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Poisonous Plants of Central Idaho

(Plants that Bite Back!)

Every year, many adults and children become seriously ill by consuming poisonous wild plants. Sometimes this poisoning is accidental, and sometimes poisoning is the result of the misidentification or misuse of medicinal herbs. Our beloved animal companions (dogs, horses, llamas, etc.) may also fall victim to poisonous plants.

As a public service, the Boise National Forest has prepared this brief field guide to the poisonous plants commonly found in central Idaho. We hope this information enhances your recreation experience. Most of the flowers and plants in the forest are harmless, so please don't think the woods are full of danger. Take the time to be informed and enjoy nature in a safe and informed way.

For more information on poisonous plants, contact your public library, your local National Forest botanist, or one of these internet websites:

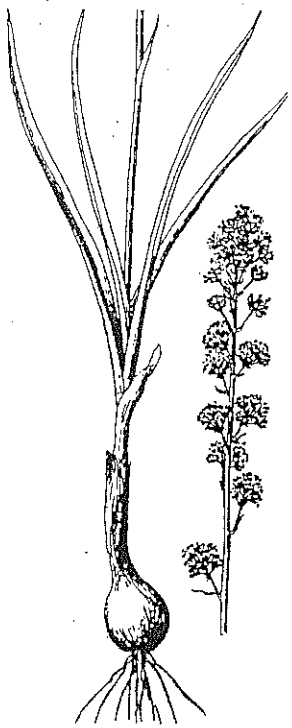
http://chipmunk.apgea.army.mil/ento/plant.htm
http://herb.biol.uregina.ca/liu/bio/botany/shtml

If you are poisoned, call the local Poison Control Center at

1.800.860.0620.

Death Camas (*Zygadenus* spp)

The grass-like leaves of death camas can be confused with wild onions (though death camas lacks the distinctive onion odor) and blue camas (death camas flowers are creamy white). This plant is common in grasslands and shrublands throughout our area. The entire plant is highly toxic and fatal to both humans and animals. Poisoning symptoms include profuse salivation, burning lips, mouth numbness, thirst, stomach pain, vomiting, diarrhea, confusion, slow irregular heart beat, low blood pressure and low temperature, difficulty breathing, coma, and death.

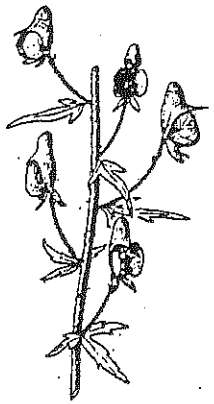


poisonous unless thoroughly cooked. The fronds can be toxic to horses or llamas if consumed in quantity over a period of a week or more.

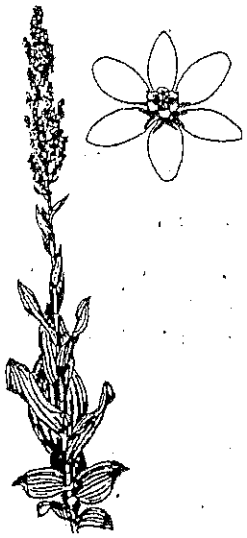
Flowering Plants

Monkshood (*Aconitum columbiana*)

The distinctive flowers of the moisture loving monkshood are typically blue, but a white flowered form is fairly common. The foliage of monkshood is similar to the closely related western larkspur. All parts of the monkshood plant are extremely toxic if eaten. Poisoning symptoms include general weakness, and eventual respiratory paralysis. Abdominal pain and nausea may also occur. A fatal dose for an average dog is 0.2 ounces (5 grams) and horses are killed by doses as small as twelve ounces (350 grams).



