

Native Plants and Wildlife Habitat of the Missoula Area

This guidebook is to be used to lead native plant walks in the Missoula area for the general public and school programs. It is meant to connect common early season native plant species prevalent in the Missoula area and their wildlife habitat function. This will help aid residents of the Missoula area in identifying and learning about plants and their importance to Montana ecosystems.

Special thanks to Peter Lesica, Marilyn Marler, and Kathy Martin for their reviews and input.

Table of Contents

Trees	2
Shrubs	5
Wildflowers	11
Noxious Weeds	23
Glossary and Resources	25

This is a first edition native plant guide. We welcome your feedback to make future editions more useful. Please contact us <u>AlhadeffN@nwf.org</u>.

Illustrations are from the *Illustrated Flora of* British Columbia and the USDA Plants Database.

Douglas, G.W., D.V. Meidinger and J. Pojar (editors), 1998-2002. *Illustrated Flora of British Columbia, Volumes 1-8*. In: Klinkenberg, Brian. (Editor) 2020. E-Flora BC: Electronic Atlas of the Flora of British Columbia (eflora.bc.ca). Lab for Advanced Spatial Analysis, Department of Geography, University of British Columbia, Vancouver. Accessed August 2020.

USDA, NRCS. 2020. The PLANTS Database (http://plants.usda.gov, August 2020). National Plant Data Team, Greensboro, NC 27401-4901 USA.



Trees

Black Cottonwood

Populus balsamifera

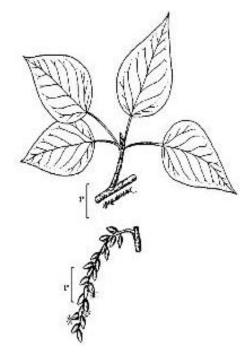
Other Common Name: Balsam Poplar

Description: Deciduous, 30-80 feet tall at maturity, with a broad, rounded crown. The bark on young trees is grey and smooth; when the tree is old, the bark is **rough**, **deeply furrowed**, **and dark grey**. The leaves grow **alternately** along the stem and have a sharp pointed tip and a heart shaped base. The leaves are finely round-toothed and dark green. The fruits are thin, long, and in **slender bunches called catkins**. [1]

Location: Usually found in foothill to subalpine riparian areas like the ones along the Clark Fork River or Rattlesnake Creek.

Fun Facts: It is called a cottonwood because the seeds are covered in hair, which looks like cotton, and helps them travel in the wind [1]. Native American tribes use the leaves to heal skin sores and cuts, and the inner bark is chewed to relieve cold symptoms [2].

Wildlife Habitat Function: Moose, deer, and elk eat the new leaves in the spring [2]. Bees use the sticky resin produced by the tree in the spring to waterproof their hives [1].



Douglas Fir

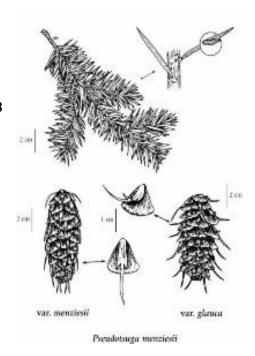
Pseudotsuga menziesii

Description: Coniferous, evergreen, 80-130 feet tall at maturity, with irregular, spreading branches and a compact crown. The bark is greybrown, straight, and vertically fissured. The needles are short, **flat and spirally arranged**, dark yellow to blue-green, and are **not sharp to the touch**. The cones are reddish-brown and most commonly identified by **3 toothed brackets that look like mice tails** that stick out from each scale. [2]

Location: Montane forests to open woodlands and can be found in a variety of places around Missoula like the Rattlesnake Recreation Area, Pattee Canyon, and Blue Mountain Recreation Area.

Fun Facts: These trees can get to be more than 1,300 years old. They are commonly used as Christmas trees due to their soft needles and pleasant smell. The brackets on the cones are described by a Blackfeet story that tells of mice jumping into the cones head first to hide from the legendary character, Naapi. [1]

Wildlife Habitat Function: Many birds and small animals eat the seeds dropped from the cones. Mule Deer rely on the tree for food and shelter in the winter. [3]





2 | Page

© 2016 Kaitlin Martin with contributions and edits from Juliet Slutzker, and Sarah Bates, J.D. Updated 2020 by Naomi Alhadeff. National Wildlife Federation Northern Rockies, Prairies and Pacific Region.

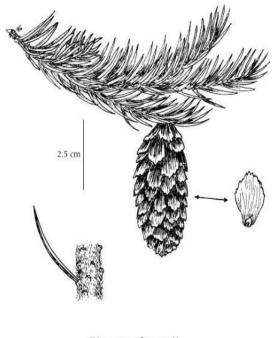
Engelmann Spruce

Picea engelmannii

Description: Coniferous, evergreen, 80-130 feet tall at maturity, with a narrow, pyramidal crown and **scaly, thin bark**. The needles are short, **blueish-green**, **spirally arranged**, and **very sharp to the touch**. The cones are reddish with thin, rounded scales and hang down from the upper branches. [2] **Location:** Moist montane to subalpine areas like the ones found in the upper Rattlesnake Recreation Area and Pattee Canyon.

Fun Facts: This tree can live to be more than 1,000 years old and is very cold tolerant, surviving winter temperatures as cold as -80 degrees Fahrenheit. Northern Native American tribes use the trunks to make canoes. The wood is also used to make pianos and violins. [1]

Wildlife Habitat Function: The needles and twigs are used as browse for deer and sheep and porcupines eat the inner bark [1]. Small mammals and many species of birds eat the seeds from the cones [2].



Picea engelmannii

Lodgepole Pine

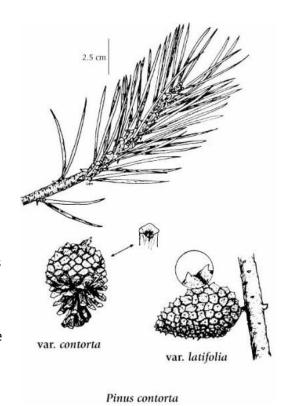
Pinus contorta

Description: Coniferous, evergreen 60-100 feet tall at maturity, with a **very straight, narrow trunk**, upward curved branches and pyramidal, open crown. Orange-brown, scaly, and thin bark. Needles long and **in bunches of 2**, deep green. Cones are egg-shaped and often asymmetrical, **tightly closed**, and grow in a spreading pattern on the branch. [1]

Location: Low to high elevations, wet to dry montane, usually **grow close together** in an **even aged stand** [2]. Can be found in the Rattlesnake Recreation Area and Blue Mountain Recreation Area.

