

# Invasive Plants

## 1. Yellow starthistle

**Origin:** Europe- Mediterranean region.

**Description:** Yellow starthistle grows to about 1.5 to 3 feet in height. Plants are gray-green to blue-green and have deep taproots. Basal leaves are 2 to 3 inches long and deeply lobed. Upper leaves are short and narrow with few lobes. Flowers are bright yellow with flowers in heads like a dandelion. Sharp spines surround the flower heads.



**Habitat:** Plants typically thrive in full sunlight and deep, well-drained soils. Starthistle is especially common in disturbed areas, roadsides and rangelands.

**Impacts:** It competes out native plants, reduces biodiversity and wildlife habitat.

### **Control:**

**Manual:** Plants can be pulled, hoed, tilled or mowed before blooming.

**Chemical:** It can be effectively controlled using general use herbicides.

**Biological:** Six biological control insects have been released in the United States for yellow starthistle control, but none have been successful so far.

## 2. Bull thistle

**Origin:** Europe, Western Asia, and North Africa.

**Description:** Bull thistle, also called common thistle, is a biennial in the sunflower family. In the juvenile phase, individual bull thistle plants form a single rosette with a taproot up to 28 inches long. Stems have spiny wings and grow 1 to 6 feet tall, with many spreading branches. Leaves are more or less lance-shaped and 3 to 12 inches long, and are hairy and spiny. The purple flower heads are surrounded by narrow, spine-tipped bracts.



**Habitat:** It grows in a wide range of environments but is most troublesome in disturbed areas such as pastures, overgrazed rangelands, recently burned forests, forest clear-cuts, roadsides, ditches, and fence lines.

**Impacts:** Out-competes native plant species for space, water, and nutrients.

**Control:**

A type of seed-feeding fly has been selected and released for biological control of bull thistle.

### 3. Teasel

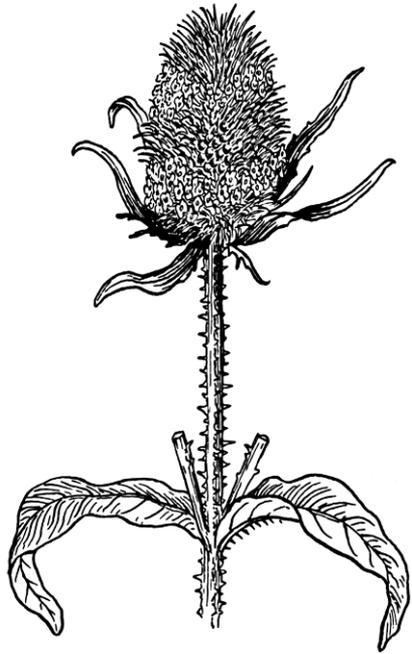
**Origin:** Europe.

**Description:** Teasel is a perennial. It typically grows to 5 to 7 feet. Flowers bloom in distinctive "rings" around the heads, and in color white or lavender. Stem leaves are large, long, prickly and opposite, forming "cups" around the stem that often can hold water. It was introduced to North America for use in the textile industry to raise the nap of cloth.

**Habitat:** Teasel grows in open, sunny habitats with moist soils. Roadsides and heavily disturbed areas are the most common habitats of teasel.

**Impacts:** Out-competes native plant species for space, water, and nutrients.

**Control:** Cutting, digging, and burning are recommended as the best solutions for control in natural areas.



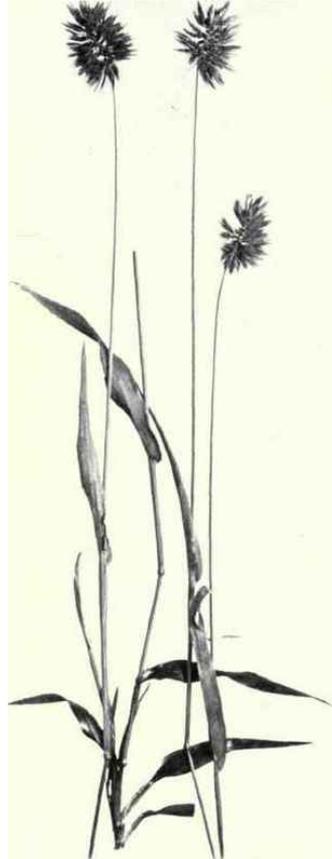
## 4. Hedgehog dogtail

**Origin:** Europe.

**Description:** Hedgehog dogtail is a short annual plant, grows to about 8 to 20 inches tall, with shallow, fibrous roots. It has a distinctive bristly, dense, oval seed head that is 0.4 to 1.6 inches long and greater than 0.4 inch thick. Stems are hollow, erect, Leaf blades flat, about 0.1 inch wide, rough.

