Wildflower Guide

Uinta County Wyoming
& neighboring Uinta Mountains
2020

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Uinta County
Conservation District

Alpine sunflower

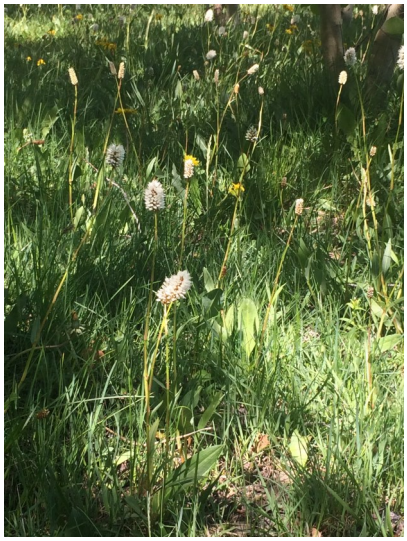
Scientific name: ***Hymenoxys grandiflora*** **(Torr. & A. Gray ex A. Gray) K.F. Parker** (syn Tetraneuris grandiflora)
Common names: Alpine sunflower, Old-man-of-the-mountain, Tundra hymenoxys, Graylocks

You'll have to hike above the timberline to find this refreshing and robust plant. The Alpine sunflower in native to the Rocky Mountains in Idaho, Montana, Utah, Wyoming and Colorado. And rocky it is; the Alpine sunflower is at home on talus slopes, gravelly meadows and other open rocky places of our Uinta Mountains above 10,000 ft.

Large showy flower heads, which unmistakably brighten up the landscape, obscure the densely woolly stems and linearly segmented leaves. Unlike many other members of the sunflower family who's floral heads follow the path of the sun during the day, the Alpine sunflower always faces east. Each floral head has 15 to 34 ray flowers and up to 400 disk flowers. Early season plants may only be a few inches tall, but later in the season plants will grow up to 12 inches. Flowering from June to August, this plant, like all alpine flowers is incredibly cold, wind and sun tolerant. Studies have shown that each plant may grow for a number of years, but only flower once before dying.

Despite being moved by botanical taxonomists through several genera, the specific epithet 'grandiflora' has remained with this species. 'Grandiflora' is Latin for 'large-flowered'. Another common name for this plant is Old-man-of-the-mountain, because of the dense covering of long or tangled white hairs on the leaves and stems. John Fremont made the first scientific collection of the Alpine sunflower in Wyoming's Wind River Range in the 1840's.

American bistort



Scientific name: ***Polygonum bistortoides* Pursh.**
Common names: American bistort, Western bistort

American bistort is a native perennial. It grows in moist meadows throughout the Western U.S from low to high elevations. It can be found in the southern part of Uinta County and the adjacent Uinta Mountains in meadows and seeps within aspen and pine communities. The flower clusters are usually white but can sometimes be pinkish in color. This plant flowers from June to August depending upon elevation.

Although palatability varies with location, this species is eaten by livestock and wildlife. Native Americans used the roots medicinally and cooked them with soups and meat.

The Greek root for the genus name 'polygonum', means 'many knees' referring to the swollen joints in the stems.

Arrowleaf balsamroot

Scientific name: ***Balsamorhiza sagittata*** **(Pursh) Nutt.**
Common names: Arrowleaf balsamroot, Oregon sunflower, Breadroot, Graydock

Arrowleaf balsamroot is a perennial forb that grows in sagebrush and juniper communities up to about 9000 ft in elevation. It is widespread in the Western U.S. Growing usually in well drained, deep soil, this plant has large tap roots that can be 4 inches in diameter and reach 8-9 feet deep.

As a member of the Composite family, each flowering head on this plant consists of 8-25 ray flowers and many disk flowers. The bright yellow flowering heads are 2-5 inches wide and grow solitary at the top of a leafless stock. The arrow-shaped leaves, with downward directed basal lobes, can grow up to 18 inches long and 6 inches wide.

The common name corresponds directly with the scientific name, Balsamorhiza sagittata. 'Balsam' is the name of a tree species and may refer to the residue within the roots of this plant. 'Rhiza' is Greek for root. 'Sagitt' is Latin for an arrow.

This plant is top killed by fire but can regrow after fire from the surviving root. It is a valuable forage for livestock and other animals, being most nutritious and palatable in spring and early summer. Some animals find the flowering head especially tasty. Native Americans used this plant for food and medicines. All parts of this plant are edible; the seeds can be ground into flour and the roots can be eaten raw or cooked.

Bastard toadflax

Scientific name: ***Comandra umbellata*** **(L.) Nutt.**
Common names: Bastard toadflax, Pale comandra, False toadflax

Bastard toadflax is a common perennial found throughout North America. It has narrowly elliptic leaves that resemble those of true Toadflax (genus Linaria). The small flower (6-8 mm wide) of this plant are borne in terminal or axillary clusters. Flowers lack petals but have 4 or 5 greenish, white or purple-tinged sepals. The sepals remain persistent on the end of the mature, globose, one seeded fruits.

Bastard toadflax is often semi-parasitic on roots of trees and shrubs. It does produce its own food by photosynthesis but obtains some nutrients from these other plants. Bastard toadflax can be found in well drained soils of sagebrush and mountain brush communities in our area.

Bitterroot

Scientific name: ***Lewisia rediviva* Pursh**
Common names: Bitterroot, Oregon bitterroot, Reviving lewisia

The flowers of Bitterroot are large and showy in comparison to its small basal leaves and short flower stocks. Each flower consists of 10 to 19 petals, ranging in color from pale to dark pink to lavender. The succulent leaves which appear early in the spring, start to dwindle as buds appear and are typically dried and gone by the time the flowers open in the late spring to summer. Flowers open under direct sunlight for 2 to 3 days.

Bitterroot has a thick, branching taproot that can grow up to 32 cm long. Native Americans gathered, ate and traded large amounts of Bitterroot each spring. The roots were dug before the plant flowered when the starch levels were highest and the roots were less bitter.

The genus 'Lewisia' was named for Captain Meriwether Lewis from his collection of this species in Montana in 1806. Despite being in a plant press for several months, one of his pressed specimens was planted and continued to grow after reaching Philadelphia in 1807. Because of its capacity to regenerate after being dried, this species was given the name 'rediviva', Latin for revive or back to life.

Bitterroot is a perennial forb native to the Western U.S. Wyoming and Montana mark the Eastern border of its range. Bitterroot is the state flower of Montana. The Bitterroot Valley, Bitterroot River and Bitterroot Mountains are named after this plant. *Lewisia rediviva* has the largest and most showy flowers of the two Lewisia species found in Uinta County. In our area, Bitterroot is most likely found in dry and rocky soils on exposed ridges or slopes. Specimens have been collected in the northern part of the Uinta County, north of Evanston.

