

and Other Plants of the Larimer County Foothills Region
Larimer County Department of Natural Resources | 2nd Edition

#### **Credits**

This guide was developed primarily by volunteers and staff of Larimer County Department of Natural Resources. Thanks also to reviewers and support from the Friends of Larimer County Parks and Open Lands, Colorado Native Plant Society, and City of Fort Collins Natural Areas Department.

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#### **How to Use This Guide**

This guide includes the most common, showy species of plants found in Larimer County at elevations between 5,000 and 8,000 feet. To use this guide, turn to the appropriate section using the colored headers and tabs:

Wildflowers: White, orange/yellow, pink/red, blue/purple

Wildflower species are further organized alphabetically by scientific family, and then genus and species.

Grasses: Green

Grasses are further organized alphabetically by genus and species.

Woody Plants: Brown

Woody plants are further organized alphabetically by scientific family, and then genus and species.

Similar species that you might confuse with the species on that page are compared side-by-side for easier identification.

Look at the photographs, read the descriptions, and use the ID Hints for the key characteristics that differentiate each species. Note, however, much variation exists in nature and the descriptions serve only as guidelines. In some cases, plants bloom at a different time, grow to a different height, or have different colored flowers.

If you do not find what you are looking for, look in a different colored section. However, if you still do not find the plant you are looking for, you might need to consult another reference, as this guide only covers a limited number of the over 1,000 species native to this

area. See the section on Further Reading and Reference for more information (pp. 212-213).

Common names vary widely across plant guides. This guide uses common names and scientific names (in *italics*) from *Colorado Flora*: *Eastern Slope* 3<sup>rd</sup> ed. (Weber & Wittmann, 1996).

#### Note

All plants in this guide are native perennials with simple leaves, unless otherwise specified.

#### A Note About Plant Families:

As you become more familiar with identifying plants, note the family groupings. Most plants within a family possess some similar characteristics. For example, plants in the pea family (Fabaceae) generally have alternate, compound leaves, pod fruits, and irregular flowers with 5 petals. Recognizing families is a great way to improve your botanical skills, which is why this guide is organized by family within each color group. See Index of Plant Families starting on page 223.

#### Warning

Many plant species are poisonous if ingested, and some may cause a negative reaction with the slightest touch. While the authors have attempted to point out the extremely poisonous species in this guide, it is by no means comprehensive, and thus great care should be taken. No plants or plant parts should be consumed or handled without the proper knowledge or guidance.

#### **About This Guide**

This guide focuses on the most common, showy, native plants growing in parks and open spaces in Larimer County, Colorado, between 5,000 and 8,000 feet in elevation. Key traits for identification, comparisons between similar species, and fun facts help you identify and learn about these interesting plants.

In addition, notes on ecology, habitat, and bloom time and references to specific Larimer County parks and open spaces will help you discover when and where to look for individual species.

Larimer County parks and open spaces are lands protected for recreation and conservation by the citizens of Larimer County, through the <sup>1</sup>/<sub>4</sub>-cent, citizeninitiated "Help Preserve Open Spaces" sales tax started in 1996.

Most areas were originally ranches or homesteads that landowners wished to preserve in perpetuity as public lands. Some of these areas have been restored as wild examples of grasslands, riparian areas, or forests that once dominated the landscape in Larimer County.

# **Ecology of the Larimer County Foothills Region**

**Climate:** In Larimer County, moisture is the most important factor in determining where plants grow. West- to south-facing slopes are exposed to the hot afternoon sun; these are the driest and most extreme sites for plant growth. Plants adapted to drought and sun stress (e.g., plains prickly pear cactus) and thick-leaved woody shrubs (e.g., mountain mahogany) commonly grow here. North- to east-facing slopes, by contrast, are shaded during the hot afternoon, so plants have more access to moisture. As a result, a larger number of plant species grow on these slopes, as well as the largest trees and densest thickets of vegetation. Differences in climate also explain differences between ecological zones and habitats.

Geology: Riparian areas (streamsides) have some of the greatest diversity of wildflowers and shrubs due to complex and rich soils, especially when the soils are formed from floodwater sediment. Shale or mudstones also develop deep, nutrient-rich soils for a wide diversity of plants. Fewer plant species grow in acid rocks (e.g., granite), which form thin, poorly developed soils that retain little water and have few nutrients.

Limestone also has low water-holding capacity, but can support unique species adapted to salts (alkalinity) and drought.

#### **Natural and Human Disturbance:**

Disturbances recycle and release nutrients for plant growth, so they are essential to the long-term health of native ecosystems.

- Fire stimulates seeds to germinate and plants to re-sprout and send up new shoots. Lodgepole pine, ponderosa pine, grasses, and many wildflowers depend on fire for reproduction.
- Flooding creates a variety of habitats and delivers nutrients to riparian areas, supporting more plant species

- than any other habitat in the Rockies. Flooding is essential to establish cottonwood and willow seedlings.
- Grazing by deer and elk, and burrowing by wildlife such as prairie dogs, are essential to maintaining the long-term health and diversity of grasslands.
- Livestock grazing can imitate natural patterns and promote native wildflowers.
- Plowing, by contrast, diminishes the availability of nutrients in grasslands, changing the dominant plant species for 50 years or more. Smooth brome and other non-native grasses generally dominate after plowing.

## **Ecological Zones**

This guide focuses on the foothills ecological zone in Larimer County, with some overlap with the plains and montane zones, from 5,000 to 8,000 feet (Fig. 1).

**Plains:** This zone occurs at the lowest elevations and includes grasslands, cottonwood forests along streams, disturbed areas, and old agricultural fields.

**Foothills:** This zone occurs on small hills or the lower portions of mountains, usually with a mixture of grasslands, shrublands (mountain mahogany and

three-leaf sumac), open rocky areas, and ponderosa pine woodlands.

**Montane:** At the highest elevations covered by this guide, this zone occurs especially on cool east- or north-facing slopes. Shady montane forests predominate, including mixtures of ponderosa pine, Douglas fir, and juniper.

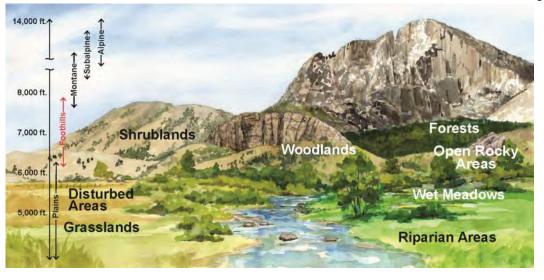


Fig. 1: Ecological zones and habitats in Larimer County

#### **Habitats**

This guide organizes plants into 8 habitats from 5,000 to 8,000 feet in Larimer County: grasslands, disturbed areas, riparian areas, shrublands, open rocky areas, woodlands, forests, and wet meadows (Fig. 1).

**Grasslands:** This habitat dominates the plains and occurs in smaller patches in the foothills and montane zones. Grasslands grow on fine-textured soils such as clay or silt. This habitat generally has grasses in distinct bunches or patches (e.g., blue grama, needlegrass, and fescue) and wildflowers (e.g.,

blanketflower and scarlet gaura). Look for native grasslands at Cathy Fromme Prairie Natural Area, Eagle's Nest Open Space, and Soapstone Prairie Natural Area. Smaller patches of grasslands grow at Horsetooth Mountain Open Space and Devil's Backbone Open Space.

Disturbed grasslands are also common in this area, reflecting a long history of agriculture and human use. Non-native grasses from Central Asia and northern Europe (e.g., crested wheatgrass, smooth brome, and tall wheatgrass) usually dominate disturbed grasslands.

**Disturbed Areas:** This habitat is most common in the plains, but can occur locally in other zones as well. Disturbed areas occur along major trails or following construction activity, and also reflect historical disturbances such as logging, fire, grazing, old homesteads, or mining. Human disturbance generally favors non-native species such as smooth brome, dandelion, Kentucky bluegrass, storksbill, and many mustard species.

**Riparian Areas:** This habitat can occur at all elevations, but is most common in the plains and foothills zones. Riparian areas occur along

streams and river floodplains and in moist spots along seasonal creeks, wetlands, or seepages. Willows, cottonwoods, and a wide variety of shrubs occur in riparian areas, along with buttercups, asters, and arnicas. Look for unusual species next to fallen trees, in moist pockets, and in overflow areas. The Big Thompson and Cache la Poudre rivers offer excellent examples of riparian areas.

**Shrublands:** This habitat is most common in the foothills zone, but can also occur on dry south- or west-facing slopes in the montane zone. Shrubs dominate here due to the coarse nature

of soils as contrasted with the silty or clay-dominated soils of the grasslands. Shrublands in places such as Devil's Backbone Open Space and Horsetooth Mountain Open Space support three-leaf sumac, mountain mahogany, pea family wildflowers, and many members of the mustard family.

Open Rocky Areas: This habitat is common in both foothills and montane zones. Loose rocks or rock outcrops create a complex and diverse habitat for plants. Drought tolerant plants (e.g., many members of the pea and mustard families) grow on ridgetops along Horsetooth Mountain Open Space and

Devil's Backbone Open Space. Rocks can also dominate narrow gullies and canyons, where they act like mulch, providing habitat for moisture-loving plants. Many shrubs (e.g., American plum, chokecherry, and hawthorn) occur in these areas.

Woodlands: This habitat is transitional between grasslands and forests in the foothills and montane zones. These open forests have widely spaced ponderosa pines and junipers with grasses and showy wildflowers (e.g., pasqueflowers and sunflowers) growing below. Forests, by contrast, provide heavy shade and generally have

understory with a greater abundance of herbs and shrubs. Look for woodlands at lower to middle elevations in Hermit Park Open Space and Horsetooth Mountain Open Space.

**Forests:** This habitat is common in the montane zone, but also occurs on cool, wet, north- or east-facing slopes in the upper reaches of the foothills zone. Forests create dense shade habitat for shrubs and wildflowers (e.g., aster, clematis, and arnica). Ponderosa pine forests generally occur in the driest forest habitats, where fire is most common. Douglas fir forests dominate on north-facing slopes, near streams, or

in higher elevations, where more moisture is available. Hermit Park Open Space and Horsetooth Mountain Open Space offer excellent examples of native forests at higher elevations.

Wet Meadows: This habitat is most common in the montane zone in forest openings, but can occur locally along rivers and other wetlands in the foothills and plains. Similar to grasslands, this habitat is dominated by grass-like plants, but it has abundant moisture at least seasonally, usually from snowmelt. Columbines, asters, and lilies are common in this habitat.

## **Open Space Conservation**

Larimer County open spaces provide some of the best remaining examples of nearly wild habitats for plants and animals in the county. Open spaces are also popular places for hiking, mountain biking, running, and other outdoor activities, and can be in danger of being "loved to death" by heavy recreational use.

Native grasslands and riparian habitats are particularly important places for conservation. They provide critical habitat for many plant and animal species, but they have been highly impacted by people as the Front Range has developed. Flat grasslands with good soils support agriculture. Riparian areas, with their abundant water, attract human settlement. Larimer County open spaces preserve good quality native grasslands and riparian habitats.

Enjoy these special places as you look for the rich assortment of wildflowers, trees, shrubs, and grasses that grow here, but please be careful not to pick flowers or disturb these sites! This allows all of us, and future generations, to continue to appreciate these special species and the heritage of wild places in Larimer County.





Lisa Matthews

Jane Thomson

#### **Prairie Wild Onion**

Allium textile

Family: Onion (Alliaceae)

**General:** Erect, up to 12" tall

Flowers/Fruit: Small, white, erect flowers, up to ¼" long, clustered in terminal umbels; see also Pink Onion Group

Leaves: Basal, linear, up to 10" long,

green and grass-like

Habitat: Grasslands, open rocky areas

**Bloom:** Late Spring, Summer

**ID Hints:** Prairie wild onion emits a strong onion-like odor. It typically has 2 basal leaves per flower stalk, and up to 40 flowers per umbel. When not in flower, this and other *Allium* species closely resemble death camas (*Toxicoscordion venenosum*), which is highly poisonous.

**Did You Know?** The genus name *Allium* means garlic and the species name *textile* refers to the fibers that surround the underground bulb.



Jane Thomson

Lisa Matthews

#### Mouse-ear Chickweed, Field Chickweed

Cerastium strictum Bloom: Late Spring, Summer

Family: Chickweed (Alsinaceae)

**General:** Erect, up to 12" tall, often clumped and mat-forming

**Flowers/Fruit:** Flowers up to <sup>3</sup>/<sub>4</sub>" wide, with 5 white petals, each deeply notched at the tip; yellow centers; arranged in loose clusters

**Leaves:** Opposite, linear, up to 1" long, covered in velvety hair

**Habitat:** Wet meadows, open rocky areas, woodlands

**ID Hints:** Due to the deeply notched petals, at first glance the flowers appear to have 10 petals, rather than just 5. Each open cluster consists of 5 or more flowers.

**Did You Know?** *Cerastium* species have the common name chickweed because they were once used as feed for domestic chickens. Members of the chickweed family are often grouped into the pink family (Caryophyllaceae).



Janet Sitas

#### **Poison Hemlock**

Conium maculatum

Family: Carrot (Apiaceae)

**General:** Erect, up to 10' tall; introduced biennial

**Flowers/Fruit:** Tiny white flowers arranged in compound umbels up to 6" wide

**Leaves:** Alternate or basal, up to 12" long, pinnately divided into lacy leaflets, toothed margins

**Habitat:** Wet meadows, riparian, disturbed areas, roadside ditches

**ID Hints:** Hollow stems are covered in purple blotches, particularly near the base. Plants produce a musty odor, especially when disturbed.

**Bloom:** Summer

**Did You Know?** Just as the common name suggests, poison hemlock is highly toxic; it led to the death of the Greek philosopher Socrates. Easily mistaken for other non-toxic, edible members of this family, such as wild carrot or parsley; extreme caution must be taken.



Janet Sitas

## **Cow Parsnip**

Heracleum sphondylium

Family: Carrot (Apiaceae)

**General:** Erect, up to 8' tall

**Flowers/Fruit:** Tiny white flowers arranged in compound umbels up to 12" wide

**Leaves:** Alternate; variable with 3 lobes, 3 leaflets or pinnately compound with large, broad leaflets with toothed margins

**Habitat:** Wet meadows, wetlands, riparian

**Bloom:** Late Spring, Summer

**ID Hints:** Large leaves; huge flattopped flower clusters; hairy, grooved stems; and moist habitat help identify cow parsnip.

