

How to
Know



WILDFLOWERS

Near
Your
Camp



United States
Department of
Agriculture

Forest
Service

Intermountain
Region

Ogden,
Utah

ONLY
YOU



can prevent forest fires!

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Now Appearing on the Public Lands Near You!

The National Forests, Parks, Wildlife Refuges, and Grasslands, and millions of acres of public lands, are truly America's wildflower gardens. The annual "Celebrating Wildflowers-National Wildflower Week" kicks off the third week of May. Throughout the year, many programs are available which feature the important role that over 630 million acres of public land play in providing diverse habitats for much of America's flora. To find out about "Celebrating Wildflowers" events on the Nation's public lands, call the

**CELEBRATING WILDFLOWERS HOTLINE
1-800-354-4595 (April - August)**

Wildflower Conservation and Etiquette

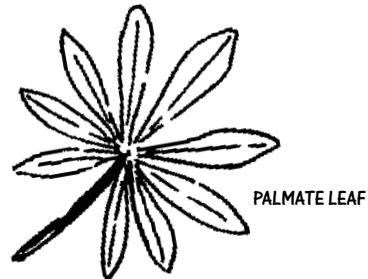
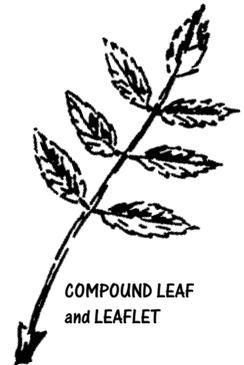
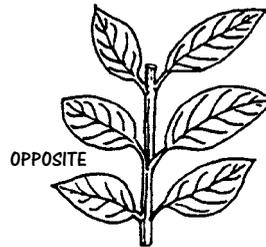
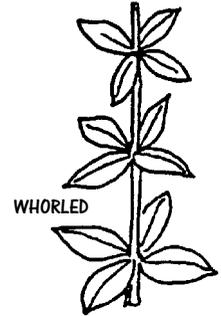
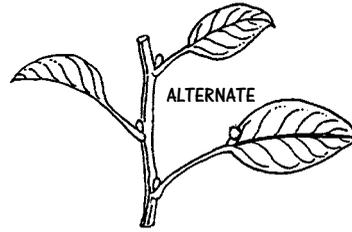
- * Take a hike and stop to smell the fragrant wild roses.
- * Take only photographs and memories when you leave.
- * Please, don't pick the flowers. Let others enjoy them too!
- * **Tread Lightly!** and stay on the trail.
- * Don't be afraid to ask for information on wildflowers.
- * Get involved! Explore volunteer opportunities on your public lands.

How to Know Wildflowers Near Your Camp

This booklet has been prepared to help you identify the more common wildflowers near your camp found throughout the Intermountain Region of the U.S. Forest Service. Camp sites in a National Forest are chosen partly because of the beautiful flowers, grass, shrubs and trees surrounding them. These plants and trees are useful as well as beautiful and are extremely important in sustaining healthy ecosystems. They provide food and protective cover for animals and furnish seeds for birds to eat. Flowers and other plants also enrich the soil and hold it in place.

Get to know the plants described in this booklet and others you may find around your camp. You may not find all the plants identified in this guide, but you will find many of them. Most important, enjoy yourself whenever you visit a National Forest.

LEAF ARRANGEMENT



Individual Flower Shapes

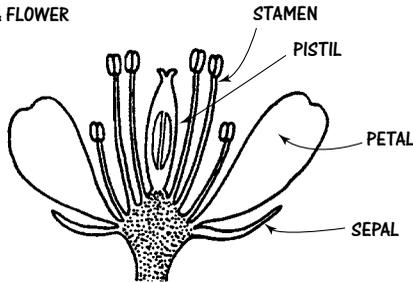
An important variation in the design of flowers is the form of the petals. Most flowers resemble a star-shape. All the petals of a “regular flower” have the same shape, size and relative position around the center. The sepals have the same arrangement. Such blossoms are called “regular flowers”.

Flowers that vary from this regular pattern are called “irregular flowers”. Examples of irregular flowers are peas and beans. Petals of an irregular flower are never all alike in size and shape.

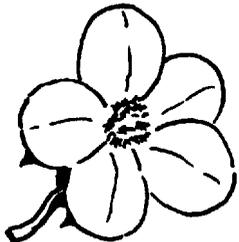
Plants that last for two or more years are known as “perennial”.

A plant that completes its life cycle in one year and must reproduce from seed is an “annual”.

