

APPENDIX 4 INVASIVE PLANTS LIST

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APPENDIX 5 INVASIVE PLANTS IDENTIFICATION

Anchusa*, *Anchusa officinalis

Other Names: Common Bugloss, Common Anchusa, Alkanet



General Description/ Identification:

Anchusa has deep taprooted perennial in the Borage Family with hairy, angular stems growing to 0.6 metres tall; lance-shaped fleshy leaves are covered with stiff hairs; deep purple to blue flowers with white centres; flower stems, initially coiled like a fiddleneck, straighten out as each bud opens; four nut-like seeds produced per flower, prefers dry, sandy to gravelly soils. Average seed production is in excess of 900 seeds per plant, is sometimes confused with blueweed (*Echium vulgare*)

Baby's Breath, *Gypsophila paniculata*



General Description/ Identification:

Baby's Breath is a much branched perennial herb with a thick, deep, woody rooting system; smooth stems grow to 1 metre; opposite, hairless, linear leaves with a prominent mid-vein grow 2 to 10 cm long; small white flowers are produced in diffusely branched clusters, an escaped ornamental originating from Eurasia and now used extensively in flower arrangements, can produce over 13,000 seeds per plant.

Black Knapweed, *Centaurea nigra***General Description/ Identification:**

Black Knapweed is a dull green plant entirely covered with small, rough hairs. Rose to purple, thistle-like blooms flower at the ends of branches. Upright stems are branched at the top, with narrow upper leaves and larger, lobed leaves below. Floral bracts have long, black fringes from a dark triangular centre which give the appearance of a black seed head.

Blueweed, *Echium vulgare*

Other Names: Blue devil, Blue-thistle, Viper's bugloss, vipérine, vipérine vulgaire, herbe aux vipers

**General Description/ Identification:**

Blueweed is a biennial to occasional annual or short-lived perennial. It is a rosette in the spring, a blueweed by late June. Grows 30 cm to 80 cm tall (0.3-0.8m) tall. It has a deep thick taproot, long narrow rosette leaves, erect stem with short 1-side branches of bright blue flowers, unequally lobed corolla with protruding stamens, its clusters of 4 hard, bony rough nutlets, and by being harshly rough-hairy throughout. It grows in dry roadsides, disturbed habitats, rocky pastures, and rangelands at low to mid elevations in British Columbia. Frequent in the central and south central areas of the province, it is a major concern in the Kootenay, Okanagan, Thompson, and Cariboo regions.

Brown knapweed, *Centaurea jacea***General Description/ Identification:**

Brown knapweed is a perennial plant originally from Eurasia. It has a woody root crown that grows 50 – 122 cm (0.5 – 1.2 m) tall. It branches near the top. Basal leaves are up to 15 cm long, tapering at both ends with the broadest part above the middle of the leaf. Stem leaves are lance-shaped, shallowly-lobed and stalkless. The stem is ridged and sometimes purple-striped. The flowers, which bloom from July to October, are rose to purple but rarely white. The somewhat hairy bracts are wider at the tips with broad, thin, papery margins. The center of the bracts are dark brown, the tips overlap the base of nearby bracts. It prefers moist, cooler conditions than other knapweed species. It can be found growing in grasslands, open woods, meadows, pastures, woodland clearings, and in cutover areas of forest. Plants can tolerate partial shade.

Bull thistle, *Cirsium vulgare* (Savi) Tenore

Other Names: CIRVU, Chardon vulgaire, Spear thistle, cirse vulgaire, pet-d'ane, piqueux

**General Description/ Identification:**

Bull thistle is a biennial. It has large, bright pink (to dark purple) flowers. Mature height ranges from 30 – 200 cm (0.3 – 2.0 m) tall. The first year grows is a rosette. It is distinguished from all other thistles by covering of short, sharp prickles on the upper, dark green surface of the leaf blade, these prickles (apart from the obvious spines along the margins, and tips of the lobes) make the surface very harsh to the touch. Its flower heads are larger than the Canada thistle, its involucral bracts (one or more whorls of bracts) surrounding the heads are more slender and usually more numerous than in Nodding thistle or Plumeless thistle and the hairs (pappus-bristles or tiny hairs, teeth, or scales, and can be too small to see without magnification) on its seeds are feather-like (have plumes) rather than being straight and unbranched as in the other two thistles. It grows in dry to moist habitats that include roadsides, cultivated fields, pastures, logged forestland, and disturbed sites. It is generally interant to shade. It is widespread and abundant in all areas of British Columbia.