**Did You Know?** This species is often mistaken for poison hemlock (*Conium maculatum*). Although they appear similar, closer inspection reveals distinct differences: poison hemlock has lacy, fern-like leaves, hairless, purple-blotched stems, and smaller flower clusters. Also known as *H. maximum*. Caution: this plant is poisonous to touch.



Lisa Matthews Jane Thomson

## Salt & Pepper

Lomatium orientale

Family: Carrot (Apiaceae)

**General:** Erect, up to 12" tall

**Flowers/Fruit:** Tiny white flowers with red anthers; arranged in compound umbels on short, leafless stems

**Leaves:** Basal, up to 5" long, highly dissected into linear gray-green leaflets

Habitat: Open rocky areas, grasslands

**Bloom:** Spring, Summer

**ID Hints:** Muted colors make this plant easy to overlook. Get close with a magnifying glass to see the red anthers. The similar plains spring parsley (*Cymopteris acaulis*) has black anthers and narrower leaves.

**Did You Know?** The common name salt & pepper refers to the color contrast between the white petals and dark red anthers present on each flower. This plant is one of the earliest to bloom in spring and also goes by the common name northern Idaho biscuitroot.



Janet Sitas Lisa Matthews

## Common Yarrow, Milfoil

Achillea lanulosa

Family: Sunflower (Asteraceae)

**General:** Erect, up to 3' tall

**Flowers/Fruit:** Creamy white to light pink ray flowers; creamy white to yellow central disk flowers

**Leaves:** Alternate and basal, lance-shaped, 3-8" long, pinnately dissected 1-2 times into lacy, fern-like leaflets

**Habitat:** Wet meadows, woodlands, grasslands, riparian, disturbed areas

**Bloom:** Late Spring, Summer

**ID Hints:** Red stems with soft, feathery, fragrant leaves. Basal leaves typically larger than stem leaves. Tiny composite flowers arranged in terminal, flat-topped clusters.

**Did You Know?** Common yarrow provides an important food source for large mammals, such as deer and bighorn sheep, as well as many bird species. It is very difficult to distinguish from the introduced species, *A. millefolium*.



Lisa Matthews

Jane Thomson, Janet Sitas (inset)

## **Pearly Everlasting & Pussytoes**

Anaphalis margaritacea & Antennaria spp.

Family: Sunflower (Asteraceae)

**General:** Erect. Pearly everlasting up to 3' tall. Pussytoes up to 2' tall.

**Flowers/Fruit:** White to yellow disk flowers in rounded, terminal clusters; no ray flowers present

**Leaves:** Basal and alternate, lance- to egg-shaped, up to 4" long, gray-green

**Habitat:** Wet meadows, woodlands, open rocky areas, grasslands, riparian

**ID Hints:** Pearly everlasting typically has large stem leaves and small, withering basal leaves, whereas pussytoes predominantly has basal leaves and relatively few, small stem leaves. Both have woolly stems and pearly white to pink papery bracts that surround the disk flowers.

Bloom: Summer, Fall

**Did You Know?** Small-leaved pussytoes (*Antennaria parvifolia*) and showy pussytoes (*A. pulcherrima*) are two common species of pussytoes in Colorado.



Janet Sitas Paul Alaback

## White Aster Group

Aster spp.

Family: Sunflower (Asteraceae)

**General:** Erect, up to 4' tall

Flowers/Fruit: Numerous white ray flowers surround yellow central disk flowers; heads several to many, up to 1" wide; see also Blue/Purple Aster Group

**Leaves:** Alternate, linear to lance- to paddle-shaped, up to 3" long, clasping the stem

**Habitat:** Broadly distributed across habitats

Bloom: Late Summer, Fall

**ID Hints:** Two or more rows of overlapping bracts surround the stem under each flower head. This differentiates these species from the closely related fleabanes (*Erigeron* spp.), which have bracts of roughly equal length in one row.

**Did You Know?** Asters are also classified under *Almutaster*, *Virgulus*, *Virgulaster*, and *Symphyotrichum*. Four commonly seen asters in the foothills include *Almutaster porteri*, *Virgulus ericoides*, *V. falcatus*, and *V. spathulatus*.



Lisa Matthews

## White Fleabane/Daisy Group

Erigeron spp.

Family: Sunflower (Asteraceae)

**General:** Erect, up to 3' tall; biennial or perennial

**Flowers/Fruit:** Numerous narrow, white to light pink ray flowers; yellow central disk flowers; see also Blue/Purple Fleabane/Daisy Group

**Leaves:** Basal and alternate, linear to lance- to paddle-shaped, up to 2" long

**Habitat:** Broadly distributed across habitats

**Bloom:** Late Spring, Summer

**ID Hints:** Fleabanes and asters are easily mistaken; they both can have numerous ray flowers and yellow disk flowers. However, the ray flowers on fleabanes are often much narrower and more numerous. Also, the bracts are roughly equal in length, whereas aster bracts overlap like shingles. *Erigeron* leaves are often hairy.

**Did You Know?** Nearly 50 different species of fleabane occur in Colorado. Three common species include *E. compositus*, *E. divergens*, and *E. flagellaris*.





Janet Sitas

Lisa Matthews

## **Easter Daisy & Showy Easter Daisy**

Townsendia hookeri & T. grandiflora

Family: Sunflower (Asteraceae)

**General:** Short plant with spreading grass-like leaves. Easter daisy: stemless. Showy Easter daisy: erect up to 8" tall.

**Flowers/Fruit:** White ray flowers with yellow central disk flowers

**Leaves:** Spreading, folded linear grass-like leaves. Showy Easter daisy also has leaves on stems.

**Habitat:** Open rocky areas, grasslands, canyons

**ID Hints:** Easter daisies are short plants usually with spreading grass-like leaves; true daisies (*Erigeron* spp.) are usually erect with broader lobed or

divided leaves. Also, Easter daisies have

stiff rough bracts under the flower; true

daisies have softer leaf-like bracts.

**Bloom:** Early spring

**Did You Know?** Called Easter daisy because unlike most daisies it flowers in the spring. Where it was first discovered in the Mediterranean it usually flowered around Easter time.



Janet Sitas

#### Miner's Candle

Oreocarya virgata

Family: Borage (Boraginaceae)

**General:** Erect, narrow, unbranched column up to 2' tall; hairy plant

Flowers/Fruit: Tiny white waxy flowers in leaf axils; petals fused together forming a shallow cup with a tiny yellow center

**Leaves:** Long, linear, rough; arranged all along stem

**Habitat:** Open rocky areas, grasslands, canyons, from plains to foothills

**ID Hints:** Tall, narrow column and tiny white flowers interspersed with leaves along the stem. Like other borages, the

flowers have a tiny pore in the center of

the flat wheel of the fused petals.

Bloom: Summer

**Did You Know?** This species is unique to rocky portions of Wyoming and Colorado. The name Borage comes from *burra*, Latin for rough hair. Also known as *Cryptantha virgata*.



Lisa Matthews

# Mariposa Lily, Sego Lily

Calochortus gunnisonii

Family: Mariposa (Calochortaceae)

**General:** Erect, up to 18" tall

Flowers/Fruit: White to cream colored flowers with a narrow, purple stripe and fringe of yellow hairs in the center; up to 2" across; solitary or in a loose cluster of 2-5 flowers

**Leaves:** Basal and alternate, linear to 12" long, grass-like

**Habitat:** Grasslands, open rocky areas, woodlands

**Bloom:** Late Spring, Summer

**ID Hints:** Showy, bowl-shaped flowers grow atop thin stalks. Each flower consists of 3 broad petals and 3 pointed, narrow, white sepals.

**Did You Know?** The genus name, *Calochortus*, is Greek for beautiful grass, referring to its showy flowers and thin, grass-like foliage. Mariposa is Spanish for butterfly, referring to the lightweight petals, which resemble butterfly wings. Mariposa lily is also frequently placed in the lily family (Liliaceae).



Jane Thomson, Janet Sitas (bottom left inset)

### White Milkvetch Group

Astragalus spp.

Family: Pea (Fabaceae)

**General:** Erect to spreading, up to 3' tall, hairy; annual or perennial

Flowers/Fruit: White to cream pea flowers up to 1" long, clustered in terminal racemes; fruit a legume; see also Blue/Purple Milkvetch Group

**Leaves:** Alternate, pinnately compound, usually 11 or more leaflets with a terminal leaflet

**Habitat:** Wet meadows, open rocky areas, grasslands, woodlands, riparian

**Bloom:** Spring, Summer

**ID Hints:** Milkvetches look very similar to locoweeds (*Oxtropsis* spp.), except milkvetch keels are rounded instead of sharply pointed. The common species of milkvetch in our area are often densely woolly and usually have leafy flower stems.

**Did You Know?** Over 70 species of milkvetch occur in Colorado. Four common species that grow along the Front Range include *A. bisulcatus*, *A. drummondii*, *A. parryi*, and *A. racemosus*.



Jane Thomson

Lisa Matthews

### White Locoweed, Rocky Mountain Loco

Oxytropis sericea

Family: Pea (Fabaceae)

**General:** Erect, less than 2' tall, often with gray hairs and leafless flower stem

**Flowers/Fruit:** Spike-like raceme of white, cream, or yellow flowers

**Leaves:** Basal rosette of hairy leaves pinnately divided into linear leaflets

**Habitat:** Open rocky areas, grasslands, from foothills to montane

**ID Hints:** Locoweed flowers have unique pointed keels and leaves mostly in a rosette at the base of the plant. Look for a purple spot on the keel of *O. sericea*.

**Bloom:** Spring

**Did You Know?** Flowers often have a purple tinge, which usually comes from interbreeding with the purple Colorado locoweed (*O. lambertii*). In mountains and northern areas it is more commonly yellow. Locoweeds are generally toxic to livestock.



Janet Sitas Lisa Matthews

### Pale Larkspur, Carolina Larkspur

Delphinium carolinianum

**Bloom:** Late Spring, Summer

**Family:** Hellebore (Helleboraceae)

**General:** Erect, up to 3' tall

Flowers/Fruit: White/cream flowers to 1" wide, sometimes tinged blue, with a reflexed spur; clustered in a terminal raceme up to 10" long; see also Blue/Purple Larkspur Group

**Leaves:** Basal and alternate, palmately lobed with linear leaflets

**Habitat:** Woodlands, open rocky areas, grasslands

**ID Hints:** Pale larkspur has leafy stems and unique-looking flowers that consist of 5 petal-like sepals, the upper of which is spurred, and 4 true petals.

**Did You Know?** Almost all parts of the plant are poisonous to humans, as well as certain wildlife and livestock. This and other *Delphinium* species are sometimes classified in the buttercup family (Ranunculaceae). Also known as D. virescens.



Janet Sitas

### Sand Lily

Leucocrinum montanum

Family: Lily (Liliaceae)

**General:** Erect, up to 6" tall, clumps

**Flowers/Fruit:** 6 narrow, pointed, separate tepals in star-like pattern

**Leaves:** Basal, linear, 3-8" long, folded

on midrib, smooth

Habitat: Grasslands, wet meadows,

shrublands, open rocky areas

**Bloom:** Early Spring

**ID Hints:** A low plant with star-like white flowers rising from the center of a clump of grass-like leaves.

Did You Know? The flower has no stem! The base of the flower and the seeds grow underground. The following year the new flower buds will push the seeds up to ground level, so the seeds can be scattered. Petals and sepals look the same, so are often called tepals.



Jane Thomson

#### **Death Camas**

Toxicoscordion venenosum

**Family:** False Hellebore (Melanthiaceae)

**General:** Erect up to 10" tall, with showy flower cluster on top of stem

**Flowers/Fruit:** 6 cream tepals in a loose cluster; green-yellow gland at base of each tepal

**Leaves:** Basal, smooth, thick, folded, grass-like, up to  $\frac{2}{3}$ " wide

**Habitat:** Grasslands, woodlands, forest openings

**ID Hints:** Cream flowers with protruding, yellow stamens and yellow-green glands at the base of each tepal. Flower stems arise from thick, folded, grass-like basal leaves.

**Bloom:** Spring

**Did You Know?** Death camas sends up its leaves very early, usually right after snow melts, and resembles wild onions (*Allium* spp.) and camas lily (*Camassia quamash*) before flowering. Death camas plants are poisonous, giving this plant its name. Also known as *Zigadenus venosus*.



Janet Sitas

# White Evening Primrose Group

Oenothera spp.

Family: Evening Primrose (Onagraceae)

**General:** Erect. Height varies: prairie up to 18"; stemless up to 8"; cutleaf up to 10".

**Flowers/Fruit:** 4 rounded or heart-shaped white overlapping petals; see also Yellow Evening Primrose Group

**Leaves:** Prairie: alternate, pinnately lobed, hairy, gray. Stemless: basal rosette with toothed, wavy margins. Cutleaf: deeply cut, linear leaf lobes.

**Habitat:** Disturbed areas, grasslands, open rocky areas, sandy soils, ant hills, roadsides

**ID Hints:** Evening primroses open in the late afternoon or evening and have long narrow tubes below the petal lobes. Prairie (*O. albicaulis*) has velvety stems and wooly leaves, with flowers up to 2" across. Stemless (*O. caespitosa*) has flowers to 4" across on a long, leafless stalk. Cutleaf (*O. coronopifolia*) has leafy stems with linear leaf lobes and flowers less than 1" wide.

**Bloom:** Spring, Summer

**Did You Know?** White evening primroses are fragrant at night to attract moth pollinators. Flowers often turn pink after pollination.



Linda Bilsing, Jane Thomson (top inset), Paul Alaback (bottom inset)

# **Prickly Poppy, Thistle Poppy**

Argemone polyanthemos

Family: Poppy (Papaveraceae)

**General:** Erect, 2-3' tall; annual or perennial

Flowers/Fruit: Large, up to 3" wide; cluster of yellow stamens in center

**Leaves:** Alternate, lance-shaped, 4-8" long, blue-green, prickly, lobed to divided

**Habitat:** Grasslands, shrublands, open rocky areas, disturbed areas, roadsides

**ID Hints:** Thistle-like, but with large, showy white flowers resembling tissue paper. Fruit has many prickles. Often

found alongside roadsides.

**Bloom:** Spring

**Did You Know?** Prickly poppy grows south to Peru. There it is called "fig of the devil" due to the fruit's resemblance to a fig, but with many prickles. All parts of the plant are poisonous.



Paul Alaback, Jane Thomson (top inset)

#### **Northern Bedstraw**

Galium septentrionale

Family: Madder (Rubiaceae)

**General:** Erect, up to 2' tall

**Flowers/Fruit:** Tiny, white to creamy white flowers, each with 4 petals, grouped in many-flowered, terminal clusters

**Leaves:** Whorls of 4 along the stems, linear to lance-shaped, up to 2" long, green, smooth

**Habitat:** Wet meadows, woodlands, grasslands, riparian

**Bloom:** Late Spring, Summer

**ID Hints:** Whorled, sweet-smelling leaves, square stems, and numerous, tiny white flowers distinguish northern bedstraw. Unlike other *Galium* species, which have rough leaves and stems, *G. septentrionale* has smooth leaves and stems.