PARTS OF A FLOWER



Example of a REGULAR flower



Example of an IRREGULAR flower

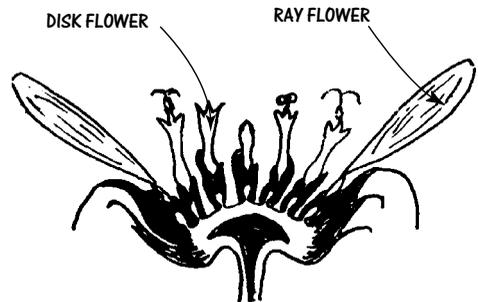


A Little About Plant Families

Not all plant families can be described in this booklet. Those included are to help you recognize different members of a plant family more common to the Intermountain Region. Wildflowers belong to different plant families and have relatives just as people do. Members of each plant family are alike; yet each differs from the other in some way.

One of the largest plant families is the “Composites” and consists of 21,000 species of herbs, shrubs, climbers, and a few trees. The dictionary says that composite means something made up of distinct parts. In the flower world a composite is actually made up of many complete, individual flowers. The many small flowers are held together in a single head and look like one single flower. Examples of composites which you may know very well are the dandelion, the daisy, and the aster.

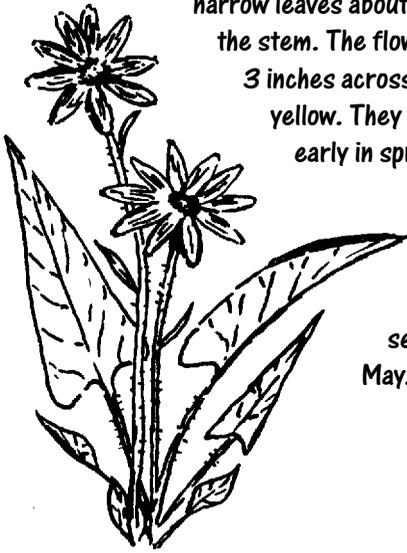
Three “composites” you may find around your camp are the Arrowleaf Balsamroot, the Heartleaf Arnica, and the Mules-Ears (also known as Wyethia).



ARROWLEAF BALSAMROOT - This plant forms large clumps of arrow-shaped leaves. The flowers are on long, thick, woolly-haired stalks which have only one or two small,

narrow leaves about half-way up the stem. The flowers, 2 to 3 inches across, are bright yellow. They appear early in spring and

reach the peak of their flowering season mid-May.



MULES-EARS (Wyethia) - This flower is also known as "Green Dock". It is a coarse perennial plant, 1 to 2 feet high, with a thick, woody tap root. The leaves, shaped like the ears of a mule, are dark green, smooth, stiff and leathery, and are often covered with a sticky substance. The outside (ray) flowers of the head are bright yellow, petal-like, 1 to 1-1/2 inches long, 10 to 15 in each head. The small inner (disk) flowers of the head are numerous, bright yellow and tubular.

HEARTLEAF ARNICA - Arnicas are perennial plants. The Heartleaf Arnica has broad, heart-shaped, opposite leaves and rather large, yellow, daisy-like flowers. The outside (ray) flowers are petal-like, 7 to 13 in number, and about 1 inch long. There are many disk flowers, small, yellow, tubular and perfect. The plant has a strong odor when the leaves are crushed.



The Lily Family

Lilies are “regular flowers” which have 3 sepals, 3 petals, 6 stamens, and usually 1 pistil, which may be divided into 3 parts at the top. In some plants of the lily family, the 3 sepals are often colored and may be mistaken for petals. This can give the appearance of a flower with 6 petals and no sepals. Members of the lily family have leaves with parallel veins.

In the Intermountain area, members of the Iris family are the plants most likely to be confused with lilies. Remember that lilies have 6 stamens while the Iris has 3.

Two lilies that may be found around your camp are the *Sego Lily* and the *Wild Onion*.

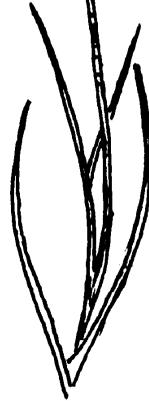
SEGO LILY - This name was adopted from the American Indians, of which the bulb was a favorite food. The bulb also furnished food for early day pioneers. The *Sego Lily* is Utah's State Flower.

The plant's tulip-shaped flowers are white, tinged with lilac, purple or blue. They may be single on the stem, or in a cluster of 2 to 5. The onion-like leaves usually occur singly at the base. Slender, erect stems, which usually grow to 17 inches high, may have 1 or 2 leaves.



