

Measures to Prevent the Spread of Invasive Species

Scope:

These measures, reporting procedures, and field cards are intended to be used during timber reconnaissance, block and road development, and any other applicable field work by BC Timber Sales staff, Timber Sales Licence holders, and contractors working in the BCTS Strait of Georgia (TSG) business area. This document applies to the following Forest Stewardship Plans:

- West Coast FSP (effective June 19, 2023)
- Campbell River FSP (effective July 20, 2023)
- Pacific Maritime FSP (effective April 1, 2018)
- South Central Coast FSP (effective February 23, 2017)

Purpose:

Species listed in the Invasive Plants Regulation do not occur naturally in British Columbia, and their presence can cause environmental and/or economic harm, and in some cases cause harm to humans or animals. The purpose of this document is to:

- Reduce the introduction and spread of plants listed in the Invasive Plants Regulation;
- Provide BCTS TSG staff and contractors with resources to identify and report invasive plant species;
- To uphold commitments to SFI standards;
 - Objective 4.1 – Conserve Biological Diversity
 - Indicator 7 - Participation in programs and demonstration of activities as appropriate to limit the introduction, spread and impact of invasive species that directly threaten or are likely to threaten native plant and animal communities.
- Meet FSP requirements to prevent the introduction or spread of species of plants under the Invasive Plant Regulation.

Applicable legislation:

Forest and Range Practices Act, Section 47 – Invasive Plants

1. *A person carrying out a forest practice or a range practice must carry out measures that are*
 - a. *specified in the applicable operational plan, or*
 - b. *authorized by the minister*

to prevent the introduction or spread of prescribed species of invasive plants.

Forest Practices and Planning Regulation, Section 17 – Invasive Plants

For the purpose of section 47 [invasive plants] of the Act, a person who prepares a forest stewardship plan must specify measures in the plan to prevent the introduction or spread of species of plants that are invasive plants under the Invasive Plants Regulation, if the introduction or spread is likely to be the result of the person's forest practices.

Forest and Range Practices Act – [Invasive Plant Regulation](#)

FSP Measures:

West Coast FSP:

Operating areas: Alberni, Effingham, Kennedy, May Lake, Toquart, Tzartus

1. Where field activities are taking place, confirm previously reported locations of priority invasive plants within the plan area using the most current recognized provincial database.
2. Where new incidences of priority invasive plants are noted in the field, notify your BCTS representative and report occurrences to the most current recognized provincial database.
3. Where invasive plants are likely to be introduced or spread as a result of forest activities being carried out, seed contiguous areas of exposed soil that exceed 0.25 ha, excluding the road prism, within 2 growing seasons of completing the activity. Where readily available and comparable in cost, preference must be given to grass seed that is:
 - High sod-forming content, except in areas that are planted with tree seedlings;
 - Has been certified by the Canadian Seed Growers Association that the seed;
 - Meets the standards for varietal purity established by the Canadian Seed Growers Association for seed of that species (Seeds Act, Seeds Regulation s.2(1)); and
 - Is of native origin.
4. Revegetate previously rehabilitated temporary access structures with legumes within 2 growing seasons of completing the activity.

Campbell River FSP:

Operating area: Artlish, Burman, Eve, Heber Saunders, Hesquiat, Kaouk, Port Eliza, Sayward

1. Where new incidences of priority invasive plants are noted in the field, notify your BCTS representative and report infestations to the Report Invasives mobile app or the most current recognized provincial database within 1 year of initial observation.
2. Minimize ground disturbance to mitigate suitable conditions for the establishment of invasives plants.
3. Where invasive plants are likely to be introduced or spread as a result of the activities being carried out, seed contiguous areas of exposed soil that exceed 0.1 ha, excluding the road prism, within 12 months of completing the activity. Where readily available and comparable in cost, preference must be given to grass seed that:
 - a. Is of native origin or is an agronomic grass seed that has a grade of Common No. 1 Forage Mixture or better;
 - b. Has a "Certificate of Seed Analysis" to ensure the seed will be free of invasive species listed under the Weed Control Regulation or the FRPA Invasive Plants Regulation.
4. Reduce the spread of existing infestations of species listed in the Invasive Plant Regulations by:
 - a. Where practicable, not brushing or mowing invasives plants during road maintenance activities, unless required for safety purposes;
 - b. Requiring all ground-based equipment be cleaned of soil and plant material before moving or transporting from an infested site to a new site.
5. If invasive plants are detected during post-harvest monitoring, develop and implement a plan with the assistance from a MOF Invasive Plant Specialist.