**Did You Know?** This species is very similar to the introduced species, *G. boreale*, and therefore the two are often lumped together and simply referred to as *G. boreale*.



Lisa Matthews

Jane Thomson

### Snowball Saxifrage, Diamond-leaf Saxifrage

Micranthes rhomboidea

**Bloom:** Late Spring, Summer

Family: Saxifrage (Saxifragaceae)

**General:** Erect, up to 12" tall

**Flowers/Fruit:** Small white flowers with yellow centers, crowded in a rounded terminal cluster to  $2^{1/2}$ " wide, atop a leafless stem

**Leaves:** Mostly basal, diamond- to egg-shaped, up to  $2\frac{1}{2}$ " long, toothed margins, often red tinged on underside

Habitat: Open rocky areas, shrublands

**ID Hints:** This species is distinguished by one leafless, hairy stem supporting a round cluster of tiny white flowers that resemble a snowball and clusters of leathery, diamond-shaped basal leaves. Often found growing in rocky crevices.

**Did You Know?** Snowball saxifrage grows at many elevations and a variety of habitats throughout Colorado. Also known as *Saxifraga rhomboidea* and *S. austrina*.



Janet Sitas Lisa Matthews

### **Whiskbroom Parsley & Musineon**

Harbouria trachypleura & Musineon divaricatum Bloom: Spring

Family: Carrot (Apiaceae)

**General:** Erect. Whiskbroom parsley: up to 24" tall. Musineon: up to 12" tall.

**Flowers/Fruit:** Tiny yellow flowers clustered into compound umbels

**Leaves:** Basal, pinnately divided. Whiskbroom parsley: linear, stiff leaf segments. Musineon: flexible leaf segments, wider in the middle or base.

**Habitat:** Open rocky areas, grasslands, shrublands, woodlands, canyons

**ID Hints:** Musineon has much smaller umbels (to 1" wide) and is shorter in stature than whiskbroom parsley (umbels to 4" wide). Also, musineon only has basal leaves while whiskbroom parsley often has one to several alternate stem leaves.

**Did You Know?** Both of these species bloom very early in the spring and have long-lasting flowers. Musineon also goes by the common names leafy and slender wild parsley.



Janet Sitas

### False Dandelion & Wavy-leaved Dandelion

Agoseris glauca & Nothocalais cuspidata Bloom: Spring, Summer

Family: Sunflower (Asteraceae)

**General:** Erect, with wooly leafless flower stem. False: up to 24" tall. Wavy-leaved: up to 10" tall.

**Flowers/Fruit:** Yellow ray flowers in heads up to 2" across; no disk flowers

**Leaves:** False: linear, flat, lance-shaped leaves. Wavy-leaved: linear folded leaves with wavy margins.

**Habitat:** Grasslands, open rocky areas; false dandelion also in woodlands

**ID Hints:** Yellow flower heads are similar to common dandelions with only ray flowers present. Key feature to look for are the distinctive leaves. Rather than the wide spiny leaves of common dandelion, these have linear, folded, wavy margined leaves with soft hairs (wavy-leaved dandelion) or flat lance-shaped leaves (false dandelion).

**Did You Know?** Produces beautiful globular heads of feathery fruits, larger and more intricate than a dandelion. Highly variable color and inbred.



Janet Sitas Paul Alaback

## **Arnica Group**

Arnica spp. Bloom: Summer

Family: Sunflower (Asteraceae)

**General:** Erect, up to 2' tall, with distinctive paired leaves

Flowers/Fruit: Large, showy, yellow ray flowers and yellow or green disk flowers

**Leaves:** Opposite, paired, egg- to lance-shaped, hairy, smooth to toothed

**Habitat:** Woodlands, forest openings, forests, riparian, canyons. Meadow arnica: grasslands, open rocky areas.

**ID Hints:** Arnicas are distinctive in having opposite leaves and few flower heads. Leafy arnica (*A. chamissonis*) has 5 or more pairs of leaves. Meadow arnica (*A. fulgens*) has linear leaves with parallel veins. Heart-leaved arnica (*A. cordifolia*) has rounded heart-shaped leaves.

**Did You Know?** Arnicas are one of the more showy flowers in forests and openings. Arnicas have variable hairs on their leaves depending on the harshness of the site.



Jane Thomson, Janet Sitas (left inset), Jenna McAleer (flower insets)

# Fringed Sage & White Sage

Artemisia frigida & A. ludoviciana

Family: Sunflower (Asteraceae)

**General:** Erect herb (not woody), up to 3' tall; fringed sage: bushy or creeping

**Flowers/Fruit:** Tiny, silvery-green to yellowish flower heads at branch tips

**Leaves:** Silvery-green, tough, leathery leaves. Fringed sage: linear, divided. White sage: strap-shaped, sometimes lobed, whitish above, hairy below.

**Habitat:** Grasslands, open rocky areas, woodlands, forest openings, pastures

Bloom: Summer, Fall

**ID Hints:** The leaves of these plants have a distinctive sage smell, silverygreen color, and leathery texture. Fringed sage has divided, linear threadlike leaves. White sage has strap-shaped, white leaves. The similar wild tarragon (*Oligosporus dracunculus*) has long, linear, green leaves, similar to white asters.

**Did You Know?** Artemisia plants are called sage because of the strong smell resembling the unrelated, edible sages of the mint family.



Jane Thomson, Paul Alaback (top inset), Lisa Matthews (bottom inset)

#### **Blanket Flower**

Gaillardia aristata

Family: Sunflower (Asteraceae)

**General:** Erect, up to 12" tall, clumps

**Flowers/Fruit:** Yellow ray flowers with red bases; dark red globe of disk flowers

**Leaves:** Alternate, lance-shaped, up to 6" long, hairy, often with linear lobes

**Habitat:** Grasslands, woodlands, open rocky areas

**ID Hints:** Each yellow ray flower has three teeth at the tip. As these flowers age, the ray flowers recede, leaving perfect round, red globes of disk

flowers.

**Bloom:** Summer

**Did You Know?** This is one of the showiest wildflowers in foothills grasslands. The red of the disk flowers appears to leak into the yellow ray flowers, forming artistic designs.



Paul Alaback

### **Gumweed, Curlycup Gumweed**

Grindelia squarrosa

**Bloom:** Summer, Fall

Family: Sunflower (Asteraceae)

**General:** Erect, up to 3' tall; biennial or short-lived perennial

Flowers/Fruit: Many yellow ray flowers surround yellow central disk flowers; each flower head to 1½" wide, arranged in flat-topped clusters

**Leaves:** Alternate, egg- to lance-shaped, toothed margins, to 2½" long

**Habitat:** Open rocky areas, grasslands, riparian, disturbed areas

**ID Hints:** Each flower head is surrounded by several rows of sticky green bracts with reflexed, hooked tips.

Did You Know? Resin-secreting glands make the bracts of each flower head gummy, and hence the common name gumweed. Although a common rangeland plant, cattle do not eat gumweed because it emits a bitter taste. The foamy white spittle on old flower heads is formed by the spittlebug; the foam protects the bugs' offspring from predators.



Janet Sitas

### Little Sunflower & Goldeneye

Helianthella uniflora & Heliomeris multiflora

Family: Sunflower (Asteraceae)

**General:** Erect, 1-4' tall

**Flowers/Fruit:** Yellow ray flowers surround yellow to brownish-purple central disk flowers (little sunflower) or yellow central disk flowers (goldeneye)

**Leaves:** Mainly opposite, sometimes alternate, lance-shaped, up to 6" long, bristly feeling to the touch

**Habitat:** Woodlands, open rocky areas, grasslands, shrublands, riparian

**ID Hints:** Little sunflower typically has 1 larger flower head (up to  $2^{1}/2$ " wide) per stem, whereas goldeneye commonly has 2 or more smaller flower heads (1-2" wide) per stem.

**Bloom:** Summer

**Did You Know?** These two species are often mistaken for true sunflowers (*Helianthus* spp.). However, the flower heads of little sunflower and goldeneye are generally smaller than sunflowers, and their leaf margins are usually entire, rather than toothed.



Janet Sitas

### **Sunflower Group**

Helianthus spp.

Family: Sunflower (Asteraceae)

**General:** Erect, 1-10' tall; annual or perennial

**Flowers/Fruit:** Flower heads 2-6" wide, comprised of bright yellow ray flowers and dark purple disk flowers

**Leaves:** Basal, alternate and/or opposite, lance- to egg-shaped, 2-8" long, rough to the touch

**Habitat:** Wet meadows, open rocky areas, grasslands, riparian, disturbed areas

Bloom: Summer, Fall

**ID Hints:** Flower heads grow atop stiff, often reddish, rough stems that have leaves with toothed margins. The leaf arrangement can be quite variable; sometimes both opposite and alternate leaves grow on the same plant.

**Did You Know?** Some of the most abundant species in the foothills include low or bush sunflower (*H. pumilus*) with multiple stems, annual sunflower (*H. annuus*) with a single stem, and prairie sunflower (*H. petiolaris*) with narrow leaves.



Jenna McAleer, Janet Sitas (inset)

#### **Golden Aster Group**

Heterotheca spp.

Family: Sunflower (Asteraceae)

**General:** Erect, up to 2' tall,

clump-forming

**Flowers/Fruit:** Small flower heads up to 1" wide, comprised of golden yellow ray flowers and yellow to orange central disk flowers

**Leaves:** Alternate, oblong to elliptic, up to 2" long and ½" wide, hairy

**Habitat:** Woodlands, open rocky areas, grasslands, canyons

Bloom: Summer, Fall

**ID Hints:** Grayish hairy stems, covered with numerous greenish-gray hairy leaves, support one to many small, yellow composite flowers.

**Did You Know?** Heterotheca species, such as golden aster (H. canescens) and hairy golden aster (H. villosa), are very common in the foothills. They are often difficult to identify to species level due to extremely variable leaf and stem characteristics. Also known as Chrysopsis.



Mary Dubler

Lisa Matthews

#### False Salsify & Yellow Salsify

Podospermum laciniatum & Tragopogon dubius Bloom: Spring, Summer

Family: Sunflower (Asteraceae)

**General:** Erect, up to 3' tall; nonnative; annual, biennial, or perennial

**Flowers/Fruit:** Pale yellow ray flowers; yellow salsify has bracts that extend beyond the ray flowers

**Leaves:** Basal and alternate, grass-like. False salsify: up to 4" long. Yellow salsify: up to 12" long.

**Habitat:** Open rocky areas, grasslands, disturbed areas

**ID Hints:** False salsify's lower leaves are typically pinnately dissected, while yellow salsify's leaves are all entire. False salsify has wiry, branched stems. Both species somewhat resemble the common dandelion, especially when in seed, as they produce a large tuft of white to brown feathery bristles.

**Did You Know?** These flowers typically open at dawn and close by noon, making them easy to overlook. False salsify is also known as *Scorzonera laciniata*.



Paul Alaback

Lisa Matthews, Janet Sitas (top inset)

#### **Prairie Coneflower, Mexican Hat**

Ratibida columnifera

Family: Sunflower (Asteraceae)

**General:** Erect, up to 3' tall, one to several slender stems

**Flowers/Fruit:** Yellow drooping ray flowers surround a dark brown to purplish cone of central disk flowers

**Leaves:** Alternate, up to 6" long, pinnately dissected into thin, linear leaflets

**Habitat:** Wet meadows, open rocky areas, grasslands

**ID Hints:** Every part of this plant is distinctive, which makes for easy identification: hairy, thinly dissected leaves, drooping ray flowers, and an elongated cone of darker colored disk flowers. Ray flowers are occasionally dark red.

**Bloom:** Summer

**Did You Know?** This wildflower resembles a traditional Mexican hat, with its tall center and brim of ray flowers. Also known as *Rudbeckia columnifera* and *Lepachys columnaris*.



Lisa Matthews

Jenna McAleer

#### Black-eyed Susan

Rudbeckia hirta

Family: Sunflower (Asteraceae)

**General:** Erect, up to 3' tall, hairy; biennial or short-lived perennial

**Flowers/Fruit:** Yellow to orange ray flowers surround dark brown to purple central disk flowers; flower heads up to 3" wide, solitary or in open clusters

**Leaves:** Alternate, lance- to egg-shaped, up to 10" long, bristly

**Habitat:** Wet meadows, open rocky areas, grasslands

ID Hints: Bright yellow ray flowers and

**Bloom:** Summer

dark brownish disk flowers make up each flower head, which grow atop hairy, slender, leafy stems.

**Did You Know?** Many small mammals and birds rely on this species as a source of food, as each flower head produces anywhere from 250-500 seeds. The name *hirta* means hairy, which is in reference to the hairy stems and leaves.



Jenna McAleer

## **Ragwort Group**

Senecio spp.

**Bloom:** Summer, Fall

Family: Sunflower (Asteraceae)

**General:** Erect, up to 4' tall; annual, biennial, or perennial

**Flowers/Fruit:** Yellow ray flowers up to 1" long surround central yellow disk flowers; flower heads up to 3" wide

**Leaves:** Basal and alternate, linear to lance-shaped, entire to pinnately divided

**Habitat:** Wet meadows, open rocky areas, grasslands, shrublands, woodlands, riparian

**ID Hints:** Many small flower heads clustered at top of stem. Each flower head is surrounded by 1 row of green bracts, which are frequently black-tipped and are of equal length.

**Did You Know?** There are about 50 species of *Senecio* in Colorado! Two common species in the foothills include lambstongue ragwort (*S. integerrimus*), with cobwebby hairs on the young leaves and stems, and broom senecio (*S. spartioides*), with hairless, linear leaves. Also known as groundsel or butterweed.



Lisa Matthews

### **Goldenrod Group**

Solidago spp.

Family: Sunflower (Asteraceae)

**General:** Erect, 1-6' tall, clumped

Flowers/Fruit: Flower heads up to ½" wide, clustered on arching stems; yellow ray flowers surround yellow central disk flowers

**Leaves:** Basal and alternate, lance-shaped, entire to toothed margins

**Habitat:** Wet meadows, woodlands, open rocky areas, grasslands, riparian, disturbed areas, ditches, wetlands

**Bloom:** Summer, Fall

**ID Hints:** Terminal, arching flower stems up to 9" long, with numerous small, yellow flower heads clustered on one side of the stem.