Clustered broomrape

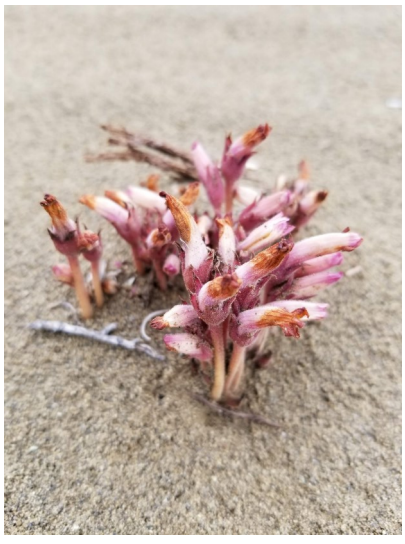
Scientific name: ***Orobanche fasciculata* Nutt.**
Common names: Clustered broomrape, Cluster cancerroot, Broomrape, Burro-weed strangler

This is a surprisingly fun little plant to find. Clustered broomrape is somewhat cryptic and is not always recognized as a flowering plant because of its color and small stature.

This plant is an obligate parasite, meaning it has no chlorophyll and depends completely on a host plant for water and carbohydrates. Although not necessarily found tucked up close to a host plant, most often in Wyoming Clustered broomrape is parasitic on the roots of sagebrush.

The stem and small scale-like leaves of this plant do not appear above ground. Fleshy purplish flowering stocks emerge, seemingly out of nowhere, to produce pinkish purple to yellow tubular flowers. Up to 12 flowering stocks, 7-24 cm tall, can appear in a cluster and remain above ground only while the flowers develop and the seeds set from late May to mid-summer.

Clustered broomrape is widespread in the West but is never found growing abundantly in an area. Small clusters can be found growing singularly throughout the summer in well drained loose sandy areas in sagebrush and juniper communities.



Colorado columbine

Scientific name: ***Aquilegia coerulea* James**
Common names: Colorado columbine, Colorado blue columbine

The distinct flowers of Colorado columbine are very noticeable as they bloom above the leafy vegetation. Each flower is a combination of intricately arranged sepals and petals. Sepals are the outermost layer of a flower which surround the petals in a bud. In many plants, sepals are green, but in the Colorado columbine, the five sepals are petaloid, meaning they bear color and look like petals. The Colorado columbine has five spreading sepals ranging in color from white to pale blue or blue to pink or purple. The five petals are usually paler or white in color and are arranged in front and opposite of the sepals. The lower part of each petal is closed, forming a long spur with a bulbous glandular tip extending backward from the flower. The spurs often match the sepals in color.

Colorado columbines grow 15 to 100 cm tall. The leaves are divided into three leaflets, with each leaflet being 1 to 3-lobed at the tip. The underside of each leaf is often paler than the top surface. The basal leaves of this perennial herb arise from the ground on long petioles (leaf stems) but rarely surpass the flowering stem or the flower.

'Columbine' comes from Latin word 'columba' meaning 'dove'. To some, the flower buds or the flowers from the rear look like groups of doves. The scientific name of Colorado columbine is *Aquilegia coerulea*. Some believe that Linneaus derived the genus name Aquilegia from the Latin words 'aqua' meaning 'water', and 'legere' meaning 'to collect', in reference to the collection of water/nectar on the glandular tip of the spur. Others believe Aquilegia came from the root word 'aquil' meaning 'eagle', in reference to the resemblance of the spurs to eagle talons. The specific epithet 'coerulea' is Latin for 'dark-blue'.

This short-lived perennial herb grows in mountain brush and aspen communities, coniferous forests, meadows, and on talus slopes. It prefers moist soils and open sunny areas or partial shade. Colorado columbine is a the only native columbine species found in our area. It is native to the Intermountain West and is Colorado's state flower.

Common stonecrop

Scientific name: ***Sedum lanceolatum* Torrey**
Common names: Common stonecrop, Lanceleaf stonecrop, Yellow stonecrop

Common stonecrop can be found throughout Uinta County in open areas with shallow, gravely or rocky soils. This plant flowers from May to August. A tight basal rosettes of reddish, succulent leaves appear throughout the spring and early summer. As the flowering stems develop these lance-shaped leaves become smaller. The leaves are shed by the time the yellow flowers bloom. The flowering stems are rarely more than 10-15 cm tall.

Common stonecrop evolved for high elevation and dry, rocky conditions. Its succulent leaves are an adaptation for water storage when little water is available to the roots. CAM photosynthesis is another adaptation this plant uses to conserve water. Like cacti, stonecrop opens the stoma (pores) on their leaves during the night to take in and store carbon dioxide. The plants use the sunlight during the day to convert the carbon dioxide to carbohydrate energy but leave their stoma closed to prevent water loss from evaporation.

It is said that Native Americans used the young fleshy leaves medicinally as a laxative. Many native pollinator species are attracted to this plant. This plant produces a chemical called sarmentosin that deters herbivores from grazing on it.

Contra stoneseed

Scientific name: ***Lithospermum ruderale*** **Douglass ex Lehmann**
Common names: Contra stoneseed, Western stoneseed, Lemonweed, Yellow puccoon

In Latin the word 'litho' means stone, and 'spermum' means seed; thus the common name 'stoneseed'. The hard ovoid nutlets of this plant are about 6mm wide and are smooth and highly polished. Unlike many other plants whose flowers produce a prolific amount of seeds, each flower of this plant produces only one, sometimes two seeds.

Although the meaning of the Latin word 'ruderal' is rubbish or waste, referring to the waste places the plant is found growing in, this is not a weedy plant. It is found growing in sagebrush communities usually at lower elevation areas in the county.

Another common name for this plant is Puccoon which means dye in one of the Native American languages, referring to the dye (red and possibly yellow) made from the roots of this plant.

It is said that Native Americans in the Great Basin used this plant as a contraceptive.

Death camas

Three species of Death camas (genus *Zigadenus*) are found in Uinta County. Some species are found in wet and drying meadows or along stream sides while other species are found in more arid areas in sagebrush, mountain brush and juniper communities. Growing and maturing early in the spring, Death camas enters dormancy early in the summer with declining soil moisture.

As its name implies, Death camas is an extremely poisonous plant. Toxic alkaloids occur in all parts of the plant, including the underground bulb, at all stages of growth.

This plant is responsible for many sheep losses throughout the West in the early spring. Other livestock, such and horses and cows can be poisoned by this plant, as can humans, but sheep are mostly likely to be affected because of grazing timing.

Death camas is one of the first plants to grow in the spring. Its leaves, which can be mistaken for grass, may be heavily grazed if sufficient other forage is unavailable. The plant, which can grow to 16 inches tall, produces clusters of cream to white flowers bloom atop a stalk which usually rises above the leaves. The deep underground bulb can cause severe illness in humans if mistaken for an edible liliaceous bulb.

Elephanthead

Scientific name: ***Pedicularis groenlandica* Retz.**
Common names: Elephanthead, Elephanthead lousewort, Bull elephant's-head, Elephantella, Pink elephants

The next time you come across this plant, take time to look at the shape of its flowers. Each individual flower of this plant strongly resembles an elephant's head complete with ears and a trunk. Many of these small, purple to violet, elephant heads are spirally arranged in dense elongated clusters at the top of each stem.

Elephanthead is a perennial plant with many stout, erect stems that usually grow 10 to 50 cm tall. The fern-like leaves can grow up to 25 cm long at the base of the plant and are reduced in size upward. Elephanthead is a hemiparasitic plant, meaning it is capable of some photosynthesis but often parasitizes on the roots of another plant for nutrients.

Like the Shooting star which can often be found growing with Elephant's head, this plant is pollinated via 'buzz pollination', where the fast vibration of a bee's wings causes that pollen to fall out of the flower and drop onto the bee.