Pacific Maritime FSP:

Operating area: Chemainus, Chemainus Pacific, Koksilah, Nanaimo, Rosander, San Juan

1. Where field activities are taking place, confirm previously reported locations of priority invasive plants within the plan area using the most current recognized provincial database.
2. Where new incidences of priority invasive plants are noted in the field, notify your BCTS representative and report infestations to the most current recognized provincial database.

3. Where invasive plants are likely to be introduced or spread as a result of the activities being carried out, seed contiguous areas of exposed soil that exceed 0.25 ha, excluding the road prism, within 2 growing seasons of completing the activity. Where readily available and comparable in cost and effectiveness, preference must be given to grass seed that is:
 - a. High sod-forming content, except in areas that are planted with tree seedlings;
 - b. Has been certified by the Canadian Seed Growers Association that the seed;
 - i. Meets the standards for varietal purity established by the Canadian Seed Growers Association for seed of that species (Seeds Act, Seeds Regulation s.2(1)); and
 - ii. Is of native origin.
4. Revegetate previously rehabilitated temporary access structures within cutblocks with legumes within 2 growing seasons of completing authorized activities.

South Central Coast FSP:

Operating area: Bute Inlet, Estero, Fulmore, Loughborough, Sonora

Note: Priority invasive plants refers to gorse, Japanese knotweed, Giant knotweed, Scotch broom, purple loosestrife, and yellow iris, consistent with section 2 of the Invasive Plants Regulation, which may be found within the plan area.

1. Where field activities are taking place, confirm previously reported locations of priority invasive plants within the plan area using the most current recognized provincial database.
2. Where new incidences of priority invasive plants are noted in the field, notify your BCTS representative and report infestations to the most current recognized provincial database.
3. Where invasive plants are likely to be introduced or spread as a result of the activities being carried out, seed contiguous areas of exposed soil that exceed 0.1 ha, excluding the road prism, within 2 growing seasons of completing the activity. Where readily available and comparable in cost and effectiveness, preference must be given to grass seed that is:
 - a. High sod-forming content, except in areas that are planted with tree seedlings;
 - b. Has been certified by the Canadian Seed Growers Association that the seed;

- c. meets Common #1 Forage Grade or better standards for varietal purity established by the Association for seed of that kind of species (Seeds Act, Seeds Regulation S. 2(1)); and
 - d. is of native origin.
4. Monitor for re-seeding requirements on accessible, applicable areas concurrent with silviculture surveying.
5. If invasive plants are detected during post-harvest monitoring, develop, and implement a plan to mitigate the spread.

Reporting Invasive Species:

Known Locations

- Go to the map display of the InvasivesBC Application [InvasivesBC - Map \(gov.bc.ca\)](https://gov.bc.ca/invasivesbc)
- [InvasivesBC resources - Province of British Columbia \(gov.bc.ca\)](https://gov.bc.ca/invasivesbc)

Plant Descriptions

- Go to Invasive Species Council of BC Website: [Identify - Invasive Species Council of British Columbia \(bcinvasives.ca\)](https://bcinvasives.ca)
- More online resources can be found on the e-Flora BC website: [E-Flora BC: Electronic Atlas of the Plants of British Columbia \(ubc.ca\)](https://ubc.ca/e-flora)
- Review invasive plant field cards below

Report New Sightings (species listed in the Invasive Plants Regulation):

- Go to Report Invasives: [Reporting invasive species - Province of British Columbia \(gov.bc.ca\)](https://gov.bc.ca/report-invasives), select an app for download and utilize the instructions for reporting or select the link to report online and follow the steps.

