

# Weed Atlas

## May 2020

# Horticulture 11

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### Provincially and Regionally Regulated

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**Hound's-Tongue** - Matteo Sasso-Avila  
**Knapweed, Spotted** - Quinn Armstrong  
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**Purple Loosestrife** - Shannon Gica  
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**Toadfax, Dalmation** - Tye Podmoroff  
**Knapweed, Russian** - David Eziekwu  
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**Nightshade** - Emilia Echeverria  
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**St. John's Wort** - Tye Podmoroff

## Provincially and Regionally Regulated

**Common Name:** Canada Thistle

**Scientific Name:** *Cirsium arvense*

**Description:** Mature plants can grow up to two feet tall and have purple flower and spiny, glossy leaves on its stem and branches

**Distribution in BC:** Officially classified as noxious. They are mostly found in the Peace River, Omineca and Skeena areas.

**Impact:** Crowds native plants and threatens crops and rangelands across the country

**Control/Management:** There are no widespread eradication techniques, but cutting or using herbicides can be stressful to the plant.

**History:** Imported from the eastern Mediterranean region, this plant likely got its name from New Englanders who blamed its introduction to the United States on French Canadian traders.



**References:**

<https://www.natureconservancy.ca/en/what-we-do/resource-centre/invasive-species/canada-thistle.html>

<https://bcinvasives.ca/invasive-species/identify/invasive-plants/canada-thistle>

**Common Name:** Hound's-Tongue

**Scientific Name:** *Cynoglossum officinale*

**Description:**

- Biennial
- In the first year plants form a little rose-looking flower
- long, rough, hairy, tongue-shaped leaves form
- During the second year, the plants grow around 1 to 4 feet tall
- The entire plant is covered with long, soft hairs
- Plants have many narrow flower clusters
- The leaves alternate



**Distribution in B.C.**

Hound's-tongue is generally found on dry pasture, roadsides, and logged forestland. It is commonly found in the southern interior of B.C.

**Impact:**

Hounds' tongue causes a loss of pasture and range for farm animals, it increases the cost of cattle, and reduces the health of the animal. It's also annoying to hikers, and mountain climbers due to its bur-like seeds that stick onto you, hounds tongue is toxic and can kill animals if it's eaten.

**Control/Management:**

Don't let hounds tongue go to seed. Hand pull or dig up the plants and remove as much of the root as possible.

**History:**

It was introduced from Europe, supposedly as a contaminant in cereal. Hounds tongue is found throughout the United States and Canada and is considered a noxious weed

**Sources:**

<https://www.kingcounty.gov/services/environment/animals-and-plants/noxious-weeds/weed-identification/houndstongue.aspx>

**Common Name :** Spotted  
Knapweed

**Scientific Name :** Centaurea  
Stoebe

**Structure :**

Most commonly closed off heads with *bracts* ("a modified or specialized leaf, especially one associated with a reproductive structure such as a flower, inflorescence axis or cone scale."

**A)**



**Impact :**

Highly invasive and can grow in large dense quantities when in the sun. Knapweed has the potential to occupy 95% of available land. There is some evidence that it may produce allelopathic chemicals, a biological phenomenon by which a plant produces one or more chemicals that influence the germination, growth, survival and reproductions of other plants (according to **B**).

**Control/Management:**

Pulling, cutting, or any other related operation of removal. If none have flowered, the pulled weeds can be left on site, otherwise roots and stems must be twisted, snapped, etc. Alternatively, there is the option for herbicides, these include products such as aminopyralid, dicamba, and picloram (according to **C**).

**History :**

Believed to have originated somewhere in the area of Europe and Western Asia

**Sourcing :**

Spotted Knapweed (**A**)

Spotted Knapweed (**B**)

Spotted Knapweed (**C**)

Spotted Knapweed (**D**)

**Common Name:**Leafy Spurge

**Scientific Name:***Euphorbia esula* L.

### Description of Structure

Leafy spurge is a perennial plant with greenish-yellow flower bracts. Most leafy spurge plants flower in May and June, although mowed stems may flower later. The leaves are simple and opposite with a blue-grey hue.

If the stems or leaves are cut, a distinctive white sap exudes. Can send up clusters of multiple stems that arise from the same underground root system. The plant reaches a maximum height of about 4 feet.



**Distribution in BC:** Leafy spurge is an invader of pastures, grasslands, prairies, and roadsides. It grows in full to part sun in a wide range of soil types, from dry to moist. Leafy spurge is considered among the most 'unwanted' invasive plants in British Columbia (BC), and rated provincially noxious under the BC Weed Control Act. It was first identified in Canada in 1889, and has grown to be a large problem, economically, socially, and ecologically. Leafy spurge now occurs extensively in the southern prairie provinces and southern Ontario..

**Impact:** Once a stand of leafy spurge becomes established, it reduces pasture or grassland productivity. If leafy spurge is present in a hayfield, the hay cannot be cut and moved, resulting in economic loss. Infestations can displace native plants and reduce wildlife habitat.

**Control/Management:** It is important to clean the work tools such as the lawn mower so that the seeds do not spread. Herbicides and pesticides can also be used to prevent growth.

**History:** This aggressive, long lived perennial was imported with contaminated seed around 1827 from Eurasia. Leafy spurge was first recorded in Massachusetts, but spread quickly and reached the western U.S. by the early 1900's.