**Habitat:** Hedgehog dogtail grows in disturbed areas such as clearings and roadsides and is often associated with other exotic grasses. It is also found along the edges of dry forests, in thin soils, and over broken rock.

**Impacts:** Well established west of the Cascade Mountains, from British Columbia to Oregon. It affects the amount and quality of litter, alters nutrient cycling and changes the composition of soil biota.



**Control:** Hand pulling of annual grasses such as hedgehog dogtail may be effective early in the spring before the seed sets.

## 5. Klamath weed

**Other common name:** St. John's wort.

**Origin:** Europe.

**Description:** Plants grow from 1 to 3 feet tall with numerous upright stems growing from the base of the plant. It has creeping horizontal stems that root at the nodes when they touch the ground. The leaves are light green. There are small transparent dots that



are scattered on the blade. Flowers are numerous in flat groups at the top of the plant. Each flower contains five deep-yellow petals.

**Habitat:** It prefers dry, sandy or gravelly soils and often occurs in pastures, open woods, waste places, and along roadsides.

**Impacts:** It is poisonous to livestock and difficult to eradicate.

**Control:** It is kept partially under check biologically by the Klamath weed beetle, which is a leaf-eating insect. However, the beetle may be a little destructive to other plants.

## 6. Medusahead

**Origin:** Eurasia.

### **Description:**

Medusahead is a winter annual grass whose seeds germinate during the fall. It is typically 6 to 20 inches tall and has distinct bristly seed heads. One or more stems arise from the base of the



plant and can be as long as 24 inches but are more commonly 8 to 13 inches in length. Each stem produces a single, short (0.6 to 2 inches long), bristly, spike-type seed head. The seed heads have 2 sets of bristles; the shorter bristles (0.8 to 1.6 inches) protrude at a wide angle to the spike; and longer bristles (1.6 to 3 inches) are more upright.

**Habitat:** Medusahead is mostly found in degraded ecological sites that have relatively high water holding capacity (such as clay).

**Impacts:** It is extremely competitive and can crowd out many native and desirable plants. Well-established medusahead communities have low plant species diversity and have low value for wildlife habitat.

**Control:** Maintaining a plant community that exploits resources will impede medusahead invasion.

## 7. Cheatgrass

**Origin:** Mediterranean region.

**Description:** Cheatgrass is an annual or winter annual, softly downy to short-hairy throughout, and generally 4 to 24 inches tall. Stems are solitary or in a few-stemmed tuft. Leaf blades are up to 8 inches long, flat, relatively narrow. The seed heads are open and droop.

**Habitat:** It is a weed of roadsides, cropland, pastureland, rangeland and other disturbed sites. It does particularly well under conditions where rainfall occurs in fall, winter and early spring.

**Impacts:** In disturbed habitats, cheatgrass often replaces rich and useful native bunchgrasses. When mature, it can cause cheat-sores in the mouths of cows and sheep.

**Control:** Soil bacteria which cause crown rot may be a potential biological control for cheatgrass. Non-selective herbicides are presently the primary chemical available for control of cheatgrass.



## 8. Yellow salsify

**Origin:** Eurasia.

**Description:** Yellow salsify is a biennial plant that grows 1 to 4 feet tall from a large taproot. All parts of the plant contain a milky, white juice. Leaves are up to 1 foot long, alternate, narrow, grass-like, somewhat fleshy, and light-green to blue-green. Flower heads are 1 to 2.5 inches across with yellow ray flowers. Bracts are 1 to 2 inches long and extend beyond the ray flowers. The plant produces seeds that measure 1 to 1.6 inches long. Seeds are attached to large feathery tufts, like the "parachutes" of dandelion seeds.