OR

- Fill out an online reporting form [Report an Invasive Species – Form \(gov.bc.ca\)](https://gov.bc.ca/report-invasives)

OR

- Email invasive.plants@gov.bc.ca with a photo, location, and description of the invasive plant

More Information (preferred eradication/treatment methods):

- [Resources and publications - Province of British Columbia \(gov.bc.ca\)](https://gov.bc.ca/invasivesbc)
- [Best Management Practices for Forestry Operations](https://gov.bc.ca/invasivesbc)
- [Best Practices for Managing Invasive Plants on Roadsides](https://gov.bc.ca/invasivesbc)
- [Best Management Practices for Soil Movement and Disposal](https://gov.bc.ca/invasivesbc)
- [Priority Invasive Plants - Coastal Invasive Species Committee \(coastalisc.com\)](https://coastalisc.com) (Each plant has methods in the description)
- [Invasive Species 101 - Invasive Species Council of BC \(Training\)](https://bcinvasives.ca)

Invasive Species Regulation:

for the purposes of section 47 of the *Forest and Range Practices Act*, the prescribed species of invasive plants are as follows:

1. Anchusa, *Anchusa officinalis*
2. Baby's breath, *Gypsophila paniculate*
3. Black knapweed, *Centaurea nigra*
4. Blueweed, *Echium vulgare*
5. Brown knapweed, *Centaurea jacea*
6. Bull thistle, *Cirsium vulgare*
7. Canada thistle, *Cirsium arvense*
8. Common burdock, *Arctium minus*
9. Common tansy, *Tanacetum vulgare*
10. Dalmatian toadflax, *Linaria dalmatica*
11. Diffuse knapweed, *Centaurea diffusa*
12. Field scabious, *Knautia arvensis*
13. Giant knotweed, *Polygonum sachalinense*
14. Gorse, *Ulex europaeus*
15. Hoary alyssum, *Berteroa incana*
16. Hoary cress, *Cardaria draba*
17. Hound's-tongue, *Cynoglossum officinale*
18. Japanese knotweed, *Polygonum cuspidatum*
19. Leafy spurge, *Euphorbia esula*
20. Marsh thistle, *Cirsium palustre*
21. Mouse-ear hawkweed, *Hieracium pilosella*.
22. Meadow knapweed, *Centaurea pratensis*
23. Nodding thistle, *Carduus nutans*
24. Orange hawkweed, *Hieracium aurantiacum*
25. Oxeye daisy, *Chrysanthemum leucanthemem*
26. Perennial pepperweed, *Lepidium latifolium*
27. Plumeless thistle, *Carduus acanthoides*
28. Puncture vine, *Tribulus terrestris*
29. Purple loosestrife, *Lythrum salicaria*
30. Rush skeletonweed, *Chondrilla juncea*
31. Russian knapweed, *Acroptilon repens*
32. Scentless chamomile, *Matricaria maritima*
33. Scotch broom, *Cytisus scoparius*
34. Scotch thistle, *Onopordum acanthium*
35. Spotted knapweed, *Centaurea maculosa*
36. St. John's wort, *Hypericum perforatum*
37. Sulphur cinquefoil, *Potentilla recta*
38. Tansy ragwort, *Senecio jacobaea*
39. Teasel, *Dipsacus fullonum*
40. Yellow Iris, *Iris pseudacorus*
41. Yellow starthistle, *Centaurea solstitialis*
42. Yellow toadflax, *Linaria vulgaris*

1. [Anchusa, *Anchusa officinalis*](#)

- hairy stems

Flowers:

- grow in numerous clusters with five sepals and petals

-small radially symmetrical sapphire blue

Leaves:

- simple and alternate branching , covered with stiff hairs.

- Toothed with spiny margins



2. [Baby's breath, *Gypsophila paniculata*](#)

- a slender, twiggly perennial plant.

- 0.4 to 1.2 m tall as a mound shaped bush.

Flowers:

- very numerous on highly branched inflorescences.

- tiny (6-8 mm), star-shaped with five petals, and is white to light pink.

Leaves:

- opposite each other, silvery-green and narrow.

- approximately 2.5-5.0 cm long and can be smooth or hairy.

- when in flower, the leaves are often not noticeable.



3. [Blueweed, *Echium vulgare*](#)

-30-80 cm tall

- upright, unbranched form with a hairy, painful to touch stem.

Flowers:

- blue, five lobed and funnel-shaped on the upper side of the short stems.

Leaves:

- linear and long, forming a basal rosette in its first year.

- leaves are present on the lower half of the plant when flower and are also very hairy.



4. Black Knapweed, *Centaurea nigra*

- 30 to 150cm tall
- upright, branched stems covered with short hairs (appears wooly)

Flowers:

- thistle-like, purple to white color, and approx. 1.5-3cm across.
- covered with stiff black/brown bracts with long black “comb-like” fringes.