Elephanthead can often be seen growing by the hundreds and possibly thousands in grass-sedge communities in wet openings and meadows within montane coniferous forests and alpine communities. Although reported in Uinta County, the best chances of spotting this plant are on a hike or horseback ride in the Uinta Mountains. This plant grows throughout the Western U.S.

The genus name, Pedicularis, means 'pertaining to lice' in Latin. Many members of this genus are referred to as Louseworts (wort meaning 'plant'). According to some sources, this genus was named because of an old superstition that people or cattle who ate this plant would be infested with lice. Others say it was once believed that this plant could cure people or cattle of lice. Either way, Elephanthead is grazed early in the summer at least by elk. The leaves of this plant were used medicinally by Native Americans.

Erigeron spp.

Scientific name: ***Erigeron* L.**
Common names: Daisy, Fleabane

There are several Erigeron species native to Uinta County and the neighboring Uinta Mountains. These annual, biennial or perennial forbs can grow in all habitat types from dry badlands to shrublands to alpine slopes and rocky ridges.

Erigeron is a genus in the Composite/Aster family. Most Erigeron species have both ray and disk flowers, however some species lack ray flowers. When present, the narrow ray flowers range from white to pink to purple. Disk flowers are usually yellow. These plants are rarely more than 40 cm tall. Their leaves vary from having an entire margin to being strongly divided. Species are often distinguished by only minute features.

In Greek the term ‘eri’ means early, and the word ‘geron’ means an old man. It is not certain whether the name was given as a reference to the early appearance of the seed heads or the white hairs that appear on the fruit which both resemble the head of an old man. It has also been suggested that it may refer to the worn-out appearance of some species, even when in flower. The common name given to some species is Fleabane, and although there is no evidence that any of these species repels fleas, the seeds of Erigeron species are nearly as small as fleas.

Evening primrose

Scientific name: ***Oenothera casepitosa* Nutt.**
Common names: Evening primrose, Tufted evening primrose, Handkerchief plant, Sand-lily

Evening primrose is a perennial forb native to the Western U.S. with beautiful, fragrant flowers that open toward evening and wilt the next day. Each flower has four showy white, notched petals (2 to 6 cm long) which turn pink with age. Evening primrose is most often acaulescent; meaning it does not have stems. The flowers grow solitary from the axils of the leaves. Each flower is preceded by a 3 to 14 cm floral tube which may be mistaken for a stem. Sweet scented nectary glands lie at the base of each floral tube. Evening primrose is adapted for pollination by hawkmoths who come to the flower for the nectar.

When in bloom, the flowers of this plant cannot go unnoticed, especially in open areas on hillsides, along roads or around ant hill mounds. Two varieties of this species occur throughout Uinta County in sagebrush, mountain brush and juniper communities on well drained soils.

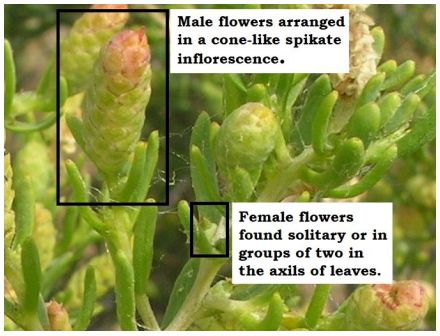
The growth form of Evening primrose is casepitose, meaning it grows in dense tufts, thus the specific epithet ‘casepitosa’. This plant is known as Handkerchief plant by some because of the flower petals’ resemblance to dainty handkerchiefs.

Greasewood

Scientific name: ***Sarcobatus vermiculatus*** **(Hooker) Torrey**
Common names: Greasewood, Black greasewood, Big greasewood, Seepwood

Meriwether Lewis, being the first to make a scientific collection of this plant, referred to Greasewood as 'the fleshey leafed thorn'. Greasewood is a woody shrub with multiple branched stems that often taper into sharp thorns. Young stems have a yellowish appearance but become gray with age. Greasewood has simple, succulent, deciduous leaves. In our area Greasewood can grow up to 2 meters tall.

Although its flowers may look a little different than a picturesque wildflower, Greasewood is a native flowering plant. Not only do the flowers lack showy petals, they are also imperfect, meaning each flower has only male or female reproductive parts. Male flowers are borne in cone-like clusters at the end of the stems. Female flowers (and fruit) appear lower in leaf axils on the same plant (monoecious). Greasewood is wind pollinated.



Greasewood grows throughout most of the Western U.S. in plant communities of saline substrates. In areas of high salinity, Greasewood may be dominant or associated with other saltbushes. Sagebrush and rabbitbrush are commonly associated plants in areas of lower salinity. The long branching taproots of Greasewood reach down to upper parts of the water table. Greasewood is a food source for large and small wildlife mammals and birds. It can also be an important browse for domestic livestock in the winter.

The genus name Sarcobatus refers to the succulent leaves and spiny branches; 'sarkos' means 'flesh', and 'batos' means 'bramble or thicket' in Greek. The Latin word 'vermiculatus' means 'wormy, worm-shaped or worm-eaten'.

Hairy clematis

Scientific name: ***Clematis hirsutissima* Pursh *var. hirsutissima***
Common names: Hairy clematis, Sugarbowls, Lions-beard, Bad-hair-day, Vase-flower

Hairy clematis can be found growing in mountain brush, meadows and woodlands in the foothills and mountains. As it often grows tucked up against shrubs or in within deep vegetation, the leaves and flowers are not always easily noticed. When they are seen however, the flowers are unmistakable.

The silvery-purple, urn shaped flowers which are 2 to 5 cm long, nod downward. Interestingly, the flower is not made up of true petals, but are petal-like sepals bearing color. A covering of small hairs gives the flowers their silvery glisten.

Hairy clematis flowers from spring to mid-summer and does not grow vines like most other species of Clematis. It does however have showy seedheads, like other Clematis species, made up of long plumes on the end of the seeds.

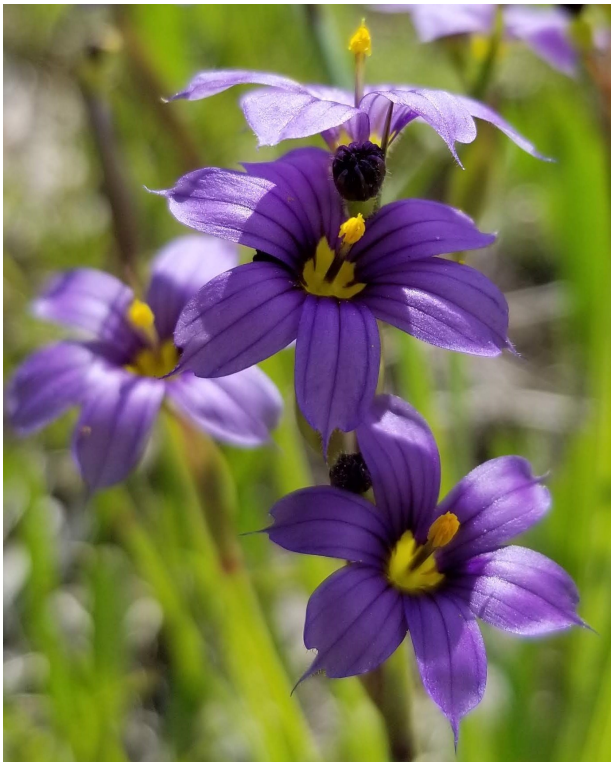
Clematis is an ancient Greek name for several climbing plants. ‘Hirsutissima’ is Latin for ‘very hairy’.