**Did You Know?** Smooth goldenrod (*S. missouriensis*), one of the shortest species of goldenrod in the foothills (up to 20" tall), is primarily found in drier sites, while Canada goldenrod (*S. canadensis*) and giant goldenrod (*S. gigantea*) are much taller and frequently occur in moister sites.



Lisa Matthews

Janet Sitas

#### Fringed Puccoon, Narrowleaf Stoneseed

Lithospermum incisum

Family: Borage (Boraginaceae)

General: Erect, up to 2' tall, clumped

**Flowers/Fruit:** Lemon yellow to orange tubular flowers up to 1½" long and ¾" wide, with 5 flattened, fringed lobes; flowers clustered at the ends of stems

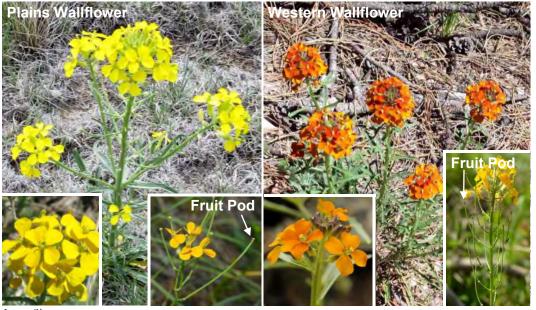
**Leaves:** Alternate, linear to narrowly lance-shaped, up to 3" long, firm, hairy

**Habitat:** Woodlands, open rocky areas, grasslands

**ID Hints:** Bright yellow tubular flowers with 5 distinctively crinkled petal lobes.

**Bloom:** Spring, Summer

Did You Know? Fringed puccoon's showy yellow flowers actually contribute very little to the plant's reproduction. Instead, seeds are primarily formed from small, unopened flowers that are produced later in the season. The common name stoneseed is in reference to the hard fruits (nutlets) that encase the seeds.



Janet Sitas

Lisa Matthews, Janet Sitas (right inset)

#### **Plains Wallflower & Western Wallflower**

Erysimum asperum & E. capitatum

Bloom: Summer

Family: Mustard (Brassicaceae)

**General:** Erect, up to 2½' tall with showy flower clusters

**Flowers/Fruit:** 4 yellow to orange petals ½" or more long, in head at top of stem; long narrow fruits

**Leaves:** Linear to lance-shaped, smooth

**Habitat:** Wet meadows, grasslands, woodlands, forest openings, disturbed areas, shrublands

**ID Hints:** Mustards commonly have 4 small light yellow petals; *Erysimum* flowers are distinctive by having larger yellow to orange petals. Leaves are smooth and unlobed unlike most other mustards. Plains wallflower has yellow petals and spreading fruit pods; western wallflower has yellow-orange petals and erect fruit pods.

**Did You Know?** Wallflowers are popular garden flowers and can become weeds. They interbreed, resulting in a wide range of colors.



Jane Thomson

#### **Bell's Twinpod & Mountain Bladderpod**

Physaria bellii & Lesquerella montana Bloom: Spring, Summer

Family: Mustard (Brassicaceae)

**General:** Erect to spreading. Bell's twinpod: 2-5" tall. Mountain bladderpod: up to 12" tall.

Flowers/Fruit: Yellow, 4-petaled flowers; singular or double pods

**Leaves:** Basal and alternate, gray. Bell's twinpod: dense rosette. Mountain bladderpod: linear to egg-shaped, on stems as well as base.

Habitat: Open rocky areas, canyons

**ID Hints:** Both plants are densely hairy with star-shaped hairs and have reclining stems. Twinpod has a basal rosette of leaves and fruits that consist of 2 (twin) inflated pods fused together, while bladderpod fruits are singular, elongated and upward pointing.

**Did You Know?** Although common on shale outcrops in the foothills, Bell's twinpod, also known as Front Range twinpod, only occurs in 3 counties in Colorado. Mountain bladderpod is widely distributed across the Rockies.



Jane Thomson

#### **Yellow Stonecrop**

Amerosedum lanceolatum

Family: Stonecrop (Crassulaceae)

**General:** Erect, up to 8" tall, succulent, hairless, stems in clumps

**Flowers/Fruit:** 5 yellow, star-like petals ½" across; flat-topped clusters

**Leaves:** Alternate, fleshy, about ½" long, lance-shaped, green or reddish

**Habitat:** Open rocky areas, woodlands, forest openings

Bloom: Summer

**ID Hints:** Fleshy pointed leaves are distinctive of this family; yellow flowers distinguish it from other species in the stonecrop family.

**Did You Know?** Stonecrops grow slowly in tough places, but have unique adaptations to drought. They open their leaf pores at night to conserve water during the day (most plants open their pores during the day). They are in the same family as sedum, hen and chickens and jade plants. Also known as *Sedum lanceolatum*.



Janet Sitas

#### Golden Banner, Golden Pea

Thermopsis divaricarpa

Bloom: Spring, Summer

Family: Pea (Fabaceae)

**General:** Erect, up to 3' tall; forms large patches

**Flowers/Fruit:** Bright yellow pea flowers, up to 1" long, arranged in terminal clusters

**Leaves:** Alternate, compound with 3 elliptical leaflets

**Habitat:** Open rocky areas, grasslands, riparian, canyons

**ID Hints:** Large, bright yellow pea flowers make this wildflower hard to overlook. At the base of each leaf are 2 egg-shaped, modified leaves called stipules; these often give the appearance of 5 leaflets, rather than 3.

**Did You Know?** Golden banner is toxic to livestock and may cause birth defects if ingested by pregnant cows. Prairie golden banner (*T. rhombifolia*) is a similar species, blooming early in spring on the plains.



Jane Thomson

Lisa Matthews

# Yellow Evening Primrose Group

Oenothera spp.

**Bloom:** Late Spring, Summer

**Family:** Evening Primrose (Onagraceae)

**General:** Erect, 6-48" tall; clumped biennial or perennial

**Flowers/Fruit:** 4 rounded or heart-shaped yellow petals; flowers up to  $2\frac{1}{2}$ " wide; see also White Evening Primrose Group

**Leaves:** Basal and alternate, linear to lance-shaped, up to 8" long, toothed margins

**Habitat:** Wet meadows, woodlands, open rocky areas, grasslands, shrublands, riparian, disturbed areas

**ID Hints:** Showy, yellow, tubular flowers, each with 4 fragile petals, grow above a dense basal rosette of toothed leaves. Flowers often mature to pink.

**Did You Know?** These flowers, although large and showy, can be overlooked because they often remain closed during the day. Night-flying moths pollinate the flowers that are open at night. Common species include *O. howardii*, *O. flava*, *O. serrulata*, and *O. villosa*.



Janet Sitas, Lisa Matthews (inset)

### Sulphur Flower

Eriogonum umbellatum

Family: Buckwheat (Polygonaceae)

**General:** Leafy mound with erect clumps of flowering stems up to 16" tall

**Flowers/Fruit:** Dense rounded umbel of yellow flowers turning red-orange with age

**Leaves:** Greenish-white, paddle-shaped leaves with dense white hairs on underside; turn bright red in fall

**Habitat:** Open rocky areas, grasslands, woodlands, forest openings

**ID Hints:** Dense mounds of leaves and many flowering stalks distinguish sulphur flowers. Flowers occur in cups formed by leaf-like bracts that have fused together. James buckwheat (*E*.

jamesii), found in ponderosa pine forests,

has hairy, cream-colored flowers.

in the mountains.

**Bloom:** Summer

**Did You Know?** Buckwheats are in the same family as the plants used for flour. There are over 50 species native to the West, mostly in dry rocky habitats



Janet Sitas Paul Alaback

## **Buttercup Group**

Ranunculus spp.

Family: Buttercup (Ranunculaceae)

**General:** Erect to spreading, up to 2' tall; often produces roots along the stem if spreading

**Flowers/Fruit:** Usually 5 glossy, yellow petals; flowers ½ - 1" wide

**Leaves:** Basal and alternate; shallowly 3-lobed to deeply divided into 3 leaflets; leaf shape and size variable

**Habitat:** Wet meadows, woodlands, shrublands, riparian, forest openings

**Bloom:** Spring, Summer

**ID Hints:** Shiny yellow, saucer-shaped flowers mature into a rounded cluster of numerous small fruits (achenes). Some species have more than 5 petals.

**Did You Know?** Buttercups are all poisonous to some degree, although their levels of toxicity can vary greatly depending on species, habitat and an individual's sensitivity. Macoun's buttercup (R. *macounii*) typically grows in wet locations, while sagebrush buttercup (R. *glaberrimus*) is usually found on drier sites.



Paul Alaback Janet Sitas

### **Cinquefoil Group**

Drymocallis spp., Potentilla spp.

Family: Rose (Rosaceae)

**General:** Erect up to 3' or spreading with many basal leaves

**Flowers/Fruit:** Yellow or white, 5 petals, up to ½", with many stamens clustered around center of flower

**Leaves:** Leaves usually compound with toothed leaflets, either palmately or pinnately arranged

**Habitat:** Open rocky areas, woodlands, forest openings, grasslands, disturbed areas

Bloom: Spring, Summer

**ID Hints:** A diverse group of plants, distinguished primarily by differences in leaves. Silvery cinquefoil (*P. hippiana*): densely hairy above, white hairy below. Sticky cinquefoil (*D. arguta*): white flowers and pinnately divided hairy leaves. Leafy cinquefoil (*D. fissa*): similar to sticky cinquefoil but with hairless leaves and yellow flowers.

**Did You Know?** Cinquefoils are similar to buttercups, but buttercups usually have shiny petals and occur in moist places.



Lisa Matthews, Janet Sitas (right inset)

## **Smooth Ground Cherry, Virginia Ground Cherry**

Physalis virginiana Bloom: Summer

Family: Nightshade (Solanaceae)

**General:** Erect, up to 2' tall, bushy, hairless

**Flowers/Fruit:** Pale yellow flowers with purple centers nod from side branches at base of stem leaves; fruits like tomatillos

**Leaves:** Broad lance-shaped, smooth with long stems, wavy or lobed margin

**Habitat:** Disturbed areas, roads, trails, pastures, grasslands, ditches

**ID Hints:** Has overall look of a scraggly tomato or Chinese lantern, to which it is closely related. Wide smooth leaves are distinctive of this group; other species are hairy. Fruits turn yellow when ripe and have papery husks.

**Did You Know?** Ground cherry species can be weeds in our gardens and along roads where we have created ideal moist, disturbed habitat for them. A purple species (*Quincula lobata*) is also common.



Janet Sitas

#### **Nuttall's Violet, Yellow Prairie Violet**

Viola nuttallii Bloom: Spring

Family: Violet (Violaceae)

**General:** Erect, up to 6" tall, clumps

**Flowers/Fruit:** Nodding flowers, up to <sup>3</sup>/<sub>4</sub>" wide; 2 upper, backward curving petals and 3 lower petals, one of which is spurred; dark stripes on lowest petal

**Leaves:** Basal, lance-shaped, vibrant green, up to 8" long; mostly entire margins, sometimes shallowly toothed

**Habitat:** Wet meadows, woodlands, open rocky areas, grasslands, shrublands

**ID Hints:** A lower petal with brownpurple veins and leafless stem are distinctive. Nuttall's violet is one of the only violet species with lance-shaped leaves, making for easy identification; many others have heart-shaped leaves.

Did You Know? The lines on the petals, also known as nectary guides, serve to direct pollinating insects toward the nectar, which is located in the spur. Seeds provide food for ants; the ants can easily grasp the seeds using the irregularly-shaped growths on the seeds.



## **Pink Onion Group**

Allium spp.

**Bloom:** Summer

Family: Onion (Alliaceae)

**General:** Erect, up to 20" tall; cluster of grass-like leaves

**Flowers/Fruit:** Narrow, cup-shaped, pink flowers in loose umbels; see also white species *A. textile* 

Leaves: Linear, grass-like, often rolled

**Habitat:** Grasslands, open rocky areas; wet meadows (*A. cernuum* and *A. geyeri*)

**ID Hints:** The smell and flower umbels distinguish onions. Common species include the nodding onion (*A. cernuum*), which has a drooping umbel, Geyer's onion (*A. geyeri*), which has 3 or more leaves per stem, and the prairie onion (*A. textile*), which has only 2 leaves per stem and usually has whitish flowers.

**Did You Know?** Wild onions smell the same as garden onions. Leeks, chives, and garlic are also close relatives in this family. Before blooming, the plant is easily mistaken for death camas.



Jenna McAleer, Lisa Matthews (insets)

## **Showy Milkweed**

Asclepias speciosa

Bloom: Summer

Family: Milkweed (Asclepiadaceae)

**General:** Erect, up to 6' tall; hairy; milky sap; large heads of flowers

**Flowers/Fruit:** Dense umbel of up to 50 white-pink-purple, star-like flowers, reflexed petals; knobby fruit pods up to 5" long containing seeds with silky hairs

**Leaves:** Gray-green egg-shaped leaves up to 12" long in opposite pairs; pink midrib

**Habitat:** Riparian, woodlands, disturbed areas, roadside ditches

**ID Hints:** Flowers have unique shape, with "horns" pointing inward and reflexed petals. A white flowered species also can be found in our area (*A. pumila*).

Did You Know? Preferred host for monarch butterflies. Uniquely-shaped stamens release clumps of pollen that attach to the butterflies when they land. Whitish, toxic sap exudes outward whenever damaged. Monarch caterpillars become distasteful to their predators after consuming the sap.



Janet Sitas Lisa Matthews

# **Rocky Mountain Bee Plant, Spider Flower**

Cleome serrulata

Bloom: Summer

Family: Caper (Capparaceae)

**General:** Erect, branched bushy annual up to 5' tall, with loose flower clusters on top (racemes)

Flowers/Fruit: 4 pink petals, ½" wide, with long protruding pink stamens; dangling green fruit pods

**Leaves:** Compound, palmately divided into 3 lance-shaped leaflets, short stem

**Habitat:** Grasslands, disturbed areas, wet meadows

**ID Hints:** Long protruding stamens give this plant a unique shaggy appearance. Narrow, cylindrical green pods dangle from long stems, characteristic of fruits in the caper family. A related species, clammy weed (*Polanisia*) is similar but has sticky texture on stem.

**Did You Know?** This annual readily colonizes disturbed areas and grows all across the Great Plains. The odor can be offensive.