Leaves:

- Green-gray, leaf much longer than wide, roughly hairy, 5-20cm on lower stem.
- leaf margins may be slightly lobed to continuous margins and will gradually become smaller towards flowers



5. Brown Knapweed, *Centaurea jacea*

- 30-150cm tall
- perennial that is openly branched near top

Flowers:

- Rose to purple and approx. 3 cm across

Leaves:

- green-gray, leaf much longer than wide, roughly hairy, leaf margins may be slightly lobed to continuous margins and will gradually become smaller towards flowers

Bracts:

- tips are wider than base and the thin, papery margins have a dark brown centre



6. Bull Thistle, *Cirsium vulgare*

- erect and branched with a mix of sharp spines and dense white hairs; green to greenish-red in colour

Flowers:

- round to pear shaped; florets are bright purple and come out at the top. Below the florets there are several spiny bracts.

Leaves:

- rosette leaves are dark green; the upper and lower surfaces are covered in dense, white hairs. Margins are deeply lobed with sharp spines at the tip of each lobe.



7. **Canada thistle, *Cirsium arvense***

- a shiny green, spiny plant that can grow from 0.3-2.0 m tall.
- distinguished from other thistles by its smooth spine-less stem.

Flowers:

- white to purple in clusters of up to five pom-pom-like flowers on stem tips with a faint vanilla scent.
- flowers are typically smaller than other thistle species.
- Seeds look like a dandelion i.e., parachute-type seeds.

Leaves:

- glossy green with sharp, spiny edges and has white hairs on the underside.



8. **Common burdock, *Arctium minus***

- 2 m tall, upright plant with reddish stems.
- Most branching stems will have large burrs on them.

Flowers:

- pink to purple flowers bloom from July-Oct
- distinct spiny hooked leaves surrounding the flower.
- burrs of seeds are round and bristly and are up to 22 mm wide.

Leaves:

- large, heart shaped, and have characteristically hairy undersides with toothed or wavy edges.
- lower leaves can grow to 50 cm long.



9. **Common tansy, *Tanacetum vulgare***

- range from 0.4–1.5 m tall and can grow in thick infestation.

Flowers:

- bright yellow, flat-topped, round and grow in clusters.

Leaves:

- dark green, and its leaves fern-like and divided with sharp edges.
- each leaflet is serrated.



10. Dalmatian toadflax, *Linaria dalmatica*

- creeping perennial, thick walled, somewhat woody

- stems are 2 to 4 feet tall

Flowers:

- borne in loose, elongate, on end of stalks
- snap-dragon shaped, bright yellow, sometimes with orange centers.

Leaves:

- waxy, heart shaped, and clasp the stem
- Ovate to ovate-lanceolate, and are alternate



11. Diffuse knapweed, *Centaurea diffusa*

- grows to 0.1-0.6 m as a slender, short flowering plant.

Flowers:

- white or sometimes purple
- in clusters or solitary at the end of branches with small, sharp, rigid spines on the bracts.
- bracts are yellowish with a brownish margin, sometimes spotted, fringed on the sides, and terminating in a slender bristle or spine.

Leaves:

- hairy, greyish-green, and split on many branches growing from a single upright stem.
- larger, hairy leaves at the base that get smaller as they go up the stem.



12. Field scabious, *Knautia arvensis*

- short perennial plant with hairy, upright stems and a well-formed taproot.

Flowers:

- large, violet to pink, clover-like and grow on long leafless stalks.

Leaves:

- grow in rosettes which are hairy, coarsely toothed, feather-shaped and variable lobed.



13. [Giant Knotweed, *Polygonum sachalinense*](#)

- bamboo-like hollow green stems, sometimes with reddish-brown speckles up to 5 m in height.
- stems may persist through the winter as bare, grey- or straw-coloured hollow stalks.

Flowers:

- attractive plumes of small, white to green flowers in the spring.

Leaves:

- predominantly heart- to triangular-shaped, 16-20 cm wide, 30 cm in length.



14. [Gorse, *Ulex europaeus*](#)

- spiny, perennial evergreen shrub with a single upright, green, branching stem that can grow to 1-3 m tall.

Flowers:

- fragrant, yellow pea-like.
- seedpods are black and hairy.

Leaves:

- green and modified into spines, but young gorse can have normal leaves that are trifoliate, resembling clover.



15. [Hoary Alyssum, *Berteroa incana*](#)

- upright to 0.7 m tall and is covered in star-shaped hairs.