Idaho blue-eye grass

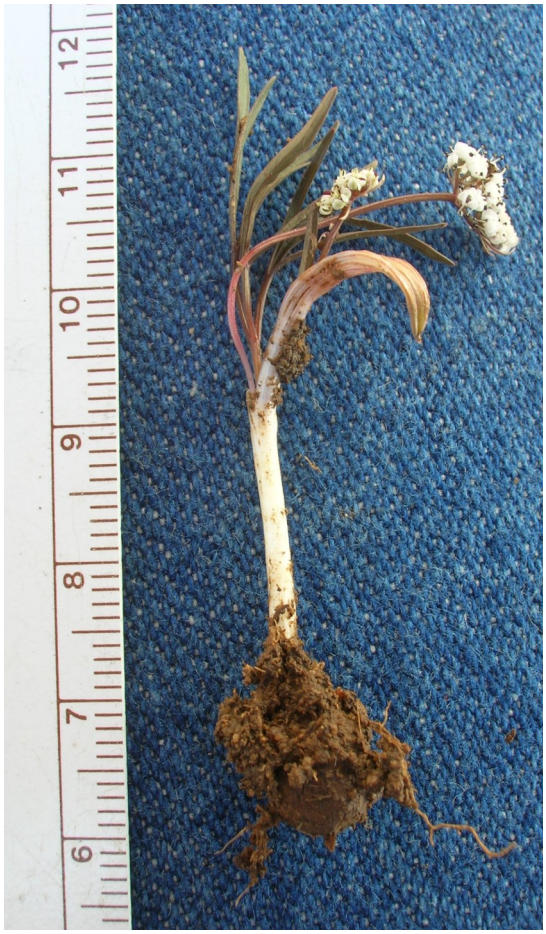
Scientific name: ***Sisyrinchium idahoense*** **E.P. Bicknell**

This plant is not a grass as the common name implies. This plant is part of the Iris family (Iridaceae) which includes many of our showy garden plants like Iris, Crocus and Gladiolus.

Blue-eyed grass has small attractive deep blue-violet flowers with a yellow center. It can be found flowering from May to mid-summer in ephemerally moist areas. The leaves and stem are flattened and remain green throughout the summer.



Indian potato



Scientific name: ***Orogenia linearifolia* S. Watson**
Common names: Indian potato, Turkey-peas, Great Basin Indian potato

You have to be out roaming the hills early in the spring to find the Indian potato. This plant flowers next to receding snowbanks on open slopes and ridges in the foothills and mountains from March to May. The small white flowers form a cluster at the top of the flowering stem. The leaves wither away within a few weeks of flowering and the plant can no longer be detected above ground.

As the common name implies, the small (about 1.5 cm thick), round root of this plant is edible and is said to taste much like a potato when eaten raw or cooked. The scientific name of this plant *Orogenia linearifolia* is Greek in origin; 'oros' meaning mountain, and 'genia' meaning born. Linearifolia refers to the linear shaped leaves, which sometimes resemble a turkey foot.

Leopard lily

Scientific name: ***Fritillaria atropurpurea* Nutt.**
Common names: Leopard lily, Spotted fritillary, Checker lily, Chocolate lily, Purple fritillary, Spotted mountainbells, Spotted missionbells.

Native to the Western U.S., the Leopard lily grows infrequent and scattered throughout most of the Intermountain West. This plant usually grows tucked up against trees or shrubs in sagebrush and montane forest communities often in moist, rich soils and moldy leaf litter.

This erect and slender plant can grow up to 40 cm tall with linear leaves along the stem and 1 to 4 flowers atop the stem. The nodding flowers are usually from 1 to 2 cm long and 0.3 to 0.8 cm wide. The flowers, which bloom from April through July are brown or purplish molted with yellow.

Marsh-marigold

Scientific name: ***Caltha leptosepala* DC.**
Common names: Marsh-marigold, White marsh-marigold, Mountain marsh-marigold, Elks-lip, Elk slip

Marsh-marigold can be found blooming from early spring to July around wet meadows, streams and seeps in higher elevation aspen, coniferous and alpine communities. This plant is often found flowering near or in receding snowbanks; the blue flower buds can push through the snow to bloom. Marsh-marigold has 5 to 12 white sepals but no true petals. The yellow center of the flower is a globose composition of several pollen bearing stamens. The glossy, heart-shaped leaves grow up to 9 cm long and 5 cm wide.

Marsh-marigold is a widely distributed species in higher elevations in and west of the Rocky Mountains up into Alaska.

Milkvetch

There are several species of milkvetch in Uinta County.

The members of the Milkvetch genus (*Astragalus*) all have a characteristic sweetpea-like flowers, ranging in our area from white to purple or pink. The legume fruit pods vary greatly in size, length, color and the amount of hair covering them. Some of the inflated pods can be very intriguing with their red-streaked coloration, and can 'pop' under your feet when stepped on. The leaves of most species in our areas are pinnately compound with few to many leaflets.

Many *Astragalus* species contain high levels of nitro-compounds. Some species in this genus are also called Locoweed and have the same poisonous affect on livestock as some members of the closely related *Oxytropis* genus. Other species are poisonous because of the large amount of selenium they accumulate from the soil. Cattle will eat some species even when other forage is abundant, but sheep and cattle are both susceptible to poisoning.

Not all species are toxic however and parts of some *Astragalus* species have been used for centuries for medicinal purposes and as a dietary supplement.

Moss campion

Scientific name: ***Silene acaulis* (L.) Jacq.**
Common names: Moss campion

Moss campion is another alpine tundra species found high in the Uinta Mountains. Like other alpine species, this plant has special adaptations to survive harsh conditions. Small, narrow leaves, low, cushion-like growth form and stemless flowers protect that plant from the wind and retain heat and moisture. Moss campion is long lived and slow growing. Research has shown that the taproots of this plant can reach 3 to 6 feet in depth. The pink to pink-purple flowers are less than half an inch across and bloom for only a few weeks during the summer.

Mountain ball cactus

Scientific name: ***Pediocactus simpsonii* (Engelmann) Britton & Rose**
Common names: Mountain ball cactus, Simpson's footcactus, Barrel cactus, Simpson's hedgehog cactus, Snowball pediocactus

There are two species of cactus found in Uinta County. This species has a spherical, unbranched stem that can grow up to 25 cm tall and 15 cm wide. It is usually found growing singularly, rarely in clusters. The petals can be pink to white and sometimes purplish, blooming from April to May. Because cacti lack green leaves, the stems are the fleshy, photosynthetic part of the plant.

This cactus loves high elevations and is adapted for cold winters and cool summer nights. The Mountain ball cactus is found mainly in the SE quadrant of the county and is not as abundant or as noticeable as the Pricklypear cactus.

The scientific name of this cactus is *Pediocactus simpsonii*. The meaning of the Greek word pedi is either 'plain' (referring to the habitat) or 'foot'.