Canada thistle, *Cirsium arvense* (L.) Scop

Other names: Chardon des champs, Canadian thistles, Creeping thistle, field thistle, Chardon du Canada

**General Description/ Identification:**

Canada thistle is a provincial noxious weed, perennial. It has purple (sometimes white) flowers, smaller than most thistle flowers, and spiny, dark-green, oblong leaves growing directly from the stem. Mature plants can be 30 – 200 cm (0.3 – 2 m) in height and have both horizontal and vertical roots. This is the only thistle with male and female flowers on separate plants. It prefers rich loamy soil, ample precipitation, and is somewhat shade intolerant, but it has adapted to a wide range of environmental conditions. It is widespread in all areas of British Columbia, and is considered a major concern in the Omineca and Peace River regions.

Common burdock, *Arctium minus*

Other Names: Petit bardane, Burdock, Burs, Clotbur, Lesser burdock, Wild burdock, Wild rhubarb, bardane mineure, rapace, rhubarb sauvage, toques

**General Description/ Identification:**

Common burdock is a regional noxious, biennial plant. It is well-known for producing the prickly burrs that so easily attach to clothing and animals. These are formed from the purple flowers that are scattered in rounded clusters along the stems. The leaves are toothed or wavy-edged, broad, dark green, and woolly underneath. The mature plant is 100 – 200 cm (1-3 m) tall and has a large fleshy taproot. It is found at low to mid elevations in grasslands and forests, along roadsides, ditches, stream banks, pastures, and disturbed habitats. It is frequent in coastal, west central, and southern British Columbia and a major concern in the Okanagan, Thompson, Cariboo, Omineca, and Peace regions.

Common tansy, *Tanacetum vulgare***Other Names:** Tanaisie vulgare, Tansy, tanaisie commune**General Description/ Identification:**

Common tansy is a regional noxious weed, perennial. It is an aromatic plant with numerous, yellow, button-shaped flowers in dense, flat-topped clusters at the top of the plants. Leaves are deeply divided, almost fern-like appearance. Mature plants grow 40 – 150 cm (0.4 – 1.5 m) tall with upright stems that are often purplish red and dotted with glands. It grows at low to mid elevations along roadsides, stream banks, in disturbed habitats, and pastures. It grows best in full sun and in fertile, well-drained soil. It is considered a major concern in the Kootenay, Okanagan, and Omineca regions.

Dalmatian toadflax, *Linaria genistifolia ssp. Dalmatica***Other Names:** LINDA, Broad-leaved toadflax, Wild snapdragon**General Description/ Identification:**

Dalmatian toadflax is a provincial noxious weed, perennial. It is an attractive plant with bright yellow snapdragon –like flowers and pale green heart –shaped leaves clustered around each stem. Mature plants grow to 120 cm (1.2 m) and a single plant can have up to 25 flower stems. Fast-growing horizontal roots make it an aggressive invader of farms and grasslands. It can be found at low to mid elevation in the BC Interior along roadsides, in gardens, cultivated fields, and other disturbed areas. It will tolerate low temperatures and course soil. It occurs throughout the Okanagan, Similkameen, Thompson, East Kootenay, Cariboo, Skeena and Boundary areas.

Diffuse Knapweed, *Centaurea diffusa***Other Names:** White knapweed, Tumble knapweed**General Description/ Identification:**

Diffuse knapweed is a provincial noxious weed. It is a short-lived perennial or biennial. It has hairy, grayish-green, split leaves on many branches growing from a single upright stem. The flowers are white or sometimes purple, with small, sharp rigid spines on the bracts. It has a taproot and grows to 100 cm (1m) in height. It is found on grasslands, disturbed areas, and along roadsides in both rural and urban areas. It is one of 13 knapweed species in British Columbia. It is found on grasslands, shrub lands, and dry open forests at low to mid elevations, but rarely on cultivated lands or irrigated pasture because it cannot tolerate cultivation or excessive moisture. It is found throughout southern British Columbia east of the Coast-Cascade Mountains and is considered a major concern in the Kootenay, Okanagan, Thompson, Cariboo, Omineca, and Peace River.