Fun Facts: This tree is usually short lived (no more than 200 years) and relies heavily upon fire to reproduce because the cones need the heat intensity to release their seeds. The straight trunks are used to make tipis; each tipi require 25-30 poles and gave the tree its name. [1]

Wildlife Habitat Function: This tree offers good cover for large and small mammals alike. [1]





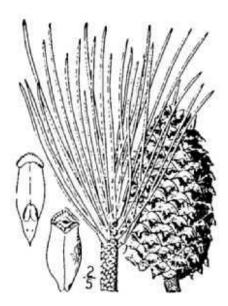
Ponderosa Pine

Pinus Ponderosa

Description: Coniferous, evergreen, 30-200 feet tall at maturity, with large, spreading branches. Straight, red-brown colored bark with deep fissures and **jigsaw-like plates** that flake off easily. Needles are slender and long (3-10 inches) and usually come in **bundles of three** (but can come in bundles of 2s, 4s, and 5s). Cones are egg-shaped, have thick **scales that prickle at the tip**, and are light brown. [1]

Location: Valley bottoms and low-elevation mountain slopes, with dry, well drained soils [2]. Commonly found growing on the edge of grassland and open meadows like the ones found in the Blue Mountain Recreation Area or the Rattlesnake Recreation Area.

Fun Facts: Ponderosa Pine is adapted to withstand low-intensity fires; its pine needles contain a flammable substance that help ignite other vegetation while the pine's thick bark protects it from flames [2]. The bark also gives off a vanilla-like smell, especially on warm days [1]. The inner bark is used as a food source for many Native American tribes and is said to taste like sheep fat [1].



Wildlife Habitat Function: The Ponderosa's large branches provide shelter and a place to raise young for nesting bird species. The seeds found in the cones are a food source for birds and small mammals including chickadees, finches, jays, Clark's nutcrackers, turkeys, chipmunks, and squirrels. Also, the needles are eaten by many types of grouse. The inner bark is a good food source for both beavers and porcupines, but their foraging activity can often hurt the tree. [3]

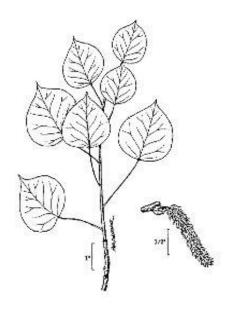
Trembling Aspen

Populus tremuloides

Other Common Names: Quaking aspen, golden aspen, mountain aspen, and trembling poplar [1]

Description: Deciduous, 30-60 feet high a maturity, with a slender trunk, short branches, and rounded crown. The bark is **smooth** and **greenish-white** with **rough, black lines throughout**. The leaves have an **alternate pattern**, are oval, pointed at the tip and **tremble in a slight breeze**. [1] **Location:** Can grow in dry or wet sites, primarily found in riparian areas like along the Clark Fork River or Rattlesnake Creek.

Fun Facts: This tree can reproduce by sending up clones of itself around the original tree due to its shallow root system. When this happens, all of the trees are connected underground and all have identical genetic material. The greenish bark on an aspen is photosynthetic, like the leaves, and can change the sun's energy into food! [3]



Wildlife Habitat Function: Preferred food and building material for beavers; deer and elk eat the twigs and leaves, and birds and small mammals nest in the small cavities in the tree that are created by rot. [1]



Western Larch

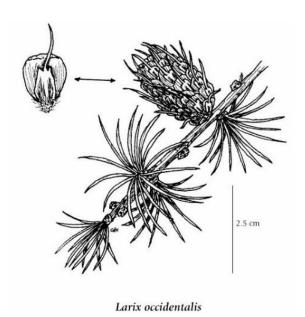
Larix occidentalis

Other Common Names: Western tamarack and mountain larch [1].

Description: Deciduous, coniferous, usually 60-160 feet tall at maturity, with short, well-spaced branches and a slender, straight trunk. Light brown, thick, and deeply furrowed bark. Needles come in tufts of 15-30 soft, three sided, deciduous needles; bright green in spring, yellow in fall, absent in winter [1]. Cones are small and reddish brown [2].

Location: Wet to dry, high foothills to montane, primarily found around Missoula in the Rattlesnake Recreation Area.

Fun Facts: The sap contains a natural sugar that tastes like slightly bitter honey. The sap is also used in paint, ink, and medicine. [1]



Wildlife Habitat Function: The twigs are occasionally eaten by deer and the needles are eaten by several species of grouse. [1]

Shrubs

Antelope Bitterbrush

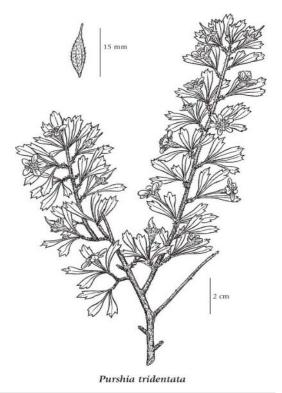
Purshia tridentata

Description: This shrub is usually 2-6 feet tall and 8 feet wide, and has light to dark grey bark. The leaves are dark green and wedge shaped. The flowers are small, yellow to white, and grow in clusters along the branches. [3]

Location: This shrub can grow from low to high elevations and in wet to very dry conditions. Usually prefers open sites like the ones found in the Rattlesnake Recreation Area, Mount Jumbo, and Blue Mountain Recreation Area.

Fun Facts: A crème made from the leaves relieves itches from chickenpox, insect bites, and rashes. [3]

Wildlife Habitat Function: This shrub is a very important browse source for ungulates during the fall and winter months. It also provides cover and food for small mammals and birds. [3]





5 | Page

© 2016 **Kaitlin Martin** with contributions and edits from **Juliet Slutzker**, and **Sarah Bates, J.D.** Updated 2020 by **Naomi Alhadeff.** National Wildlife Federation Northern Rockies, Prairies and Pacific Region.

Choke Cherry

Prunus virginiana

Description: Deciduous shrub, but can grow to look like a tree, 3-20 feet high at maturity. The leaves are **alternate**, oval, pointed at the tip, and often **twisted at the middle**. The leaves have small, sharp ridges and have **2-3 small black glands** at the base of leaf near the stalk. In the spring, this shrub has white, saucer shaped, **5 petaled flowers that grow in clusters**. The fruits are shiny, dark red cherries that grow in clusters. [1]

Location: Dry to moist, open sites, low to high elevation. Many times found in riparian areas like along Rattlesnake Creek.