### References

<https://bcinvasives.ca/invasive-species/identify/invasive-plants/leafy-spurge>

<https://www.mda.state.mn.us/plants/pestmanagement/weedcontrol/noxiouslist/leafyspurge>

**Common Name:** Milk Thistle

**Scientific Name:** *Silybum marianum*

### Structure

The thistle-like plant grows for a year or two. It grows 60 to 150 cm high and blossoms from June to September. Its flower is like a purple daisy heads, which consist only of tubular flowers, the appearance of a thistle-like is due to the outer husks of the flower that ends in a sharp thorny spikes. One plant can produce over 6,000 seeds in just one year. It also has like a fruit that is brown-spotted and it has like a shiny white pappus.



**Distribution in BC:** The distribution of this plant is limited in Greater Victoria. The plant is imported to the area as a garden plant. This plant is a new invader to British Columbia, Milk thistle grows in both sun and shade, and in moist and dry locations. They can also quickly spread to natural areas such as garry oak meadows.

**Impact:** The ripe fruit is used and is also freed by the pappus. The commercial drug is delivered from crops only mostly in Germany but it is imported. The ingredients of this drugs are the fruits that contains silymarin this substance helps: gallbladder disorders, hepatitis, etc.. Another ingredient is fatty oil. So we can say that the impact of this weed is a human one.

**Management or treatment:** It is used to treat alcoholic liver disease, gallbladder problems, hepatic cirrhosis, chronic hepatitis, and used as an appetite stimulant.

**History:** Native to Southern Europe, parts of the Middle East, and Northern Africa. It has been naturalized in South America, North America, and Southern Australia. It is considered a weed because it grows so fast.

### References

Commission E, ESCOP, WHO, (1982), Milk Thistle, Kooperation Phytopharmaka, 29/april/2020, <https://www.koop-phyto.org/en/medicinal-plants/milk-thistle.php>.  
Park Division, (Spring 2010), Intensive Alert, City of Victoria, 29/april/2020, <https://www.victoria.ca/assets/Departments/Parks~Rec~Culture/Parks/Documents/invasive-species-milk-thistle.pdf>.

Burgess Lana, (20/12/2017), 10 potential health benefits of milk thistle, MedicalNewsToday, 29/april/2020, <https://www.medicalnewstoday.com/articles/320362#what-is-milk-thistle>.

Cunha P. John, Milk Thistle, RxList, 29/april/2020, [https://www.rxlist.com/consumer\\_milk\\_thistle\\_carduus\\_marianum/drugs-condition.htm](https://www.rxlist.com/consumer_milk_thistle_carduus_marianum/drugs-condition.htm).

Abenavoli L, (2010), Milk Thistle Background, LifeSeason, 29/april/2020, <https://lifeseasons.com/milk-thistle>.

**Common Name:** Purple Loosestrife

**Scientific Name:** Lythrum Salicaria

**Description of Structure:**

- Purple loosestrife is a perennial plant.
- Purple loosestrife brings out dense, woodlike roots that are expandable.
- Pieces of their roots and stems can develop new purple loosestrife flowers.
- Every purple loosestrife has 5-6 magenta petals circling a yellowish center.
- The leaves are shaped as a linear to lanceolate.
- Purple loosestrife spreads above all through seeds.
- Once the flower matures, the flower develops around 2.7 million grain-sand-like seeds yearly. These seeds can effortlessly spread by water, wind and any living things such as humans, animals, etc.



**Distribution in BC:** Purple loosestrife is common in the lower Fraser Valley, Southern Vancouver Island and Okanagan. They can be found growing in ditches, wet areas at low-mid altitudes, canals, shallow ponds, stream and lake shorelines.

**Impact** - These flowers affect wildlife and agriculture poorly. It prevents wildlife from nesting, shelter and refrains them from eating food because these flowers create single-species no birds, mammals and fish rely on.

**Control/Management** - These flowers can effortlessly spread if improper methods are used, for instance not removing the roots and underground stems. Managing the spreads of these flowers is of great importance in caring for critical fishes, wildlife and native plant habitat.

**History** - Purple loosestrife was originally from Europe and Asia which was brought to North America in the 19th century. This plant appears in every Canadian province and U.S. state except for Florida.

**References:**

[https://www.crocus.co.uk/plants/\\_/lythrum-salicaria-robert/classid.2000010779/](https://www.crocus.co.uk/plants/_/lythrum-salicaria-robert/classid.2000010779/)

[http://www.seagrant.umn.edu/ais/purpleloosestrife\\_info](http://www.seagrant.umn.edu/ais/purpleloosestrife_info)

<https://www.nps.gov/articles/purple-loosestrife.htm>

<https://www.dnr.state.mn.us/invasives/aquaticplants/purpleloosestrife/index.html>

[https://bcinvasives.ca/documents/Purple Loosestrife TIPS 2017 WEB.pdf](https://bcinvasives.ca/documents/Purple%20Loosestrife%20TIPS%202017%20WEB.pdf)

<https://www.des.nh.gov/organization/commissioner/pip/factsheets/bb/documents/bb-45.pdf>

<https://www.dnr.state.mn.us/invasives/aquaticplants/purpleloosestrife/control.html>

<http://www.invadingspecies.com/purple-loosestrife/>



**Common Name:** Perennial Sowthistle

**Scientific Name:** *Sonchus Arvensis*

**Description:**

**#ROOTS**

- Underground extensive root system

**#LEAVES**

- Soft, spiny toothed edges that are wavy and hairless
- Lower leaves are up to 2 inches wide & 12 inches long.

**#FLOWERS**

- Bright yellow loose branching clusters (dandelion-like)
- 2 inches wide, on the slender stalks
- Bloom from July ~ October



**Distribution in BC:**

- Most frequent in the province's southern coastal regions and they grow almost all the places in Canada - Northern US

**Impact:**

- Agricultural: A common weed of cultivated crops, grain fields, and orchards. An alternate host to aphids, several viral diseases, and nematodes.
- Ecological: They are adapted to a wide range of conditions, but most competitive in temperate climates.
- Human: Contain chemical compounds used for industrial and pharmaceutical purposes.