Field scabious, *Knautia arvensis***Other Names:** Gipsy Rose**General Description/ Identification:**

Field scabious is a regional noxious weed, perennial. It has large violet to pink, clover-like flowers at the ends of long leafless stalks. The stems are upright and hairy with coarsely toothed, feather-shaped leaves. It has a well developed woody taproot. It grows between 25 – 100 cm (0.25 – 1 m) tall. The leaves form a basal rosette, are paired on the stem. It prefers grassy places and dry soils, avoiding heavy soils, and flowers between July and September. It is found on roadsides, pastures, and fields at mid elevations. It is present in the Cariboo and Peace agricultural regions and is most troublesome in the Kootenays, Okanagan, Thompson, and Omineca regions.

Giant knotweed, *Polygonum sachalinense***Other Names:** Fallopia Sachalinensis**General Description/ Identification:**

Giant knotweed is a herbaceous noxious perennial, strongly rhizomatous. It grows over 367 cm (3.7 m/ 12ft) tall. Giant knotweed is related to the Japanese knotweed but is different in size. The Giant knotweed grows twice the size of the Japanese knotweed. The leaves form a heart shape. The hollow stems are jointed and swollen at the nodes, giving a bamboo-like appearance. The leaf arrangement is alternate. The leaves are petiolate, and they often exceed 30.5 cm long and about 10 cm wide. It grows along stream banks, in moist waste places, neglected gardens, roadsides, and railroad right-of-ways.

Gorse, *Ulex europaeus***Other Names:** Gorse, Furze, Furse or Whin**General Description/ Identification:**

Gorse is a perennial shrub. It is a spiny evergreen shrub with bright yellow pea-like flowers. It has small leaves which terminate in rigid, grooved spines when mature. Shrubs grow 1-3 m tall, usually with a single, densely branched, upright stem. Gorse is closely related to the brooms and has adapted to dry growing conditions. The leaves of young plants are trifoliate, but are later reduced to scales or small spines. All species have yellow flowers, some with a very long flowering season. In British Columbia, it grows on dry, open, sandy or rocky clearings, coastal bluffs, logged areas, and roadsides. It thrives in poor growing areas and conditions, including drought. It is sometimes found on very rocky soils where many species cannot thrive. It is most common on southern Vancouver Island near Victoria, but also occurs on a number of Gulf Islands, in West Vancouver, and at Skadegate on the Queen Charlotte Islands.

Hoary Alyssum, *Berteroa incana***Other Names:** berteroa blanche, alysse**General Description/ Identification:**

Hoary alyssum is a regional noxious weed, a biennial or short-lived perennial. It grows to 70 cm (0.7 m) and has white flowers carried on long slender stalks. Oval seed pods are flattened and held close to the stem. Leaves are grey-green in color. The upper leaves are small and also clasped close to the stem. The entire plant is covered in star-shaped hairs. It is most common on sandy or gravelly soils, it establishes in dry, disturbed habitats, such as roadsides and railway embankments. It is also found on meadows, pastures, and hayfields. It occurs in south central and southeastern BC in the Okanagan, Thompson, and Kootenay agricultural regions.

Hoary cress, *Cardaria draba***Other Names:** Whitetop**General Description/ Identification:**

Hoary cress is a perennial weed. It produces numerous white flowers at the top of the plant which has given it its popular name of “white-top”. It has distinctive heart-shaped seedpods, blue-green foliage, and grows to 60 cm (0.6 m) high. The leaves are alternating, simple, and mostly toothed. It is typically found on open, unshaded, disturbed ground at low to mid elevations on the coast and in the Interior grassland and forest regions of BC. It is infrequent in southern BC, but is a major concern in the Okanagan and Thompson agricultural regions and is present in the Kootenays and Cariboo.

Hound's-Tongue, *Cynoglossum officinale***General Description/ Identification:**

Hound's-tongue is a provincial noxious weed. It is a biennial or short-lived perennial. In its first year, it forms a rosette with leaves shaped like a dog's tongue. It forms a rosette in the first year, bolts (put up a stalk) and flowers the second year. Mature plants are 30 to 120 cm (0.3 – 1.2 M) tall and have rough, hairy, wide leaves and reddish purple, five-petal flowers. Each flower produces four rounded-triangular nutlets (seed covered with stony layer/ small nut) covered in hooked prickles. It has a woody taproot. It grows from grasslands to mid elevation forests. It is found on dry sites on pastures, roadsides, and logged-over forest land, primarily in the southern Interior. It is a major concern in the Kootenay, Okanagan, Thompson, and Cariboo areas.