Jane Thomson Janet Sitas

#### **Colorado Locoweed**

Oxytropis lambertii

**Bloom:** Spring

Family: Pea (Fabaceae)

**General:** Erect with tall leafless flower stalks up to 16" tall; silky hairy throughout

**Flowers/Fruit:** Pink-purple flowers in spike-like racemes; pointed keel

**Leaves:** Basal, pinnately compound, up to 12" long with many narrow leaflets, forming basal rosette

**Habitat:** Grasslands, open rocky areas, sandy places

**ID Hints:** Pink-purple flowers with pointed keel and flat basal leaves distinguish Colorado locoweed from other pea-like plants. Sometimes it hybridizes with Rocky Mountain locoweed indicated by lavender petals and black or white hairs on fruit. For creeping plants, see vetch.

**Did You Know?** Locoweed concentrates selenium from the soil, which is both addictive and toxic to livestock; it makes them go crazy or "loco" in Spanish.



Lisa Matthews

#### Wild Geranium

Geranium caespitosum

Family: Geranium (Geraniaceae)

**General:** Bushy, many stems up to 2' tall; showy flowers

**Flowers/Fruit:** 5 pink to magenta petals with dark veins; column of stamens; after flowering, the long, pointed capsule resembles a stork's bill

**Leaves:** Rounded with 3-5 palmately divided lobes

**Habitat:** Grasslands, woodlands, open rocky areas

**Bloom:** Spring, Summer

**ID Hints:** Wild geranium flowers in summer and has rounded lobed leaves. A sticky, white-flowered species with larger leaves, Richardson's geranium (*G. richardsonii*), grows at higher elevations or cool sites.

**Did You Know?** Geranium seeds have styles that coil like springs. When the seed falls to the ground, the spring coils and uncoils with changes in moisture, drilling the seed into the ground.



Lisa Matthews

# **Copper Mallow, Scarlet Globemallow**

Sphaeralcea coccinea

**Bloom:** Spring, Summer

Family: Mallow (Malvaceae)

**General:** Erect, up to 12" tall, grayish hairy stems, clump-forming

**Flowers/Fruit:** 5 orange to pink-red petals, each with a shallow notch at the tip; flowers up to <sup>3</sup>/<sub>4</sub>" wide

**Leaves:** Alternate, up to 1½" long and 2" wide, palmately lobed into 3 or 5 segments, grayish-green, hairy

**Habitat:** Open rocky areas, grasslands, shrublands

**ID Hints:** Bright orange to reddish flowers on grayish-green hairy stems and palmately lobed, hairy leaves.

**Did You Know?** Marshmallows used to be made from the roots of a sister genus of copper mallow; now they are made synthetically. This species and other members of the mallow family often have star-shaped hairs on their stems and leaves; however, you need a hand lens or microscope to see them.



Janet Sitas Lisa Matthews

#### **Scarlet Gaura & Velvetweed**

Gaura coccinea & G. mollis

**Bloom:** Summer

**Family:** Evening Primrose (Onagraceae)

(Ollagraccae)

**General:** Erect, up to 7' tall

Flowers/Fruit: 4 white-pink petals; reflexed sepals; conspicuous protruding stamens; long racemes with oldest pink flowers on bottom, newer white flowers on top

**Leaves:** Linear, grayish green, hairy, and densely crowded on stem

Habitat: Grasslands, disturbed areas

**ID Hints:** Scarlet gaura is usually less than 12" tall with ½" flowers; velvetweed can tower to 7', is branched and has a long spike of many small flowers. The reflexed sepals give these flowers a unique, shaggy appearance.

**Did You Know?** Moths with long tongues pollinate these long-tubed flowers in the evening or at night, when the flowers are most fragrant.



Mary Dubler

Marlene Bornema

#### Scarlet Gilia, Skyrocket

Ipomopsis aggregata

Bloom: Summer

Family: Phlox (Polemoniaceae)

**General:** Tall raceme of flowers on erect stem up to 3' tall

Flowers/Fruit: Pink to red trur

**Flowers/Fruit:** Pink to red trumpetshaped with 5 equal petal lobes flaring outwards in short racemes

**Leaves:** Pinnately divided into linear leaflets, smaller at top of stem

**Habitat:** Wet meadows, forest openings, open rocky areas

**ID Hints:** Trumpet-shaped flowers up to 1½" long identify this as a member of the phlox family. Unlike most other phloxes, scarlet gilia is tall and narrow and has a skunk-like odor. Long petal lobes are sharply pointed.

**Did You Know?** The long narrow tubes of these flowers and red-pink color make them ideal for hummingbird pollinators. Also a popular garden plant.



Janet Sitas

# **Spring Beauty**

Claytonia rosea

Family: Purslane (Portulacaceae)

**General:** Tiny erect flowers, with weak stems up to 6" tall; fleshy leaves

**Flowers/Fruit:** White to pink petals with red veins, only 2 sepals

**Leaves:** 1 pair of opposite stem leaves, linear to lance-shaped; 1-2 basal leaves usually present as well.

**Habitat:** Ponderosa pine forests, woodlands, wet meadows, riparian, forest openings

**Bloom:** Early spring

**ID Hints:** Spring beauties have unique waxy pink petals and have only 2 sepals. They need moisture and emerge right after snow melts. At higher elevations or in cool moist spots, lanceleaf spring beauty (*C. lanceolata*) grows with wider stem leaves and no basal leaves.

**Did You Know?** Spring beauty is one of the first flowers to bloom in spring. Look carefully for the green, fleshy leaves in March in an otherwise brown landscape.



Janet Sitas Jane Thomson

#### **Shooting Star**

Dodecatheon pulchellum

Family: Primrose (Primulaceae)

**General:** Erect, up to 20" tall; leafless flower stem, leaves basal

**Flowers/Fruit:** Dart-shaped flowers with anthers forming black and yellow cone ("beak"); pink-purple reflexed petals

**Leaves:** Basal, smooth, lance-shaped or elliptical

**Habitat:** Wet meadows, riparian, woodlands

**Bloom:** Early spring

**ID Hints:** Unique-looking flowers with bright pink-purple (sometimes white), reflexed petals and anthers forming a dark cone.

**Did You Know?** Flowers release pollen in response to rapid wing beats of bees, as they try to access the nectar through the gap in the anthers. Also known as prairie pointer in the Great Plains and formerly called American cyclamen. Common at higher elevations.



Janet Sitas

# Red Paintbrush Group

Castilleja spp.

Bloom: Summer

Family: Figwort (Scrophulariaceae)

**General:** Erect cluster of short leafy stems up to 2' tall

**Flowers/Fruit:** Pink-red bracts with long narrow lobes; red-green flowers in dense spikes mostly hidden by bracts

**Leaves:** Lance-shaped to linear, often lobed with rounded tips; sometimes hairy

**Habitat:** Grasslands, wet meadows, open rocky areas, woodlands

**ID Hints:** Paintbrushes form a wide range of colors and leaf shapes. Most common reddish species include *C. linariifolia*, with linear leaves and narrowly lobed bracts and *C. miniata*, which grows near forests and has broader bracts and broad leaves often entire or shallowly lobed.

**Did You Know?** Paintbrushes are root parasites; they tap onto roots of shrubs and grasses to get extra nutrients. *C. linariifolia* is the Wyoming state flower.



Janet Sitas, Jenna McAleer (right inset)

# Blue/Purple Aster Group

Aster spp.

Bloom: Summer, Fall

Family: Sunflower (Asteraceae)

**General:** Erect, up to 3' tall

**Flowers/Fruit:** Pale lavender to blue ray flowers; yellow central disk flowers; heads several to many, to 1" wide; see also White Aster Group

**Leaves:** Alternate, linear to lance- to paddle-shaped, up to 3" long, clasping the stem

**Habitat:** Broadly distributed across habitats

**ID Hints:** Numerous ray flowers surround yellow disk flowers, grouped in small heads. Leafy, branched slender stems. Bracts overlap like shingles, unlike *Erigeron*, which has bracts of roughly the same length.

**Did You Know?** Three very common and similar species found in the foothills include *Machaeranthera* spp. (tansy aster), *A. laevis*, and *A. spathulatus*. Look for asters particularly in the fall. Asters are also classified under *Virgulus*, *Virgulaster*, and *Symphyotrichum*.



Janet Sitas

#### Wavy-leaved Thistle, Gray Thistle

Cirsium undulatum

Family: Sunflower (Asteraceae)

**General:** Erect, grayish native thistle, often branched, very spiny, up to 6' tall

Flowers/Fruit: Red-pink or white, heads up to 1½" wide, ball-like base, weak curved spines, no ray flowers

**Leaves:** Spiny, wavy margins with small lobes, white hairs underneath

**Habitat:** Grasslands, pastures, roadsides; common in the plains

**ID Hints:** Hairy leaves and lack of spines on leaf surfaces separate gray thistle from exotic weedy thistles. Musk thistle (*Carduus nutans*) has nodding heads. Native plains thistle (*C. ochrocentrum*) has heads 3" or more wide and stiff, straight spines on the flower head.

**Bloom:** Summer

**Did You Know?** Thistles are often assumed to be non-native weeds, but Colorado has 15 species of native thistles. They provide nutritious forage for deer and elk.



Lisa Matthews

## Blue/Purple Fleabane/Daisy Group

Erigeron spp. Bloom: Late Spring, Summer

Family: Sunflower (Asteraceae)

**General:** Erect, up to 3' tall; biennial or perennial

**Flowers/Fruit:** Numerous narrow, blue-purple ray flowers; yellow central disk flowers; see also White Fleabane/ Daisy Group

**Leaves:** Basal and alternate, linear to lance- to paddle-shaped, up to 2" long

**Habitat:** Broadly distributed across habitats

**ID Hints:** Fleabanes and asters are easily mistaken; they both can have numerous ray flowers and yellow disk flowers. However, the ray flowers on fleabanes are often much narrower and more numerous. Also, the bracts are roughly equal in length, whereas aster bracts overlap like shingles. *Erigeron* leaves are often hairy.

**Did You Know?** Nearly 50 different species of *Erigeron* grow in Colorado. Many look similar and require advanced skills to identify.



Janet Sitas

## Kansas Gayfeather, Dotted Blazing Star

Liatris punctata Bloom: Late Summer

Family: Sunflower (Asteraceae)

**General:** Erect, up to  $2\frac{1}{2}$  tall

**Flowers/Fruit:** Pink-purple disk flowers clustered in heads, arranged in a terminal spike

**Leaves:** Alternate, linear, up to <sup>1</sup>/<sub>4</sub>" wide and 6" long, dark green

**Habitat:** Open rocky areas, grasslands

**ID Hints:** Shiny, glandular dots cover the upward arching leaves. Each small head contains 4-6 disk flowers and feathery styles, but no ray flowers.

**Did You Know?** Kansas gayfeather plants can have a taproot as deep as 7-16', depending on the soil type. This makes it extremely drought tolerant. This popular garden plant is common throughout the Great Plains.



Lisa Matthews

# **Chiming Bells, Lanceleaf Chiming Bells**

Mertensia lanceolata

Family: Borage (Boraginaceae)

**General:** Erect, up to 15" tall

Flowers/Fruit: Small, blue-purple tubular flowers, up to <sup>3</sup>/<sub>4</sub>" long, drooping in loose clusters

**Leaves:** Alternate, lance-shaped, bluegreen, up to 4" long; fleshy and soft

Habitat: Woodlands, open rocky

areas, grasslands

**ID Hints:** Unbranched, leafy stems with sky blue flowers and pink buds in nodding clusters.

**Bloom:** Spring

**Did You Know?** Long tubular flowers are common with all mountain bluebells. Chiming bells start out pink and turn blue as they mature. True bluebells (*Campanula* spp.) have bell-shaped flowers and are in a different family.



Janet Sitas Lisa Matthews

#### **Common Harebell**

Campanula rotundifolia

Family: Bellflower (Campanulaceae)

**General:** Erect, up to 2' tall

**Flowers/Fruit:** Blue-violet, nodding, bell-shaped flowers, <sup>1</sup>/<sub>4</sub>-1" long; petals fused at the base and flared at the tips

**Leaves:** Alternate, stem leaves linear to 2½" long, basal leaves round

**Habitat:** Wet meadows, woodlands, open rocky areas

Hints: Delicate stems support either

**Bloom:** Summer

**ID Hints:** Delicate stems support either one flower or several, arranged in a loose cluster. Basal leaves are often absent at time of flowering. Typically forms small patches.

**Did You Know?** *Campanula* is Latin for bell-shaped. Strong insects, such as bees, are required to pollinate these difficult to reach drooping flowers. Grows all across the northern U.S., from desert to rainforest.



Janet Sitas

Lisa Matthews

# Western Spiderwort, Western Dayflower

Tradescantia occidentalis

**Bloom:** Summer

Family: Spiderwort (Commelinaceae)

**General:** Erect, up to 2' tall, bushy, grass-like

**Flowers/Fruit:** 3 blue (sometimes pink) petals up to 2" across, 3 narrow sepals, yellow stamens; clusters at top of stem or at base of stem leaves

**Leaves:** Grass-like, sheathed or partially rolled around smooth stem, up to 12" long

**Habitat:** Open rocky areas, grasslands, disturbed areas, roadsides

**ID Hints:** Large blue 3-petaled flowers are unique as are its jointed, and coarse, folded grass-like leaves. One petal is slightly smaller than the others.

Did You Know? Also called dayflower or flower of the day because the flowers only last one day, usually appearing in morning. Called spiderwort because of web-like pattern of sticky sap. So unique, it is placed in its own family.



Lisa Matthews, Jane Thomson (inset)

# Blue/Purple Milkvetch Group Astragalus spp.

Family: Pea (Fabaceae)

**General:** Erect to spreading, up to 3' tall, hairy; annual or perennial

**Flowers/Fruit:** Purple to blue flowers up to 1" long, often bicolored, clustered in terminal racemes; fruit a legume; see also White Milkvetch Group

**Leaves:** Alternate, pinnately compound, usually 11 or more leaflets with a terminal leaflet

**Habitat:** Wet meadows, open rocky areas, grasslands, woodlands, riparian

**Bloom:** Spring, Summer

**ID Hints:** Milkvetches look very similar to locoweeds (*Oxtropsis* spp.), except that the keel petal of milkvetches is not sharply pointed. The common species of milkvetch in our area are often densely wooly and the flower stems are usually leafy.

**Did You Know?** Astragalus is the largest genus in the world. Roughly 70 species grow in Colorado alone. They frequently hybridize, so they can be extremely variable and confusing.