**Management/Control:**

- Grazing, cutting mowing, cultivation, and digging can reduce seed set. However, it does not eliminate all plants or root spread.

**History:**

- Introduced from Europe as a seed contaminant

<https://www.gov.mb.ca/agriculture/crops/weeds/perennial-sowthistle.html>

<https://www.minnesotawildflowers.info/flower/perennial-sowthistle>

[https://www.nwcb.wa.gov/images/weeds/PERENNIAL-SOWTHISTLE-BROCHURE\\_Liocoln.pdf](https://www.nwcb.wa.gov/images/weeds/PERENNIAL-SOWTHISTLE-BROCHURE_Liocoln.pdf)

[https://www2.gov.bc.ca/assets/gov/environment/plants-animals-and-ecosystems/invasive-species/alerts/annual\\_sow.pdf](https://www2.gov.bc.ca/assets/gov/environment/plants-animals-and-ecosystems/invasive-species/alerts/annual_sow.pdf)

<https://www.inspection.gc.ca/plant-health/seeds/seed-testing-and-grading/seeds-identification/sonchus-arvensis/eng/1477079283039/1477079283382>

**Common Name:** Dalmatian Toadflax

**Scientific Name:** *Linaria Dalmatica*

### Photograph

**Description of Structure:** The Dalmatian Toadflax is a hardy perennial plant that can grow up to 1.2m. It has bright yellow flowers and heart-shaped green leaves. The plant has a root system that can grow 3.7m horizontally which allows them to spread with ease. A plant can contain up to 25 flowering stems and each plant is capable of producing 500,000 seeds annually.



**Distribution in BC:** the Dalmatian Toadflax is found in the Okanagan, Similkameen, Thompson, East Kootenay, Cariboo, Skeena, and Boundary areas.

**Impact:** The Dalmatian Toadflax has no value as a food product and only crowds out valuable crops. This makes it a very useless and pesky plant. Another pesky trait of the Dalmatian Toadflax is that it is reported to contain a poisonous glucoside that has the ability to be harmful to livestock and in turn cause economic losses for farmers.

**Control/Management:** Due to the Dalmatian Toadflax having such a large lateral root system, it is hard to dig them up without new plants springing up. Using a mower is also very ineffective due to the lateral root system again because of the new sprouts that will appear from the roots. One good thing is that in cultivated areas, the tillage of the land will usually maintain the Dalmatian Toadflax. Chemical containment of the plant can also be a challenge due to the waxy leaf's ability to repel most chemicals. Chemicals are able to be used though, as long as they are oil based products that can get through the waxy coat.

**History:** The Dalmatian Toadflax is native to the Mediterranean and was first found to have been in North America in the late 1800s. It was first spotted in British Columbia in 1940 in the southeastern regions. Later it was found to have moved onto Vancouver Island in 1951 and then in central British Columbia by 1953.

### References

[https://en.wikipedia.org/wiki/Linaria\\_dalmatica](https://en.wikipedia.org/wiki/Linaria_dalmatica)

[https://en.wikipedia.org/wiki/Linaria\\_dalmatica#/media/File:Linaria\\_genistifolia\\_ssp\\_dalmatica\\_1.jpg](https://en.wikipedia.org/wiki/Linaria_dalmatica#/media/File:Linaria_genistifolia_ssp_dalmatica_1.jpg)

<https://bcinvasives.ca/invasive-species/identify/invasive-plants/dalmatian-toadflax>

<https://www.kingcounty.gov/services/environment/animals-and-plants/noxious-weeds/weed-identification/dalmatian-toadflax.aspx>

**Common Name:** Russian Knapweed

**Scientific Name:** *Acroptilon Repens* L

**Description of Structure:**

- Deep creeping roots
- Stems can be 30-90 cm tall
- Not yet mature stems are covered with grey short hairs
- They have lavender/blue and pink flowers
- Vase shape flower head



**Distribution in BC:** It was contaminating alfalfa seeds.

It is currently found in the Keremeos area, the Kootenay region, Okanagan, Merritt, Kamloops, and Williams Lake areas. It spreads through creeping horizontal roots and seed.

**Impact:** Russian knapweed can dominate an area and significantly reduce desirable visitation. It is a threat to the stability of ranching operations, it can reduce available forage and crop values and can devalue the land itself. Knapweed is toxic to horses and can cause neurological disorder, chewing disease.

**Control/Management:** The best method of control for Russian Knapweed is to prevent establishment through proper land management. The healthier the natural land is the less susceptible it will be to the Russian Knapweed invasion. Combining cutting and herbicides can be used to manage the Russian Knapweed invasion.

**History:** Russian Knapweed was introduced into Canada in the early 1900s. Native to Mongolia, Western Turkestan, Iran, Turkish Armenia, and Asia Minor.

**References:**

- [oasiss.ca](http://oasiss.ca)
- <http://idahoweedawareness.com/netcenter/library/idahoweeds/rknapweedlib.html>

**Common Name:** Oxeye Daisy

**Scientific Name:** *Leucanthemum Vulgare*.

-The Oxeye Daisy is an invasive perennial that can reach from 1-3 feet in height. A single plant can produce from 1-40 flowering stems and is very destructive to gardens. The Oxeye Daisy has white thin petals with a yellow center holding them together. The yellow center collects pollen for bees to carry to other plants for creation. The stem of the daisy has a medium radius with a light green colour to it. Flowering occurs all summer. Each daisy can produce up to 200 seeds!