Japanese knotweed, *Polygonum cuspidatum*

Other Names: Mexican bamboo, bamboo, fleecflower, Himalayan fleecvine, monkeyweed,

**General Description/ Identification:**

Japanese knotweed is a rhizomatous, semi woody, herbaceous perennial that grows up to 300 – 400 cm (3 – 4 m) tall. It has bamboo like stems that are green to reddish brown and spotted. The leaves are egg-shaped, stalked, 10 to 15 cm long, flattened or rounded at the base with a pointed tip and are dark green above and lighter green below. It has greenish to creamy-white flowers and produce in clusters from the leaf axils. They form aggressive, dense thickets and are maintained by extensive and deep, creeping rhizomes. New shoots are known to penetrate thick asphalt. It grows in gardens, around old buildings or former building sites, waste places and roadsides. It is a frequent colonizer of temperate riparian ecosystems, roadsides and waste places.

Leafy spurge, *Euphorbia esula*

Other Names: Green spurge

**General Description/ Identification:**

Leafy spurge is a bushy plant topped with clusters of small, yellowish-green flowers supported by distinctive heart-shaped bracts. Leaves are narrow and arranged spirally around the stem. Mature plants are usually under a meter tall and have extensive horizontal roots. The entire plant contains white milky latex. It grows at low to mid elevations on dry roadsides, fields, grasslands, open forests, and disturbed habitats. It has adapted to a wide range of conditions but prefers semi-arid areas. Isolated pockets occur in the Cariboo, Boundary, East Kootenay, Nechako, and North Okanagan areas. It is a major concern in the Kootenay, Okanagan, Thompson, Cariboo and Omineca regions.

Marsh plume thistle, *Cirsium palustre***Other Names:** European swamp thistle**General Description/ Identification:**

Marsh plume thistle is a biennial weed. It is typically a single, slender, unbranched stem with a cluster of purple flowers at the top. The upright stem, which can grow to 200 cm (2 m) tall, is evenly covered in spiny wings. Leaves are deeply segmented, hairy on the undersides, and have prominent woody veins. It is well adapted to moist to wet openings, including pastures, bog and fen communities, logged areas, and roadsides.

Meadow hawkweed, *Hieracium pratense***Other names:** Yellow hawkweed**General Description/ Identification:**

Meadow hawkweed is a perennial weed that originates from Europe. It has a shallow root system and underground creeping stems called rhizomes. The stems are bristly (hairy) and usually leafless, although occasionally a small leaf appears near the midpoint. Stem can reach up to 91 cm (0.9 m) tall and bear up to 30 flower heads near the top. Leaves are hairy and found at the base of the flower. Flowers are yellow and appear in May to July depending on elevation.

Meadow knapweed, *Centaurea pratensis***General Description/ Identification:**

Meadow knapweed blooms in midsummer to fall. It is a perennial of the sunflower family. It grows from woody crown and up to 100 cm (1 m) tall. The lower leaves are long stalked, upper leaves have no stalk. Stems are many branched and tipped by solitary flower head up to 30 cm wide. Flower heads are pink to reddish purple, oval or almost globe shaped. A key identifying feature is the fringed bracts on the flower head. It is a hybrid of black and brown knapweeds. Its foliage is coarse and tough. It grows in pastures, parks, lawns, industrial sites, tree farms, vacant lands, railroads and roadsides. It favors moist roadsides, sand/ gravel bars and river banks, irrigated pastures, moist meadows and forest openings.

Nodding thistle, *Carduus nutans***General Description/ Identification:**

Nodding thistle is a large biennial or winter annual weeds. Seedling emerge from early spring to late fall. Its flowering can vary from 4 to 22 months. It forms a single taproot and reproduces by seeds. Its leaves are dark green with light green midrib, smooth and hairless on both sides, coarsely lobed, slightly wavy, and arranged alternately on a stem that appears winged. Each lobe ends with a prominent spine. First year rosette leaves can be up to 24 inches long. Plant height varies from two to seven feet. The terminal flower of musk thistle is large from 4 – 8 cm in diameter. It usually is slightly bent over. The stem is freely branched. It is found in disturbed areas like pastures, roadsides, waste areas, and ditch banks. They are also a problem in prairies, old fields and hay fields.