**Habitat:** Yellow salsify is a potential inhabitant of nearly any vegetation or community type. Disturbed areas are typical yellow salsify habitats, but in open forests and woodlands, shrublands, and grasslands yellow salsify may be persistent.

**Impact:** High densities of yellow salsify are likely to inhibit the growth and recruitment of native forbs and grasses. However, livestock and wildlife utilize yellow salsify, sometimes extensively.

**Control:** Limiting disturbances may be the most successful and most economical method of yellow salsify control.

## 9. Timothy

**Origin:** Europe.

**Description:** Timothy grows in erect stems that are about 20 to 40 inches tall. Leaves vary in length from a few inches to a foot and are about 1/4 inch wide, narrowing gently toward the tip. Flower heads are spike-like and dense, from 2 to 6 inches in length.



**Habitat:** Timothy is adapted to a cool and humid climate. Timothy thrives best on clay loams, under a wet or moist climate. Timothy will grow for a time on soils low in fertility, but it is better adapted to a high fertility soil.

**Impact:** Timothy is widely used for pasture and hay. It is palatable and nutritious. It is often not considered a "weedy" or invasive species, but can spread into adjoining vegetative communities under ideal climatic and environmental conditions. And on favorable sites where it is best adapted, it can exist as a monoculture.

## 10. Meadow knapweed

**Origin:** Europe.

**Description:** Meadow knapweed blooms in midsummer to fall. It grows from woody base up to 3.5 feet tall. The lower leaves are long-stalked, upper leaves have no stalk and are lance-shaped. Stems are many-branched and tipped by a solitary flower head up to one inch wide. Flower heads are pink to reddish purple. A



key identifying feature is the fringed bracts on the flower head. However, because meadow knapweed is a hybrid, its traits can vary.

**Habitat:** Meadow knapweed favors moist roadsides, sand or gravel bars, river banks, irrigated pastures, moist meadows, and forest openings. It also can invade industrial sites, tree farms, and grasslands.

**Impacts:** Meadow knapweed is one of several introduced knapweeds that out-compete grasses and other pasture species, causing productivity to decline. It has the potential to invade native prairie and oak savanna.

**Control:** Some approved biological control agents released for other knapweeds have become established on meadow knapweed, including a seed head fly, a seed head moth, and two seed head weevils.

# Native Plants

## 11. Idaho fescue

**Origin:** Native.

**Description:** Idaho fescue is a cool-season, densely tufted, perennial bunchgrass. The characteristic bluish-green leaves are tightly rolled and rough to the touch. The extensive, fibrous root system is a distinct black or dark brown color. The narrow seed head is 3 to 8 inches long, with branches somewhat spreading during pollination. This species is shade tolerant, and is a common understory plant; however, it also occurs on exposed sites as a dominant plant.



**Habitat:** This grass grows on a variety of soils, but reaches best growth on well-drained, sandy or gravelly loams.

**Uses:** Idaho fescue is a valuable range grass, both for livestock and big game animals. It is palatable in the spring, and cures well on the stem, making good fall and winter forage. It is also the host plant of the endangered Mardon Skipper butterfly.

## 12. California oatgrass

**Origin:** Native.

**Description:** California oatgrass is a long-lived perennial bunchgrass with stems that grow 1 to 3.3 feet tall. The leaf sheaths are smooth to densely hairy. Leaves are both basal and attached to the stem. The upper blades are flat to in-rolled. It flowers between May and early July. Seed heads are distinctive with 1 to 6 broadly spreading spikelets.



**Habitat:** California oatgrass can be found at elevations between 500-7000 feet, growing in diverse climates, ranging from the cool, humid conditions near the coast to the hot, dry environments in inland valleys and foothill woodlands.

**Uses:** It is well utilized by livestock, and is a basic range land grass. California oatgrass is recommended for re-vegetation, wildlife plantings, and restoration of oak savannas, transitional wetlands, and upland prairies, especially in the Pacific Coast states.