Fun Facts: The cherries are an important food for some Native American tribes, and are widely popular for making jelly and syrup. [1]

Wildlife Habitat Function: The cherries on this plant are an important food source to many birds, rabbits, rodents, and bears. It is also a common shrub for nesting by birds. It is an important browse source for deer and the early spring flowers provide nectar for butterflies, bees, and ants. [3]



Common Juniper

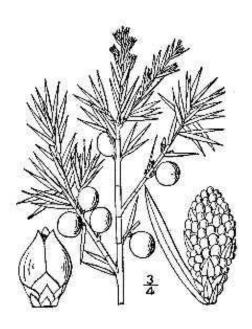
Juniperus communis

Description: Coniferous, evergreen with spreading branches that often form **mats and clumps**. The needles are sharp and are **in whorls of 3**, whitish below and dark green on top. The cones look like **light blue berries** and grow in clusters on the branch tips. [1]

Location: Dry, open forests to plains, Blue Mountain Recreation Area, Rattlesnake Recreation Area, and Mount Jumbo are good places to find this shrub.

Fun Facts: This plant can be found all over the world and has been used medicinally for centuries. [1]

Wildlife Habitat Function: The cones (berries) are a food source and offer good cover for several species of birds. [1]



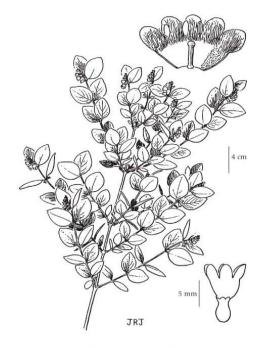


Common Snowberry

Symphoricarpos albus

Description: Deciduous shrub, usually 1-3 feet tall, branches are opposite and slender. The leaves are **opposite**, oval, and light green. The flowers are **pink or white and are funnel shaped**, hairless, and grow in clusters near branch tips. The fruits look like **white berries** (hence the name) that **grow in clusters** and persist through winter. [1] **Location:** Lower elevations, plains to wooded sites, many times around riparian zones like the ones along Rattlesnake Creek.

Fun Facts: All parts of this shrub are toxic. Some Native American tribes refer to this plant as "corpse berry" and believe that it is a part of the spirit world and therefore not to be eaten by the living. [1] **Wildlife Habitat Function:** Provides browse for livestock and wildlife and shelter for small birds and mammals. [1]



Symphoricarpos albus

Kinnikinnick

Arctostaphylos uva-ursi

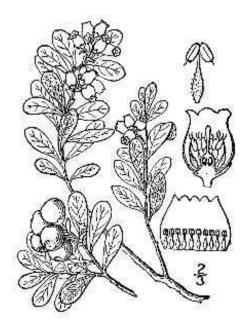
Other Common Names: Common Bearberry

Description: Spreading, **evergreen** shrub that **grows close to the ground and forms mats**. The leaves are alternate and **spoon-shaped** with a rounded tip and are dark green and glossy. The flowers are pinkish and funnel shaped and the fruits look like bright red berries, both grow in clusters. [2]

Location: Low to high elevations, open to wooded sites like the ones found at the Rattlesnake Recreation Area and Pattee Canyon.

Fun Facts: The leaves contain high amounts of tannin and are used to tan hides. The berries and flowers are edible, but have a bitter, mealy taste. [1]

Wildlife Habitat Function: The berries of this plant are a favorite of bears. Birds and small mammals also eat the berries of this plant. [1]





Oregon-Grape

Mahonia repens

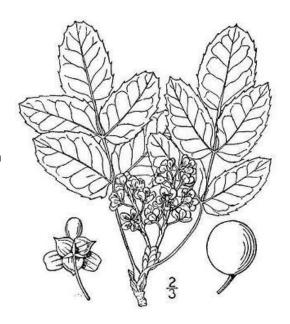
Description: Low, winter green shrub with erect branches that are 2-10 inches long. The leaves are alternate, oblong to egg-shaped, and have 5-7 leaflets that have spine-tipped teeth, dark green above and whitish beneath. The flowers are yellow and small with six petals that grow in elongated, many- flowered clusters. The fruits are grape-like, juicy, purplish-blue, and grow in clusters. [1]

Location: Forested areas, plains to montane and can be found in the Rattlesnake Recreation Area.

Fun Facts: The berries of this shrub are edible and make good jam, but are very sour when eaten raw. [1]

Wildlife Habitat Function: Many birds like to eat the berries.

[3]



Red-Osier Dogwood

Cornus sericea

Other Common Name: Red-Twig Dogwood

Description: Tall, deciduous shrub, 3-10 feet tall, with smooth, **dark red bark**. The leaves are oval, pale green, and **hairy underneath** and have prominent veins. The flowers are small, white, 4-petaled, and **grow in clusters** at the branches end. The fruits are white and berry-like. [2]

Location: Riparian areas or moist, forest sites. Can be found along Rattlesnake Creek or the Clark Fork River.

Fun Facts: Native American tribes use the berries for

food and the strong wood for arrows. [2]

Wildlife Habitat Function: This is an important browse source for moose and the berries are a favorite among birds and black bears. [2]





Rocky Mountain Juniper

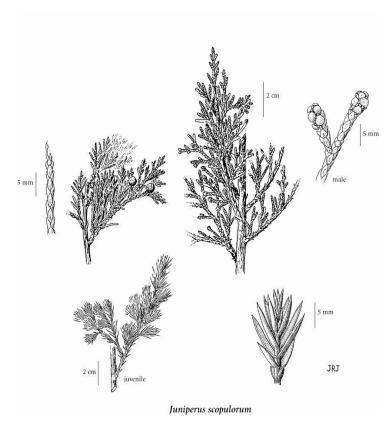
Juniperus scopulorum

Description: Coniferous, evergreen **shrub to small tree**, 3-30 feet tall, with **cedar-like** branches and a round crown. The leaves are opposite and lay flat in 4 vertical rows and are **scaly, grey-green**. The cones are **berry-like** and are **bluish-purple**. [1]

Location: Open, dry, rocky sites, plains to mountains, found in open sites at Blue Mountain Recreation Area and Mount Jumbo.

