leaves are narrow, tough and prickly, standing perpendicular to the stem.

Flowers: May to July

Often called the "white forget-menot for its resemblance to the closely related blue forget-menots.

Miner's Candle—Cryptantha celosioides—Boraginacea



PaleToadflax—Comandra umbellata—Santalaceae

General: The alternate leaves are thick and covered with a whitish substance that gives them a gray-green color. The floral parts are attached to a greenish tube from the top of the ovary. Flowers have 5 white to purple lobes that extend out from the top of the tube. Each floral lobe has a stamen at the base and a tuft of hairs behind each stamen.

Flowers: April to August

General: Silvery-gray, woolly-hairy, perennial herb; stems clumped from a branched base, sometimes tap rooted. Flowers are a deep yellow with few ray florets around a rounded, yellow button of disc florets.

Flowers: May to August

Pussytoes have been used for various medicinal purposes ranging from rattlesnake bites to coughs.

General: The basal leaves often form large, flat mats. The leaves are green on upper surface. Dense wooly hair on lower surface gives it a grayish-white color. The woolly flowering stems have an umbel flower arrangement in a range of colors from creamy white to yellow, tinged with red or purple, especially as they age.

Flowers: June to August

General: Mainly basal leaves, rather soft, linear, tapered to slender points fringed with fine hairs; The flowers are white with 5 showy petals and 5 small, egg-shaped sepals.

Flowers: July to August



Pussytoes—Antennaria spp.—Asteraceae



Sulphur Buckwheat—Eriogonum umbellatum—



Threadleaf Sandwort—Arenaria capillaris—Caryophyllaceae



General: Flowers hang down from the ends of branches, often concealed under the broad leaves. There are usually 2 creamy white, bell-shaped flowers per branch. The leaves are egg-shaped, abruptly pointed with parallel leaf veins conspicuous.

Flowers: May to July

Fruit is a round, bright red berry, which is edible, mild and tastes faintly like cantaloupe.

Wart-Berry Fairy Bell—Prosartes trachycarpa—Liliaceae



General: The basal leaves are divided into three sharply toothed leaflets that are hairless on top and often have a bluish-white cast. White flowers grow in clusters on slender stalks with five broad, egg-shaped petals, five green sepals and 20 yellow stamens.

Most cultivated strawberry plants were developed from this plant.

Flowers: June to August

Wild Strawberry—Fragaria virginiana—Rosaceae





Yarrow—Achillea millefolium—Asteraceae

General: Many tiny flowers with five white rays and yellow disks, clustered in a dense, flat-topped umbel on a thin stem. Leaves are narrow long pinnately dissected in thin leaflets resembling a feather.

Flowers: June-September

A medicinal wonder, Yarrow is used to stop bleeding from wounds, a poultice for burns, treats fevers and colds, alleviates toothaches. Called Chipmunk's Tail because of the appearance of the leaves.

General: Strongly aromatic, perennial herb, tufted, from a stout, woody root crown, often forming mats.

Flowers: July to October

An aromatic plant that can be used as a spice, but only in small amounts because its bitterness is overpowering. A Northern Cheyenne remedy for nosebleeds. Also used as smudge for mosquitoes and has various ceremonial uses. Indicator species for overgrazed pastures.



Fringed Sagewort—Artemisia frigida—Asteraceae

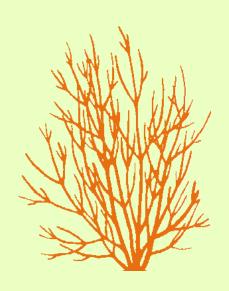
General: Often noticed for its silvery-white to greenish foliage and stems that are covered with a dense mat of woolly hairs.

Flowers: July to October

This plant has various ceremonial and medicinal uses the word sagewort is interchangeable with sagebrush and wormwood.



Prairie Sagewort—Artemisia ludoviciana—Asteraceae



General: Highly branched shrub, it resembles sagebrush in silvery color and growth form—not aromatic like sagebrush. Flowers are bright yellow to cream. Long hair surrounds the flowers. Leaves are alternate, blades narrow, lance-shaped. The margins are entire and the leaf has a prominent midvein. Surface is woolly, giving the new leaves a silvery look. Flowers: May-September



Gray Horsebrush—Tetradymia canescens—Asteraceae

General: A shrub with a rounded crown and several erect stems from the base. The flowers are yellow, arranged in an umbrella-shaped head. The leaves are alternate, linear to spatula-shaped blades with entire margins. Flowers: June-September

A source of Indigenous chewing gum. It can also be used as tea, cough syrup, and dye. During WWII, this was tested as a potential source of rubber.