Orange hawkweed, *Hieracium aurantiacum*

Other Names: Devil's paintbrush, King devil, Bouquet rouge

**General Description/ Identification:**

Orange hawkweed is a fibrous rooted perennial with milky juice and above ground runners grows 30 60 60 cm tall. Its leaves are mostly basal. The seedlings form a rosette and flowering bolts re sprout from a small rhizome yearly thereafter. Runners are produced during flowering and extend 10 to 25 cm. These runners form new rosettes. It has a fibrous root system with a woody stem base. The stalk is leafless and covered with stiff, black, glandular hairs. It has vibrant orange red flowers. It is adapted to a wide range of temperatures and conditions – gravelly, acidic, full sun, part shade – but does require well drained soils. It can grow successfully under coniferous forest canopy.

Oxeye daisy, *Chrysanthemum leucanthemum***General Description/ Identification:**

Oxeye daisy is a rhizomatous perennial that grows up to 100 cm (1 m) tall. The roots are rhizomous. The lower leaves are spoon shaped, coarsely dissected and stalked. The upper leaves are narrower and stalkless or clasp the stem. The flowers are daisy like and are at the end of the stem. They have a yellow disk in the center. It can survive in a wide range of environmental conditions. It is common in native grasslands, overgrazed pastures, waste areas, meadows, railroad rights of way, and roadsides. It can grow in wide range of soils, especially those low in pH and nutrients.

Perennial pepperweed, *Lepidium latifolium*

Other Names: Tall whitetop, Giant whiteweed, perennial peppergrass, slender perennial peppergrass, broadleaf or bradleaved pepperweed, ironweed

**General Description/ Identification:**

Perennial pepperweed is a highly invasive herbaceous perennial. They are multiple stemmed and grow stiffly erect masses up to 1.5 m tall and sometimes taller. The leaves are lanceolate, bright green to gray-green, and entire or toothed. Flowering occurs from early summer to fall. Abundant small white 4 petaled flowers are borne in dense clusters near the stem tips. The base of the stem is semi woody. The roots enlarge at the soil line, forming a woody crown. Root length is dependent on soil tilth (health of soil), but can be up to 6 feet. Roots are creeping, with new plants springing from root sections. It can invade a wide range of habitats including riparian areas, wetlands, marshes, and floodplains. It adapts readily to natural and disturbed wetlands.

Plumeless thistle, *Carduus acanthoides*

Other Names: Spiny plumeless thistle

**General Description/ Identification:**

Plumeless thistle is a biennial or winter annual. Its flowers are purple, sometimes white or yellow. They flower between May and August. The leaves are alternate. The leaves are more deeply lobed and narrower than musk thistle and very pubescent underneath. Each lobe has one to three pointed marginal spines which are short but very sharp. First year it is a rosette. The rosettes have wavy leaves with yellow spines along the white colored leaf margins. They tend to be shorter than other thistles, generally reached 30 to 90 cm (0.3 – 0.9 m) tall. It can become very weedy and form dense colonies, especially along waterways, ditches, and roadsides in summers following wet falls. It is seldom found in cultivated fields, even when infestations are nearby in roadsides or pastures.

Puncture vine, *Tribulus terrestris*

Other Names: Caltrop, Cathead, Yellow vine, Goathead, Bura gokharu and Bindii

**General Description/ Identification:**

Puncture vine is a taprooted herbaceous perennial plant that grows as a summer annual in colder climates. The stems radiate from the crown to a diameter of about 10 cm to over 1 m, often branching. They are usually prostrate, forming flat patches, though they may grow more upwards in shade or among taller plants. The leaves are pinnately compound with leaflets less than a quarter-inch long. The flowers are 4 – 10 mm wide, with five lemon-yellow petals. A week after the flower blooms, it is followed by a fruit that easily falls apart into four or five single seeded nutlets. The nutlets are hard and bear two to three sharp spines. They are hard enough to puncture bicycle tires. It is native to warm temperate and tropical regions of the Old World in southern Europe, Southern Asia, throughout Africa, and Australia. It can thrive even in desert climates and poor soil.

Purple loosestrife, *Lythrum salicaria***General Description/ Identification:**

Purple loosestrife is a perennial weed. Each flower on the spike is made up of many individual flowers. The flowers are small and have five or six pink purple petals surrounding small, yellow centers. It flowers from late June to early September and requires pollination from insects or birds. The leaves are downy with smooth edges. They are usually arranged opposite each other in pairs. It is sometimes mistaken for fireweed. It grows primarily on disturbed soils of recently built roads, canals, railway lines and cultivated areas. It thrives in areas of populated places with connecting roadways and degraded and disturbed wetland habitats.

