

### Toxic Plants of Kittitas County

Family	Genus	Species	Common Name	Toxicity Rating	Toxic plant part(s)	Symptoms of poisoning	Toxic principle	Affected livestock	Distribution in Kittitas County
Borage	<i>Amsinckia</i>	<i>intermedia</i>	Fiddleneck	High -- 20 lbs. single dose or cumulative	All, especially the seeds	Hepatic cirrhosis, dermatitis, aimless wandering, head pressing	Pyrrrolizidine alkaloids	all, esp. in hay or contaminated grain	Common
Borage	<i>Cynoglossum</i>	<i>officinale</i>	Houndstongue	High -- 0.6 - 2% of hay, 1 plant per day for a week, or cumulative	all, generally not palatable except in hay	Dullness, wandering, increased pulse and respiration, weakness, death from liver hemorrhage	Pyrrrolizidine alkaloids	cattle, horses, sheep less so	Common
Buckwheat	<i>Rumex</i>	<i>crispus</i>	Curly Dock	Low -- large quantities	Top, leaves, stem	muscle tremors, tetany, weakness, reluctance to move, coma, death	Soluble oxalates	Sheep, Cattle, and horses	Common
Buttercup	<i>Aconitum</i>	<i>spp.</i>	Monkshood	High -- Small quantities	all	Labored breathing, irregular heart beat, weakness, muscle spasms, death	Diterpene alkaloids	all	Rare
Buttercup	<i>Delphinium</i>	<i>spp.</i>	Larkspur	Very High -- 1 lb. Cattle appear to be attracted to it	all, fresh or dry	Constipation, bloat; death from respiratory and cardiac failure. Livestock deaths are common	Diterpene alkaloids	all, esp cattle	Occasional
Buttercup	<i>Ranunculus</i>	<i>spp.</i>	Buttercups	Low -- large quantities, may develop a taste for plant	All	Mouth blisters, salivation, diarrhea	Glycoside (ranunculin)	all	Common
Dogbane	<i>Apocynum</i>	<i>spp.</i>	Dogbane	High -- 0.5 - 1 oz./100 lbs body weight	All, especially leaves and stems	Dilation of pupils, sore mouth, sweating, death	Cardiac glycosides	horses, cattle, sheep goats	Occasional
Fern	<i>Pteridium</i>	<i>aquilinum</i>	Bracken Fern	Low -- cumulative, 20% of diet	all, fresh or dry	Loss of weight, depression, body weakness, convulsions	Thiaminase, tannins, cyanogenic glycosides	Cattle, horses, sheep	Occasional--upper county
Figwort	<i>Digitalis</i>	<i>purpurea</i>	Foxglove	Very High -- 0.25 lb.	all	Contracted pupils, labored breathing, convulsions, death is likely if ingested	Cardiac glycosides	all	Rare---occasionally in upper county
Frumitory	<i>Dicentra</i>	<i>spp.</i>	Bleeding Heart, Steer's head	Moderate -- generally avoided but may eat in early spring	All	Shaking, staggering, excessive salivation, labored breathing, abdominal pain, convulsions	Alkaloids	Cattle and horses	Occasional; also as ornamentals
Goosefoot	<i>Kochia</i>	<i>scoparia</i>	Kochia	Low -- Prolonged grazing (30 days)---useful forage otherwise	Mainly the seeds, increased when stressed	Photosensitization, aimless walking, blindness, gastrointestinal distress	Nitrates, saponins, oxalates	Cattle, horses, sheep	Common