Janet Sitas, Lisa Matthews (inset)

#### **Purple Prairie Clover**

Dalea purpurea

Family: Pea (Fabaceae)

**General:** Erect, up to 2' tall

**Flowers/Fruit:** Numerous tiny (1/4") pink-purple flowers clustered in a coneshaped, terminal spike 1-11/2" long

**Leaves:** Alternate, divided into 3 or 5 linear leaflets

**Habitat:** Woodlands, open rocky areas, grasslands

#### Bloom: Late Spring, Summer

**ID Hints:** Look closely to see shiny, translucent glands dotting the leaves. Golden orange stamens protrude distinctly from the purple flowers. The stems appear wiry and often have a yellowish cast.

**Did You Know?** Purple prairie clover provides excellent wildlife food because of its high protein content. It is also an important source of food for native bumblebees and honeybees.



Lisa Matthews, Jane Thomson (inset)

### **Common Lupine, Silvery Lupine**

Lupinus argenteus

Family: Pea (Fabaceae)

**General:** Erect, up to 3' tall

Flowers/Fruit: White, blue or purple pea flowers up to ½" long, in dense to open terminal racemes up to 8" long; fruit a hairy legume up to 1" long

**Leaves:** Alternate, palmately compound with 5 or more leaflets, silvery green

**Habitat:** Wet meadows, woodlands, open rocky areas, grasslands

**ID Hints:** Lupines are distinguished by palmately compound leaves on an obvious stem with terminal racemes of pea flowers.

**Bloom:** Summer

**Did You Know?** The flowers and seeds of common lupine are toxic to humans and certain livestock. However, they serve as an important food supply for several species of butterflies. There are many species of lupines, many of which hybridize, making them sometimes difficult to identify.



Janet Sitas, Lisa Matthews (top inset)

#### **Vetch Group**

Vicia spp.

**Bloom:** Spring, Summer

Family: Pea (Fabaceae)

**General:** Spreading or clasping with weak stems up to 4' long

**Flowers/Fruit:** Up to 10 red-purple pea flowers in branched clusters

**Leaves:** Pinnately compound with a tendril at the tip; linear to oblong leaflets

**Habitat:** Grasslands and open rocky areas; pastures and disturbed areas (*V. americana*)

**ID Hints:** Vetch plants always have leaf tendrils used to clasp or climb. Blue vetch (*V. americana*) is a large, summerblooming climber with oblong leaves. Narrow-leaved vetch (*V. linearis*) is a short, spreading, spring-flowering plant with long linear leaflets and white and blue flowers. For erect hairy plants, see locoweed and milkvetch.

**Did You Know?** *Vicia* means binding, referring to how these plants clasp to fences or other plants.



Janet Sitas

#### **Colorado Columbine, Blue Columbine**

Aquilegia coerulea

Bloom: Summer

**Family:** Hellebore (Helleboraceae)

**General:** Erect, up to 3' tall

**Flowers/Fruit:** 5 showy bluish-white sepals, white to blue spurred petals, up to 3" across

**Leaves:** Alternate, palmately compound, divided 2-3 times into threes, each leaflet <sup>3</sup>/<sub>4</sub>-2" long

**Habitat:** Wet meadows, riparian, woodlands, forest openings

**ID Hints:** Very distinctive flowers that mature into clusters of 1" long, hairy seed pods. Light blue-green leaves are mostly basal; stem leaves, when present, are much smaller, which distinguishes this species from meadow rue.

**Did You Know?** This is the Colorado state flower. The long, backward pointing spurs contain nectar that only hummingbirds and insects with long tongues can reach.



Janet Sitas, Jane Thomson (insets)

# Blue/Purple Larkspur Group Delphinium spp.

**Family:** Hellebore (Helleboraceae)

**General:** Erect, up to  $2\frac{1}{2}$  tall

**Flowers/Fruit:** Blue-purple petals with one backward pointing spur; see also white species *D. carolinianum* 

**Leaves:** Basal and alternate, palmately divided with linear leaflets

**Habitat:** Wet meadows, shrublands, grasslands, open rocky areas

#### **Bloom:** Late Spring, Summer

**ID Hints:** Larkspur flowers have 5 petal-like sepals, the upper of which is spurred, and 4 small petals in the center. Numerous flowers are arranged in open racemes.

**Did You Know?** *D. geyeri* and *D. nuttallianum* are two fairly common larkspur species located in the foothills. Almost all parts of the plant are poisonous to humans, as well as certain wildlife and livestock. This plant is sometimes classified in the buttercup family (Ranunculaceae).



Paul Alaback

Marlene Bornema

#### Wild Iris, Blue Flag

Iris missouriensis

Family: Iris (Iridaceae)

**General:** Erect, up to 2' tall, spreads

into dense clumps

**Flowers/Fruit:** Large, lilac-purple flowers with a yellow center, 2-4" wide

**Leaves:** Mostly basal, linear, 8-15" long, light gray-green

**Habitat:** Wet meadows, riparian, grasslands, disturbed areas

Bloom: Late Spring, Summer

**ID Hints:** Very delicate and showy flowers. The 3 showy sepals curve downward, while the 3 petals inside are held upright.

**Did You Know?** The fine, silky fibers found along the leaf margins are incredibly strong and have been used to make fishing nets, string and snares for catching wild game. The vertical orientation of the leaves minimizes solar heating, which conserves moisture.



Janet Sitas

#### Bee Balm, Horsemint

Monarda fistulosa

Family: Mint (Lamiaceae)

**General:** Erect, up to 4' tall

Flowers/Fruit: Rose-purple, 1-1½"

long flowers in a terminal head

**Leaves:** Opposite, lance-shaped, up to

3½" long, gray-green

**Habitat:** Wet meadows, riparian, canyons, woodlands, forest openings

**Bloom:** Summer

**ID Hints:** The very showy flower cluster sits atop a square, hairy, unbranched stem. The flowers may appear messy, like uncombed hair. The leaves have a very minty fragrance.

**Did You Know?** The nectar inside bee balm flowers attracts butterflies, hummingbirds and bees. The aromatic leaves are frequently used in perfumes and potpourris. You can usually smell this plant 6' or more away.



Janet Sitas

#### Skullcap

Scutellaria brittonii

Bloom: Spring, Summer

Family: Mint (Lamiaceae)

**General:** Erect, up to 8" tall

**Flowers/Fruit:** Dark blue-violet, up to 1½" long; the upper sepals and petals form a rounded, helmet-like lobe; lower lip has white streak

**Leaves:** Opposite, somewhat firm, linear to egg-shaped, 1-3" long

**Habitat:** Wet meadows, riparian, woodlands, open rocky areas

**ID Hints:** Skullcap flowers are found in pairs in the leaf axils. They consist of a larger lower lip and a smaller upper lip. Although somewhat small overall, the prominent helmet-like shape of the upper sepals and petals stands out, even from a distance.

**Did You Know?** Skullcap, like other members of the mint family, has a square stem. The common name skullcap is in reference to the flowers' distinctive helmet-like appearance.



Oscar Otto, Janet Sitas (inset)

## Wild Blue Flax, Prairie Flax

Adenolinum lewisii

Bloom: Spring, Summer

Family: Flax (Linaceae)

**General:** Erect to spreading, up to 2' tall, clusters of stems or bunches

**Flowers/Fruit:** 5 separate, pale blue petals, darker blue veins, to 1½" wide

**Leaves:** Alternate, linear, to <sup>3</sup>/<sub>4</sub>" long, slender stems very leafy when young

**Habitat:** Open rocky areas, grasslands, woodlands, forest openings

**ID Hints:** Delicate, sky blue flowers with yellow centers on top of slender stems. This species is very difficult to distinguish from the introduced species (*A. perenne*), which has a more erect habit and darker blue flowers.

**Did You Know?** The extremely fragile petals will drop with the slightest breeze. The stems were used as an ancient source of fiber. *Linum lewisii* and *A. perenne* are commonly used synonyms.



Janet Sitas, Jane Thomson (inset)

### Sugarbowl, Leatherflower

Coriflora hirsutissima

**Bloom:** Early Spring

Family: Buttercup (Ranunculaceae)

**General:** Erect, up to 2' tall

**Flowers/Fruit:** Dark violet, nodding with outward curving tips; usually solitary on stem

**Leaves:** Opposite, pinnately divided 2-3 times, linear leaflets, up to ½" wide

**Habitat:** Grasslands, shrublands, wet meadows, ponderosa pine forests

**ID Hints:** Distinctive silver hairs cover the stems, leaves and flowers. Seedheads resemble feathery plumes. Flowers resemble clematis, but the latter grow on vines attached to, or growing on top of, other plants.

**Did You Know?** The flowers have colored sepals and no petals. The sepals feel like leather and the entire plant is hairy, giving rise to its name *hirsutissima*, or hairy. Also known as *Clematis hirsutissima*.



Janet Sitas

#### Pasqueflower, Prairie Crocus

Pulsatilla ludoviciana

Family: Buttercup (Ranunculaceae)

**General:** Erect, up to 12" tall, clumps

**Flowers/Fruit:** Lavender cups, 1-2" wide; bright yellow stamens in center; feathery seedhead

**Leaves:** Basal, divided in 3s, lobed, hairy

**Habitat:** Wet meadows, woodlands, open rocky areas, ponderosa pine forests

**ID Hints:** Clumps of lavender flowers

**Bloom:** Early Spring

nestled in a collar of furry bracts; one flower per stem.

**Did You Know?** Flowers emerge before leaves. The fruit resembles a feathery plume of smoke. The name pasqueflower comes from the Latin root for Easter, because flowers often bloom at Easter time in Europe. *Anemone patens* and *P. patens* are commonly used synonyms.



Janet Sitas Jane Thomson Lisa Matthews

#### **Penstemon Group**

Penstemon spp.

Family: Figwort (Scrophulariaceae)

**General:** Erect, up to 20" tall

Flowers/Fruit: Tubular blue, pink, white, red, or maroon, up to 1½" long; often arranged in spikes

**Leaves:** Opposite (occasionally alternate), lance-shaped, up to 4" long

**Habitat:** Grasslands, shrublands, woodlands, wet meadows, riparian, open rocky areas

Bloom: Spring

**ID Hints:** 5 fused petals, with 2 forming an upper lip and 3 a lower lip. 4 fertile stamens; the 5<sup>th</sup> usually appears thicker and hairy, giving rise to the common name beardtongue.

**Did You Know?** The Rocky Mountains contain more species of *Penstemon* than anywhere else in the U.S. Over 30 species grow in the Front Range and 10 species grow in Larimer County open spaces and parks.



#### Lisa Matthews, Paul Alaback (inset)

#### **Crested Wheatgrass**

Agropyron desertorum

**Bloom:** Summer

**General:** Non-native, erect bunchgrass, 1-3' tall

**Inflorescence:** 1-4" long bristly-looking terminal spike with closely overlapping spikelets

**Leaves:** Basal and alternate, flat, up to 8" long and 1/2" wide

**Habitat:** Open rocky areas, grasslands, disturbed areas, pastures, trails, roadsides

**ID Hints:** Dense, bristly, flat spikes elevated above relatively wide, flat leaves.

**Did You Know?** Although a non-native, crested wheatgrass is often planted for its high livestock forage value and erosion control. The beautiful spikes are commonly used for dried flower arrangements. Also known as A. cristatum.



# Side-oats Grama Bouteloua curtipendula

oua curtipendula Bloom: Summer

**General:** Erect, clumped to spreading, 8-36" tall

**Inflorescence:** 4-12" long branched spike;

drooping purple spikelets

**Leaves:** Mostly basal, up to 12" long and 1/3"

wide, flat to slightly rolled inward

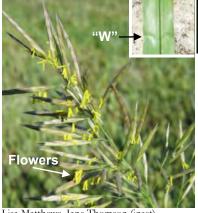
Habitat: Woodlands, open rocky areas, grasslands,

shrublands, disturbed areas, trails

**ID Hints:** Very distinctive 1-sided inflorescence with many drooping spikelets.

**Did You Know?** Side-oats grama is frequently used as an ornamental grass because of its unique looking inflorescence. Wildlife and livestock graze on this grass during the summer and fall.

**Bloom:** Summer



Lisa Matthews, Jane Thomson (inset)

# **Smooth Brome**

Bromopsis inermis

**General:** Erect non-native; 2-4' tall in loose clumps

**Inflorescence:** 2-8" long panicle; spikelets held on narrow to open branches

**Leaves:** Alternate, flat, up to 15" long and ½" wide, smooth to hairy

Habitat: Wet meadows, open rocky areas, grasslands, disturbed areas, pastures, roadsides

**ID Hints:** Brome grasses have a "W" across the leaf blade. Smooth brome has long, rounded, drooping spikelets and forms dense patches.

**Did You Know?** Smooth brome is planted for forage grass and soil stability, but once established excludes other native species. Also known as Bromus inermis.



# Blue Grama

Chondrosum gracile

**Bloom:** Summer

**General:** Erect, clumped to mat-forming, 8-24" tall

**Inflorescence:** Spikes with 1-6 densely flowered branches, often 1-sided

**Leaves:** Mostly basal, up to 10" long and 1/5" wide, flat to loosely rolled inward

Habitat: Grasslands, shrublands, disturbed areas

**ID Hints:** Each branch on a blue grama spike resembles a dense eyelash.

**Did You Know?** Blue grama is one of the dominant grass species of the shortgrass prairie and is used for waterwise lawns. It is the state grass of Colorado. Also known as *Bouteloua gracilis*.



#### Canada Wild Rye

Elymus canadensis

**Bloom:** Summer

**General:** Erect bunchgrass,  $2\frac{1}{2}$  - 5' tall

**Inflorescence:** 3-10" long bristly spike, erect to nodding; spikelets with many long awns

**Leaves:** Alternate, flat to folded, up to 16" long

and 3/4" wide, with fine-toothed margins

Habitat: Open rocky areas, woodlands, riparian

**ID Hints:** Canada wild rye has very characteristic flower spikes that somewhat resemble bristly bottlebrushes.

**Did You Know?** In addition to being decent forage for wildlife, Canada wild rye provides nesting sites for many bird species.



## **Needle-and-Thread Grass**

Hesperostipa comata

**Bloom:** Summer

**General:** Erect, densely clumped bunchgrass, up to  $3\frac{1}{2}$  tall

**Inflorescence:** 4-15" long panicle; few spikelets, each with 1 very long, terminally curled awn

**Leaves:** Alternate, flat to inwardly rolled, up to 16" long and less than 1/4" wide

Habitat: Grasslands, woodlands, open areas

**ID Hints:** Distinguished by its unique long, curly awn, which is up to 9" long and remains persistent on the tip of the mature fruit as well.

**Did You Know?** The common name refers to the hard, sharp-tipped fruits (needle) with their long, curly awn (thread). Also known as *Stipa comata*.