Fun Facts: The seeds cannot germinate until they have been passed through the digestive tract of a bird or mammal. These shrubs usually live to be 300 years old but can get to be over 1,500 years old! [1]

Wildlife Habitat Function: This shrub is a popular food source for bighorn sheep and many varieties of birds. [3]



Rubber Rabbitbrush

Ericameria nauseosa

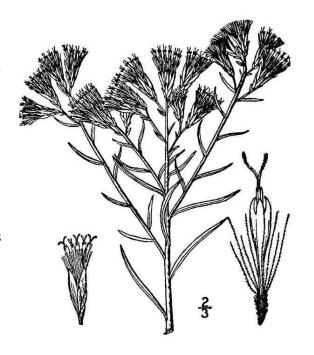
Other Common Names: Grey rabbitbrush

Description: Erect, deciduous shrub, 1-4 feet tall, with **dense**, **flattop branches** that are grey in color and are **flexible and covered in hair**. The leaves are alternate and linear, grey and **velvety**. The flowers are **small and yellow** and grow in many clusters at the branch tips. [1]

Location: Low elevation, dry, open sites like Mount Jumbo or the lower parts of Blue Mountain Recreation Area.

Fun Facts: During World War II this plant was used as a substitute rubber source. Many Native American tribes use this brush for weaving baskets and creating dye. [3]

Wildlife Habitat Function: Important browse for deer and elk in the winter. Cover for song birds and sage grouse. Offers some of the only late summer and fall habitat for many pollinators including butterflies and bees. [3]





Serviceberry

Amelanchier alnifolia

Other Common Names: Saskatoon, Juneberry **Description:** Deciduous shrub or small tree, erect to spreading, 3-20 feet high. The bark is smooth and dark grey. The leaves are alternate, oval to nearly round, and coarsely toothed on upper half. The flowers are white and star shaped with 5 linear petals in short leafy clusters near branch tips. The fruits are berry-like and dark purple. [1]

Location: Riparian and open woods, plains to montane and can be found in the Rattlesnake Recreation Area.

Fun Facts: The fruits of this tree are among the most valued by many Native American tribes and the branches can be used to make arrows. [1]

Wildlife Habitat Function: Deer, elk, and moose browse on the leaves of this plant, and bears, small mammals, and birds eat the fruits. [1]



Woods Rose

Rosa woodsii

Description: Erect, deciduous shrub, 1-5 feet tall, with pairs of large, hooked thorns just below the leaf nodes and with smaller prickles between. The leaves are oval and sharply toothed and grow in leaflets of 5-9. The flowers are large, pink to magenta, and grow in clusters of 2-5 at branch tips. The fruit is a rose hip which is red and round. [2]

Location: Grows best in moist, open sites, especially in riparian and wetland areas like the ones found along Rattlesnake Creek. **Fun Facts:** The rose hips are high in vitamins A, B, C, E, and K. **Wildlife Habitat Function:** The hips offer a good food source for many birds. [3]





Wildflowers

Arrowleaf Balsamroot

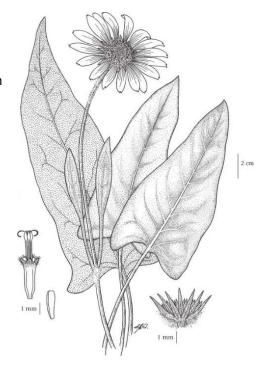
Balsamorhiza sagittata

Description: Soft-hairy perennial flower that **grows in bunches** with several stems and several flowers per bunch, 1-2 feet tall. The leaves are **arrowhead shaped**, basal, large (7-20 inches long), and **grey green with dense, soft hairs**. The flowers are **bright yellow**, with 12-22 petals per flower head, and look much like a sunflower with a smaller, darker yellow center. [1]

Location: Prefers dry, open, rocky sites, plains to wooded areas like those found in the lower Rattlesnake Recreation Area and Mount Jumbo.

Fun Facts: This plant is an important food source for many Native American groups. The young leaves, young stems, seeds, and roots can be eaten. [1]

Wildlife Habitat Function: The young plants are a favorite browse plant for deer, elk, and bighorn sheep [2]. The dried seed heads are popular source of food for deer, birds, and rodents.



Balsamorhiza sagittata

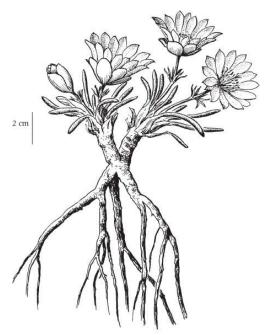
Bitterroot

Lewisia rediviva

Description: Small and low growing perennial flower. It grows from a **whorl of 5-7 leaf-like bracts** that are a grey to dark green. The leaves are small and club-shaped. The flowers are **deep pink to light pink** to whitish and have a yellow to orange center that are 1-3 inches across, with 12-18 lance-shaped petals. [1]

Location: Dry, open, rocky sites in plains to wooded areas like those on Mount Jumbo, Waterworks Hill, and the Rattlesnake Recreation Area.

Fun Facts: The root is a highly valued traditional "first food" for Montana's Native American tribes. The roots bitter taste is the source of its name. The bitterroot is Montana's state flower. [2] Wildlife Habitat Function: This plant offers a good source of pollen for pollinators and a few bird species eat its seeds. [1]



Lewisia rediviva



11 | Page

© 2016 **Kaitlin Martin** with contributions and edits from **Juliet Slutzker**, and **Sarah Bates, J.D.** Updated 2020 by **Naomi Alhadeff.** National Wildlife Federation Northern Rockies, Prairies and Pacific Region.

Brittle Prickly Pear Cactus

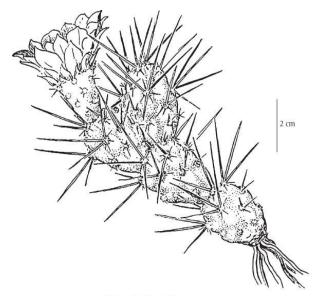
Opuntia fragilis

Description: Perennial flower, with low-lying, thick, fleshy, jointed, rounded segments covered in spines. The spines are barbed and 1-3 cm long. The flowers are yellow to peach colored, bell-shaped, thin, and have overlapping pedals. [1]

Location: Dry, open sites, plains to foothills, like the ones found at Blue Mountain and the lower Rattlesnake Recreation area and Mount Jumbo.