Narrowleaf Indian paintbrush

Scientific name: ***Castilleja angustifolia*** (Nutt.) G. Don
Common names: Narrowleaf paintbrush, Northwestern Indian paintbrush

To start the summer off, the first wildflower we will spotlight is an Indian paintbrush. There are approximately 17 species of paintbrush found in the state of Wyoming. The species pictured here looks very similar to the linearleaf or Wyoming Indian paintbrush (Castilleja linariifolia Benth.) which was adopted as the Wyoming state flower in 1917.

An interesting fact about Indian paintbrushes, is that they are hemiparasitic. This means that although they have chlorophyll to capture sunlight for sugar production, they attach themselves parasitically onto the roots of a host plant in order to get adequate water and nutrients from the soil because they lack their own developed root systems. Sagebrush plants and some perennial grasses with vast root systems are excellent host plants for Indian paintbrushes. Due to the fact that they are hemiparasitic, it is difficult to transplant Indian paintbrushes or grow them in a garden from seeds.

Indian paint brushes can be found throughout Uinta County in a variety of habitats from dry to moist. They vary in color from red and pink to yellow and orange. The flowers of Indian paintbrushes are actually quite inconspicuous, so the color you see is not technically the flower itself but bracts, or modified leaves, bearing color.

Northern bedstraw

Scientific name: ***Galium boreale* L.**
Common names: Northern bedstraw

Northern bedstraw is a widely distributed circumboreal perennial herb. It grows in mountain brush, aspen, meadow and coniferous forest communities.

This plant has many small white or cream flowers (3.5-7 mm wide), arising in clusters from the leaf axils and the apex of the stems. The flowers have no sepals but are composed of four united petals that fold back from the short tube. Three-veined, linear leaves are arranged around the square stems in sets of four.

This plant flowers from late May through August. These pictures were taken along the trails in the Uinta Mountains where Northern bedstraw grows abundantly, often covering the forest understory with its prolific flowers.

Parry's primrose

Scientific name: ***Primula parryi* A. Gray**
Common names: Parry's primrose, Brook primrose

Parry's primrose is a showy perennial with bright green foliage and contrasting bright magenta flowers with yellow centers. The beauty of this plant is rarely missed by hikers. Parry's primrose usually grows up to 40 cm tall. The numerous erect leaves can often surpass the flowering stalk, which gives rise to 2 to 12 flowers. Its 15 to 30 mm wide flowers bloom in July and August and are the largest of this genus found in the Intermountain West.

In contrast to its beautiful flowers, the foliage of this plant is ill-scented. The odor, which is often described as skunk or carrion-like, can be brought out by the lightest touch to the plant and can remain with a pressed specimen for years.

Parry's primrose grows in moist places, along streams and springs, in wet meadows and near melting snowbanks in subalpine and alpine areas above 8500 feet in elevation. It is said that in higher alpine areas most of the plants do not flower nor do they survive the winter. Parry's primrose is a very common species in the Western U.S. It is native to the Uinta Mountains, but has not been found within the borders of Uinta County. This picture was taken along the Henry's Fork trail in mid-July.

Pricklypear cactus

Scientific name: ***Opuntia polyacantha* Haw.**
Common names: Pricklypear cactus, Starvation pricklypear, Central pricklypear, Hairspine pricklypear

The Pricklypear cactus is the more common of the two species of cactus found in Uinta County. This cactus has flattened, branched stems which grow in clusters. Flowers can be yellow to bronze, or pink to violet in color, blooming from June to July. This species can be found throughout the hills of Uinta County, and is widespread throughout the western U.S.

This cactus serves as protection for some bird species and germinating grasses. It is a food and water source for small rodents. In abundance, this species may be an indicator of poor range condition. Natural or intentional fire can burn off the spines making it palatable to livestock and antelope. Stems, flowers, fruit and juice from this plant are all used by Native Americans for food, drink, medicine, adhesives and in fixing dyes.

The scientific name of this plant *Opuntia polyacantha*. 'Acantha' is a Greek word meaning thorn or prickly, thus the species name polyacantha means 'many thorns'.

Rosy pussytoes

Scientific name: ***Antennaria rosea*** **EL Greene (Syn. *Antennaria microphylla* Rydberg)**
Common names: Rosy pussytoes, Littleleaf pussytoes

Rosy pussytoes is a mat forming plant common in the foothills and mountains in our area. Like other plants in this genus, the leaves of Rosy pussytoes are covered with soft white hair. The basal leaves are often more rounded, whereas the leaves on the stems are linear and reduced upward. Rosy pussytoes is a member of the Composite/Aster family, with flowering heads composed of only disk flowers clustered at the top of the stems. Reduced leaf-like structures, not the flower petals themselves, surrounding each head of flowers bear the white to light or dark rosy pink color from which the common name and specific epithet are derived. These plants are referred to as pussytoes because of the resemblance of the flower clusters to the bottom on a kitty's paw.

This plant is dioecious, meaning the male and female flowers are found on separate plants. Interestingly, seeds are often but not always produced without fertilization. Individual plants within a mat are usually clones of each other, connected by underground stems. The evergreen mats are a useful ground cover in their habitats, lasting for several years.

Rosy pussytoes is adapted to dry open areas and is intolerant of shade. This plant is common in low to mountainous sagebrush, mountain brush and forests throughout the Northern Great Plains, Western U.S, Canada and Alaska.

Sagebrush

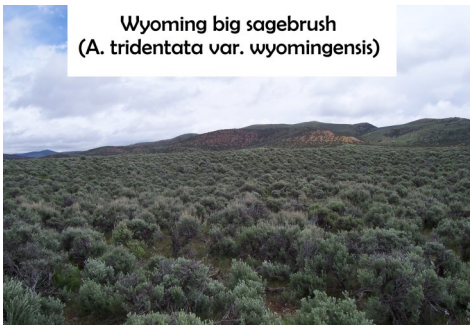
There are several species of Sagebrush found in Uinta County, Wyoming. Most of the species in our area are shrubs but some species are perennial herbs.

Due to the small size of the flowers, some may not recognize Sagebrush as a flowering plant. Sagebrush, genus Artemisia, is a member of the Aster/Composite family. Plants of this family (the Sunflower family), have floral heads composed of many smaller flowers (ray and/or disk flowers). Sagebrush plants have clusters of small flowering heads, each head containing a number of small disk flowers but lacking ray flowers.

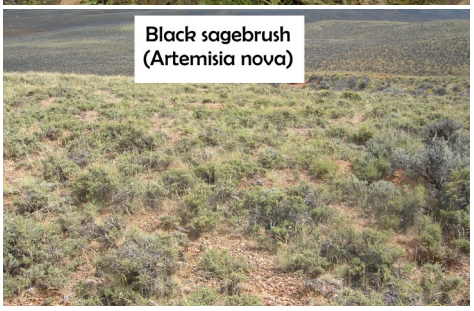
The most common type of Sagebrush in our area is Artemisia tridentata, or Big sagebrush, characterized by three-lobed leaves (thus tridentata meaning tri-dentate, or three-toothed). As described in our July 2020 newsletter, there are three varieties of Big sagebrush. Wyoming big sagebrush (A. tridentata var. wyomingensis) is the state shrub of Wyoming. It is very common and grows in dry areas in our valleys, deserts, and mountains. Mountain big sagebrush (A. tridentata var. vaseyana) grows in higher mountain meadows and slopes. The leaves of Mountain big sagebrush fluoresce under a black light when they are crushed and placed in a cup of water. Basin big sagebrush (A. tridentata var. tridentata) typically grows in deeper soils in valley bottoms along old fences, ditches or near seasonally moist areas.