-The daisy has been proven to carry several crop threatening diseases.

-The chemical called Clopyralid is recommended for control of oxeye daisy. It is recommended to shoot the chemical when the daisy is young and growing.

-*Leucanthemum vulgare* is native to Europe and was found in the United States as an ornamental in the 1800s.

-The dangerous plants thrive in a wide variety of soil types and can grow in sun and partial shade. Very commonly seen on the side of the road and on farms/pastures. The plant grows in rainfall exceeding 30 inches.

### **References**

<https://www.mortonarb.org/search/content/Leucanthemum>

<https://www.invasiveplantatlas.org/subject.html?sub=5937>

**Common Name:** Puncturevine

**Scientific Name:** Tribulus Terrestris

**Description of Structure:** This is an annual plant that arises from a shallow taproot. It is a member of the Caltrop family and recognizable due to its silky hair and yellow flowers. This vine will branch out from its roots where its green/red/brown stems will grow to lengths of 1- 4.5 feet. Puncturevine leaves are 1-1.5 inches long and divide into pairs of 4-8 ovals. These vines can form thick mats that lay on the ground or can grow upright when there is competition for light. The bright yellow flowers are formed on short stalks with 5 petals. Puncturevine also holds a circular fruit with harsh spines and five burs. This fruit will split open when fully matured.



**Distribution in BC:** Within British Columbia it only appears in the southern Okanagan and lower Similkameen areas.

**Impact :** Puncturevine's name is appropriate as it's sharp spines have the ability to damage the feet of humans, wildlife and domestic animals. While also having the possibility of injuring the mouth stomach or intestinal linings of all animals when ingested. The spiny fruit also has the potential to puncture bike tires and vehicles resulting in the spreading of seeds.

**Control/Management** - The best way to prevent the spread of puncturevine and to control the spread is to prevent its establishment. Any seed pods that are found should be destroyed immediately and disposed of by burning them. Other prevention methods include hoeing, shallow tillage or hand pulling of small patches. In order to make long term differences all seeds must be destroyed.

**History** - Puncturevine originated in Europe and was first found in California in 1903 and moved into Canada during the early 1970's.

## References

- [for.gov.bc.ca](http://for.gov.bc.ca)
- [puncturevine](#)

**Common Name** Scotch Thistle

**Scientific Name** Onopordum acanthium

**Description of Structure** The Scotch Thistle is an annual/biennial plant that will grow up to 2 meters. This plant reproduces by seed and pieces of its roots. These plants have one stem with flat leaves on the lower end and a purple head with a prickly base at the upper end of the flower. The thorns are all over the plant on the stem, leaves and head. The thorns are to protect the flower from herbivore predators looking for a colourful snack. This plant grows best in a moist and well drained environment with slightly acidic soil.



**Distribution in BC** Thistles can spread very easily due to the fact that a single flower can produce more than 20 000 seeds alone and these seeds can remain viable in the soil for up to 30 years. The BC Weed Control Act has considered this plant to be regionally noxious as it continues to escape controlled gardens and spread throughout the region.

**These** plants create an obstruction due to their prickly nature and are spreading into irrigation ditches, roadsides, rangelands and disturbed areas. The thistle can limit the production of forage and livestock by displacing grasses and creating dense monocultures.

**Control/Management** To manage the scotch thistle, the best methods consist of herbicides, cultivation and planting competitive desirable plants in areas that they grow.

**History** The Scotch Thistle is native to Europe and eastern Asia. This thistle saved Scotland from Norseman invaders during the reign of Alexander III. One of the Norsemen accidentally stepped on a thistle in the middle of the night and screamed in pain which alerted the Scottish guards that they were coming and ever since that night the Thistle has been the national flower of Scotland. The Scotch Thistle was first introduced to North America in the late 1800's and continued to spread all over Canada by airborne seeds.

**References** <https://www.coastalisc.com/scotch-thistle/>

<https://bcinvasives.ca/invasive-species/identify/invasive-plants/scotch-thistle>

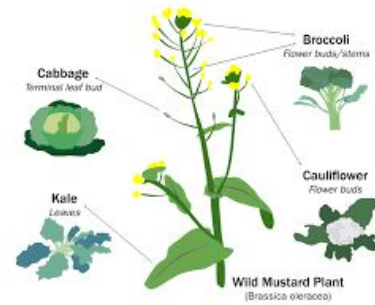
<https://en.wikipedia.org/wiki/Thistle>

[https://www.google.com/url?sa=i&url=https%3A%2F%2Fen.wikipedia.org%2Fwiki%2FFile%3AMooie\\_bloeiwijze\\_van\\_een\\_Speerdistel\\_\(Cirsium\\_vulgare\)\\_03.jpg&psig=AOvVaw2d9CwUMaP-yK5vP5ZCSwes&ust=1588800521861000&source=images&cd=vfe&ved=0CAIQjRxqFwoTCLD\\_yazVnekCFQAAAAAdAAAAABAJ](https://www.google.com/url?sa=i&url=https%3A%2F%2Fen.wikipedia.org%2Fwiki%2FFile%3AMooie_bloeiwijze_van_een_Speerdistel_(Cirsium_vulgare)_03.jpg&psig=AOvVaw2d9CwUMaP-yK5vP5ZCSwes&ust=1588800521861000&source=images&cd=vfe&ved=0CAIQjRxqFwoTCLD_yazVnekCFQAAAAAdAAAAABAJ)

**Common Name:** Wild Mustard

**Scientific Name:** *Sinapis Arvensis*

**Description:** the roots are thin, stems are waxy and hairy, leaves are narrowly oval shaped and prickly, and flowers have yellow or white coloured petals.