Flowers:

- small white flowers with deeply notched petals.
- Oval seedpods are 5-8 mm long, somewhat flattened, and held close to the stem.

Leaves:

- greenish grey in color and clasp closely to the stem.



16. Hoary cress, *Cardaria draba*

- from 10-60 cm tall.

Flowers:

- numerous white flowers with 4 petals each.
- dense flower clusters give a flat-topped appearance early in the season.
- seed pods are heart-shaped.

Leaves:

- on mature plants are hairy and shaped like arrow-heads.
- upper leaves on immature plants are typically hairless and clasp the stem.



17. Hound's-tongue, *Cynoglossum officinale*

- can grow up to 1.5 m tall with hairy, upright stems.

Flowers:

- a dull red-purple with five petals each.
- each flower produces four rounded-triangular seeds covered with hooked prickles.

Leaves:

- first year plants form a rosette with flopping leaves that resemble the shape of a dog's tongue.
- in the second year, mature plants develop rough, hairy, wide leaves.



18. Japanese knotweed, *Reynoutria japonica*

- a bamboo-like tall, straight and dense plant growing 1-5m in height.

- stems are hollow and green, sometimes with reddish-brown speckles and may persist through the winter as bare, grey- or straw-colored hollow stalks.

Flowers:

- attractive plumes of small, white to green clusters in the spring.

Leaves:

- heart- to triangular-shaped, 8-10 cm wide and 15 cm in length.
- grow in a zigzag pattern in along the plant's arching stems.



19. Leafy spurge, *Euphorbia esula*

- grows up to 1 m tall as a bushy plant.
- all parts of the plant contain a milky juice (latex) that can irritate skin when the plant is cut or broken when being handled.

Flowers:

- greenish-yellow flowers grow in a flat-topped umbrella shape, with pairs of heart-shaped floral leaves underneath flower clusters.

Leaves:

- narrow and spiral around the stem.



20. Marsh plume thistle, *Cirsium palustre*

- has a single, slender, unbranched stem with spiny wings that can grow up to 1.5 m in height.

Flowers:

- Purple flowers cluster at the end of stems.

Leaves:

- spiny, hairy and have woody veins on the underside.



21. Mouse-ear hawkweed, *Hieracium pilosella*

- perennial herbaceous plant that is growing, up to 30cm tall.
- stems are slender and hairy.

Flowers:

- single or pairs at end of stem; dandelion-like with many petals
- bracts covered in blackish glandular and white bristly hairs.

Leaves:

- flat, narrow and covered in hairs.
- simple, alternate, and at the base of the plant.



22. Meadow knapweed, *Centaurea pratensis*

- 30 to 150cm in height
- Perennial that is openly branched near top

Flowers:

- Rose to purple and approx. 2 cm across.

Leaves:

- Deep-green, much longer than wide, hairy and stalkless. Basal leaves occasionally with wavy margins or lobed, taper at both ends, upper leaves are smaller and not lobed.

Bracts:

- Fringes gold to dark brown, about the width of the bract and rounded at the tip.



23. Nodding thistle, *Carduus nutans*

- herbaceous perennial, 0.2 to 2.4m tall
- 1 to 7 erect, highly branched stems that have spiny wings except immediately below flower head

Flowers:

- terminal, solitary, 2.5-5cm diameter, deep reddish purple
- bracts end in sharp, spiny tips

Leaves:

- alternate, dark green, deeply lobed or pinnately cut, and spiny margined
- extend onto stem, giving winged appearance



24. Orange hawkweed, *Hieracium aurantiacum*

- grows from 30-60 cm in height with a hairy stem, that contains a milky fluid when broken open.

Flowers:

- bright orange-red cluster at the top.

Leaves:

- bristly-hairy with few to no leaves being found on the stem.



25. Oxeye daisy, *Chrysanthemum leucanthemum*

- a flowering plant that can range from 20–80 cm in height.

Flowers:

- typical daisy-like appearance, with single white flowers and a yellow center.

Leaves:

- wavy and clasp toward the stem.



26. Perennial pepperweed, *Lepidium latifolium*

- grow to 0.5-2.0m tall, waxy stem, perennial.

Flowers:

- white, packed in dense clusters near end of branches

Leaves:

- alternate, lance-shaped, entire to toothed, bright green to grey-green, waxy and without clasping bases.