Rush Skeletonweed, *Chondrilla juncea*

Other Names: Gum succor, Devil's grass, Nakedweed

**General Description/ Identification:**

Rush skeletonweed is a perennial weed. It is a mass wiry, milky fluid filled stems and small yellow flowers growing up to 130 cm (1.3 m) tall. Wiry stems are covered with stiff reddish brown hairs at the base. Barely visible narrow leaves give it a skeleton like appearance. It can produce 20,000 parachute like seeds that can travel easily with wind, water, animals, and humans along dry grasslands. Horizontal roots also aid reproduction. It is found on rangelands, roadsides, and disturbed habitats at mid elevations in the dry grassland zone.

Russian knapweed, *Acrotilon repens***General Description/ Identification:**

Russian knapweed is a creeping perennial that reproduces from seed and vegetative root buds. It is rhizomatous. It emerges in early spring, bolts in May to June, and flowers through the summer into fall. It grows up to 100 cm (1 m) tall. The young stems covered in soft, gray hairs. It round flower heads produced singly at the ends of branches. The flowers are light pink to purple. The small pearly bracts with papery margins are slightly hairy at the tip. It grows in cultivated fields, orchards, pastures and roadsides.

Scentless chamomile, *Matricaria maritime***General Description/ Identification:**

Scentless chamomile is an annual to short lived perennial. It has daisy like flowers, 2 to 3 cm across. It grows from 15 cm to over 1 m in height. It is fern like, very finely divided leaves. It is often confused with stinking mayweed, oxeye daisy, and pineappleweed. It reproduces by seed only. The plants are usually very pushy and have a fibrous root system. It continually blooms, forms seed, and seeds germinate throughout the growing season. It is well adapted to heavy clay soils and tolerates both periodic flooding and dry sites.

Scotch broom, *Cytisus scoparius***General Description/ Identification:**

Scotch broom is a perennial, leguminous (like peas or beans) shrub. It grows 1 – 3 meters tall. Its stems can get up to 5cm thick. It has green shoots with small deciduous trifoliate leaves 5 – 15 mm long. In the spring and summer it is covered in yellow flowers 20 – 30 mm from top to bottom and 15 – 20 mm wide. It grows in sunny sites, usually on dry sandy soils at low altitudes.

Scotch thistle, *Onopordum acanthium***Other Names:** Acanthe sauvage, Cotton thistle, White thistle**General Description/ Identification:**

Scotch thistle is a biennial or sometimes annual. It reproduces by seed. It produces a large rosette of spiny leaves the first year. The plants typically germinate in the autumn after the first rains and exist as rosettes throughout the first year, forming a stout, fleshy taproot that may extend down 30 cm or more for a food reserve. In the second year, the plant grows 20 – 300 cm (0.2 – 3 m) tall. The leaves are 10 – 50 cm wide, are alternate and spiny, often covered with white woolly hairs and with the lower surface more densely covered than the upper. The leaves are deeply lobed with long, stiff spines along the margins. Fine hairs give the plant a grayish appearance. It prefers dry summers, grows best in sandy, sandy clay, and calcareous soils which are rich in ammonium salts. It grows in ruderal places as well as dry pastures and disturbed fields. Its preferred habitats are natural areas, disturbed sites, roadsides, fields, and especially sites with fertile soils, agricultural areas, range/grasslands, riparian zones, scrub/ shrublands and water courses.

Spotted knapweed, *Centaurea maculosa***General Description/ Identification:**

Spotted knapweed is a biennial, but can also be a short lived perennial. It produces a rosette the first year and a flowering bolt the second. It can self pollinate and is also cross pollinated by insects. The flowers are pinkish purple and be occasionally creamy white. The bracts on the flower's base have black tips, distinguishing it from other knapweed species. The stems are upright and branched, growing up to 150 cm (1.5 m) tall. It is normally found on well drained, light to coarse textured soils, but is intolerant of dense shade. It prefers moister habitats than Diffuse knapweed, but is intolerant of constant moisture.

St. John's wort, *Hypericum perforatum*

Other Names: Tipton's weed, Chase-devil, Klamath weed

**General Description/ Identification:**

St. John's wort is a perennial plant with extensive creeping rhizomes. Its stems are erect, branched in the upper section, and can grow up to 100 cm (1 m) high. It has opposing, stalkless, narrow, oblong leaves which are 12 mm long or slightly larger. The leaves are yellow green in color with transparent dots through the tissue and occasionally with a few black dots on the lower surface. Its flowers have 5 petals and are bright yellow with black dots. It thrives in areas with either a winter or summer dominant rainfall pattern.