**Junegrass** Koeleria macrantha

**Bloom:** Spring

**General:** Erect bunchgrass, up to 6" tall; grows in small clumps

**Inflorescence:** Green flowers in dense spikes

**Leaves:** Basal, linear (up to 1/10" wide), rolled or folded, hairy along margins

**Habitat:** Open rocky areas, wet meadows, woodlands, foothills to montane

**ID Hints:** Junegrass has prow-shaped leaf tips, similar to many turf-forming bluegrass species (e.g., lawngrass, Poa spp.). Narrow, vertical spikes are unique also.

**Did You Know?** Junegrass is popular for water-wise gardens and dried flower arrangements. The flower spikes can persist for months if protected from winds.



# **Switchgrass**

Panicum virgatum

**Bloom:** Summer

General: Erect bunchgrass, 3-5' tall

**Inflorescence:** 4-20" long, open, airy panicle with many tiny spikelets (less than 1/3" long)

**Leaves:** Alternate, flat, up to 24" long and ½"

wide

**Habitat:** Wet meadows, woodlands,

grasslands, riparian

**ID Hints:** The stems of switchgrass are often tan- to red-colored; this, combined with its delicate looking panicle, make it easily recognizable from a distance.

**Did You Know?** Switchgrass is one of the dominant species of the tall grass prairie in the Midwest. Rabbits and pheasants will often nest within its dense cover.



### **Native Western Wheatgrass**

Pascopyrum smithii

Bloom: Summer

**General:** Erect, spreading, up to  $3\frac{1}{2}$  tall

**Inflorescence:** 2-7" long spike; closely spaced bluish-green spikelets, often with short awns

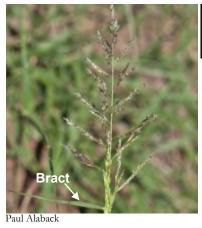
Leaves: Alternate, flat to inwardly rolled, firm, up

to 10" long with obvious veins

**Habitat:** Open rocky areas, grasslands

**ID Hints:** Look for blue-green, conspicuously veined leaves and similarly colored spikelets.

**Did You Know?** Native western wheatgrass is one of the most common native grasses in the United States. Also known as Agropyron smithii and Elymus smithii.



#### **Sand Dropseed**

Sporobolus cryptandrus

**Bloom:** Summer

**General:** Erect bunchgrass, up to 36" tall

**Inflorescence:** 6-15" long panicle with tiny gray

to purple spikelets

Leaves: Alternate, flat, but often inwardly rolled

near tip, up to 10" long and  $\frac{1}{4}$ " wide

**Habitat:** Open rocky areas, grasslands, shrublands

**ID Hints:** When first beginning to flower, the inflorescence appears dense and spike-like; however, it matures into an open, pyramidal panicle with a distinct bract.

**Did You Know?** Sand dropseed is extremely drought tolerant. During the hot summer, leaves curl inward to reduce surface area and thereby reduce water loss.



Janet Sitas

Lisa Matthews

# Narrow Leaved Yucca, Soapweed, Spanish Bayonet Yucca glauca Bloom: Summer

Family: Agave (Agavaceae)

**General:** Rounded cluster of stiff sharp leaves; flowering stems up to 5' tall

**Flowers/Fruit:** Large raceme of nodding, bell-shaped, white-creamgreenish flowers; 6 tepals

**Leaves:** Large clumps of basal leaves; linear, stiff, sharp pointed, rolled inward, whitish; also growing on stem

**Habitat:** Grasslands, open rocky areas, pastures

**ID Hints:** A unique prairie plant with its round cluster of sharp leaves, similar to yuccas in southwestern deserts. Tall flower stalks are particularly showy in early summer.

**Did You Know?** The pronuba moth pollinates the flowers while laying its eggs, and the developing fruit provides food for the moth's offspring, a mutually beneficial relationship between different species known as symbiosis.



Paul Alaback

#### Three-leaf Sumac, Skunkbrush

Rhus aromatica

Bloom: Spring

Family: Sumac (Anacardiaceae)

**General:** Erect, heavily branched, rounded, woody shrub up to 6' tall

**Flowers/Fruit:** Yellow/cream cupshaped flowers with 5 tiny petals

**Leaves:** Alternate, divided into 3 rounded and lobed dull-green leaflets up to 1½" long

**Habitat:** Open rocky areas, grasslands, shrublands (mountain mahogany, sagebrush), canyons

**ID Hints:** One of the few woody shrubs with 3 leaflets. Flowers appear before leaves. Leaves are dull, unlike poison ivy's shiny green leaves. Small clusters of red fruits with stiff hairs are distinctive in mid-summer.

**Did You Know?** Native people have used parts of this plant for medicine and the stems for weaving baskets. It is one of the most common shrubs in low elevation foothills habitats, especially in rocky areas. Also known as *R. trilobata*.



Jane Thomson, Paul Alaback (insets)

#### Poison Ivy, Western Poison Ivy

Toxicodendron rydbergii

Family: Sumac (Anacardiaceae)

**General:** Creeping, climbing or erect woody shrub/vine up to 3' tall

**Flowers/Fruit:** Small, inconspicuous cream/yellow flowers clustered at top of stem; small greenish-white fruits

**Leaves:** Alternate, divided into 3 egg-shaped leaflets over 2" long, toothed, pointed, prominently veined

**Habitat:** Woodlands, riparian, canyons, moist disturbed areas, fences, trails

**Bloom:** Spring, Summer

**ID Hints:** Leaves are glossy when young, red in fall. Remember "leaflets three, let it be." Three-leaf sumac, in the same family, has leaves that differ by being dull green and smaller.

**Did You Know?** The toxic resin in poison ivy's leaves and stems causes a painful, itchy skin rash, even in winter. The resin easily spreads from clothes or pets to skin. Washing the skin with strong soap within 15 minutes of contact may diminish its effects. Also known as *Rhus rydbergii*.



Janet Sitas

#### Rabbitbrush

Chrysothamnus nauseosus

Family: Sunflower (Asteraceae)

**General:** Small, creeping to large sprawling woody shrub up to 6' tall; many small, thin ascending branches

**Flowers/Fruit:** Dense clusters of long, narrow, yellow disk flowers with pointed tips flaring outwards

**Leaves:** Small, tough, linear leaves, often partially rolled under

**Habitat:** Grasslands, disturbed areas, riparian, roadsides, ditches

Bloom: Summer, Fall

**ID Hints:** Large woody shrub covered with yellow flowers in late summer and fall. The many thin, upward bending shoots or branches give this plant a broom-like appearance. Green rabbitbrush (*C. viscidiflorus*) has smooth green young twigs (no fine white hairs like common rabbitbrush) and grows in the foothills and moister areas.

**Did You Know?** Rabbitbrush is valued for its colorful fall flowers. Fast growth in disturbed sandy areas makes it valuable for erosion control.



Lisa Matthews

#### **Prickly Pear Cactus**

Opuntia polyacantha

Family: Cactus (Cactaceae)

**General:** Low, creeping with fleshy, segmented stems and long spines

**Flowers/Fruit:** Showy pink, yellow or copper-colored flowers up to 3" across; fleshy fruits

**Leaves:** Long spines, which are modified leaves

**Habitat:** Grasslands, open rocky areas, shrublands

Bloom: Summer

**ID Hints:** This species of cactus has dense spines, a smooth surface and fruits that wither soon after ripening. A similar species found on the plains, *O. macrorhiza*, has scattered spines, skin wrinkled horizontally and fruits that persist for several months.

**Did You Know?** Cactus species mostly grow in subtropical areas but a few can tolerate our county's cold winters. They grow slowly and can only survive in tough dry places where they will not be shaded by other plants.



Janet Sitas, Jane Thomson (middle inset)

# **Common Juniper & Rocky Mountain Juniper**

Juniperus communis & Sabina scopulorum

Family: Cypress (Cupressaceae)

**General:** Common juniper: creeping, low mat. Rocky Mountain juniper: shrub to tree-like, erect up to 20' tall, thin stringy bark.

**Cones:** Cones covered with fleshy tissue form blue-gray "berries"

**Needles:** Common juniper: sharp, pointed, flat needles. Rocky Mountain juniper: densely arranged, scale-like.

**Habitat:** Woodlands, open rocky areas, shrublands, forests

**ID Hints:** Dense scale-like or flat needle-like leaves distinguish junipers from other conifers in our area. Common juniper has small needles in 3s that are white above, green below. Rocky Mountain juniper has scale-like triangular leaves in pairs.

**Did You Know?** Junipers grow in dry sites near the growth limit of forest, so they grow slowly. Like other plants in this family, they have a strong smell from chemicals that protect them from insects and wood decay.



Lisa Matthews, Paul Alaback (top right)

#### **Wax Currant**

Ribes cereum

Family: Gooseberry (Grossulariaceae)

**General:** Tall, highly branched shrub without spines; up to 5' tall

Flowers/Fruit: Small white to pink tubular flowers in clusters; red-orange fruits with long dried "stalk" at end

**Leaves:** 1" wide alternate, rounded, tough, waxy leaves with rounded lobes

**Habitat:** Grasslands, shrublands, open rocky areas, riparian, canyons

Bloom: Spring

**ID Hints:** One of the first shrubs to flower in spring. Only currant that can grow in open dry habitats. Leaves also smaller, more tough and waxy than other *Ribes* species. Golden current (*R. aureum*), with showy yellow flowers, grows along streams.

**Did You Know?** Early flowers are important for hummingbirds in spring. Some *Ribes* species are an alternate host for the disease blister rust, which attacks white pines.



Janet Sitas, Paul Alaback (left inset,), Hilary Thomson (right insets)

#### **Ponderosa Pine**

Pinus ponderosa

Family: Pine (Pinaceae)

**General:** Large erect tree can grow 100' or more in height; thick brown to orange bark with deep fissures

**Cones:** 3-6" rounded to triangular seed cones with sharp prickles on tips of scales; pollen cones are red-yellow

**Needles:** Bundles of 2-3 needles, 4-8" long, forming at tips of branches

**Habitat:** Woodlands, open rocky areas, riparian, grasslands, montane zone

**ID Hints:** The only pine in the Larimer

**Bloom:** Summer

County foothills with bundles of 3 needles. Other pines have shorter needles in bundles of 2 (lodgepole) or 5 (limber). Bark fissures smell faintly of butterscotch or vanilla.

**Did You Know?** An iconic symbol of the west, ponderosa pine is legendary for its longevity and adaptability. Thick bark allows it to survive low-intensity ground fires. Seeds provide a major food source for many birds and small mammals.



Janet Sitas

## Virgin's Bower, White Clematis

Clematis ligusticifolia

Family: Buttercup (Ranunculaceae)

**General:** Climbing vine with thin woody stems, tendrils at tips

**Flowers/Fruit:** Clusters of small white flowers at branch tips; five strap-like tepals; feathery fruits in fall

**Leaves:** Opposite, compound leaves, usually 3 leaflets, lance-shaped, flat bases

**Habitat:** Riparian, grasslands, disturbed areas, forest openings, cottonwood forests

**Bloom:** Spring, Summer

**ID Hints:** One of the few woody vines native to our area. Unique in having clusters of small white flowers. Fruits form distinctive feathery balls in late summer or fall.

**Did You Know?** Clematis has weak, thin, woody stems and climbs over fences, poles and shrubs. It is particularly common in moist areas near streams. The feathery fruits resemble those of pasqueflowers, to which it is closely related.



Jane Thomson, Lisa Mathews (top inset), Janet Sitas (bottom inset)

# **Mountain Mahogany**

Cercocarpus montanus

Family: Rose (Rosaceae)

**General:** Highly branched, rounded, woody shrub up to 8' tall

Flowers/Fruit: Tiny, cream-pink, narrowly cupped flowers; fruit: achene with long, feathery style

**Leaves:** Alternate, simple, smooth, egg-shaped, tough green leaves with pointed teeth, hairy on underside

**Habitat:** Open rocky areas, grasslands, shrublands, openings in dry sites, rocky ridges

**Bloom:** Spring

**ID Hints:** Only woody shrub in our area with small, coarsely toothed leaves and no spines or thorns. Often grows with three-leaf sumac and grasses.

**Did You Know?** Usually flowers in May at low elevations. *Cervocarpus* refers to the unique tailed, feathery fruits that coil and straighten with moisture to help drill the seed into the ground. The term mahogany refers to its tough wood, which is resistant to decay. Leaves turn copper red in fall.



Lisa Matthews, Janet Sitas (insets)

# **Boulder Raspberry**

Oreobatus deliciosus

Family: Rose (Rosaceae)

**General:** Erect woody shrub up to 5' tall with long arching stems; flaky bark

**Flowers/Fruit:** 5 large, rounded, showy white petals; solitary; up to 3" wide; fruit resembles red raspberries

**Leaves:** Alternate large, rounded, lobed leaves, 1-2" wide; toothed margins; whitish below

**Habitat:** Open rocky areas, rock outcrops, canyons; common along cliffs

**Bloom:** Summer

**ID Hints:** Large white flowers, rounded lobed leaves and long-lived sprawling branches distinguish this species. Growing in moister areas, raspberries (*Rubus*) have prickles and compound leaves; thimbleberry (*Rubacer*) has larger leaves 4-8" wide and thin fragile branches.

**Did You Know?** This species is unique to the Front Range. The term *deliciosus* is a misnomer because the berries look good, but are not edible.



Jane Thomson, Paul Alaback (top inset), Lisa Matthews (bottom inset)

# **Chokecherry, Western Chokecherry**

Padus virginiana

Bloom: Spring, Summer

Family: Rose (Rosaceae)

**General:** Erect, woody shrub or tree, can grow over 15' tall

Flowers/Fruit: White flowers with extended stamens form long racemes; may turn pink with age; fruits dark red to black

**Leaves:** Alternate, egg-shaped, toothed margins; reddish glands at base of leaf

**Habitat:** Riparian, woodlands, open rocky areas, canyons, cottonwood forests, forest openings, cliffs

**ID Hints:** Leaves appear before flowers. No spines or thorns. Forms flowers and fruits in bottlebrush-like clusters (racemes). Most other cherries form flowers and fruits in rounded clusters.

**Did You Know?** The fruits provide important food for wildlife. However, acid in the fruits can cause respiratory problems if animals eat too many. Also known as *Prunus virginiana*.



Lisa Matthews, Jenna McAleer (top inset), Janet Sitas (bottom inset)

# **Shrubby Cinquefoil**

Pentaphylloides floribunda

Family: Rose (Rosaceae)

**General:** Highly branched, small rounded shrub up to 3' tall

**Flowers/Fruit:** 5 showy yellow petals; small clusters can cover whole shrub

**Leaves:** Alternate, pinnately compound, with 3-7 linear leaflets; small, tough, hairy leaflets

**Habitat:** Open rocky areas, riparian, wet meadows; common in montane zone

Bloom: Summer

**ID Hints:** Flowers are similar to the cinquefoil perennial wildflowers, but this species is a woody shrub. Finely divided leaves are distinctive.