Grass	<i>Sorghum</i>	<i>spp.</i>	Sudan grass, Johnson grass	Low -- large quantities, cumulative	all; safe forage unless stressed	Posterior ataxia, Mucous membranes appear cherry-red, Open mouth breathing,	Cyanogenic glycosides, nitrates	Cattle, sheep, horses	Occasional
Heath	<i>Ledum</i>	<i>glandulosum</i>	Labrador Tea	High -- small % of body weight	All, esp. leaves	Slow/irregular heart rate, blurred vision, excessive salivation, vomiting, colic, labored breathing, coma, death	Diterpenoid compounds	All	Occasional
Honeysuckle	<i>Sambucus</i>	<i>spp.</i>	Elderberry	Low -- if ingesting young shoots, leaves, or bark. Uncooked berries may cause nausea	All, esp. leaves and bark. Berries safe to eat in small amounts if cooked	Stomach pain, nausea, vomiting, diarrhea, weakness, possible death in severe cases	Cyanogenic glycosides	Cattle, sheep , pigs,	Common
Horsetail	<i>Equisetum</i>	<i>spp.</i>	Horsetail, Scouring rush	Low -- large quantities, cumulative	all	Weight loss, weakness, central nervous system disorders, death	Thiaminase	horses, esp. in hay	Common
Iris	<i>Iris</i>	<i>spp.</i>	Iris	Low -- large quantities	all	gastrointestinal distress	Irritant resin	all	Common
Lily	<i>Veratrum</i>	<i>californicum</i>	False hellebore	Low -- large quantities, but is readily eaten by sheep & goats	All	Burning in mouth and throat, salivation, vomiting, paralysis, reproductive problems (monkey face in lambs)	Steroidal alkaloids	Cattle, sheep, and goats	Common
Lily	<i>Zigadenus</i>	<i>spp.</i>	Death camas	High -- Sheep - 0.5 - 2 lbs. Cattle - 5 - 10 lbs.	All, esp. new growth	Weakness, prostration, convulsions, coma, death	Steroid alkaloids	Cattle, horses, sheep, llamas, goats	Occasional
Milkweed	<i>Asclepias</i>	<i>speciosa</i>	Showy milkweed	High -- .05 - 2% body weight	all, fresh or dry	Staggering, depression, weakness, dilated pupils, coma, death	Cardiac glycosides	all	Common
Mustard	<i>Brassica</i>	<i>spp.</i>	Mustards	Low -- Large; excessive consumption--safe forage otherwise	all, fresh or dry	Not life threatening, causes repeated colic if hay is substantially contaminated; has also been known to cause Congenital Hypothyroid Dysmaturity Syndrome in foals	Mustard oils, goitrogenic glycosides	all	Common
Mustard	<i>Descurainia</i>	<i>pinnata</i>	Tansy mustard	Low -- cumulative, large quantities, prolonged grazing	all	Blindness, inability to use tongue, aimless wandering, weight loss	Unknown	Cattle, horses, pigs	Occasional
Mustard	<i>Thlaspi</i>	<i>arvense</i>	Pennycress	Low -- large quantities, possible in hay or grain	Seeds & leaves, fresh or dry	Gastrointestinal distress, peeling skin, in severe cases paralysis and possible death	Glucosinolates	All	Common