**Distribution:** it was introduced in B.C. in about the year 2000.

**Impact:** it can invade grain and other field crops. It can also reduce crop yields, value and livestock forage production in rangeland.

**Management:** cut or pulled before seed-set, or Metsulfuron methyl.

**History:** it was introduced in the Mediterranean region in 1748 and in the capital of New York.

**References:**

- [weedsCanada.ca](http://weedsCanada.ca)
- [www.cabi.org](http://www.cabi.org)
- [www.2gov.bc.ca](http://www.2gov.bc.ca)
- [commons.wikimedia.org](http://commons.wikimedia.org)

## Other Invasive Plants



**Common Name:** Baby's Breath

**Scientific Name:** Gypsophila Paniculata

**Description:**

**#ROOTS**

- They go deep and penetrate the soil for about 13 feet

**#LEAVES**

- Arranged opposite along the stem
- Lance-shaped (wider middle and tapered ends)

**#FLOWERS**

- Small panicle-like, numerous flowers that are attached to openly branched stems
- Mostly white-colored
- Bloom from July ~ October



**Distribution in BC:** Present in the southeast portion of BC

- No reported infestations in the North Prince George

**Impact**

- mildly toxic to cats and dogs due to the toxin gyposenin, which causes irritation to the gastrointestinal tract

**Management/Control**

- Early detection & rapid response is the management priority for most of the place
- Hand-pulling or digging is effective

**History**

- They are native to Eurasia
- Introduced to North America as an ornamental in the late 1800s

<https://magnaflor.com/shop/bulk-wholesale-babys-breath/million-stars/>

<https://homeguides.sfgate.com/characteristics-gypsophila-76710.html>

[http://msuinvasiveplants.org/documents/extension/weed\\_posts/2015/May\\_babys\\_breath.pdf](http://msuinvasiveplants.org/documents/extension/weed_posts/2015/May_babys_breath.pdf)

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**Common Name:** Bladder Campion

**Scientific Name:** *Silene Vulgaris*

**Description:** the roots are whitish taproot and widely spreading wiry branches, stems are waxy and smooth, leaves are narrowly oval, and flowers are in branching clusters and have greyish coloured petals.

**Distribution:** occurs throughout Canada except for N.T. and N.U.

**Impact:** it's not a serious weed in cultivated areas but it can become weedy to zero to minimum-till fields.

**Management:** removing its root system to prevent it from growing seeds.

**History:** it originally grew in the meadows of the UK

**References:**

- [weedinfo.ca](http://weedinfo.ca)
- [inspection.gc.ca](http://inspection.gc.ca)
- [wildlifetrusts.org](http://wildlifetrusts.org)
- [gobotany.nativeplanttrust.org](http://gobotany.nativeplanttrust.org)
- [gardenknowhow.com](http://gardenknowhow.com)



**Common Name:** Bull Thistle

**Scientific Name:** *Cirsium vulgare*

- In the first year little flowers form, flowering stems in the second year
- Long, sharp spines on the leaves
- Leaves are lobed shaped and almost hairy - there are rough hairs on top of the leaves, and woolly hairs on the bottom
- The base of the leaf extends down onto the stems and spikey wings protrude outwards
- Pink or magenta flower heads form on top of each stem



**Distribution in B.C.**

It is common throughout eastern Canada and the US. It is spread all over B.C.. Bull thistle spreads by seed and is invasive.

**Impact:**

Bull thistle dominates forest clear cuts and reduces growth of tree seedlings. They are also a problem in hay fields and pastures.

**Control/Management:**

Bull thistle only reproduces by seeds so by preventing the plants to spread their seeds you prevent an infestation.

**History:**

It arrived originally from Europe and Asia, but now introduced throughout North America.

**Sources:**

<https://www.kingcounty.gov/services/environment/animals-and-plants/noxious-weeds/weed-identification/bull-thistle.aspx>

**Common Name:** Chicory

**Scientific Name:** Cichorium Intybus

**Description of Structure:**

- Chicory is a biennial herbaceous plant with medicinal and culinary uses.
- Once one of the stems is broken the plant oozes milky juice.
- The flowers are between 2 and 5 feet tall.
- The colour of the petals is usually light blue. Its leaves feature dandelion leaves, spaced and as they get higher on the head/stem its leaves become smaller. Their young leaves can be eaten raw and can be combined with salads.
- Chicory seeds produce edible plants that will evolve to become blue edible flowers.



**Distribution in BC:** Chicory seeds can be found in the low-mid altitudes on the coast of grasslands and forests. It can be found in fields, roadsides, and disturbed habitat.

**Impact** - The chicory root gives a laxative effect, decreases swellings and increases the bile from the gallbladder. The roots can be a replacement for coffee. This looks like a use not an impact!

**Control/Management** - Chicory can be managed with a herbicide called TopShot based on the website; [www.solutionstores.com](http://www.solutionstores.com). The TopShot herbicide specifically kills only the chicory which does not lead any harm on the grass.

**History** - This wild plant lives by the roadsides in Europe and is now common in North America, China and Australia, which is widely common.