Fun Facts: The fruits of this plant are edible once the spines are removed. [1]

Wildlife Habitat Function: The flowers of this plant are an important source of pollen for bees. [1]



Opuntia fragilis

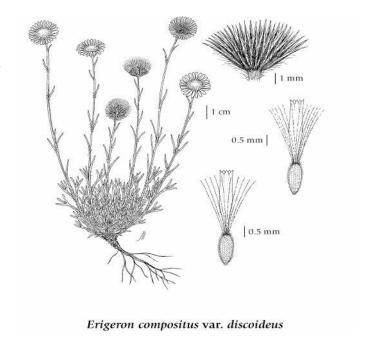
Cutleaf Daisy

Erigeron compositus

Description: Hairy perennial flower, 1-4 inches tall. The leaves are **fan shaped** and long stemmed. The flowers are mainly **white** but can be pink to blue with **20-60 petals** around a yellow center, **daisy-like**. [1]

Location: Rocky to sandy sites, montane to alpine like the areas around Mount Jumbo and the Rattlesnake Recreation Area.

Fun Facts: This plant does not need to be pollinated to reproduce; it can propagate on its own due to a unique structure inside the plant. [3]





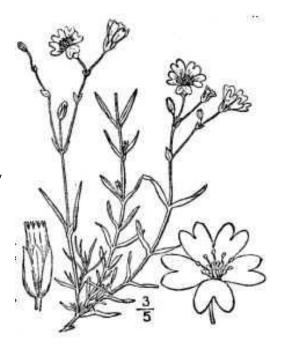
Field Chickweed

Cerastium arvense

Description: Perennial flower that grows in **loose mats**, 1-10 inches tall. The leaves are opposite and are lance-shaped, velvety from small hairs. The flowers are **small** (less than half an inch), have **5 deeply notched white petals**, and grow in flat-top clusters. [1]

Location: This flower grows at all elevations but prefers dry, rocky sites like those found on Mount Jumbo and the Rattlesnake Recreation Area.

Fun Facts: Early settlers fed this flower to chickens and other domestic fowl when they were ill, which gave the plant its name. [2]



Glacier Lily

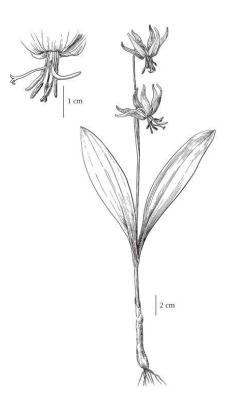
Erythronium grandiflorum

Description: 5-15 inches tall perennial herb. The leaves are **basal only** and come in a pair that are bright green and **lance-shaped**. The flowers are **bright yellow** and **nodding** with **6 petals curved upwards** and six large stamens protruding downwards. Each stem contain 1-3 flowers.

Location: Moist, wooded areas, montane to alpine and can be found in the Rattlesnake Recreation Area, Pattee Canyon, and Blue Mountain Recreation Area.

Fun Facts: The edible root of this plant, which looks like a bulb, is valued by Native Americans and tastes like an onion. The leaves and seed pods are also edible. [1]

Wildlife Habitat Function: The bulb-like root is a popular food source for black bears, grizzly bears, and rodents and the seed pods are browsed upon by deer, elk, mountain goats, and big horn sheep. [1]



Erythronium grandiflorum ssp. grandiflorum



Harebell

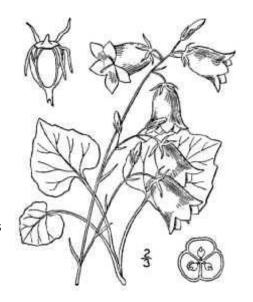
Campanula rotundifolia

Description: Delicate, slender perennial with milky sap, 8-12 inches tall that usually grows in clusters. It has numerous leaves that are narrow, lance-shaped, and about 2 inches long. The flowers are purple to blue, bell shaped, and have 5 petals; they are usually nodding, or facing towards the ground. [2]

Location: Harebells grow in nearly all habitats at all elevations and can be found on Mount Jumbo and the Rattlesnake Recreation Area.

Fun Facts: Some Native American traditional medicine practices use the leaves of the flower to treat coughs [2]; other tribes, such as the Navajo, historically valued the flowers for protection during hunting trips [1].

Wildlife Habitat Function: This flower is a good source of nectar for humming birds and a source of pollen for bees and butterflies, especially later in the season when there are fewer flowers blooming. [3]



Harsh Indian Paintbrush

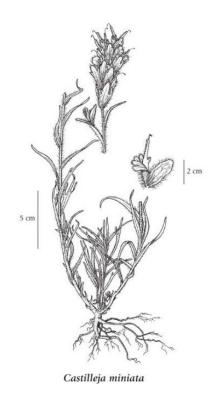
Castilleja hispida

Description: Erect, perennial flower, 10-24 inches tall that grows in clusters. The leaves are alternate and linier to lance-shaped, with lobed lower leaves. The flowers are vary from light red to scarlet, with long, linear, red brackets that grow in dense spikes. [1]

Location: Open to wooded sites like those found on Mount Jumbo.

Fun Facts: This plant's roots joins the roots of other plants to absorb their neighbor's nutrients. Some Native peoples believe that the rattlesnake got its venom from the paintbrush because they grow in the dry, rocky areas where rattlesnakes are often found. [1]

Wildlife Habitat Function: Many scientists believe that the hummingbird and the paintbrush evolved together because of the hummingbird's superior pollination of the plant and the plant's nectar that hummingbirds love. [1]





Little Larkspur

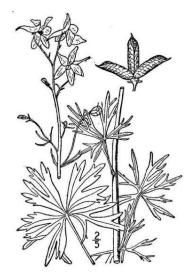
Delphinium bicolor

Description: Erect, perennial flower, 3-20 inches tall. The leaves grow mainly at the bottom of the plant, but a few grow along the stem and are palmately cut. The flowers are a **deep purple** and have **five spreading sepals that grow below four round pedals**, two of which are blue and the others white. [2]

Location: Plains to montane, low to high elevations and can be found on Mount Jumbo, Blue Mountain, and the Rattlesnake Recreation Area.

Fun Facts: This flower is poisonous and can cause people and livestock to become ill. [1]

Wildlife Habitat Function: While this plant is poisonous to humans and livestock, many animals such as ungulates have a very high tolerance to this toxin and the plant provides good forage for them in the spring and summer time. [1]



Low Pussytoes

Antennaria dimorpha

Description: Very short, perennial flower that **forms mats**. The basal leaves are lance to egg shaped and hairy, the stem leaves are alternate and much shorter. The flower heads are **small**, **greenish white**, and **do not contain petals**; disc florets only that grow in 2-9 clusters. [1]

Location: Dry foothills to montane like those found on Mount Jumbo.