Nightshade	<i>Datura</i>	<i>stramonium</i>	Jimsonweed	Very High -- 0.08% body weight	all, generally unpalatable	Paralysis, delirium, respiratory paralysis & death is likely	Tropane alkaloids	all	Rare
Nightshade	<i>Hyoscyamus</i>	<i>niger</i>	Black Henbane	High -- small quantities	all, fresh or dry	Effects central nervous system with stimulatory and hallucinatory effects	Tropane alkaloids	all	Very Rare
Nightshade	<i>Solanum</i>	<i>spp.</i>	Nightshade	High -- 1-10 lbs.	all	Diarrhea, incoordination, paralysis, convulsions, death	Steroidal glycoalkaloids	All esp. cattle and pigs	Common
Parsley	<i>Cicuta</i>	<i>douglasii</i>	Water hemlock	Very High -- 0.2 - 0.8 lb	all	Violent central nervous system effects, rapid and violent death is likely	resinoid (cicutoxin)	all	Common
Parsley	<i>Conium</i>	<i>maculatum</i>	Poison hemlock	High -- 1 - 10 lbs.	all	Paralysis, respiratory failure & death, birth defects	Piperidine alkaloids	all	Occasional
Pea	<i>Astragalus</i>	<i>spp.</i>	Milkvetches and locoweeds	Moderate -- 30% bodyweight but acquire a taste for it and seek it out	all	Respiratory distress, paralysis, depression, vacant staring, head pressing, belligerent, reproductive problems	Indolizidine alkaloid	cattle, sheep, esp. horses	Occasional in shrub steppe areas
Pea	<i>Lupinus</i>	<i>spp.</i>	Lupine	High -- Sheep - 0.25 lb Cattle - 1 lb	all	Spasms, cerebral excitement, death, birth defects (crooked calf)	Quinolizidine and piperidine alkaloids	sheep, goats, horses, cattle	Common, wide variation in toxicity among subspecies
Pea	<i>Trifolium</i>	<i>spp.</i>	alsike clover, red clover	Low -- cumulative, prolonged grazing	all	blindness, depression, photosensitization, staggering gait, cirrhosis of the liver and severe kidney problems	Unknown compounds, nitrates	Cattle and horses	Occasional
Pea	<i>Vicia</i>	<i>villosa</i>	Hairy Vetch	Low -- large quantities, cumulative	plant, seeds	Skin irritation, poor appetite, diarrhea, convulsions and death from quantities of seed	unknown in plant, seeds contain cyanide	Horses and cattle	Common
Pigweed	<i>Amaranthus</i>	<i>retroflexus</i>	Redroot Pigweed	Moderate -- significant quantities, cumulative	all	Muscle weakness and tremors, ataxia, knuckling at the fetlock joints, Renal failure.	Oxalates and nitrates	Pigs, cattle	Common
Pine	<i>Pinus</i>	<i>ponderosa</i>	Ponderosa pine	Moderate -- 1.5 lbs per day	Bark, buds, needles	Causes abortion in pregnant cows, some appear more sensitive	Isocupressic acid	Cattle	Common
Rose	<i>Prunus</i>	<i>virginiana</i>	Chokecherry	High -- 4oz may be lethal to a 100 lb animal	Bark, leaves, and seeds	Blue color in mouth; rapid breathing, gasping; muscular twitching, staggering, convulsions; coma, death within hour after lethal dose	Cyanogenic glycosides	all	Common
Spurge	<i>Euphorbia</i>	<i>esula</i>	Leafy spurge	Low -- rarely grazed	Latex	Gastrointestinal irritation, dermal irritation	Diterpenes	all	Very Rare -- not known to exist in Kittitas County
Spurge	<i>Ricinus</i>	<i>communis</i>	Castorbean	Very High -- 1 oz	All	Gastrointestinal distress, vomiting, bloody diarrhea, shock, collapse, convulsions, death is likely	Lectins (ricin)	all	Very Rare, not known to exist in Kittitas County
St. Johnswort	<i>Hypericum</i>	<i>perforatum</i>	St. Johnswort, goatweed	Moderate -- Sheep - 5% body weight Cattle - 1% body weight	Leaves and flowers	Photosensitization, blisters & scabs around eyes, mouth, ears, nose, and feet; signs develop in 2d to 3wk, death rare	Phenolic compound (hypericin)	cattle, sheep, swine, goats	Common
Sunflower	<i>Acroptilon</i>	<i>repens</i>	Russian Knapweed	Low -- large quantities, cumulative	all, fresh or dry	Chewing disease, head pressing, aimless walking, death from starvation	Unknown sesquiterpene lactone	Horses	Occasional
Sunflower	<i>Centaurea</i>	<i>solstitialis</i>	Yellow starthistle	Low -- Cumulative	all, fresh or dry	Chewing disease, head pressing, aimless walking, death from starvation	Unknown sesquiterpene lactone	Horses	Rare
Sunflower	<i>Senecio</i>	<i>jacobaea</i>	Tansy ragwort	High -- 1 - 5% animal weight, cumulative	all	Liver lesions, staggering, weakness, & death	Pyrrrolizidine alkaloids	all	Rare
Sunflower	<i>Senecio</i>	<i>vulgaris</i>	Common groundsel	High -- 1 - 5% animal weight, cumulative, similar to tansy ragwort	all	Acute & chronic liver damage, colic, death; very similar to tansy ragwort poisoning	Pyrrrolizidine alkaloids	all	Occasional
Sunflower	<i>Tanacetum</i>	<i>vulgare</i>	Common Tansy	Low -- large quantities	Leaves, stems	Salivating, abdominal pain, colic	Tanacetin	all	Common
Sunflower	<i>Tetradymia</i>	<i>canescens</i>	Horsebrush	High -- 0.5 - 0.75 lbs may cause "bighead" in sheep	Leaves, buds	Bighead in sheep, liver failure, abortion, possibly coma and death in severe cases	Tetradymol	Sheep	Occasional in shrub steppe areas
Sunflower	<i>Xanthium</i>	<i>strumarium</i>	Cocklebur	High -- 0.1 - 0.3% body weight	Seeds & seedlings, fresh or dry	Liver, gallbladder, and gastrointestinal irritation, appetite loss, vomiting, convulsions, death	Glycoside	All, esp. pigs	Occasional