- Basal leaves are larger than upper leaves.



27. Plumeless thistle, *Carduus acanthoides*

- grow to 0.3-1.2m tall and have a stout, fleshy taproot.

- stems are freely branched above and covered with leaf-like spines that extend up to the flowering heads.

Flowers:

- solitary at the ends of branches or in clusters of 2-5.

- Purplish-pink, 2-5cm diameter.

- bracts are narrowly lance-shaped and appear as sharp spines.

Leaves:

- Basal rosette leaves 10-20cm long with spiny lobes.

- alternate, stalkless, hairy underneath, and blending into the stem.



28. Puncture vine, *Tribulus terrestris*

-Silky hair annual, green to reddish brown stems (0.3-1.5m long), forming dense mats

Flowers:

- yellow, solitary on short stalks, 5 petals, 13mm wide, opening in mornings only
- fruit is hard spiny bud with five burs that split when mature. Can hook to clothes to spread.

Leaves:

- 13mm long, opposite, and divided into 4-8 pairs of oval, 13 mm leaflets.



29. Purple loosestrife, *Lythrum salicaria*

- a shrub-like appearance, with stiff, four-sided stems.

-Plants can grow up to 3 m in height.

Flowers:

- grow in in dense spikes and are showy and pinkish-purple.

Leaves:

- narrow, stalkless leaves.
- often confused with the native plant fireweed.



30. Rush Skeletonweed, *Chondrilla juncea*

- grows up to 1.3 m tall, and has many wiry, branched stems that have reddish, down-turned hairs at the base.

Flowers:

- small yellow flowers that are flat and toothed across the end.

Leaves:

- Barely visible narrow leaves give this plant a skeleton-like appearance.



31. Russian knapweed, *Acroptilon repens*

- bushy perennial, ranging from 0.5-1m tall.
- stems grow upright and widely branched. Young stems covered in grey hairs.

Flowers:

- small, either pink or purple.
- bracts under the flower heads are green to straw coloured.

Leaves:

- alternate pattern, oblong to lance shaped.
- lower leaves are lobed.



32. Scentless chamomile, *Matricaria maritima*

- can grow from 15 cm-1 m tall, with mature plants having many flowers growing on separate stems.

Flowers:

- like a daisy with white petals and a yellow center.

Leaves:

- small and look like frilly carrot leaf tops that grow all along the length of the stem.

Similar species:

- Oxeye daisy looks similar; however its flowers are larger, and leaves are not carrot-like.



33. Scotch broom, *Cytisus scoparius*

- a shrub that grows from 1-3 m in height.
- stems are woody, rigid and five-angled.

Flowers:

- bright yellow pea-like flowers, that sometimes have red markings in the middle.

Leaves:

- lower leaves have three leaflets, while the upper leaves are singular.



34. Scotch thistle, *Onopordum acanthium*

- can grow up to 3 m tall and has stems with spine-edged wings that run up the sides.

Flowers:

- large pink, purple or sometimes reddish.

Leaves:

- irregularly lobed, have sharp yellow spikes, and are covered in woolly hairs that give the foliage a grey-green appearance.