**Did You Know?** Widespread at high elevations and high latitudes around the world. This species is valued because it has showy flowers all summer long and is commonly planted as an ornamental. Also known as *Dasiphora fruticosa* and *Potentilla fruticosa*.



Jane Thomson, Paul Alabac (inset)

#### **Wild Plum**

Prunus americana

**Bloom:** Early Spring

Family: Rose (Rosaceae)

**General:** Rounded, bushy, woody shrub, up to 15' tall

Flowers/Fruit: 5 white petals; rounded flower clusters with extended stamens; small green to yellow fruit

**Leaves:** Alternate, egg-shaped, finely tapering to a point, finely toothed

**Habitat:** Open rocky areas, riparian, canyons

**ID Hints:** Flowers appear before leaves, making the whole shrub look white and smell sweet. Branches end with a distinctive thorn-like spur (unlike similar looking cherries).

**Did You Know?** Wild plum spreads by root sprouts, which helps control erosion. Thickets in rocky canyons form an important habitat for wildlife. These shrubs provide bright white patches in an otherwise brown, early spring landscape.



Janet Sitas

#### **Woods Rose**

Rosa woodsii

Family: Rose (Rosaceae)

**General:** Small, creeping to erect, spiny shrub up to 3' tall

**Flowers/Fruit:** 5 pink petals, fragrant; narrow green sepals; hips smaller (½") than other species

**Leaves:** Alternate, pinnately compound, 7-11 toothed leaflets

**Habitat:** Riparian, woodlands, open rocky areas, disturbed areas, fences, pastures, roadsides under trees, forest openings

**Bloom:** Summer

**ID Hints:** All roses have pinnately compound leaves and prickles on the stem, and unique hips for fruit. Woods rose has longer, broad-based thorns at nodes of stems and scattered or missing bristles along the stem. Say's rose (*R. sayi*) in the foothills and *R. arkansana* in the plains have dense fine bristles along the stem, generally without a broadbased thorn.

**Did You Know?** Woods rose is not necessarily a rose of the woods, but is named after the botanist Woods.



Jane Thomson, Lisa Matthews (insets)

#### **Plains Cottonwood**

Populus deltoides

Family: Willow (Salicaceae)

**General:** Large erect tree (up to 90' tall and 6' in diameter); gray, deeply furrowed bark; broad rounded canopy

**Flowers/Fruit:** Female catkins (up to 4" long) have green oval capsules; male catkins (up to 3" long) have many tiny purple-red anthers

**Leaves:** Alternate, triangular, dark green above, light green underneath

Habitat: Riparian, canyons

**ID Hints:** Small trees can be confused with narrow-leaf cottonwood (P. angustifolia), which has long, linear leaves with a short stem (1/3 of blade).

**Bloom:** Spring

**Did You Know?** Plains cottonwood trees are either male or female. Fruit capsules split open and release seeds attached to glossy, cotton filaments, hence the name cottonwood. These ecologically-important trees provide shady, insect-rich habitat for birds and other wildlife in riparian areas. Also known as *P. sargentii*.



Lisa Matthews

# Sandbar Willow, Coyote Willow

Salix exigua

Bloom: Spring, Summer

Family: Willow (Salicaceae)

**General:** Dense thicket of narrow flexible stems up to 15' tall

**Flowers/Fruit:** Long catkins of yellow flowers; male and female flowers on separate plants

**Leaves:** Alternate, linear, yellow-green above, white below, up to 5" long

**Habitat:** Riparian, wet meadows, ditches, wetlands, cottonwood forests, areas that are seasonally flooded

**ID Hints:** Willows are extremely diverse and well adapted to wet places and disturbance. Larimer County open spaces have 4 tree species and over 20 shrub species of willow. This species is distinguished by linear leaves, usually 10 or more times longer than wide.

**Did You Know?** Willows have strong hormones for sending out new shoots after they are damaged, which makes them important in stabilizing stream banks.

## **Further Reading and References**

#### **Books**

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Shaw, R. T. (2008). *Grasses of Colorado*. Boulder, CO: University Press of Colorado.

Weber, W. A., & Wittmann, R. C. (2001). *Colorado flora: Eastern slope* (3<sup>rd</sup> ed.). Boulder, CO: University Press of Colorado.

#### Websites

Colorado Native Plant Society: <a href="www.easterncoloradowildflowers.com">www.easterncoloradowildflowers.com</a>
Southern Colorado Wildflowers: <a href="www.swcoloradowildflowers.com">www.swcoloradowildflowers.com</a>
Montana Natural History Guide: <a href="mailto:nhguide.dbs.umt.edu">nhguide.dbs.umt.edu</a>
Dr. Mary L. Dubler, DVM: <a href="www.wildflowersofcolorado.com">www.wildflowersofcolorado.com</a>

#### **Mobile Apps**

Colorado Rocky Mountain Wildflowers: www.highcountryapps.com

# **Glossary**

**Achene** Small, dry, one-seeded fruit. Common in the sunflower family (Fig. 2).



Fig. 2

Alternate Leaves, leaflets, or branches that attach to a stem in an alternating pattern, one per node, not in pairs (Fig. 3).

**Annual** Plant that completes at least 1 life cycle (produces leaves, flowers, sets seed, dies) per year.

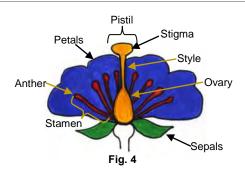




Anther Top portion of a stamen where pollen is stored (Fig. 4).

Fig. 5 Awn Stiff, bristle-like extension. Common in grasses (Fig. 5).

**Basal** Situated at the base of a plant (Fig. 6).



**Basal rosette** Dense cluster of leaves arranged in a circular pattern at or near ground level (Fig. 7).





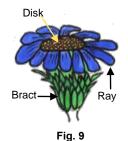
Fig. 7

Fig. 6

**Berry** Fleshy fruit with multiple seeds (Fig. 8).

**Biennial** Plant with a 2-year life cycle; produces leaves in 1<sup>st</sup> year; flowers, sets seed and dies in 2<sup>nd</sup> year.

**Bract** Leaf-like part directly below a flower or group of flowers. Can be brightly colored (Fig. 9).



**Bristle** Stiff hair-like structure.

Fig. 8

**Bunchgrass** Grass that grows in distinct clumps; does not spread by rhizomes.

**Capsule** Dry, multiseeded fruit with 2 or more sections that

split open when mature (Fig. 10).



Catkin Dense spike or cone-like structure of unisexual flowers, usually without petals or sepals. Common in the willow and birch families (Fig. 11).

Fig. 11 Clasping Wholly or partly surrounding a plant structure, e.g., a leaf clasping a stem (Fig. 12).

Composite Multiple small flowers in dense heads that resemble single flowers. Found only in the sunflower family. Composites can have only ray flowers (e.g., dandelions), only disk flowers (e.g., thistles), or both ray and disk flowers (e.g., daisies) (Fig. 9).

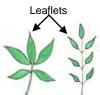


Fig. 13

juniper family.

**Compound** Divided into 2 or more similar segments, e.g., leaves divided into leaflets (Fig. 13).

Cone Mass of scales bearing seeds or pollen. Cones are "cone-shaped" in the pine family and "berry-shaped" in the

**Diamond-shaped (rhomboid)** Leaf shape that is widest in the middle and tapering at both ends. Much wider and more sharply angled than elliptical (Fig. 14).

Disk flower Small tubular flower of the sunflower family, e.g., multiple disk flowers make up the dark center of the black-eyed Susan. Each disk flower has its own reproductive organs (Fig. 9).

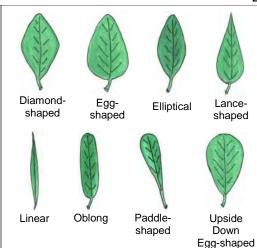


Fig. 14. Leaf Shapes

**Dissected** Leaf that is separated into multiple narrow segments (Fig. 15).

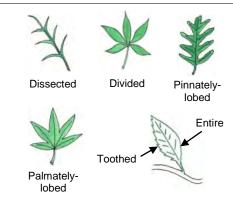


Fig. 15. Leaf Margins

**Divided** Leaf that is separated into lobes or segments to the base or mid-rib (Fig. 15).

**Egg-shaped (ovate)** Leaf shape that is widest at the base and tapering gently toward the tip (Fig. 14).

**Elliptical** Leaf shape that is narrow to oval, broadest in the middle and symmetrically narrowed at the ends (Fig. 14).

**Entire** Leaf margin without lobes or teeth (Fig. 15).

**Fruit** Ripened ovary containing the seeds of the plant.

**Gland** Small structure that secretes a sticky or oily substance.

**Head** Dense cluster of flowers at the end of a branch or stem. Common in the sunflower and mint families (Fig. 9).

**Hip** Multi-seeded, berry-like fruit of the rose family (Fig. 16).

3

**Inflorescence** The entire flowering portion of one plant; flower cluster.

Fig. 16

**Keel** Rib or ridge; 2 fused lower petals of the pea family (Fig. 17).



Lance-shaped (lanceolate) Fig. 17

Leaf shape that is widest near base, length clearly longer than width, tapering to a narrow point. Leaf narrower and more sharply pointed than egg-shaped (Fig. 14).

**Leaf axil** Located in the upper angle between a leaf and stem (Fig. 18).

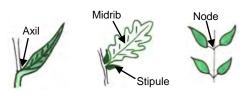
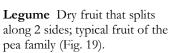


Fig. 18. Leaf Parts

**Leaflet** One segment of a compound leaf (Fig. 13).





, i ig. 13

**Linear** Leaf shape that is long and narrow; grass-like (Fig. 14).

**Lobe** Rounded segment of a leaf or flower part (Fig. 15).

**Margin** The edge, e.g., of a leaf.

**Midrib** Central vein or rib of a leaf (Fig. 18).

**Node** Point on a stem where leaves, buds or branches are attached (Fig. 18).



**Nutlet** Small, single-seeded fruit with a hard, dry outer shell (Fig. 20).

Fig. 20

**Oblong** Leaf shape that is rectangular with rounded corners (Fig. 14).

**Opposite** Leaves, leaflets or branches that attach to a stem in pairs at the same node (Fig. 21).

Fig. 21

**Ovary** Basal portion of a pistil; contains the seeds (Fig. 4).

Paddle-shaped (spatulate) Leaf shape that is wide and rounded toward the outer end, distinctly narrowing near base (Fig. 14).



Palmate Compound leaf shape that is separated into leaflets radiating from a single point, similar to fingers from the palm of a hand (Fig. 22).

Fig. 22

Panicle Inflorescence that is branched 2 or more times, maturing from the bottom upwards (Fig. 23).



**Perennial** Plant that lives 3 or more years; some do not flower in 1st year.

**Petal** Modified leaf surrounding the pistil(s) and/or stamens; can be any color (Fig. 4).

**Pinnate** Leaf shape that has leaflets or lobes arranged in 2 rows on opposite sides of a central axis; feather-like (Fig. 21).

Pistil Innermost flower part made up of a stigma, style and ovary; the female part of the flower (Fig. 4).

**Pod** Dry fruit that splits at maturity. Common in the legume, mustard and evening primrose families.

**Pore** A small opening allowing the movement of gasses in a plant.

**Prickle** Small, sharp outgrowth with a broad base growing from the epidermis or bark, e.g., prickles on ponderosa pine cones and rose stems.

**Prow** A pointed, projecting front part, similar to the bow of a ship.

**Raceme** Inflorescence with each flower on a single stalk; the stalks are attached to a central, unbranched axis (Fig. 24).

**Ray flower** Strap-shaped flower of the sunflower family, e.g., multiple ray flowers make up the outer circle of petals on a daisy. Each ray flower has its own reproductive organs (Fig. 9).

Fig. 24

**Reflexed** Plant part this is bent backward or downward.

**Root parasite** Plant that attaches to roots of other plants or fungi to gather nutrients. May have green or colored leaves, e.g., Indian paintbrush.

**Scale** Overlapping flat, flakey or woody structures, e.g., juniper leaves and cones.

**Sepal** Small leaf-like parts under the petals, usually green; the outermost whorl of a flower (Fig. 4).

**Sheath** Portion of a leaf that surrounds the stem. Common in grasses (Fig. 25).



**Shrub** Woody perennial with multiple stems growing from ground level.

**Simple** Leaf that is not divided into distinct leaflets, but can have lobes that almost reach to the midrib, e.g., pinnately-lobed (Fig. 15).

Smooth Not rough; hairless.

**Spike** Long, unbranched inflorescence with flowers attached directly (without a stalk) to the axis (Fig. 26).

**Spikelet** Smallest unbranched flower cluster in grasses and sedges.

Spine Sharp, slender, stiff modified leaf, e.g., cactus spine.



**Spur** Hollow extension of a petal or sepal. Common in the pea and buttercup families (Fig. 27).

**Stamen** Male, pollen-producing part of a flower, made up of a filament and anther (Fig. 4).

**Stigma** Top of the pistil where pollen collects (Fig. 4).

**Stipule** Small leaf-like or papery structure at the base of the leaf stalk; usually in pairs (Fig. 18).

**Style** Narrow part of the pistil that connects stigma to ovary (Fig. 4).

**Taproot** Large, central root stem from which multiple smaller roots grow.

**Tendril** Slender clasping or twining growth used for support or climbing.

**Tepals** Petals and sepals that are the same color and nearly equal in size.

**Terminal** At the tip; farthest from point of attachment.

**Thorn** Sharp, woody, stiff modified stem, e.g., thorns on a wild plum.

**Toothed** Having small lobes or points along the margin; can be rounded or pointed (Fig. 15).

**Tree** Long-lived, woody perennial with a single dominant stem.

**Two-lipped** Type of irregular flower; petals fused at the base form a tube and split into 2 "lips" at the end, e.g., penstemon flowers (Fig. 28).



Fig. 28



**Umbel** Flat-topped or convex inflorescence with all flower stalks attaching to the same point, similar to an umbrella (Fig. 29).

Fig. 29 Upside down egg-shaped (obovate, oblanceolate) Leaf

shape that is narrowest at base, broadening toward the tip (Fig. 14).

Vine Plant that trails or climbs by attaching to plants or other objects, e.g., clematis.

Whorl Circle or ring of like parts, such as leaves or flower parts, with three or more per node (Fig. 30).



Fig. 30

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