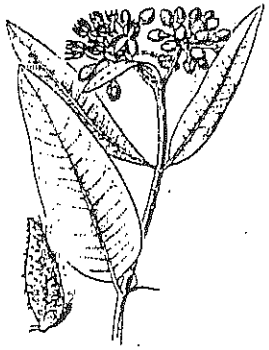
Corn Lilly (*Veratrum* spp)



Corn lily is common in forested areas where the soil is consistently moist. It is a tall, erect plant, all parts of which are highly toxic and potentially fatal. The highest concentration of toxins are in the roots. Early spring foliage seems to be more poisonous than mature leaves. Poisoning symptoms include burning sensations in the mouth, vomiting, diarrhea, sweating, blurred vision, hallucinations, and general paralysis. It may cause birth defects if consumed by pregnant females. The occasional cases of human poisoning have been attributed to misuse of medicinal preparations. *Veratrum* species are used medicinally to treat high blood pressure though doses are difficult to standardize. This plant was used medicinally by American Indians for external afflictions and as a local anaesthetic. It was also occasionally used in cleansing rites as a purgative.

cardiac glycoside, a chemical that can cause heart failure. Dogbane is especially toxic to dogs. The bitter taste of this plant makes accidental poisoning unlikely. This plant is sometimes used in herbal remedies and its misuse can cause poisoning. A similar species called Indian hemp (*Apocynum cannabinum*) is tall, upright, and commonly found near low elevation wetlands. It too contains the cardiac glycoside found in dogbane. Indian hemp was used fiber source for rope and twine by American Indians.

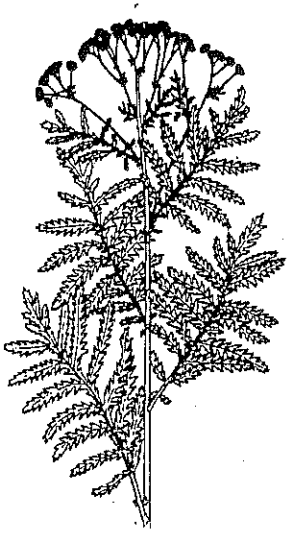
Milkweed (*Asclepias speciosa*)



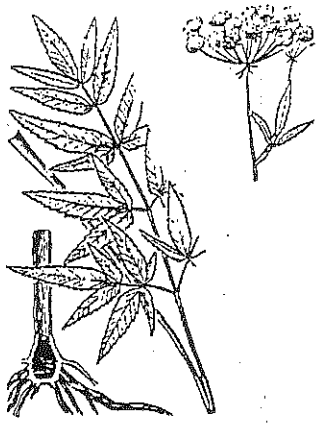
Milkweed is typically found in dry habitats, especially in dry, disturbed areas like roadsides, pastures, and dry streambeds. Although eating milkweed is rarely fatal to humans (because it tastes nasty), livestock occasionally die from eating it. Young shoots of milkweed can be eaten, but only after thorough cooking. Never eat parts of mature plants. Milkweed sap can cause a rash on people with sensitive skin.

and potentially fatal. Nightshade most often poisons children who have been tempted to eat the bright-red, ripe berries. Although the unripe, green fruit is more toxic than the ripe fruit, children have died from consuming both (so don't take any chances). The toxicity of nightshade varies with the growing conditions of plant. Symptoms of poisoning include abdominal pain, thirst, restlessness, flushing, and skin irritation. In severe cases, victims may experience vomiting, difficulty breathing, dilated pupils, diarrhea, bloody urine, loss of sensation, and even death.

Tansy (*Tanacetum vulgare*)



Tansy (not to be confused with tansy ragwort) is a widespread, tall, strong scented herb, with deeply toothed leaves. It is common in disturbed areas at low elevations. The entire plant is toxic and capable of causing severe illness and sometimes death. Tansy is sometimes misused as an

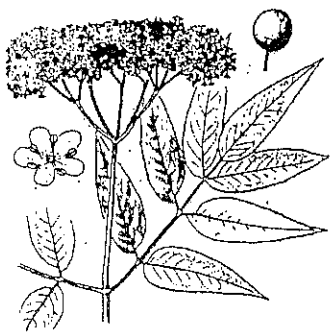


inside of the base is divided into a series of distinctive hollow chambers (the chambers may be poorly developed in younger plants). This is the most poisonous plant in North America; unfortunately, it is sometimes mistaken for look-alike edibles. The entire plant is fatally poisonous if ingested but the root is most toxic (a piece of root the width of a finger can kill an adult human). When cut, the root exudes a yellow juice that contains the toxin. Symptoms occur within 15 minutes to one hour after ingestion and include nausea, excessive salivation and frothing at the mouth, vomiting, violent convulsions, and usually death.