**References -**

<https://www.seed-bank.ca/product/wild-chicory-seeds/>

<https://plants.usda.gov/core/profile?symbol=CIIIN>

<https://www.hindawi.com/journals/ecam/2013/579319/>

[https://bcinvasives.ca/documents/Field Guide to Noxious Weeds Final WEB 09-25-2014.pdf](https://bcinvasives.ca/documents/Field_Guide_to_Noxious_Weeds_Final_WEB_09-25-2014.pdf)

<https://draxe.com/nutrition/chicory-root/>

<https://www.solutionstores.com/chicory-control>

<https://en.wikipedia.org/wiki/Chicory>

<https://westcoastfood.ca/i-heart-endive-in-the-fraser-valley/>

**Common Name:** Cluster tarweed

**Scientific Name:** *Deinandra fasciculata*

**Description:** The roots have a garlic smell to them. The flowers come in clusters. The leaves may be up to 6 inches and 15 cm long. The seeds are tiny and you have to spread them apart by 12 to 24 inches apart. It is appropriate for eastern kootenays.



**Distribution in BC:** it's often found in the woods or at the park

**Impact :** It is economic

**Controlled/management:** you need to learn to identify plants and monitor it in the early season and the treatment to use chemicals to burn it.

**History:** Is native to some parts of Western North America

**References :**

[The Weed Warrior: Cluster Tarweed, don't you be my ...  
www.cranbrooktownsman.com › opinion › the-weed-w...](http://www.cranbrooktownsman.com/opinion/the-weed-warrior-cluster-tarweed-dont-you-be-my-neighbour/)  
[www.cranbrooktownsman.com › opinion › the-weed-w...](http://www.cranbrooktownsman.com/opinion/the-weed-warrior-cluster-tarweed-dont-you-be-my-neighbour/)

<http://www.co.stevens.wa.us/weedboard/other%20weeds/HTM%20pages/cluster%20tarweed.htm>

<https://www.bclocalnews.com/opinion/the-weed-warrior-cluster-tarweed-dont-you-be-my-neighbour/>



is

**Common Name:** Creeping Buttercup

**Scientific Name:** *Ranunculus repens*

**Description:** Distinctions from other buttercups include prostrate stems and three-sectioned leaves. Creeping buttercups have small round petalled flowers.

**Distribution in BC:** Found mostly in the Cariboo, Thompson River, Kootenay areas as well as on Vancouver Island, and along the southwest coast of BC.

**Impact:** Flowers can be toxic to livestock. Depletes soil of potassium and other nutrients, hurting crop productions.

Grows in disturbed areas such as prescribed paths in parks and can spread into neighbouring vegetation.

**Control/Management:** Repetitive cutting sometimes works, but root fragments regenerate easily. Herbicides are more effective.

**History:** Imported from Eurasia.



**References:**

<http://www.weedinfo.ca/en/weed-index/view/id/RANRE>

[https://www2.gov.bc.ca/assets/gov/environment/plants-animals-and-ecosystems/invasive-species/alerts/creeping\\_buttercup.pdf](https://www2.gov.bc.ca/assets/gov/environment/plants-animals-and-ecosystems/invasive-species/alerts/creeping_buttercup.pdf)

**Common Name:**Curled dock

**Scientific Name:** *Rumex crispus* L.

### Description of Structure

Stems and roots: it has erect stems, 1 m. Or taller, from a thick, yellowish, deeply penetrating, simple or branched main root

Leaves: Variable leaf-shaped: dull green cotyledons with a flourey surface; first true leaves rounded in outline.

Flowers and fruits: small, greenish-colored flowers

grouped in spirals around the branches of the terminal inflorescence, becoming at maturity a thick and branched mass of light-brown to dark-brown "fruits"; plain paper, with smooth margins, with 1 protuberance and encloses a small, shiny, reddish-brown fruit ("seed") that is triangular in cross section, pointed at both ends. It blooms from June to July



### Distribution in BC

Wet roadsides to mesic, ditches and disturbed sites; common in SW BC, common elsewhere in S BC south of 55 degrees N; introduced from Eurasia. The curly dock is a common weed in wet conditions such as grasslands, low grasslands, riverbanks, roadsides, depressions in cultivated fields, and occasionally in sandy highlands throughout Ontario.



### Impact

May cause oxalate poisoning in stock.

May cause dermatitis in horses and sheep.

Contains *rumicin* an irritant that mainly affects pregnant cows, calves and bullocks.

Field cases of toxicity are rare.

### Control/Management

Seedlings less than 6 weeks old can usually be controlled by cultivation. Repeated cultivations over summer are required to control rootstocks.

Mowing and slashing are ineffective.

Some selective control in legume based pastures can be achieved by using glyphosate in a blanket wiper in late spring.

### History

Originated in Europe, North Africa, Asia

### References

[http://www.herbiguide.com.au/Descriptions/hg\\_Curled\\_Dock.htm](http://www.herbiguide.com.au/Descriptions/hg_Curled_Dock.htm)

[https://en.wikipedia.org/wiki/Rumex\\_crispus](https://en.wikipedia.org/wiki/Rumex_crispus)

**Common Name:** Foxtail Barley

**Scientific Name:** *Hordeum jubatum*.

-The Foxtail Barley is a very dangerous perennial plant that likes to grow in forests and backyards. The most common seasons it appears is mid summer, late summer, early fall, and mid fall. The weed is green and a little prickly with light green wheat like tops. The weed grows from 1-2 feet tall.

-Foxtail Barley is self seeded which makes it even more invasive.

-The strong Chemical Glyphosate sprayed upon the plant during the fall is the best control treatment.

-As soon as the Foxtail barley enters the reproductive stage of growth and seed heads are formed, the long barbed awns will cause serious problems for grazing animals. The awns lodge in the mouth, eyes and noses of animals, and can cause serious injury. Livestock will avoid mature foxtail barley plants if given a choice. Fall-seeded cereals may allow foxtail barley populations to increase because the crop and weed develop during the same period.