35. Spotted knapweed, *Centaurea maculosa*

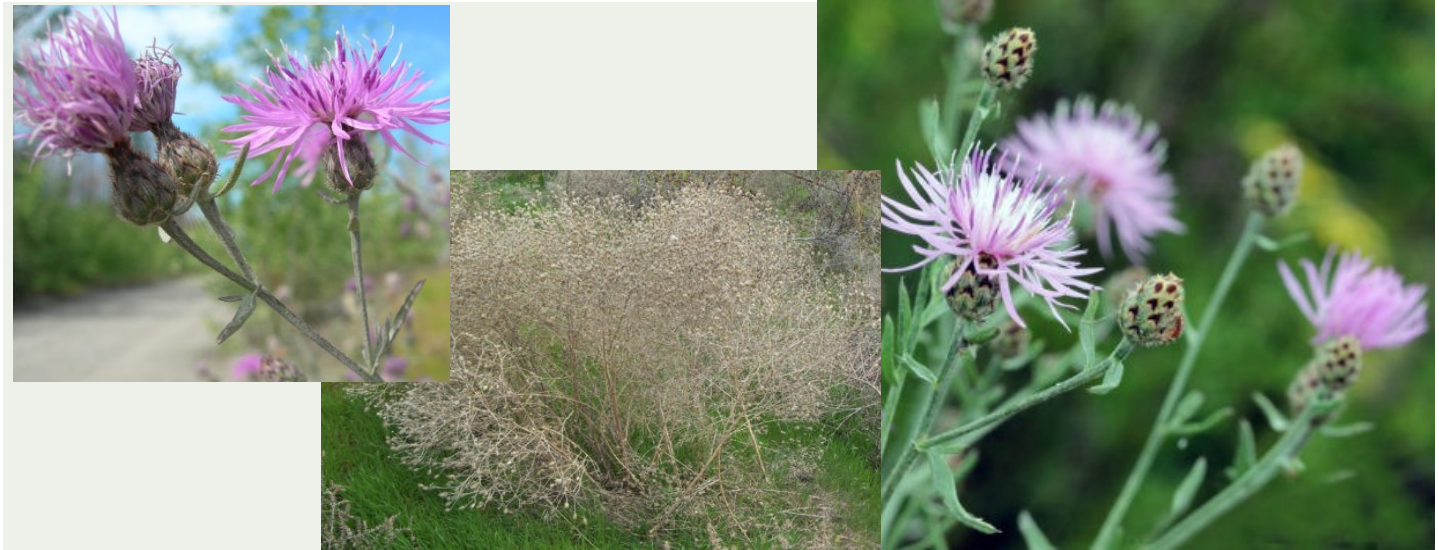
- a biennial plant that can grow 60-150 cm tall with several branched stems growing vertically from a thick taproot.

Flowers:

- purple, sometimes white, found individually (not in clusters), at the ends of branches.
- black-tipped flower head bracts (leaf-like petals) give plants a spotted appearance.

Leaves:

- grey-green, deeply lobed with alternate arrangement. They become smaller as they advance up the stem.



36. St. John's wort, *Hypericum perforatum*

- grows from 0.3-1 m in height.

Flowers:

- bright yellow, with 5 petals each, and grow in clusters at the top of branches.
- turn a rusty red colour after finishing flowering late in the summer and autumn.

Leaves:

- dark green, opposite leaves which show tiny transparent gots when held up to the light.



37. Sulphur cinquefoil, *Potentilla recta*

- a herbaceous plant that can grow from 0.3-0.8 m tall.

Flowers:

- pale yellow flowers, each with 5 heart-shaped petals.

Leaves:

- hairy and divided into 5-7 separate toothed leaflets, arranged in a palm-like formation.

Similar species:

- often confused with the native Graceful cinquefoil (*Potentilla gracilis*), which is shorter and has white woolly hair on the underside



38. Tansy ragwort, *Senecio jacobaea*

- can grow to be 0.2-1.2 m in height with purplish stems.

Flowers:

- bright yellow daisy-like flowers with 10-15 petals each. Flowers are arranged in a dense, flat-topped cluster.

Leaves:

- dark green and ruffled, becoming ragged in appearance during their second year of growth.



39. Teasel, *Dipsacus fullonum*

- stems grow from 0.5-2 m and taller, with few prickly branches.

Flowers:

- spiny cone-shaped seed head with small pink or light purple flowers.

Leaves:

- long, thin and arrow shaped.



40. Yellow Flag Iris, *Iris pseudacorus*

- a perennial aquatic plant that can grow to be 1-1.5 m tall on a smooth green stem.

Flowers:

- bright yellow, often with brown spots or purple veins, with 3 upward pointing petals and three downward pointing, tongue shaped “petals” called sepals.

Leaves:

- flat and sword-shaped, up to 90 cm long and 3 cm wide.



41. Yellow starthistle, *Centaurea solstitialis*

- erect, rough, branching and can grow up to 1 m in height. Sometimes it can grow in clusters that appear shrubby.

Flowers:

- bright yellow, found at the end of stems.
- distinct with sharp straw-coloured thorns that can reach 2 cm long.

Leaves:

- Lower leaves are deeply lobed while upper leaves are toothless and sharply pointed.



42. Yellow toadflax, *Linaria vulgaris*

- grows up to 80 cm in height by a creeping root system.

Flowers:

- light yellow with an orange spot on its lower lip, like a snapdragon.

Leaves:

- long, slim, light green leaves.

Similar species:

- Dalmatian toadflax is a similar plant with yellow, snapdragon-like flowers but grows taller, has larger flowers, and heart shaped leaves.