Fun Facts: There are many species of pussytoes that grow in Montana and they are hard to tell apart. They do not require pollination to reproduce, so many of the offspring are clones to their parents. [2]



Moss Phlox

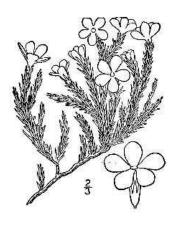
Phlox hoodii

Description: Short, compact perennial flower that forms cushions. The leaves are needle-like, opposite, dense, and overlap. The small flowers range from light pink to white and have 5 petals. [1]

Location: Lower elevations, dry and open sites like that on Mount Jumbo and Waterworks Hill.

Fun Facts: Moss phlox is usually one of the first flowers that can be seen growing in the early spring.

Wildlife Habitat Function: This flower is sometimes used as a browse source for mule deer and elk in the early spring when it is growing and other vegetation is limited. [3]





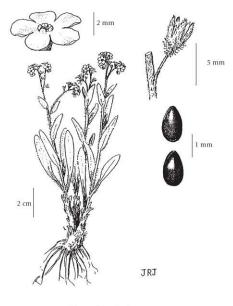
Mountain Forget-Me-Not

Myosotis asiatica

Description: Hairy, leafy, perennial flower, 2-12 inches tall. The leaves are lance to spoon-shaped, alternate, and 1-5 inches long. The flowers are small and bright blue with a yellow ring at the center, and have 5 petals that grow in small clusters at the stem tip. [1]

Location: Wet open sites at all elevations like that found along Rattlesnake Creek in the Rattlesnake Recreation Area.

Fun Facts: This flower is thought to get its name from a fable that tells of a man who is collecting the flowers for his true love near a river. As he wanders collecting the flowers, he does not pay attention and slips into the river. As the young man drowns, he throws the flowers on the bank of the river and yells, "Forget me not!"—hence the name of the flower. [1] Wildlife Habitat Function: The forget-me-not is great at attracting pollinators because the blue petals get the pollinators' attention and the yellow ring in the center guides them to the flower's pollen. [2]



Myosotis asiatica

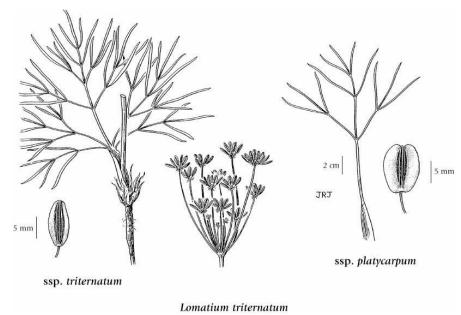
Nineleaf Lomatium

Lomatium triternatum

Description: Erect, perennial flower with a branching crown. The leaves are mainly basal, long, and linear and hairy. The flowers are tiny and yellow in compact, flattop clusters. [1]

Location: Open sites in lower elevations and can be found on Mount Jumbo at Waterworks Hill.

Fun Facts: This plant is also called nine-leaved desert parsley and the leaves taste a lot like the parsley found in a grocery store and can be used to flavor food. The Blackfeet's



long distance runners used the seeds of the plant to prevent side-ache. [1]

Wildlife Habitat Function: The roots of this plant is a favorite for forage among small mammals like mice and gophers. It is also a good snack for grizzly bears. [2]



Nuttall's Rockcress

Arabis nuttallii

Description: Small, sparsely-haired, perennial flower that can grow to be 8 inches tall. The basal leaves are **spoon shaped** and have long hairs, the stem leaves are smaller and lance-shaped. The flowers are **small**, **white**, **and have four petals that grow in small clusters at the end of each stem**. [2]

Location: Dry rocky soils in all elevations like those found on Mount Jumbo.

Fun Facts: The leaves of this plant are edible and have long been used as salad greens. [1]

Wildlife Habitat Function: This flower is good forage for small mammals and ungulates such as deer and elk. [1]



Oblongleaf Bluebells

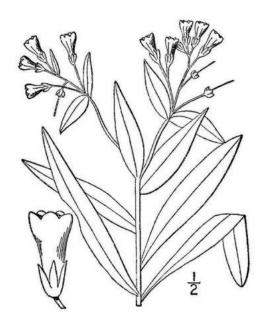
Mertensia oblongifolia

Description: Ascending, perennial flower that can grow up to 12 inches tall. The leaves are **blueish- green and lance-shaped**. The leaves at the base of the plant are very long (up to 6 inches) and become smaller further up the stem. The flowers are **purplish-blue**, **funnel shaped**, and **hang in clusters** from the top of the stem. [2] **Location:** Open grassy areas like that at Blue Mountain Recreation Area and the Rattlesnake Recreation Area.

Fun Facts: The leaves of this plant are edible. [2]

Wildlife Habitat Function: This flower offers good sources of

pollen for bees and butterflies. [1]





Pasqueflower

Anemone patens

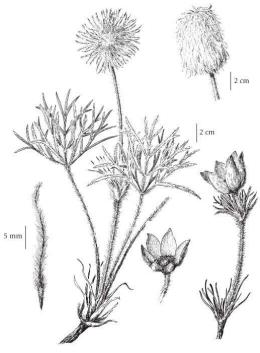
Other Common Name: Prairie crocus

Description: Hairy, perennial flower that is 2-10 inches tall. The leaves are mainly basal, three times divided into long, slender leaflets, making them look feathery. The flowers are blue to purple and cup-shaped, with 5-7 hairy petals that are about one inch long. [2]

Location: Montane grasslands like the ones found in the Rattlesnake Recreation Area.

Fun Facts: All parts of this plant are poisonous if ingested and are even irritating to the skin externally. It is usually the first flower to bloom in the grasslands of many regions. [1]

Wildlife Habitat Function: These flowers offer a good early pollination source to bees and butterflies because there are limited other sources of pollen in the early season besides these wildflowers. [1]



Anemone patens ssp. multifida

Prairie Smoke

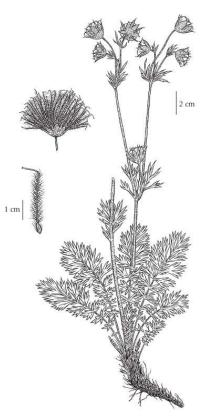
Geum triflorum

Other Common Name: Old Man's Whiskers

Description: Soft, **pinkish**, perennial flower that usually **grows in clumps**. The leaves mainly basal and **fern-like** with dense lobed or toothed leaflets. The flowers are **small and nodding**, **purplish to pink**, hairy, and **urn shaped** and grow is loose clusters. [1] **Location:** This flower can grow in many different types of environments and from high to low elevations and can be found in the Rattlesnake Recreation area and on Mount Jumbo.