Other species of Sagebrush also have three-lobed leaves. Some species have more than three linear dissections of each leaf and some species have linear, unlobed leaves. The species vary in the amount of hair or tomentum covering the leaf, stem, and floral surfaces. The aromatic smell of Sagebrush is slightly variable but common among all species. Basin big sagebrush can grow up to 7 feet tall, whereas Fringed sagebrush (Artemisia frigida) is a mat forming species that grows up to 16 inches tall in dry rocky places often on windblown hilltops.


Basin big sagebrush (Artemisia tridentata var. tridentata)

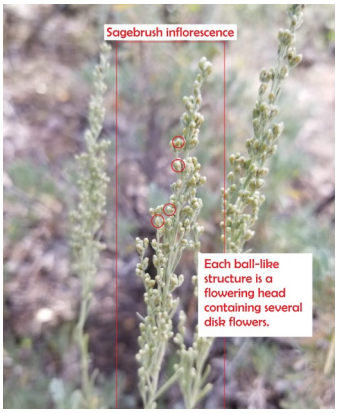

Wyoming big sagebrush (A. tridentata var. wyomingensis)


Mountain big sagebrush (A. tridentata var. vaseyana)


Black sagebrush (Artemisia nova)


Fringed sagebrush (Artemisia frigida)


White sagebrush (Artemisia ludoviciana)




Big sagebrush in flower

Scarlet gilia

Scientific name: ***Ipomopsis aggregata (Pursh) V. Grant***
Common names: Scarlet gilia, Scarlet trumpet, Skyrocket, Honeysuckle, Skunk flower

Scarlet gilia is a widespread and common wildflower in the Western U.S. This plant is characterized by its trumpet-like flowers, bright green foliage and finely dissected leaves which are identifiable even before flowering. Scarlet gilia grows in sagebrush and pine communities in well drained soils along hillsides, roadsides and trails at low to high elevations. This plant is a very drought tolerant but prefers full sun as it is not shade tolerant.

Scarlet gilia can be found blooming late spring into the fall. Flowers can range from pale pink to salmon to scarlet (very rarely yellow). The base of the flower petals are fused together and form an elongated tube most commonly, but not exclusively, pollinated by hummingbirds and long-tongued moths. It is said that hummingbirds prefer the brighter colored flowers that usually appear early in the flowering season, and the moths are attracted to the lighter colored flowers which often appear later in the season, either on the same or different plants.

This plant was first collected for a scientific specimen by Lewis and Clark in Idaho. It has been moved through several genre since it was first classified by Frederick Pursh in 1814, landing at one point in the genus *Gilia*. The common name Scarlet gilia has stuck with the plant even after its move to the genus *Ipomopsis*. The word 'aggregat' in Latin means assembled or brought together in flocks, most likely in reference to the cluster of flowers atop the plant. The common name Skunk flower refers to the pungent skunk-like smell the leaves give off when picked or crushed. Individual flowers do not have the skunk-like odor but do have a droplet of nectar at the base of the tube which is often sucked out after the flower is picked, hence the common name Honeysuckle.

Scarlet globemallow

Scientific name: ***Sphaeralcea coccinea*** **(Nutt.) Rydb.**
Common names: Scarlet globemallow, Desert mallow, Red false globemallow, Copper mallow, Cowboy's delight, Slippery Elm

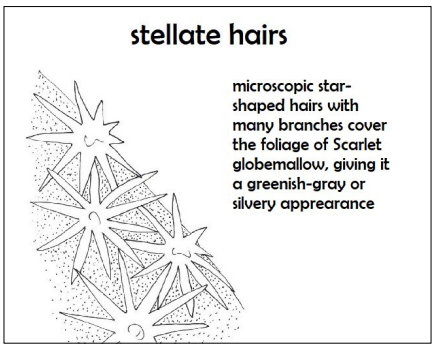
Scarlet globemallow is a perennial forb with orangish-red flowers that bloom from April to September. Plants can grow up to 12-20 cm tall. Flowers are about 2.5 cm wide and resemble small hollyhock or hibiscus flowers. Stellate hairs give the foliage a greenish-gray or silvery appearance.

Scarlet globemallow is a fair to good forage for cattle and large wildlife when grasses are dormant or less abundant. It is an important food sources for many small wildlife, birds and insects.

Widely distributed throughout the Western U.S., it can be found growing in a variety of different soil types in sagebrush and juniper communities in Uinta County. This plant does not tolerate shade but is extremely drought resistant and readily invades disturbed areas such as roadsides of burn areas.

Native Americans had many uses for this plant ceremonially and medicinally.

The scientific name for this plant *Sphaeralcea coccinea*. The Greek word 'sphaira' means globular, and 'alcea' is the generic name of the closely related hollyhock. The Latin word 'coccin' means scarlet, referring to the flower color.



Shooting star

Scientific name: ***Dodecatheon pulchellum*** **(Raf.) Merr.**
Common names: Shooting star, Pretty shooting star, Dark-throat shooting star

This perennial plant can be found in open moist areas such as wetlands, meadows and seeps in Uinta County. It can tolerate mineralized soils and can often be found in highly alkaline areas. This plant was spotted yesterday near Fort Bridger staining a green meadow with its purplish-pink flowers.

The leaves of this plant are found in a basal rosette. The flower-bearing stem, or scape, can grow to be 2 inches to 15 inches tall. Each scape usually bears 2 to 12 red, pink or purple flowers that resemble small darts. The flowers are about 1 inch long and are usually found nodding at a downward angle while the flower petals, which are united at the base, are reflexed upward in the opposite direction. A developed filament tube which is yellow and black points downward away from the petals.

The unique physical characteristics of the flowers demand the skill of native bumble bees (not honeybees) to shake the pollen loose from the flower from below in a process called 'buzz pollination'. The bees do not come to these flowers for nectar, but use the pollen as a source of protein and lipids for themselves and the larvae in their nest.

The genus Dodecatheon is said to have been named in honor of twelve great gods. The Greek meaning of the word 'dodec' is twelve. The Greek meaning of the word 'theos' is God. The species name 'pulchellum' means pretty in Latin.

Shrubby cinquefoil

Scientific name: *Dasiphora fruticosa* (L.) Rydb. (syn. *Potentilla fruiticosa* L. and *Pentaphylloides fruticosa* (L.) O. Schwarz)
Common names: Shrubby cinquefoil, Bush cinquefoil, Golden hardhack, Yellow rose, Tundra rose

Shrubby cinquefoil is a deciduous mountain shrub that flowers from late spring until early fall. It can grow up to a meter tall and usually spreads as wide. At maturity, its bark is red and shreddy. The flowers of this plant are born solitarily in the axils of the leaves or in clusters of 1 to 7 at the tips of branches. Each flower has 5 round petals that are 6 to 14 mm long. The leaves are pinnately divided into 3 to 5 linear oblong leaflets.

Shrubby cinquefoil is common in moist mountain meadows and open woods of mountain brush, aspen and coniferous communities and on floodplains and stream banks. It is a common species in western and northern North America. It is frequently planted as an ornamental and is often used in erosion control. For livestock and wildlife, it is not a preferred forage but will be eaten if more palatable plants are not available. When this plant is heavily browsed it is an indication of overgrazing.