Sulphur cinquefoil, *Potentilla recta*

Other Names: Five finger cinquefoil, Rough fruited cinquefoil, Upright cinquefoil, Yellow cinquefoil

**General Description/ Identification:**

Sulfur cinquefoil is distinguished by its 5 to 7 leaflets palmately arranged at the end of a leafstalk like fingers from the palm of a hand, but sometimes with only 3 leaflets per leaf or the leaves not divided on the smaller flowering branches. The leaves always green on both surfaces, and the large, deep yellow to sulfur yellow flowers with petals longer than sepals. It is similar to Rough cinquefoil in general habit and appearance but distinguished by being perennial from a course, fibrous root system. They occur in pastures, meadows, waste areas, roadsides, and occasionally in gardens and cultivated fields.

Tansy ragwort, *Senecio jacobaea***General Description/ Identification:**

Tansy ragwort is a toxic biennial weed. It is stout, erect or slightly spreading and may be branched. Often groups of stems arise from the plant crown. It usually germinates during the fall or early winter, lives through the next year as a rosette, then dies the following year after producing flowers and seeds. Its leaves are dark green on top, whitish green underneath, and have deeply cut, blunt toothed lobes with a ragged/ ruffled appearance. Flower clusters develop on stout, leafy elongated stems that grow up to 183 cm (1.8 m) tall. Each flower cluster is composed of many bright yellow flowers with (usually) 13 petals. It is toxic to cattle and horses. It is normally found in pastures and along roadsides and trails.

Teasel, *Dipsacus fullonum***General Description/Identification:**

Teasel is an herbaceous biennial weed. It grows up to 100 to 250 cm (1 – 2.5 m) tall. They have prickly stem and leaves, and the inflorescence of purple, dark pink or lavender flowers that form a head on the end of the stem(s). The inflorescence is ovoid, 4 – 10 cm long and 3 – 5 cm broad, with a basal whorl of spiny bracts. The first flowers begin opening in a belt around the middle of the spherical or oval flowerhead, and then open sequentially toward the top and bottom, forming two narrow beaks as the flowering progresses. The dried head persists afterwards, with the small 4 – 6 mm seeds. It is found on roadsides, pastures, hayfields, and occasionally rosettes can be found on turfgrass.

Yellow iris, *Iris pseudacorus***General Description/ Identification:**

Yellow iris is a herbaceous perennial. It grows to up to 91 – 122 cm (0.9 – 1.2 m) tall. It has broad, sword shaped leaves that are stiff, erect and green with grayish blue cast. The flowers are white to cream or often yellow, born on erect peduncles with several flowers on each stem and bloom from April to June. It grows in fresh or brackish water often occupies habitats that have low oxygen. It can be found in wetlands, shorelines, rocky shores, ditches, stream banks, floodplains forests, and areas of shallow water. It will tolerate high soil acidity and requires high levels of nitrogen for optimum growth.

Yellow starthistle, *Centaurea solstitialis*

Other Names: Golden starthistle, Yellow cockspur, Barnaby's thistle

**General Description/ Identification:**

Yellow starthistle is a winter annual. It is a grayish green plant with multiple rigid stems that extend in all directions from the base, forming a bushy looking cluster that can reach two meters in height and more than that in diameter. It produces bright yellow flowers ringed with long, sharp spines, the plant grows quickly and is very competitive. It bears a taproot that can reach a meter deep into the soil, allowing it to thrive during the dry, hot summers. It is common in vacant lots and fields, along roadsides and trails, in pastures and ranchlands, and in parks, open space preserves and natural areas.

Yellow toadflax, *Linaria vulgaris*

Other Names: Common toadflax, Butter and eggs

**General Description/ Identification:**

Yellow toadflax is a perennial. It has short spreading roots, erect to decumbent stems 15 – 90 cm high, with fine, threadlike, glaucous (bluish grey or green appearance) blue green leaves 2 – 6 cm long and 1 – 5 mm broad. The flowers are similar to those of the snapdragon. They are pale yellow except for the lower lip which is orange, borne in dense terminal racemes from mid-summer to mid-autumn. They are found in ruderal (growing in rubbish poor land or waste) spots, along roads, in dunes, and on disturbed and cultivated lands.