### 13. Desert parsley (several species)

**Origin:** Native.

**Description:** There are many species of desert parsley. Many have finely dissected leaves. The plant can grow to 3 inches high and 10 inches wide from a taproot. The leaves of many species are similar to parsley leaves, and lead-gray in color because of an insulation of silky hairs. Most species flower very early in the spring, and have yellow flowers in



clusters. The flowers of a few species are white or purple. Fruits are up to 0.15 inch long, 0.1 inch wide, football shaped, and 2-seeded. The seeds are very similar to those of dill, and have papery "wings." The seeds often have a strong odor.

**Habitat:** Habitat is prairie grasslands, eroded slopes, glades, and rocky open ground. It cannot grow in shade.

**Uses:** The cooked root of several species can be dried and ground into a powder and then be mixed with cereal flours or added to soups etc. The leaves are edible and said to taste like parsley. However, please do not collect the plants on the national monument.

## 14. Coyote mint



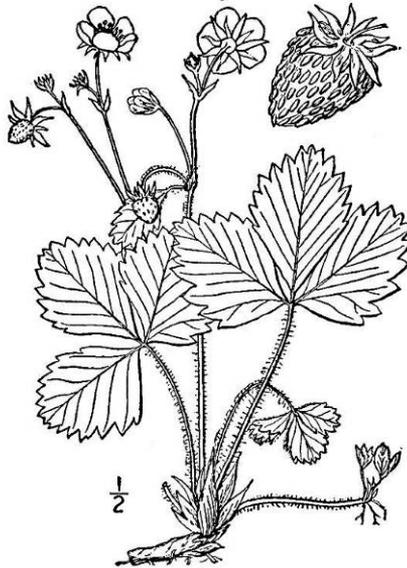
**Origin:** Native.

**Description:** Coyote mint is an attractive, scented perennial with numerous stems arising from 4 to 20 inches in height. The older stems become somewhat woody below. The leaves have very short stalks and they are arranged opposite on the stem. The leaves are lance-like to elliptical in shape. The inflorescence is a tight head of numerous slender, red-purple to pink flowers.

**Habitat:** Dry slopes and rocky banks from low elevations to well into mountains.

**Uses:** A strong aromatic odor can be detected from the plant. In the past, the plant was used to make tea for treating colds and headaches.

## 15. Woodland strawberry



**Origin:** Native.

**Description:** Woodland strawberry is an herbaceous perennial plant. The toothed leaves are thin and basal with a stem, which is generally 1 to 5 inches long. The leaves have leaflets of 3 and are sparsely hairy above. The flowers have 5 white petals with numerous pistils and 20-35 stamens. The five bractlets are often 2-lobed. The red fleshy fruit is covered with small seeds.

**Habitat:** Typical habitat is along trails and roadsides, embankments, hillsides, stone- and gravel-laid paths and roads, meadows, young woodlands, sparse forest, woodland edges, and clearings.

**Uses:** The fruit was gathered and eaten by native peoples throughout the United States and Canada. Now the fruits are still collected for domestic uses.

## 16. Rabbitbrush



**Origin:** Native.

**Description:** Gray rabbitbrush also known as common rabbitbrush is a shrub typically 1 to 4 feet in height. Usually several erect stems arise from the base and branch to create a rounded form. Branches are covered with felt-like white hairs. Leaf shape is generally linear, and leaf length can range from 0.7 to 2.5 inches. Like branches, leaves are typically covered with white hairs and appear to be gray in color. Rabbitbrush becomes very attractive when it blooms in late summer in a showy display of bright-yellow clusters of flowers.

**Habitat:** This shrub grows well in sandy, gravelly, or clay-alkaline soils. It grows well on disturbed areas.

**Uses:** This shrub is an excellent plant for erosion control because it has deep roots. It is also browsed by wild and domestic animals.

## 17. Snowberry



**Origin:** Native.

**Description:** Snowberry is a shrub that usually grows 1 to 4 feet tall. The leaves are 0.6 to 2 inches long, rounded, entire or with one or two lobes at the base. The flowers are small, white to creamy, with a strong unpleasant odor; numerous in a rounded cluster; blooming from mid May to July. The fruits are roundish, dull-white berries about 0.4 inch in diameter, eventually becoming blackish, ripening August or September.