Poison hemlock (*Conium maculatum*) Introduced from Europe, poison hemlock is easily identified by its purple-spotted stems. The plant emits a mousy smell when bruised or crushed. Poison hemlock grows in disturbed soils and is often weedy. The entire plant is highly toxic,

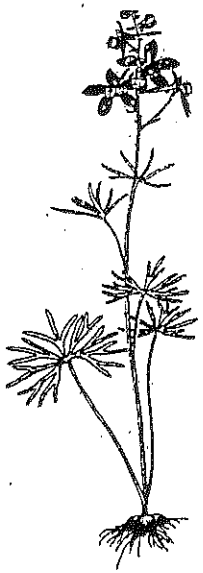
even the smoke of burning plants) is allergenic, causing severe and continuing skin irritation on contact for most people. You can also be poisoned by secondary contact with tools or clothes that have touched poison ivy. The fluid in poison ivy induced blisters contain the compound that causes the infamous reaction and can cause further contamination (so don't pop those blisters).

Elderberry (*Sambucus* spp.) Elderberries are common along forest roads throughout central Idaho. The leaves, stems, bark, and roots contain compounds that are strongly purgative and cyanide producing. Eating uncooked berries may cause nausea, vomiting, and diarrhea. Children can get sick from using hollow elder stems for peashooters or whistles. Elderberry flowers and fruits are edible when cooked and are commonly used to make wine and jelly. Elderberry stems and roots were used medicinally as an emetic by American Indians.



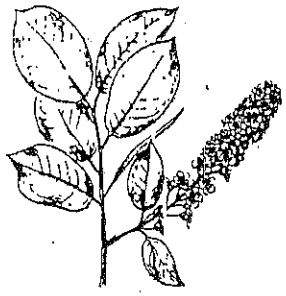
Livestock will generally avoid this plant unless there is little else to eat.

Hound's Tongue (*Cynoglossum officinale*) Hound's tongue is a very attractive plant with dull reddish or purple flowers. It is common in pine and Douglas-fir forests. Eating any part of the hound's tongue plant can cause permanent and irreversible liver damage.



Larkspurs (*Delphinium* spp.) There are many species of larkspur in our area. The most common ones are blue, but white flowered forms are not uncommon. A tall species (western larkspur) is found along streams in forested areas. A short species, (Nuttall's larkspur) is found in dry soils in both forests and shrublands. Symptoms of poisoning include general weakness and

Cherries (*Prunus* spp.)

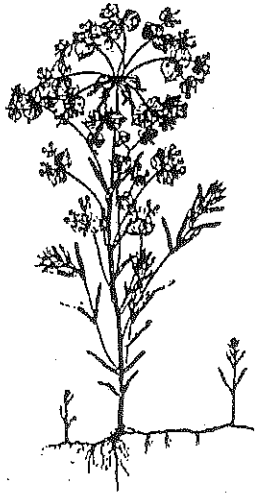


Chokecherry

Wild cherries are found throughout central Idaho. Although the fruits of wild cherry are enjoyed by literally thousands of people every year, there have been a few cases of children being poisoned by eating large number of seeds along with the cherries. Cherry seeds, leaves, bark, and shoots contain cyanide producing compounds. These compounds have caused livestock deaths. Cyanide poisoning initially causes rapid breathing followed by slow and difficult breathing, anxiety, confusion, headache, low blood pressure and rapid heart rate. Convulsions, coma, and death can occur rapidly. There are two species of cherries in our area: the popular chokecherry (used for jams and syrups) and the less palatable bittercherry (a favorite of songbirds).

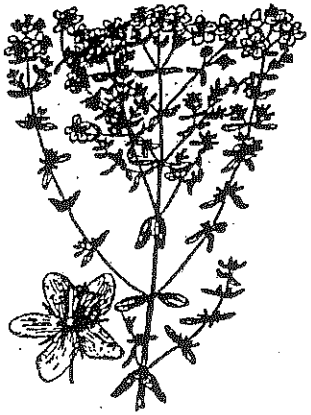
Bittercherry

spurge poisoning include convulsions, burning at the mouth, fluid build-up in lungs, and constriction of pupils. Even licking your fingers after handling the plants can cause burning lips and tongue. The milky sap of spurge may cause a rash or blistering in people with sensitive skin.