Fun Facts: When this flower seeds, the seed heads are feathery and wispy, looking like an old man's beard or a field of smoke, giving the flower its name. [2]

Wildlife Habitat Function: This flowers offers a browse source to mule deer, whitetail deer, and elk. [3]



Geum triflorum var. triflorum



Rocky Mountain Dwarf-Primrose

Douglasia montana

Other Common Name: Douglasia

Description: Tufted, perennial flower that forms **short, loose** cushions. The leaves are very small, mostly basal, and are narrowly lance-shaped and minutely toothed. The showy, **small flowers** are

bright pink to pale purple, with five petals. [3]

Location: Dry, open sites like the ones found on Mount Jumbo and

Waterworks Hill.



Ranunculus glaberrimus

Other Common Name: Early Buttercup

Description: Hairless and fleshy perennial flower 1-5 inches tall. The leaves are mainly basal, round, and toothless, some leaves are deeply 3-lobed. The flowers are yellow, saucer-shaped, and have five shiny petals. The center of the flower is light green and 1-many flowers can grow from one stem. [1] **Location:** Dry open to wooded areas and can be found all around the Missoula Valley.

Wildlife Habitat Function: The bright yellow of the buttercups leaves attract many insect pollinators. [1]

Shootingstar

Dodecatheon conjugens

Description: Hairless, 2-12 inches tall perennial herb. The leaves are basal and oblong and tapered to the stalk, 1-6 inches long. The magenta to pink flowers are nodding with 5 linear petals swept backwards from a yellow collar and a black tip, 1-several flowers grow from each stem. [1]

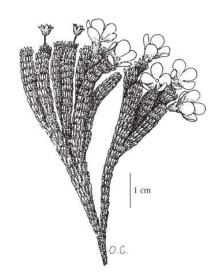
Location: Moist, open sites from plains to montane and can be found in the

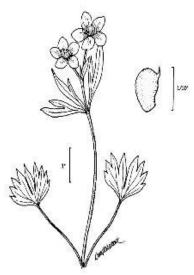
Rattlesnake Recreation Area, Mount Jumbo, and Waterworks Hill.

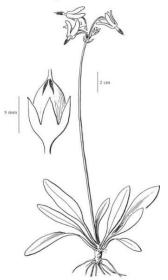
Fun Facts: This plant smells very similar to root beer.

Wildlife Habitat Function: This plant's pollen is only released by vibrations

caused from the fast movements of bees' wings. [1]











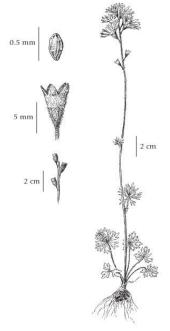
Small-Flowered Woodland Star

Lithophragma parviflorum

Description: 3-8 inch tall perennial herb. The leaves are mainly basal and are divided into 5 wedge-shaped sections, which are toothed and hairy beneath. The flowers are small, white to pinkish, broadly funnel-shaped or star-like, with 15-25 slender petals. [1]

Location: Dry, rocky sites plains to montane, can be found on Mount Jumbo.

Wildlife Habitat Function: This flower offers a good early pollen source for bees and other pollinators because it is one of the first flowers to bloom. [1]



Lithophragma parviflorum var. parviflorum

Western Trillium

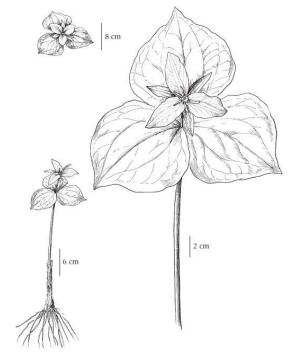
Trillium ovatum

Description: Erect, perennial flower 3-10 inches tall. The leaves are dark green and **egg-shaped** and **come in a whorl of** 3. The flowers are **white with 3 broad petals and 3 small green sepals**. [1]

Location: Wet, shady sites, foothills to subalpine like along Rattlesnake Creek in the Rattlesnake Recreation Area.

Fun Facts: Trillium leaves traditionally served as a good food source to Native American tribes and the roots have been used to help mothers in childbirth. [1]

Wildlife Habitat Function: The seeds in this plant are very attractive to ants. The ants carry the seeds back to their nests and feed it to their young. This is the primary way in which trillium spreads its seeds. [1]



Trillium ovatum var. ovatum



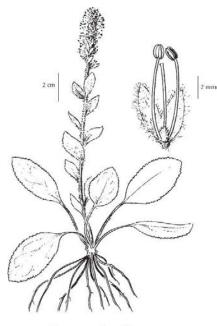
Wyoming Kitten-Tails

Besseya wyomingensis

Description: Hairy perennial, 3-8 inches tall. The leaves are mainly basal, egg to oblong-shaped with rounded teeth. The flowers are grey-green and slightly purple with two projecting petals that form many flowers in dense spikes. [1]

Location: Dry and open at most elevations and can be found on Mount Jumbo and Waterworks Hill.

Fun Facts: Navajo hunters chewed on the roots of this plant as they hunted for good luck. [1]



Besseya wyomingensis

Yarrow

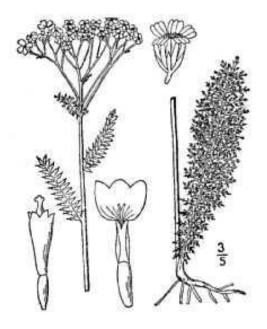
Achillea millefolium

Description: Erect, **leafy** perennial that is 5 to 30 inches tall. The leaves are alternate and **fern-like**. The flowers are **white** and **very small** and **grow** in **umbrella-like** flat-top clusters at the stem tip. [1]

Location: Meadows, grassland, and forests at all elevations and can be found throughout and around the Missoula Valley.