<https://www.mortonarb.org/trees-plants/tree-plant-descriptions/foxtail-barley>

[https://wiki.bugwood.org/HPIPM:Foxtail\\_barley](https://wiki.bugwood.org/HPIPM:Foxtail_barley)



**Common name:** Goatsbeard

**Scientific name:** *Tragopogon dubius*

**Description of Structure:** Goatsbeard is a taprooted biennial that grows from 0.3 m to 1 m in height. It contains long grass like leaves with crisp margins. The stems are swollen below the flower bud and contain a milk consistency like juice. The leaves are long and linear with a smooth and fleshy texture. Goatsbeard has a large flower head that ranges from 4-6 cm across. It is a showy, pale lemon- yellow colour accompanied by a slender, tapering, green involucral bracts. When the flower goes to seed it can often be mistaken for a large dandelion.



**Distribution in BC:** Goatsbeard can be found in the Kootenay, Okanagan and Thompson-Nicola region.

**Impact:** Goatsbeard is listed as an invasive plant of concern. It is competitive with other native species and often results in their death. Many mistake it for being native and not invasive due to its pretty appearance and enjoyable yellow flower.

**Control/Management:** The best way to control Goatsbeard is through chemicals. A combination of 2, 4-D and dicamba applied during the rosette stage will provide effective control and increase other perennial grasses growth around it. This weed can not be controlled through mowing.

**History:** Goatsbeard was brought in from Europe as a medicinal vegetable in the year 1900 and since then has spread to 49 states and 9 provinces. Other sources say it might have been introduced as a garden plant in North America due to its pretty yellow flower.

**References:**

- [Bcinvasives.ca](http://Bcinvasives.ca)
- [Weedinfo.ca](http://Weedinfo.ca)
- [Nwipc.org](http://Nwipc.org)
- [Western Salsify revised 2017.pdf](#)

**Common Name:** Himalayan Balsam

**Scientific Name:** *Impatiens glandulifera*

**Description of Structure:**

- Stems are bamboo like
- These are thick stems with a purple to reddish tint
- Plants are able to grow up to 2 metres tall
- Leaves are in a whirl shape of usually three's
- Egg shaped leaves with serrated edges
- Exotic looking helmet shaped flowers with white/pink/purple colours
- Seed capsules are 3-5 cm long and contain up to 16 seeds
- This is an annual plant



**Distribution in BC:** Primarily located in southern B.C, highly prodimant in the lower mainland areas such as Fraser river Delta, Kootenay, Terrace, Bella Coola valley

**Impact:** Himalyan Balsam is a shallow rooted system that has the ability to expose invaded areas to erosion during winter when plants die off. Its high competitive nature and strong invasive habits have the ability to damage the native species around and decrease the diversity of plants causing damage to the eco systems. The sweet nectar of the Himalyan Balsam will attract pollinators and lower the chances of native plants being pollinated.

**Control/Management:**

- Hand pulling is an effective method of removal
- Plants should be bagged and disposed of
- Mulching or soil cultivation can be successful
- Herbicide use is limited as the Himalyan Balsam regularly appears in wet areas

**History:** This plant is native to the Himalayas and spread to North America due to its beauty and was used as a garden plant. It quickly spread to the wild and became an annoying invasive species prone to causing issues.

**References:**

- <https://www.independent.co.uk/news/science/himalayan-balsam-call-the-marines-it-s-an-alien-plant-invasion-8723024.html>
- [Owlcation.com](http://Owlcation.com)
- [bcinavsives.ca](http://bcinavsives.ca)

**Common Name:**Nightshade

**Scientific Name:**Solanum

**Structure:** Seed leaves are narrowly egg shaped to lance shaped, covered with tiny hairs, and about 4–10 mm long. Flowers bloom from March through October. Four to eight star-shaped, usually white flowers grow in a cluster. Berries turn from green to black when mature and the outer portions of the flower cover only a small part of the fruit surface. Seeds are egg shaped, and 5–8 mm in diameter.



**Distribution in BC:** A few are located in British Columbia.

**Human Impact:** This a poisonous plant, the part of the plants that are toxic are almost all parts, immature fruit and leaves. The weed's extensive root system enables the plant to draw moisture and nutrients from a large volume of soil and compete effectively against other species. The plant reduces the production of winter crops.



**Management or treatment:** Some of the things people do are application of a registered herbicide and physical removal. Also another way is the change in land is used as a prevention of this weed to spread but you have to use first the others 2 options before changing the land.

**History:** Nightshade is a part of the Solanaceae family of flowering plants which includes tomatoes, potatoes, eggplants and more, and can be found growing throughout most of the northern hemisphere.

## References

UC IPM Pest Management Guidelines, Weed Gallery: Black nightshade, UC IPM, 30/april/2020, [http://ipm.ucanr.edu/PMG/WEEDS/black\\_nightshade.html](http://ipm.ucanr.edu/PMG/WEEDS/black_nightshade.html)

Bassett I. J., Bailey L. H., Cooper M. R., (1970-1980), nightshade (Common name), Canadian Biodiversity Information Facility, 30/april/2020,

<https://www.cbif.gc.ca/eng/species-bank/canadian-poisonous-plants-information-system/all-plants-common-name/black-nightshade/?id=1370403267063>

Parsons, WT & Cuthbertson, EG., (February 2010), Silverleaf Nightshade, Agriculture Victoria, 5/may/2020,

<http://agriculture.vic.gov.au/agriculture/pests-diseases-and-weeds/weeds/a-z-of-weeds/silverleaf-nightshade>.