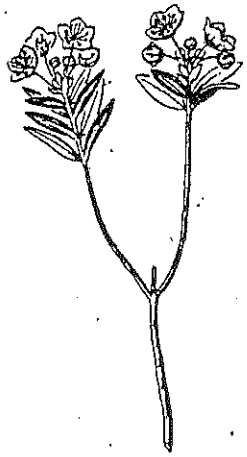


Klamath Weed or St. Johnswort (*Hypericum perforatum*)

Klamath weed is an erect herb with opposite leaves, and bright yellow flowers commonly found in dry areas at low elevations. This species has minute oily droplets on the stems that can cause a skin rash on people with sensitive skin. Consuming large

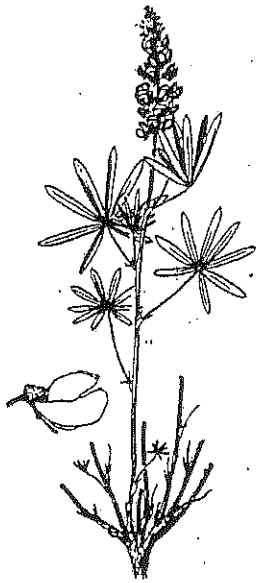


quantities of Klamath weed may cause convulsions, increased heart-rates and temperature, diarrhea, and even blindness in both humans and animals. Animals often survive Klamath weed poisoning only to die from secondary complications, such as failure to eat. This plant has long been used in herbal remedies, and was recently identified as an effective treatment against some forms of depression.



Mountain Laurel (*Kalmia polifolia*) Commonly found in wet, high mountain meadows, the mountain laurel is an attractive, but deadly plant. All parts are poisonous and can be fatal to both humans and animals. After initial consumption, the victim will experience burning lips, mouth, and throat, followed six hours later by nausea, vomiting, abdominal pain, low blood pressure, drowsiness, convulsions, weakness, and progressive paralysis followed

by coma and death. Children have been poisoned by merely sucking on the flowers of this plant. Even honey made from mountain laurel pollen is toxic. Mountain laurel is sometimes confused with Labrador tea (*Ledum* species).



Lupines (*Lupinus* spp.) Lupines are found in a wide range of habitats. All lupines share the characteristic leaf shape seen in the accompanying picture. All parts of lupines are toxic, especially spring foliage, flowers, and fruits. Lupine consumption by pregnant females can cause birth defects. Documented cases show cows and goats that eat lupines can pass toxins through their milk. Deformities in puppies and human babies have been linked to lupine contaminated milk consumed by pregnant females. Death from lupine poisoning is rare among humans but livestock that eat lupine in great quantities may die.

eventual respiratory paralysis. Abdominal pain and nausea are also commonly experienced. Young plants and seeds contain the highest amounts of toxins and poisonings are more common in animals than humans.

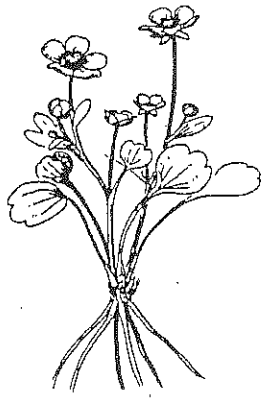
Steer's Head (*Dicentra uniflora*)

Related to the gardener's bleeding hearts, steer's head grows in rich, well-drained, organic soils throughout the northwest. Death in humans is rare but symptoms may include vomiting, diarrhea, severe trembling, and difficulty in breathing. Children are at greater risk than adults.

Spurge (*Euphorbia* spp.)

There are many species of spurge. In our area, the noxious leafy spurge (*E. esula*) is most common. Plants bleed a milky juice when cut or bruised. People have died from consuming dried plants, fruits, and seeds. Symptoms of

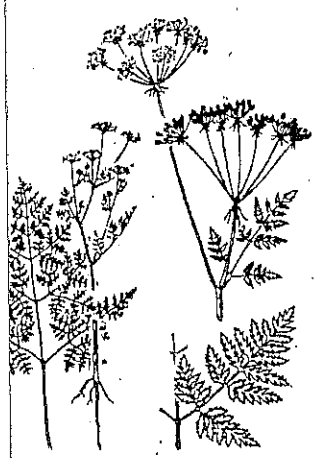
Buttercups (*Ranunculus* spp.)



