

Canada Thistle

Cirsium arvense Sunflower Family

Identification Tips

- Branched perennial 2-5 feet tall with extensive, deep, creeping horizontal roots
- Leaves narrow, 2-7 inches long, with crinkled, lobed, spiny edges
- Flower heads pink to lavender, numerous, on branch tips
- Flower heads smaller than those found on other thistles

Biology

A single plant can cover a large area with many stems arising from one root system. Flowers June to September. Seeds move by wind, water, and attached to animals, clothing, equipment, and vehicles. Also found in contaminated crop seed and hay. Plants mostly spread by lateral root growth and new shoots from root buds. Root pieces as small as ¼ inch have enough stored energy to develop new plants, and can survive at least 100 days without aboveground shoots. Horizontal roots may extend 15 feet, and vertical roots 6-15 feet deep.

Impacts

Single plants spread quickly to form dense patches. One plant can colonize an area 3-6 feet in diameter in 1 or 2 years. Crowds out forage grasses in pastures and rangelands. Reduces crop yields and pasture productivity.

Distribution

Thought to have been introduced to the United States from Europe and Asia during the 1800s. Now established on every continent except Antarctica. Found throughout King County in cultivated fields and pastures, as well as open areas with disturbed soil such as logged sites, roadsides, railway embankments, and vacant lots.

What You Can Do

In King County, Canada thistle is already so widespread that requiring control would not be feasible, but you can reduce its impact by keeping it from spreading off your property. You can help hay growers and other farmers by controlling thistles in rural areas.

Control Methods

For best results, control methods should be employed throughout several growing seasons. The key principle in Canada thistle control is to reduce the root mass by stressing the plant and forcing it to use stored nutrients.

Manual:

Although seedlings are easily removed, digging established plants is not practical because of the far-reaching horizontal roots and deep vertical ones. For best results, cut plants when they have the least root reserves,

**Non-Regulated Class C
Noxious Weed:
Control Recommended**



Many compact, pink to lavender flowers grow at branch ends.



Spineless bracts surround flower heads, which are smaller than those of other thistles.



Leaves are 2-7 inches long, narrow, and have spiny, crinkled edges.

Questions?

King County Noxious Weed Control Program: **206-477-WEED** kingcounty.gov/weeds

which is when they have formed tight green buds (usually by June). Cut the regrowth each time buds reappear. This approach will weaken the roots over time. For new infestations, carefully dig up young plants before they become established. Make sure to remove all mature seed heads so no new seeds are left onsite.

Mechanical:

Do not cultivate or till until plants have been controlled. Each root fragment can grow into a new plant. Mowing or clipping at the bud stage can be effective, and should be repeated on regrowth to weaken roots. Combining fall herbicide treatment on regrowth after mowing has been effective. Mowing once a year is not effective. Seeds can develop 8-10 days after flowers open, so mowing before buds open is best. Clean equipment, and avoid spreading mature seeds and/or root fragments to uninfested areas.

Cultural:

Maintain healthy, competitive grasses in pastures by fertilizing and using proper pasture management techniques. Avoid overgrazing and mow thistles after grazing. Seed or plant disturbed or open areas. If closely monitored, goats and sheep can be used to manage thistle.

Chemical:

Follow label directions, only using products appropriate and legal for the site at specified rates. Some herbicides have restrictions when pastures are grazed, especially by lactating dairy animals. Addition of a suitable surfactant to the spray mix will improve control. In pastures, use selective broadleaf herbicides that won't harm grasses. Avoid spraying drought-stressed plants or spraying just before a hard frost. Effectiveness of herbicides is increased when roots are weakened by mowing or previous treatments. Control entire infestation, since roots will spread from uncontrolled areas into adjacent controlled areas.

Soil-active selective broadleaf herbicides containing dicamba, clopyralid, and aminopyralid, as well as combination products clopyralid+2, 4-D and clopyralid+triclopyr work well when applied to actively growing thistles in spring pre-bud or in fall. (These soil-active herbicides should be used only in pastures and non-crop areas.) Triclopyr, 2, 4-D, and combination products such as 2, 4-D+dicamba or 2, 4-D+triclopyr are most effective when applied at or just before bud stage. Glyphosate is very effective when applied from after bud stage until fall frost, but is non-selective and will kill grasses. Wait at least 3 days to cut or till plants treated with glyphosate.

For more information, contact the Noxious Weed Control Program.



Plants spread mainly through lateral root growth, growing quickly to form dense stands.

Could be confused with:

Several native and invasive thistle species resemble Canada thistle.

For example, **bull thistle (*Cirsium vulgare*)** is a Class C noxious weed with deeply lobed, hairy, spiny leaves and spiny wings along its stems. It only reproduces by seed. **Edible thistle (*Cirsium edule*)** is a native thistle with lightly hairy leaves and cobwebby hairs around the bracts at the base of its flower heads. It also reproduces entirely by seed. Other look-alikes are the Class A invasive **milk thistle (*Silybum marianum*)** and the native **short-styled thistle (*Cirsium brevistylum*)**.



Bull thistle



Edible thistle