Sky pilot

Scientific name: ***Polemonium viscosum Nutt.***
Common names: Sky pilot, Sticky polemonium, Viscid Jacobsladder, Skunkweed

This perennial plant is found at high elevations in open, rocky areas in spruce-fir and alpine tundra communities. Sky pilot enjoys sun-warmed, south facing talus slopes of the High Uintas. It is native to high mountains of the Western U.S.

Sky pilot is described as strongly mephitic, meaning foul-smelling. Interesting enough, some describe the smell as sweet while others describe it as skunk-like. Either way, the scent comes from sticky, glandular hairs that cover the stems and numerous, finely dissected, upright leaves of this plant.

The intense dark blue-violet flowers have five lobes arising from a fused tubular base. Yellow-orange stamens appear at the center of the flower. The specific epithet ‘viscosum’ means ‘sticky’ in Latin and refers to the sticky leaves. Plants of the Polemonium genus are known as Jacobsladder. The common name Sky pilot comes from preferred high elevation habit.

Spring beauty

Scientific name: ***Claytonia lanceolata Pall. ex Pursh***
Common names: Spring beauty, Lance-leaf spring beauty, Western spring beauty, Rocky Mountain spring beauty

Spring beauty is another early flowering perennial plant found in Uinta County and the neighboring Uinta Mountains. This plant grows in sagebrush, aspen, and conifer communities in the moist foothills to alpine areas. It is most often found flowering near melting snowbanks through mid-summer depending upon the elevation.

Each plant grows from an edible semi globose corm (a thickened underground stem with papery leaves) which is about 2 cm in diameter. One to two stems (2-16 cm tall) arise from each corm, bearing a pair of fleshy, lance shaped leaves, and 3 to 10 flowers. The flowers range from white to dark pink. The petals have dark pink veins and are notched at the tip.

This genus was named after John Clayton (1694-1773), an early and important plant collector in Virginia. The species name 'lanceolata' is Latin referring to the lance-shaped leaf which is longer than it is wide and it widest below the middle.

The corm is a carbohydrate-rich food source for rodents and bears. Indigenous people ate the corm and vitamin C rich leaves.

Stickseed

Scientific name: ***Hackelia* species Opiz**
Common names: Stickseed, Forget-me-not, White candle, Spreading false-forget-me-not, Large flowered stickseed, Many flower stickseed

There are a few species of Stickseeds found in Uinta County. These plants are herbaceous perennials with stout stems that can grow from 20 to 100 cm tall. The lanceolate shaped leaves are larger toward the bottom of the plant and appear furry because of the hair covering their surface. The small flowers each have five petals which are fused together at the base. The petals can be white to light or dark blue with a yellow spot in the center. Plants with blue flowers usually have a white vein in each petal whereas species with white petals can have a light blue vein. The fruit of Stickseeds are composed of 4 tiny (3-6 mm) nutlets with barbed spines. The nutlets separate when the fruit is mature and dry.

Stickseeds (genus *Hackelia*) are in the same family as the Forget-me-nots (genus *Myostis*). Stickseeds are often referred to as Forget-me-nots, or False forget-me-nots because they have similar small often blue flowers. Likewise, many other species in the Forget-me-not family are referred to as Stickseeds because they have similar barbed nutlets that stick to the fur of passing animals or the socks and shoelaces of hikers.

Stickseeds are found in dry, often sandy soils, in sagebrush, juniper, mountain brush and aspen communities. They flower throughout the summer. When handled, Stickseed nutlets can cause skin irritation in some people.

Tiquilia

Scientific name: ***Tiquilia nuttallii*** **(Hook.) A.T. Richardson**
Common names: Tiquilia, Nuttall's crinklemat, Nuttall's tiquilia, Rosette tiquilia

Tiquilia is a low growing annual plant with small flowers. The five-lobed flowers are 2 to 2.5 mm wide and can be white, pink or lavender. The branched stems of this plant grow prostrate to the ground forming widely spreading, open mats across the sand. This plant is often referred to as Crinklemat because of the crinkled appearance of its small leaves due to the impression of the prominent veins on the upper surfaces.

In Uinta County, Tiquilia can be found in dry, open sandy areas in the salt desert plant communities (greasewood, sagebrush, etc.) between Carter and Granger. Although it is found mainly in Nevada and Arizona, it does occur in middle and higher elevation deserts in Southern Idaho and Oregon as well as Western Utah and Wyoming.

Uinta groundsel

Scientific name: ***Senecio multilobatus* Torr. & A. Gray ex A. Gray.**
Common names: Uinta groundsel, Lobeleaf groundsel, Basin butterweed, Multilobed groundsel.

Uinta groundsel can be found throughout Uinta County in the dry, open foothills and lower parts of the mountains in sagebrush, mountain brush, aspen and pine communities. This widespread species is part of the Aster family. Each flowering head contains many disk flowers and 7-13 ray flowers.

Although not preferred by livestock when abundant forage is available, Uinta groundsel does contain pyrrolizidine alkaloids which are toxic if consumed in large quantities. This species is often used in restoration projects. Parts of this plant were used by Native Americans for medicinal purposes.

The species name 'multilobatus' refers to the many lobes on each leaf.

Water hemlock

Scientific name: ***Cicuta maculata* L.**
Common names: Water hemlock, Spotted water hemlock, Spotted parsley, Spotted cowbane, Suicide root

Water hemlock is considered to be the most 'violently' toxic plant in North America. Although the majority of the toxin (cicutoxin) is concentrated in the chambered roots, all parts of this plant can be lethal when ingested even in small amounts.

Water hemlock grows along the wet edges of valley ditches and mountain streams, as well as in marshes, pastures and other shallow wet places. These stout plants, which can grow ½ to 2 meters tall, have white tuberous roots and compound leaves with serrate margins. The clusters of tiny white flowers bloom from July to August.

Like many other plant families which contain both edible and poisonous plants, Apiaceae is the family of Water hemlock hemlock, parsnips, carrots and parsley. Poison hemlock (Conium maculatum), native to Europe, Africa and Asia, is also a member of this family. Poison hemlock is now an established invasive weed throughout the North American, growing in roadside ditches and other disturbed moist areas. Poison hemlock, which has not been reported in Uinta County, differs in appearance from Water hemlock mostly by leaf characteristics. Poison hemlock contains different toxins which cause different types of poisoning but can also be lethal to humans and livestock if consumed. Poison hemlock was used to execute Socrates.

The Apiaceae family is also known as the Umbel family (Umbelifereae) because of the characteristic shape of the inflorescence (the flower clusters). An umbel is described as an inflorescence with the individual flower stems arising from a common point, much like the central hub and individual struts of an umbrella. Each inflorescence of Water hemlock is a compound or double umbel, with many flower stems arising from each hub.

More information on Water hemlock and Poison hemlock, including differences in poisoning and livestock management can be found in the USDA ARS Poisonous Plant Bulletin #415. A link to this pdf can also be found at our website: www.uintacountycd.com/wildflowers.