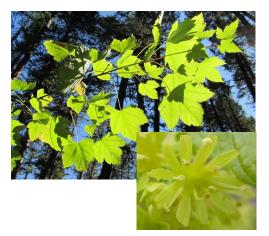
Rubber Rabbitbrush—Ericameria nauseosus—Asteraceae

General: One of 22 species of sagebrush in Montana is a highly branched leafy shrub, with white shedding bark. Older plants appear twisted. The numerous alternate leaves have silvery hairs on both sides. The leaves have entire margins, are stalkless and pointed at both ends. Flowers: July-October

Recognized by Blackfeet and Lakota as an important forage plant for horses and big game.



Silver Sagebrush—Artemisia cana—Asteraceae



General: Deciduous shrub or small tree, clumped; branches opposite, with greyish bark and reddish twigs. Flowers are yellowish-green with 5 petals and 5 sepals. Fruits are v-shaped pairs of wrinkled, winged seeds. It is tolerant of shade, often growing under the canopy of conifer trees.

Flowers: April to June

Rocky Mountain Maple—Acer glabrum—Aceraceae



General: The flowers are arranged in a spike, directly attached to the stem. The fruit is a red, berrylike, flesh, one-seeded fruit. The leaves are compound, with 3 oak-like leaflets.

Flowers: May to June

Indigenous uses include tea, jam, and food seasoning. Medicinal uses include relief of poison ivy rashes. Not a fire tolerant shrub, but they were burned to force the growth of long, straight sprouts for basket weaving.

Skunkbush Sumac (Lemonade Bush)—Rhus trilobata—Anacardiaceae



General: Deciduous shrub, erect to spreading, branches numerous, without thorns. The flowers are golden yellow and the tube is funnel-shaped. The berries vary in color from yellow and orange to red.

Flowers: April to May

Meriwether Lewis wrote in his journal, "a great abundance of red yellow perple & black currants and service berries now ripe—particularly the yellow currant which I think vastly preferable to those of our gardens."

Golden Currant—Ribes aureum—Grossulariaceae

General: Deciduous shrub, erect to spreading, branches numerous, without thorns. The leaves are alternate, kidney-shaped to broadly fanshaped. Flowers are white, tinged greenish or pinkish, tubular, with 5 tiny, erect petals and 5 small, spreading sepals. Fruit is a red berry. Flowers: May to July

Flowers with this kind of bellshape provide a source of nectar for hummingbirds early in the year.

General: Erect shrub, densely branched. The leaves are in pairs, opposite each other on the stems. Each flower has 4 petals, many stamens, 4 styles, and a sweet orange-blossom aroma.

Flowers: May to July

Mockorange is the state flower of Idaho, where it is often called syringa. This plant was named in honor of Meriwether Lewis.



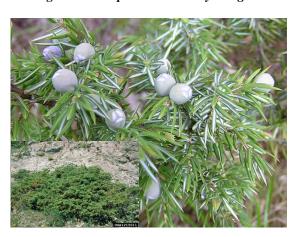
Wax Currant—Ribes cereum—Grossulariaceae



Lewis's Mock Orange—Philadelphus lewisii—Hydrangeaceae

General: Coniferous, evergreen shrub, spreading, often forms mats. The leaves are mostly in whorls of 3, sharp needles, whitish above, dark green below. Seed cones (female) are berry-like, dark blue, often with a grayish bloom. Pollen cones (male) round to egg-shaped.

Salish uses include tonics used to treat colds, flu, arthritis, muscle aches, and kidney issues.



Common Juniper—Juniperus communis—Cupressaceae



General: Coniferous, evergreen shrub to small tree, usually erect with an irregularly rounded crown, small branches slender, scale with overlapping leaves, cedar-like. Trunks twisted and knotted. Male and female cones on separate shrubs, scattered among leaves; pollen cones eggshaped. Seed cones (female) berry-like bluish-purple.