There are many species of buttercups in our area. They typically have shiny yellow flowers and are most often found in areas with wet or damp soils. Fresh plants often contain irritant oils which can cause blistering of the mouth and digestive tract though this is almost never fatal. Some buttercup species are more toxic than others and some species are used as medicinal herbs. Buttercups are considered more toxic to grazing animals than humans.

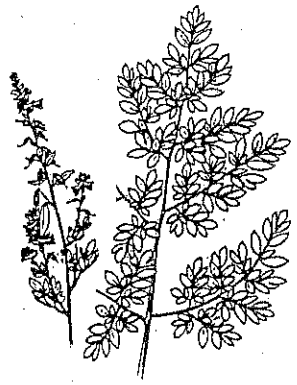
Poison Ivy (*Rhus radicans*)

Poison ivy, our most familiar poisonous plant, occurs in many low and mid-elevation habitats. Its growth form can vary from a low shrub to a trailing vine. The entire plant (stems, flowers, pollen, and



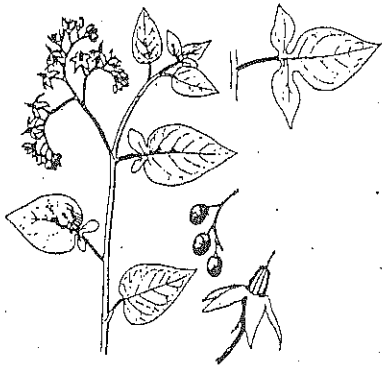
especially for children. It is more toxic in warm, sunny weather, and young foliage is more toxic than mature foliage. Symptoms of poisoning include an initial stimulation of the nervous system followed by severe depression of nervous system responses, slowing of the heart, paralysis, and eventually respiratory paralysis. Small quantities of poison hemlock ingested by pregnant females may cause birth defects. This is the plant used to silence the philosopher Socrates in 339 BC.

Fitweed (*Corydalis caseana*)
Fitweed is common in forested wetlands and along streams at modest elevations throughout central Idaho. It is especially toxic to livestock though it is generally not considered harmful to humans.

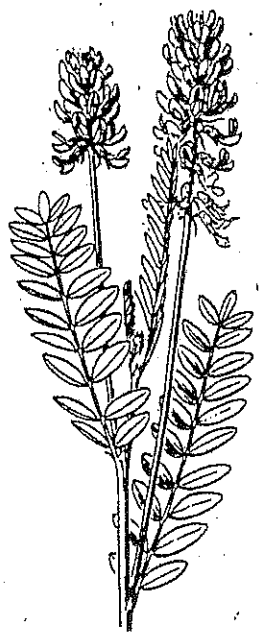


Tansy Ragwort (*Senecio jacobaea*) All parts of this common, yellow-flowered, wasteland weed are toxic, potentially carcinogenic, and may cause severe liver damage. This plant is seldom immediately fatal to humans. Milk from cows that have eaten tansy ragwort and honey from bees that pollinate its flowers can cause the same ill effects as consuming the plant directly. Livestock that eat tansy ragwort over extended periods may die.

Nightshade (*Solanum dulcmara*)
The deadly nightshade is a common, slender vine often found in low elevation streambeds and other shaded, wet places. The entire plant, especially its unripe fruit, is toxic



Locoweeds and Milkvetches (*Astragalus* spp.)

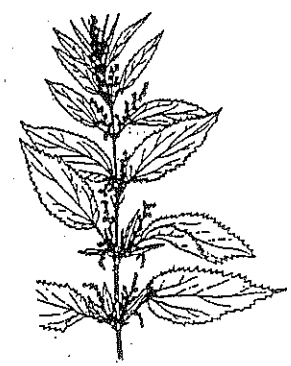


The genus *Astragalus* is the most diverse group of flowering plants in the world. Many species of *Astragalus* are valuable forage for livestock (milkvetches), but a few varieties (the locoweeds) are poisonous. Locoweeds pose little danger to humans as the toxic effects generally requires consuming large quantities of plant material (the seeds and pods are more toxic). Locoweeds can be addictive to horses. Animals "hooked" on locoweed will commonly display noticeable changes in behavior, may shun all other foods, and may eventually die.