Western iris

Scientific name: ***Iris missouriensis* Nutt.**
Common names: Western iris, Flag, Blue flag, Western blue-flag, Missouri iris

There are many ornamental hybrid species of Iris that add showy color to our gardens, but the Western iris is the only species native to the Intermountain West. It can be found in moist meadows and other areas that are usually dry by the end of summer.

The flowers, which are usually pale lavender, bloom from May to June. The blue to violet nerves marking the flowers are nectar or bee guides that direct pollinating insects into the flower.

The scientific name for this plant is *Iris missouriensis*, 'Iris' comes from a Greek word which means 'rainbow' referring to the many brightly colored flowers found in the genera which are mostly native to Eurasia. Missouriensis refers to the Missouri River not to the state of Missouri. This native species is widespread in the Western U.S.

Parts of this plant, including the root, were used medicinally by Native Americans as a remedy for many things including toothache. The root, however, is poisonous and was also used by Native Americans as an arrow poison.

Western Yarrow

Scientific name: ***Achillea millefolium* L.**
Common names: Western yarrow, Filfoil yarrow

Yarrow is a widely distributed circumboreal species with many native and introduced varieties which are not easily distinguished from one another and often hybridize together. There is one variety native to Southwest Wyoming, commonly referred to as Western yarrow. Western yarrow can be found throughout the plant communities of Uinta County, but never in great abundance. Although rarely a weed problem, introduced varieties are often more robust and aggressive.

A member of the Sunflower/Composite family, Yarrow is characterized by numerous flowering heads in flat-topped or rounded clusters. Each flowering head has 5 white ray flowers (2 to 3.5 mm long) and 10 to 12 disk flowers. The leaves, which are more abundant and longer at the base of the plant, are finely dissected, aromatic and semi-evergreen. The stems and leaves have a covering of short tangled hairs.

Yarrow is used in seed mixes for rehabilitation of overgrazed and otherwise disturbed areas because of its easy establishment, drought tolerance and low maintenance. It is an important food source for wildlife, including sheep, antelope, deer and sage grouse. It can make up a large portion of the summer diet of domestic sheep as well. Despite the fact that the leaves and flowers contain poisonous toxins, this plant is rarely eaten in large enough quantities to cause problems. Western yarrow was used medicinally by Native Americans.

Yarrow played a role in Greek Mythology as a medicine to stop bleeding and heal the wounds of soldiers during the Trojan Wars. Because of this, Carl Linnaeus named this genus after the war hero Achilles. The species name ‘millefolium’ is Latin for ‘a thousand leaves’ referring to the finely dissected feather-like leaves.

White locoweed

Scientific name: ***Oxytropis sericea* Nutt.**

White locoweed is another poisonous range plant in our area. It is one of many related locoweed plants that contain an alkaloid called swainsonine, toxic to cattle, sheep, horses and goats, as well as antelope, deer and elk.

The common name comes from the Spanish word 'loco', meaning crazy, referring to symptoms animals have after continuously eating the plants for a few weeks – neurological damage by the swainsonine causes the animal to become weak, nervous and lose their sense of direction. Other symptoms of poisoning include emaciation, birth defects or abortions, congestive heart failure and death. Although signs of neurological poisoning may disappear with time, animals never fully recover. Even when other forage is available, animals who do eat locoweed seem to get addicted to it and actively seek more. Livestock owners are advised to keep animals out of areas with abundant locoweed or hold off on grazing until other forage is abundant in areas with locoweed.

This genus belongs to the Legume or Pea family which is the third largest (in number of species) flowering plant family in the world, behind the Orchid family and the Aster family. Many species in this family are nitrogen fixers; meaning that they (with the help of bacteria on their roots) capture nitrogen in the air and fix it into a form available for plants, beneficially raising the total nitrogen level in the soil.

Wyoming kittentails

Scientific name: ***Besseya wyomingensis* (A. Nelson) Rydb**
Common names: Wyoming kittentails, Kittentails, Wyoming coral-drops, Wyoming besseya

Wyoming kittentails is a perennial herb that grows in higher elevation moist open areas on high ridges and subalpine or alpine meadows. The pictures shown here were taken near the top of the Butte, north of Evanston, Wyoming.

The basal leaves of Wyoming kittentails can be up to 7 cm long. The leaves on the stem are much smaller. Stems grow 5 to 30 cm tall. Flowers are clustered into a dense inflorescence (2 to 10 cm long) at the top of each stem. Interestingly, the flowers of this plant lack petals. The filaments of the stamen (male reproductive parts of the plant) bear the showy violet purple color.

Wyoming kittentails can be found in most Wyoming counties, and scattered throughout some other counties in the Intermountain States and Western Canada. Although not particularly abundant in Wyoming, its populations are secure and not listed as vulnerable or imperiled as in other states.

Yellow monkeyflower

Scientific name: **Mimulus guttatus** DC.
Common names: Yellow monkeyflower, Seep monkeyflower, Common monkey flower

Yellow monkeyflower is a native wildflower common throughout western North America. It grows in marshy areas, in seeps and springs, and along streambanks.

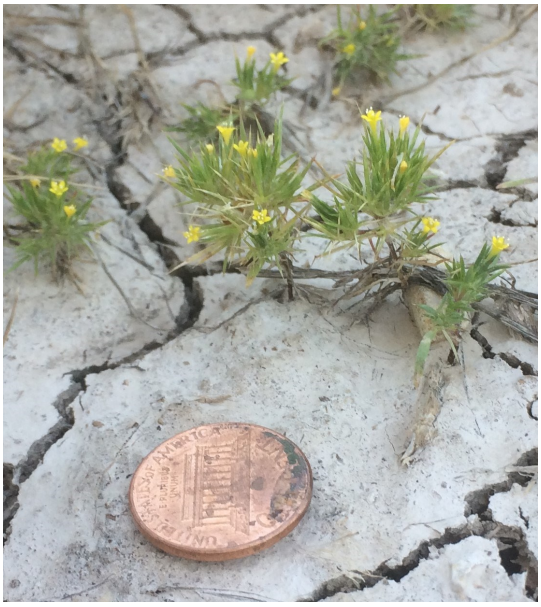
The bright yellow flowers of this plant are similar to those of a snapdragon. The petals are fused together to form a throat that opens into a reflexed 2-petal upper lip and a spreading 3-petal lower lip. The red spotted lower lip has a raised palate which closes the tube of the flower after pollination. Yellow monkeyflower is bee pollinated.

The leaves of Yellow monkeyflower are most often ovately shaped and palmately veined with a coarsely toothed top margin. Stems are stout and slender, sometimes decumbent and often rooting at the nodes.

Although bitter tasting, Native Americans and early settlers ate this plant. Stems and leaves were also used medicinally in wounds and burns. The common name comes from the resemblance of the flower to a monkey's face. The specific epithet 'guttatus' means 'spotted or speckled' in Latin.

Yellow pincushion-plant

Scientific name: ***Navarretia breweri* (A.Gray) Greene**
Common names: Yellow pincushion-plant, Brewer's *navarretia*, Yellow-flowered *navarretia*, Yellow navarretia



Get your hand lens out for this tiny plant. Although these plants usually grow in groups, because of their size and the short-lived nature, they often go unnoticed. Yellow pincushion-plant grows in shallow clay soil of dry meadows and other dry open areas. Individual plants usually grow no taller than 5 cm. The tubular yellow flowers are less than 2 mm wide and 7 mm long.