WILD ONION - These perennial plants grow from bulbs and can usually be identified by their odor alone. White, rose, or purplish flowers are arranged in a cluster at the end of a leafless stalk. These flowers have 3 sepals, 6 stamens, and 3 petals that look alike and are sometimes slightly united. Leaves growing around the base of the plant are round, or flattened and resemble the garden

onion. Throughout the Intermountain Region these plants bloom early in the spring and usually dry up by mid-summer.



The Rose Family

All members of the rose family are “regular flowers” with alternate leaves, 5 sepals, 5 petals (red, white, yellow; seldom blue), and numerous stamens and pistils, each with one to several seeds.

Apples, peaches, pears, apricots, strawberries, cherries and plums are common members of the Rose Family. Two plants in this family that you may find near your camp are the Wild Rose and the Wild Strawberry.

WILD ROSE - The wild rose is a thorny shrub, 2 to 3 feet high, with showy pink or rose-colored flowers, usually several in a cluster. The flowers have 5 heart-shaped petals, about 1/2 inch long. Alternate leaves are divided into 5 to 7 leaflets with saw-toothed edges. The smooth berries are globe-shaped, about 3/8 inch in diameter, and are crowned by five long taper-pointed sepals. Rose “hips” are full of Vitamin C and a nutritious syrup is still made from them.



WILD STRAWBERRY - These plants are low perennial herbs with underground root stocks. They have runners like the garden strawberry, which root at the tip and produce new plants. Each plant has a cluster of leaves at the base. The leaf is made up of three leaflets, usually toothed. The flowers are white in flat-topped clusters on leafless stems. The fruit is of fair size and has a very good flavor.



The Pea Family

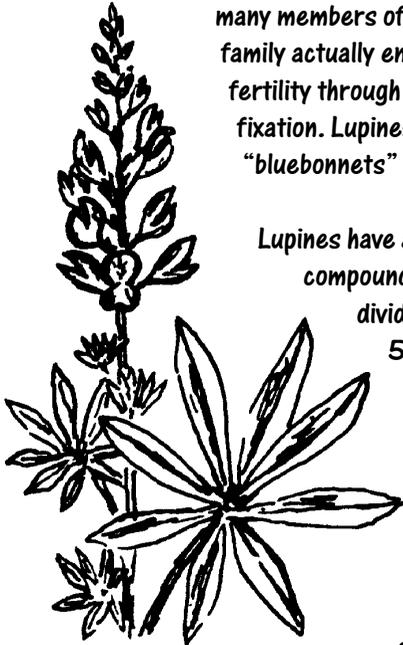
If you know what the garden sweet pea looks like, it will be easier for you to recognize the plants in the Pea Family. Each plant carries pods, with irregular flowers, and each has a very characteristic form. Each flower is composed of an upper petal called the banner which is usually large, 2 equal side petals called wings and 2 equal lower petals called "keel petals". The keel petals enclose the 10 stamens and 1 pistil.

LUPINE - From the scientific name *Lupinus* or wolfish, these plants were believed to destroy the soil. We now know that many members of this family actually enhance soil fertility through nitrogen fixation. Lupines are called "bluebonnets" in Texas.

Lupines have alternative, compound leaves, divided into 5 to 15 finger-like leaflets. The blue, pink, white or yellow flowers grow in a cluster and are

similar to the garden sweet pea in shape.

The seed pods are smaller than the garden pea, are flattened, and contain 2 to 12 seeds. All parts of lupines are toxic and should not be eaten.



The Mint Family

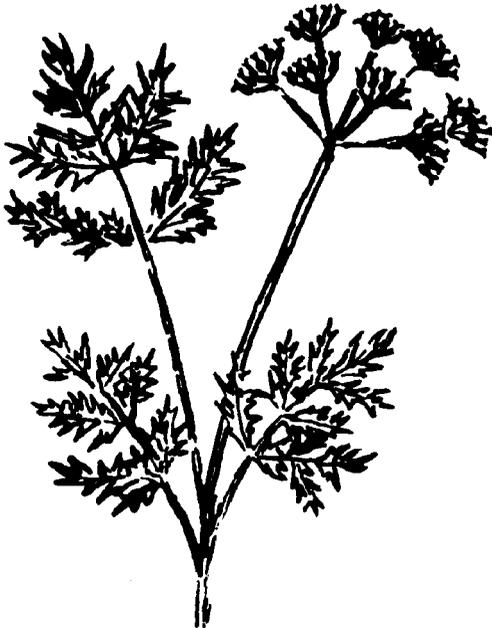
HORSEMINT - There are over 5,000 species of mints worldwide and include many cultivated varieties such as lavender, rosemary, basil, spearmint and peppermint. Like all other members of the mint family, the stems of this plant are square in cross-section. Leaves grow opposite each other on the stem. The flowers, formed like tubes, have two lips. Horsemint has roughly triangular leaves with coarsely-toothed edges, and has a minty odor. The small, white or pink flowers occur in a dense cluster.