Rocky Mountain Juniper—Juniperus scopulorum—Cupressaceae



General: Woody shrub is densely and rigidly branched. The leaves are wedge-shaped with 3 lobes, like big sage-brush, but without the pungent aroma. The upper leaf surface is green, while dense hair under gives it a gray cast. The yellow flowers are highly fragrant to attract pollinating insects.

Flowers: April to June

Antelope Bitterbrush—Purshia tridentata—Rosaceae



Chokecherry—Prunus virginiana—Rosaceae

General: The white flowers are arranged in long racemes of 15 or more on the ends of leafy twigs. The fuit is a round, dark purple to black cherry with a single round pit. The leaves are alternately arranged, egg-shaped to more oval.

Flowers: May to July

Very popular edible plant—be sure to spit out the pits! This can be used to make jam, syrup, and much more.

General: A deciduous shrub, spreading from rhizomes. Leaves are alternate, oval, often widest above middle, irregularly coarsetoothed towards tip. The flowers are white often tinged pink to purple, saucer-shaped with 5 tiny petals in flat-topped clusters. Flowers: May to July



Birchleaf (White) Spiraea—Spiraea betulifolia—Rosaceae

General: Deciduous shrub or small tree, erect to spreading, often forms thickets. Leaves are alternate, oval to round, rounded at tip, coarsely toothed on upper half. The flowers are white, starshaped with 5 slender petals in leafy clusters near branch tips. Flowers: April to July

An important food source for many Indigenous peoples, they can be eaten fresh, dried, or mashed. Also called Sarvisberry, Shadbush, Juneberry, Saskatoon, and more.



Western Serviceberry—Amelanchier alnifolia—Rosaceae

General: Deciduous shrub, erect to spreading, branches covered with thorns at its nodes. The leave are alternate, pinnately compound, sharply doubletoothed, somewhat hairy beneath. The flowers are pink, saucer-shaped with 5 broad, single petals. Fruits are red, round to pear-shaped, berry-like hips. Flowers: June to August

Rose hips are rich in vitamins A, B, C, E and K.



Wild Rose—Rosa woodsii—Rosacea



General: Coniferous, evergreen tree. Trunk straight. Branches irregular, spreading or drooping. Crown compact, pyramidal. Flat, evergreen needles individually attached to branches, spirally arranged, dark yellow to bluegreen, not sharp to touch, aromatic when crushed. Male and female cones on same tree, pollen cones reddish to yellow, seed cones narrowly eggshaped, hanging greenish when young, reddish brown later.

General: Coniferous, evergreen tree. Trunk straight, largely bare of branches in closed stands. Branches usually curve upward, crown open, pyramidal. Needles in bundles of 2, deep green to yellow-green. Male and female cones on same tree. Pollen cones (male) reddish to yellow-green, seed cones (female) egg-shaped, often asymmetrical. Some open to shed seeds, many remain closed.

General: Coniferous, evergreen tree. Trunk straight.
Branches numerous, stout, lower ones often drooping.
Crown open, irregularly cylindicral. Needles in bundles of 3.
Male and female cones on same tree, pollen cones (male) reddish-purple to yellow, seed cones (female) broadly eggshaped in groups of 1-3, reddish purple when young, dull brown when mature.



Douglas Fir—Pseudotsuga menziesii—Pinaceae



Lodgepole Pine—Pinus Contorta—Pinaceae



Ponderosa Pine—Pinus Ponderosa—Pinaceae



Limber Pine—Pinus flexilis—Pinaceae

General: Coniferous, evergreen tree, often gnarled and twisted, trunk short and stout, branches thick in whorls, plume-like. Evergreen needles in bundles of 5, 3-sided, smooth-edged, stiff, slightly curved, crowded at branch tips. Male and female cones on same tree, pollen (male) cones reddish, seed cones (female) light green when young, light brown later.

FIELD NOTES

FIELD NOTES

FIELD NOTES

Celebrating Wildflower Honorees



2022



2021



2020

Celebrating Wildflowers Partners







For more information about Celebrating Wildflowers or about this booklet, please contact the Montana Discovery Foundation, 2880 Skyway Drive, Helena, MT 59602 or email MontanaDiscoveryFoundation@gmail.com.

Available online at MontanaDiscoveryFoundation.org