Fun Facts: This plant has been used as a medicine for thousands of years. The roots contain a numbing agent and all parts of the plant help suppress bleeding. [1]

Wildlife Habitat Function: Bighorn sheep, pronghorn, and deer will graze on this plant. [3]





Yellow Bell

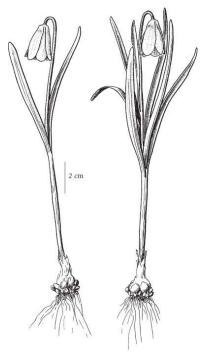
Fritillaria pudica

Description: Nodding, perennial 3-10 inches tall. The leaves usually come in 2 and are opposite, linear, and fleshy. The flowers are yellow and narrowly bell-shaped with 6 lance shaped petals that nod downwards, usually solitary.

Location: Open to wooded areas, plains to foothills and can be found in the Rattlesnake Recreation Area.

Fun Facts: The roots of these flowers are edible and are valued as a food source for many Native American tribes. [2]

Wildlife Habitat Function: Bears and small mammals are also fond of the eating the roots and deer and elk browse the leaves. The scent of yellow bell to humans is not pleasant, but it attracts flies, which are the flowers primary pollinator. [1]



Fritillaria pudica

Yellow Puccoon

Lithospermum ruderale

Other Common Names: Lemonweed

Description: Leafy, perennial flower that grows in clusters. The leaves are hairy, dark green, and linear to narrowly lance-shaped. The flowers are pale yellow to greenish, and widely funnel-shaped with 5 petals that grow in round clusters at the stem tip. [1]

Location: Dry, open sites, plains to montane, can be found in the Rattlesnake Recreation Area.

Fun Facts: This plant is traditionally believed to be able to stop the rain by some tribes, while other tribes traditionally believe that this plant can stop thunderstorms. [1]





Noxious Weeds

Canada Thistle

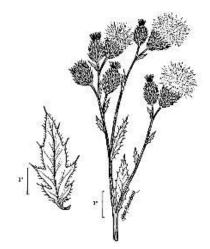
Cirsium arvense

Other Common Name: Creeping thistle

Description: Prickly, perennial flowers that often forms thick colonies. The leaves are alternate, lance-shaped, **spiny toothed**, and **wavy**. The flowers are **pinkish-purple**, **small**, and look **fuzzy**, growing in flat-top, spreading clusters at the stem tips. [1]

Location: Many types of landscapes, but prefers disturbed areas, originally from Europe.

Fun Facts: Unlike many plants that have both female and male components, separate plants only have either a male or female part. [1]

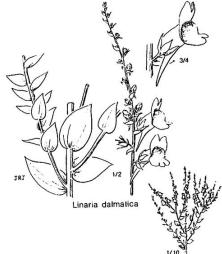


Dalmatian Toadflax

Linaria dalmatica

Description: Erect, hairless, perennial flower. The leaves are **alternate**, **egg-shaped**, and clasp the stem. The flowers are **yellow**, with a fuzzy orange lower lip, and look **snap-dragon-like** and grow in clusters. [1] **Location:** Mainly disturbed areas, originally from Europe and introduced as an ornamental.

Fun Facts: It produces thousands of seeds and spreads by creeping roots, making it hard to control. [1]



Hound's Tongue

Cynoglossum officinale

Description: Soft, leafy, biennial herb. The leaves are **alternate**, long, and elliptic to **lance-shaped**. The flowers are **reddish-purple** and shortly funnel-shaped with **5 petals that grow in clusters at the stem tip**. The fruits come in clusters of 4 and are covered in **barbed prickles**. [1] **Location:** Many types of landscapes, but prefers disturbed areas, originally from Europe. **Fun Facts:** This plant can cause skin reactions and the fruits effectively catch onto passerby's fur or pant-legs, spreading their seeds far and wide. [1]





Leafy Spurge

Euphorbia esula

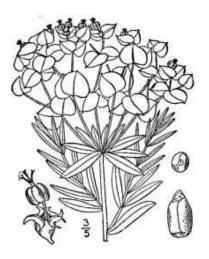
Description: Erect, perennial flower, **tinged blueish-white** and hairless. The leaves are **alternate** and linear. The flowers are **greenish yellow**, and

grow in in flat-topped, umbrella-like clusters. [1]

Location: Can be found in nearly all habitats, prefers disturbed soil,

originally from Europe.

Fun Facts: This plant is considered noxious in many areas and is able to outcompete many plants in all different types of habitats. The milk juice can irritate and blister sensitive skin and every part of the plant is poisonous to humans. Sheep and bugs have been used to control this weed. [1]

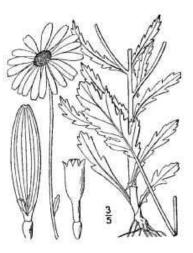


Oxeye Daisy

Leucanthemum vulgare

Description: The leaves are **alternate** and **spoon shaped** and blunt-toothed to deeply lobed. The flowers are showy, **white daisies**, with 15-30 petals around a **yellow center**, and grow solitary on long, leafless branches. [1] **Location:** Mainly disturbed areas, all habitat types, introduced from Europe.

Fun Facts: Smells like stale perspiration which attracts flies for pollination. [1]



Spotted Knapweed

Centaurea biebersteinii

Description: Branching, rough, biennial flower. The leaves are **alternate**, linear, and **grey** colored. The flowers are **pinkish-purple** and **fringed**, growing on long stalks in open, branching clusters. [1]

Location: Mainly disturbed sites, introduced from Europe.

Fun Facts: These plants are bitter and not commonly consumed by animals, but if it is eaten, it can cause damage to an animal's digestive tract. Always use gloves when pulling this weed. [1]





Glossary

Basal: Grows from the bottom of the plant.

Nodding: Bending downwards towards the ground.

Palmate: Leaves divided into three or more lobes or leaflets diverging from a common point; like fingers from a hand.

Whorl: A ring of 3 or more similar structures.

Resources

[1] Kershaw, Linda, A. MacKinnon, and Jim Pojar. *Plants of the Rocky Mountains*. Lone Pine Publishing Company, Inc., 1998. Print.

[2] Kimball, Shannon, Lesica, Peter. Wildflowers of Glacier National Park. Mountain Press Publishing Company, Inc. 2012. Print.

Kittelson, P.M., Lesica, Peter. *Precipitation and Temperature are Associated with Advanced Flowering Phenology in a Semi-Arid Grassland*. Journal of Arid Environments, Vol 74, 1013-1017. 2010. Print.

[3] USDA PLANTS Database. United States Department of Agriculture. Web. USDA PLANTS Database. United States Department of Agriculture. Web. Line drawings.