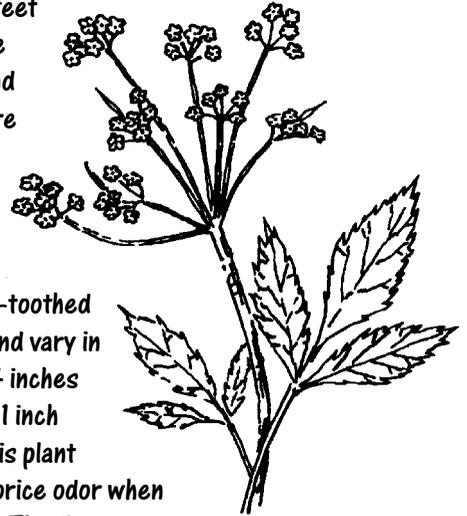
The following flowers are presented as individual plants, not as members of any plant families previously described. Do not attempt to eat any plants without identification by a professional botanist.

NOTE: The carrot family includes many edible members and also some of the most poisonous plants known to man, especially the Water Hemlock and Poison Hemlock, which killed the Greek Philosopher, Socrates. Do not pick or eat any plant resembling a carrot in the wild.

WILD CARROT - Wild carrots are smooth, dark green perennials, with hollow, slender stems that vary in size. Their leaves are usually large, dark green in color, and finely divided—similar to the leaves on ferns or garden carrots. The flowers are small, white or pinkish, and occur in clusters, 2 to 5 inches in diameter.



SWEET ANISE - This plant is also a member of the Carrot Family. It is an erect, smooth perennial plant with a hollow stem that can grow up to 4 feet high. The compound leaves are slightly hairy, thin leaflets with saw-toothed edges, and vary in size to 4 inches long and 1 inch wide. This plant has a licorice odor when crushed. The flowers are very small, white or yellowish in color, and are formed in uneven clusters. Club-shaped seeds easily stick to clothing.



LARKSPUR - American Indians extracted a blue dye from these flowers. Early settlers also used this plant dye to make ink. The dark blue or purplish flowers have 5 sepals that look like petals. The 4 petals come in pairs—the upper pair is white or yellowish veined with blue. They are prolonged backward into the spur that looks like a dunce cap. The lower pair is usually blue with a tuft of hair near the middle. The leaves are alternate, deeply divided or feathery. Larkspurs are highly toxic to both animals and humans.



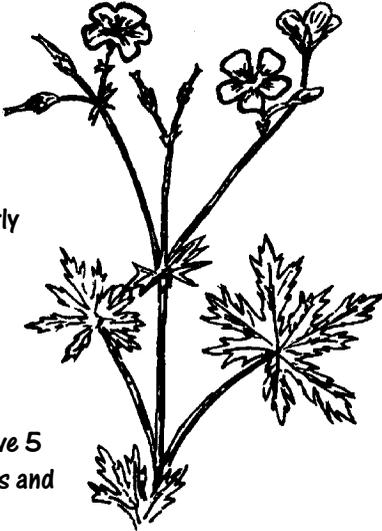
INDIAN PAINTBRUSH - The State Flower of Wyoming. This plant is semi-parasitic on the roots of other plants, especially sagebrush.

The yellow, orange, pink, rose, or dark red flowers, clustered at the end of the stems, are different than most flowers, especially as to their coloring. The colored parts are the bracts and sepals while what is the petal in most flowers has a light greenish yellow tube-like part that encloses the stamens and pistil.



WILD GERANIUM - Northern Indian tribes used the powdered root of this plant when they were wounded to help the blood coagulate. It was effective due to the tannin content in the roots.

This plant has opposite leaves palmately-lobed, occurring mostly at the base. Their showy flowers are pink, rose, purple or white. They have 5 sepals, 5 petals and 10 stamens.