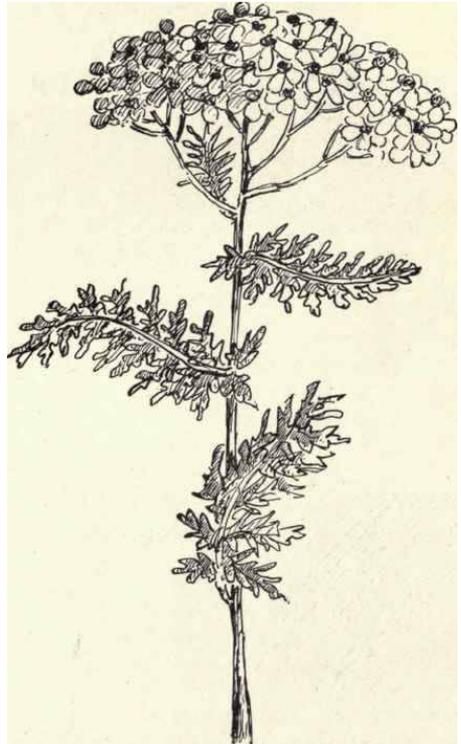
**Habitat:** It is found along stream banks, in swampy thickets, moist clearings and open forests at sea level to middle elevations. It tolerates a variety of soil types but grows best in heavy clay soils. Snowberry grows well in sun or shade.

**Uses:** It is an important food source for many types of livestock and wildlife. The fruits were used by Native Americans as medicine, however, they used snowberries with great caution as the fruits are slightly poisonous.

## 18. Common yarrow

**Origin:** Native.

**Description:** Common yarrow is a perennial herb that produces one to several stems (8 to 16 inches tall) from a fibrous underground rootstock. Leaves are evenly distributed along the stem, with the leaves near the middle and bottom of the stem being the largest. The leaves have varying degrees of hairiness. Leaf blades are lance-shaped in outline, but are finely divided. The cluster of "flowers" are actually composed of little flower heads that look like individual flowers. The petals are whitish to yellowish-white. The plant commonly persists from May through June.



**Habitat:** Common yarrow is frequently found in the mildly disturbed soil of grasslands and open forests.

**Uses:** Native Americans used common yarrow leaves to treat headaches and other pains.

## 19. Thimbleberry



**Origin:** Native.

**Description:** Thimbleberry is a dense shrub up to 8 feet tall, often growing in large clumps which spread through the plant's underground rhizome. Unlike most other members of the genus, it has no prickles on the stems. The leaves are palmate (hand-shaped), up to 8 inches across, with five lobes; the leaves are soft and fuzzy in texture. The flowers are 1 to 2.5 inches in diameter, with five white petals. It produces red fleshy fruits, which ripen to a bright red in mid to late summer.

**Habitat:** Open to wooded, moist to dry places from the plains to subalpine mountain slopes.

**Uses:** The fruits are nutritious and used for food by both human and wildlife. Leaves have medicinal use.

## 20. Tall Oregon-grape



**Origin:** Native.

**Description:** Tall Oregon-grape is an evergreen shrub with short vertical stems, mostly under 5 feet tall. The leaves are compound, with 5 to 7 leaflets; each leaflet is strongly toothed and somewhat resembles holly. Leaflets are shiny and more so than dwarf Oregon-grape. The flowers and fruit are like those of other Oregon-grapes. The ripened fruits are small, purplish black. They are edible and have a sour flavor. The plant blooms in March and April with small yellow flowers in clusters.

**Habitat:** The plant is adapted to a wide range of conditions. It can be found growing in dry to moist soils, and sites that vary from exposed to shady.

**Uses:** Fruits can be used for food by both human and wildlife. The plant is well-adapted to dry, exposed sites, making it suitable for many restoration projects.