Sterkenberg Zack, (28/October/2015), Botany Gone Bad: The History of the Deadly Nightshade Plant, ambius, 5/may/2020,

<https://www.ambius.com/blog/botany-gone-bad-the-history-of-the-deadly-nightshade-plant/>

**Common Name** Scotch broom

**Scientific Name** *Cytisus scoparius*

**Description of Structure** The scotch broom which is an evergreen shrub consists of bright yellow flowers with red dots in the middle. This shrub has 5 angled woody stems with stalky leaves with 3 leaflets at the bottom and unstalked leaves toward the top. This shrub can grow anywhere from 1-3 meters high. The seed pods are flat and hairy that go from green in colour to black with maturity.



**Distribution in BC** The Scotch Broom is so invasive because these plants can produce up to 3500 pods which contain 5-12 seeds which can be launched up to 5 meters away from the plant and can easily spread to new areas by seed transport by vehicles. The scotch broom can also produce shoots from cut stems, roots and stumps

**Impact** This weed can increase wildfire fuel which escalates wildfire intensity, obstruct site lines on roads, resulting in increased maintenance costs for removal, limit movement of large animals, and the infestations of this plant can kill off conifer seedlings.

**Control/Management** to control the growth of this plant, a systemic herbicide is recommended to kill the entire plant including all stems and roots.

**The** scotch broom is a plant native to western and central europe and is very common in Great Britain which it is believed to originate from(probably Scotland) . The Scotch Broom was first brought to BC by Captain Walter Calhoun Grant who brought it from Hawaii to plant on his farm located on Vancouver Island.

**References** [https://en.wikipedia.org/wiki/Cytisus\\_scoparius](https://en.wikipedia.org/wiki/Cytisus_scoparius)  
<https://galtt.ca/broom.html>  
<https://bcinvasives.ca/invasive-species/identify/invasive-plants/scotch-broom>  
<https://www.google.com/url?sa=i&url=http%3A%2F%2Fblogs.oregonstate.edu%2Ftree-to-pics%2F2014%2F03%2F13%2Fsprings-scotch-broom-show-around-corner%2F&psig=AOvVaw189xn1AJJOo4im2pzsYAeP&ust=1588792401525000&source=images&cd=vfe&ved=0CA0QjhxqFwoTCKj17li3nekCFQAAAAAdAAAAABAD>

**Common Name:** St. John's Wort

**Scientific Name:** *Hypericum perforatum*

**Description of Structure:** The St. John's Wort grows in dense bush-like structures that can contain anywhere from 25-100 flowers per cluster. The seeds have a gel-like coating that can allow the seed to survive in soil for up to 10 years and one plant can disperse as many as 100,000 seeds per year. Full grown plants can reach up to 1m in height and will turn a rusty red colour. The St. John's Wort has a lateral reaching root system that is able to form new buds that are not part of the parent plant making them very easy to take over an ecosystem.



**Distribution in BC:** the Kootenays, Okanagan, Boundary, North Thompson, Cariboo, Skeena, Fraser Valley and Vancouver Island. Basically anywhere with low to mid elevation near the coast, forest or grassland.

**Impact:** The St. John's Wort is poisonous to livestock with light coloured hair posing a large threat to farmers. Since 1686 it has been used as a medicine and was thought to have many healing properties like antibiotic and wound healing properties contained in its red oil. The St. John's Wort can also play with drug effectiveness through enzymes contained in the plant. In medieval times a brew of the plant was even used to treat skin disorders.

**Control/Management:** In Canada there are two leaf eating beetles that are used to very effectively control this weed. In Nova Scotia there is another plant that is able to control the growth of the St. John's Wort, as it is a host plant that maintains the weed at low levels.

**History:** The St. John's Wort was first found in Europe and was first spotted in North America in 1793 in Pennsylvania. By 1893 it was seen in western United States and then in 1940 it was thought to have spread all the way into western Canada (British Columbia).

### **References**

<https://bcinvasives.ca/invasive-species/identify/invasive-plants/st-johns-wort>

[https://en.wikipedia.org/wiki/Hypericum\\_perforatum](https://en.wikipedia.org/wiki/Hypericum_perforatum)

[https://www.google.com/imgres?imgurl=https%3A%2F%2Fupload.wikimedia.org%2Fwiki%2Fcommons%2F4%2F47%2FSaint\\_John%2527s\\_wort\\_flowers.jpg&imgrefurl=https%3A%2F%2Fen.wikipedia.org%2Fwiki%2FHypericum\\_perforatum&tbnid=UEbDqVie0GoaGM&vet=12ahUKEwiMiK-YrpbpAhWaAzQIHW1XCRoQMygBegUIARCiAg..i&docid=ZAcpb3-RKZEaam&w=1600&h=1067&q=st%20johns%20wort&ved=2ahUKEwiMiK-YrpbpAhWaAzQIHW1XCRoQMygBegUIARCiAg](https://www.google.com/imgres?imgurl=https%3A%2F%2Fupload.wikimedia.org%2Fwiki%2Fcommons%2F4%2F47%2FSaint_John%2527s_wort_flowers.jpg&imgrefurl=https%3A%2F%2Fen.wikipedia.org%2Fwiki%2FHypericum_perforatum&tbnid=UEbDqVie0GoaGM&vet=12ahUKEwiMiK-YrpbpAhWaAzQIHW1XCRoQMygBegUIARCiAg..i&docid=ZAcpb3-RKZEaam&w=1600&h=1067&q=st%20johns%20wort&ved=2ahUKEwiMiK-YrpbpAhWaAzQIHW1XCRoQMygBegUIARCiAg)

<https://www.nrcresearchpress.com/doi/pdf/10.4141/cjps88-015>