Sometimes the geranium is called "storksbill," because the odd shape of the seed-carrying arrangement of the pistil resembles the bill of a stork. When seeds are ripe, they break loose at the bottom and curl upward on a thin filament.

COLUMBINE - The scientific name, *Aquilegia*, is from Latin for eagle; the spurs suggest an eagle's claw. The blue columbine was voted the State Flower of Colorado in 1911 by its schoolchildren and accepted by the State legislature.

Columbines are among the most beautiful native western flowers. They are showy, nodding, and have a single flower to a stem.

The flower's 5 petals extend backward to form the spurs. The 5 sepals are usually as long as the spurs.



PENSTEMON - There are about

250 different species of

penstemon in North America. The name means 5 stamens.

These perennial plants have opposite leaves.

The showy flowers can be found in blue, purple, red, pink or white, with blends of these colors and slightly resemble garden

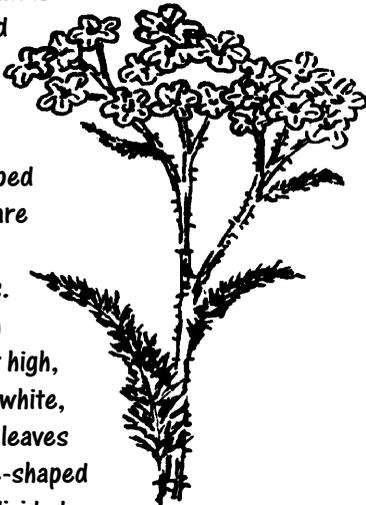
snapdragons. They occur in long colorful clusters near the top of an erect stem which grows up to 24 inches high.



YARROW - With the Latin name, *Achillea millefolium*, this plant was named after the Greek Warrior Achilles and was used to treat battle wounds, and relieve rashes and itching.

This perennial plant is widely distributed and abundant throughout the West. The small, white, round-topped flower clusters, are made up of many individual flowers.

The stems, which grow up to 3 feet high, are covered with white, woolly hairs. The leaves are narrow, lance-shaped in outline, much divided like a fern.



Noxious Weeds

Many people are not aware that noxious weeds are one of the greatest threats to wildland ecosystems in the United States. These aggressive non-native plants originally arrived from other countries and are now rapidly expanding and causing permanent damage to our native plant communities. For example: Yellow starthistle spread from one to 10 million acres between the years of 1980-1995; Spotted knapweed was first identified in the 1920's in Montana - it now covers 5 million acres in that State alone; the Medusahead grass was first found in Utah 5 years ago and its spread has been exploding ever since. The Forest Service is working with local and other federal agencies to aggressively control noxious weeds on public lands.

What can you do?

- (1) Learn to recognize weeds in your local area,
- (2) Don't pick flowers or transport wild flowers you can't identify,
- (3) Don't camp or drive through weed-infested areas,
- (4) Always use certified weed-free hay, straw, or mulch, and
- (5) Report weed infestations to your local county or local Agriculture Extension Service.

Following are some weeds you might encounter near your campground:

PURPLE LOOSESTRIFE - is an introduced European perennial ornamental species that escapes into aquatic sites such as streambanks and shorelines of lakes, ponds, and ditches. It is a member of the Loosestrife Family. The plants grow 6 to 8 feet tall, have simple, opposite leaves and rose-pink flowers arranged on a long vertical raceme. If left unchecked, a wetland will eventually become a monoculture of Loosestrife and severely threaten waterfowl habitat and impede water flow in irrigation ditches.



YELLOW STAR THISTLE - is an annual plant with a dandelion-head of yellow flowers subtended by sharp spines. It is a member of the Sunflower Family and is closely related to knapweeds and other purple thistles. Generally associated with dry, open fields, Yellow Starthistle can produce up to 150,000 seeds per plant that persist in the soil up to 10 years. It is poisonous to horses causing permanent brain damage and death. It infests millions of acres throughout the West. It has been invading Idaho lands at the astounding rate of about 6,000 acres per year since 1981.



LEAFY SPURGE - is a long-lived perennial up to 3 feet tall that reproduces by vigorous rootstalks and seed. It is native to Eurasia and was brought into the U.S. in 1827 as a seed impurity. It is a member of the Spurge Family and produces an irritating milky sap in all parts of the plant. The flowers are produced in clusters on ends of branches with each cluster being subtended by several broadly-rounded, yellowish-green leaves. Leafy Spurge is a common invader of grain fields, pastures, and roadsides. In 1990, annual losses in rangeland productivity were estimated to have reached \$92 million dollars in the U.S. alone.