## References:

- Bull thistle*. US Forest Service. Retrieved July 2011 from [http://www.na.fs.fed.us/fhp/invasive\\_plants/weeds/bull-thistle.pdf](http://www.na.fs.fed.us/fhp/invasive_plants/weeds/bull-thistle.pdf)
- Common Teasel (Dipsacus fullonum subsp. sylvestris)*. Wisconsin Department of Natural Resources. Retrieved July 2011 from [http://dnr.wi.gov/invasives/fact/teasel\\_com.htm](http://dnr.wi.gov/invasives/fact/teasel_com.htm)
- Desert Parsley*. Utah State University. Retrieved July 2011 from <http://extension.usu.edu/rangeplants/htm/desert-parsley/>
- Fragaria vesca*. US Forest Service. Web. Retrieved July 2011 from <http://www.fs.fed.us/database/feis/plants/forb/fraves/all.html>.
- Greg Gremaud & Tim Smith. *Teasel Alert!* Missouri Department of Conservation. Retrieved from <http://mdc4.mdc.mo.gov/Documents/173.pdf>
- Hedgehog dogtail*. Garry Oak Ecosystems Recovery Team Society. Retrieved July 2011 from [http://www.goert.ca/documents/InvFS\\_cynoechi.pdf](http://www.goert.ca/documents/InvFS_cynoechi.pdf)
- Idaho fescue*. Montana State University. Retrieved July 2011 from <http://animalrangeextension.montana.edu/articles/forage/species/grasses/Idaho-fescue.htm>
- PLANTS Profile for Achillea millefolium L. (common yarrow)*. USDA. Retrieved July 2011 from <http://plants.usda.gov/java/profile?symbol=ACMI2>
- PLANTS Profile for Bromus tectorum L. (cheatgrass)*. USDA. Retrieved July 2011 from <http://plants.usda.gov/java/profile?symbol=B RTE>

*PLANTS Profile for Danthonia californica Bol. (California oatgrass).* United States Department of Agriculture (USDA). Retrieved July 2011 from <http://plants.usda.gov/java/charProfile?symbol=DACA3>

*PLANTS Profile for Festuca idahoensis Elmer (Idaho fescue).* USDA. Retrieved July 2011 from <http://plants.usda.gov/java/profile?symbol=FEID>

*PLANTS Profile for Fragaria vesca L. (woodland strawberry).* United States Department of Agriculture (USDA). Retrieved July 2011 from <http://plants.usda.gov/java/profile?symbol=FRVE>

*PLANTS Profile for Gaultheria L. (snowberry).* United States Department of Agriculture (USDA). Retrieved July 2011 from <http://plants.usda.gov/java/profile?symbol=GAULT>

*PLANTS Profile for Phleum pratense L. (Timothy).* USDA. Retrieved July 2011 from <http://plants.usda.gov/java/profile?symbol=PHPR3>

*PLANTS Profile for Taeniatherum caput-medusae (L.) Nevski (medusahead).* USDA. Retrieved July 2011 from <http://plants.usda.gov/java/profile?symbol=TACA8>

*Record of Decision and Resource Management Plan (August 2008).* Cascade Siskiyou National Monument. Bureau of Land Management . Retrieved July 2011 from [http://www.blm.gov/or/districts/medford/plans/files/CSNM%20ROD%20and%20RMP\\_8-15-08.pdf](http://www.blm.gov/or/districts/medford/plans/files/CSNM%20ROD%20and%20RMP_8-15-08.pdf)

*St. John's wort.* National Invasive Species Information Center, USDA. Retrieved July 2011 from <http://www.invasivespeciesinfo.gov/plants/stjohnswort.shtml>

*Tall Oregon-grape*. Washington Association of Conservation Districts.  
Retrieved July 2011 from  
<http://sanjuan.wsu.edu/mastergardeners/documents/TallOregonGrape.pdf>

*Thimbleberry Rubus parviflorus Nutt.* Montana Plant Life. Retrieved July  
2011 from [http://montana.plant-life.org/species/rubus\\_parvi.htm](http://montana.plant-life.org/species/rubus_parvi.htm)

*Tragopogon dubius*. US Forest Service. Retrieved from  
<http://www.fs.fed.us/database/feis/plants/forb/tradub/all.html>

*Yellow starthistle*. National Invasive Species Information Center, USDA.  
Retrieved July 2011 from  
<http://www.invasivespeciesinfo.gov/plants/yellowstar.shtml>