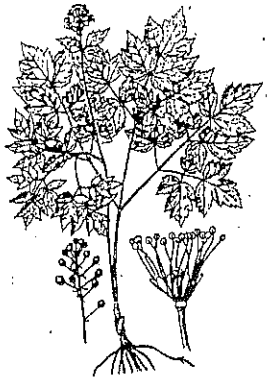
Water Hemlock (*Cicuta douglasii*) Common in damp ground and shallow water, the water hemlock can be identified by its thick, fleshy, underground stem-base. The

herbal tea. Poisoning symptoms include rapid and feeble pulse, stomach lining inflammation, spasms and convulsions. The dried leaves and flowers have been used to kill intestinal worms, promote menstruation, and cause abortion.

Stinging Nettle (*Urtica dioica*) Stinging nettle is common in wet areas throughout the forests of central Idaho. This thin, upright nettle usually occurs in dense patches. Stinging nettle causes extreme discomfort when touched. Tiny hairs on the stem and leaves break off readily and leave small amounts of a very irritating chemical in your skin. People differ greatly in their sensitivity to stinging nettle and different areas of your body may be more sensitive to it. Young stinging nettle leaves can be eaten if cooked properly. Never eat nettle flowers.



Baneberry (*Actea rubra*)



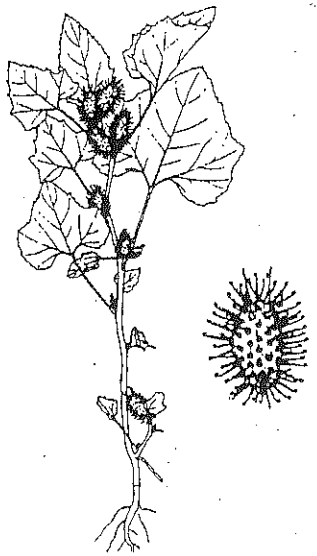
Baneberry is found in wetlands and commonly grows to three feet tall. All parts of this plant are poisonous if eaten, but the roots and berries are especially toxic. While death from baneberry poisoning is rare, symptoms can be extremely uncomfortable and include vomiting, delirium, and stomach cramps lasting up to three hours. Symptoms may be worse for children than adults. The berries of the baneberry plant are bright and colorful and are especially attractive to children. Baneberry was used as a medicinal plant by American Indians.

Dogbane (*Apocynum androsaemifolium*)

Dogbane is a low-growing plant common in a wide range of dry habitats. It has milky sap and pink, waxy flowers. The toxic compound in dogbane is a

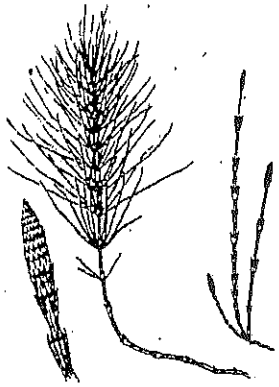
Cocklebur (*Xanthium strumarium*)

Cocklebur is a coarse weedy annual herb introduced to America from Europe. It is most often found along river banks and lake shores. No human poisonings from cocklebur are known but seeds and seedlings are toxic and potentially fatal to animals.



People with sensitive skin may develop a rash from handling the plant. Cocklebur is sometimes confused with burdock (*Arctium* spp.) which is a larger plant having more spherical burs. Burdock may also cause dermatitis in sensitive individuals but it is not poisonous. Burdock root can be eaten as a raw vegetable.

Ferns and Their Allies



Horsetails and Scouring Rushes (*Equisetum* spp.) Horsetails are common in moist, coarse-textured soils. The most common species in forested areas has "leafy" stems, but lowland varieties are typically leafless. Although the rough texture of horsetails is enough to keep most people from eating them, young children and horses can eat enough to cause a stomach ache. American Indians and early settlers used these plants to scrub cooking utensils.

Bracken Fern (*Pteridium aquilinum*) This large fern is common in areas of disturbed forest land such as roadsides and old timber sale areas around central Idaho. The fronds and fiddlenecks (emerging fronds) are

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