#### Ornamental Trees and Shrubs

Beech	<i>Quercus</i>	<i>spp.</i>	Oak	Low -- Large quantities, 50% of diet	all, especially leaf buds, flower buds, and acorns	stop eating, become depressed, and develop intestinal stasis. Liver damage, renal damage	Tannins	Cattle sheep, goats, horses and pigs	As ornamentals; rarely found in wild
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Dogbane	<i>Nerium</i>	<i>oleander</i>	Oleander	Very high -- 0.005% of body weight	All, fresh or dry, also smoke	Appetite loss, depression, vomiting, stomach pain, irregular heart rate, death	Cardiac glycosides	All	Possible ornamental
Heath	<i>Lucothoe or Kalmia</i>	<i>spp.</i>	Mountain laurel, Sierra laurel	Very high -- 1 oz	all	Irregular heart beat, blurred vision, paralysis, foaming at the mouth, vomiting, colic, coma, death	Diterpenoid compounds	all	Possible ornamental
Heath	<i>Rhododendron</i>	<i>spp.</i>	Rhododendron, Azalea	High -- 0.2% body weight	all	Vomiting, blurred vision, salivation, colic, possibly coma and death	Diterpenoid compounds	All	As ornamentals
Maple	<i>Acer</i>	<i>rubrum</i>	Red maple	High -- 1.5 pounds of leaves	Leaves, especially when fallen, damaged, or wilted.	Breathing difficulties, jaundice, dark brown urine, and death.	unknown oxidant	Horses only	As ornamentals
Pea	<i>Laburnum</i>	<i>anagyroides</i>	Golden Chain Tree	Moderate -- ingestion of seeds or bark will cause symptoms	All, esp. bark and seeds that hang down in pods	Stiffness, staggering gait, convulsions, recumbency, death	Alkaloid (cytisine)	All	Possible ornamental
Pea	<i>Robinia</i>	<i>pseudoacacia</i>	Black & Yellow locust	High -- As little as 6.5oz	All, especially beans and bark	Digestive irritation, depression, paralysis of hindquarters, collapse	Lectins (robin), tannins	All, esp. horses and cattle	As ornamentals
Vervain	<i>Lantana</i>	<i>spp.</i>	Lantana	High -- 1% body weight	Leaves and fruit	Chronic: photosensitization, labored breathing, constipation, swollen eyelids Acute: severe bloody diarrhea, weakness, rapid heart rate, jaundice, death	Triterpenoid compounds	All	Possible ornamental
Walnut	<i>Juglans</i>	<i>nigra</i>	Black walnut	Low -- 5% of bedding with woodchips has caused laminitis in horses	Woodchips, bark, mature fruit	Immobility, depression, elevated temperature, increased heart and respiration rates, edema of lower legs, laminitis	Juglone and unknown toxin(s)	Horses	As ornamentals
Yew	<i>Taxus</i>	<i>spp.</i>	Yew	High -- 0.5 lb	All	Breathing problems, trembling, weakness, heart problems, sudden death	Diterpenoid taxanes	all	Possible ornamental

#### Mechanical Problems

Cashew	<i>Toxicodendron</i>	<i>spp.</i>	Poison Ivy, Oak		All	Dermal irritation, allergic reaction		All, especially humans	Common
Grass	<i>Bromus</i>	<i>spp.</i>	Brome, Cheatgrass		Awns	Injury to mouth, nose, and eyes		Grazing livestock	Common
Grass	<i>Hordeum</i>	<i>spp.</i>	Barley--foxtail, hare, wild		Awns	Injury to mouth, nose, and eyes		Grazing livestock	Common
Grass	<i>Setaria</i>	<i>spp.</i>	Foxtail--yellow, green, bristly		Awns	Injury to mouth, nose, and eyes		Grazing livestock	Common

**Note: new entries or suggestions welcomed - contact Tip at email listed above**