Milk Thistle

Silybum marianum — Sunflower Family

Class A Noxious Weed: Eradication Required

Identification Tips

- Robust branching winter annual/biennial, 2 to 6 feet tall
- One large, pink-purple flower per stem
- Spines along the leaf edges and stems
- White marbling patterns on shiny green leaves
- Broad, spiny bracts surround the flower head

Due to its limited distribution in King County and impact to agricultural lands, milk thistle is a Class A weed; eradication is required by law.

Biology

- Flowers from April to October
- Reproduces by seed; over 6,000 seeds per plant are produced annually
- Seeds fall near the plant and are moved by erosion, animals, rain, and human activity
- Seeds begin germinating after fall rains
- Seeds remain viable in the soil for at least 9 years
- Can overwinter as a rosette

Milk thistle is identified from other thistles by its distinctive leaves with white marbling.

Impacts

- Can cause nitrate poisoning in cattle and sheep
- Severely reduces forage in pastures and rangeland
- When not controlled, can produce 4 tons of green weight per acre pushing out beneficial plants

Distribution

- Limited distribution in King County; most sites located in rural King County
- Milk thistle may have been imported to the region through contaminated hay; has been used as an ornamental
- Establishes in areas with full or partial sun and disturbed soils such as pastures, roadsides, ditches and fencerows

Questions?

King County Noxious Weed Control Program Line: **206-296-0290**
www.kingcounty.gov/weeds

What You Can Do

Please report any new infestations of milk thistle so we can work quickly to stop it from spreading. Although sometimes grown as an ornamental or medicinal plant, in our region this plant has proven to be invasive and toxic to cattle and sheep. The King County Noxious Weed Control Program is actively trying to eradicate milk thistle from all areas in the county. Do your part by checking for this noxious weed on your property and for seeds on clothing, vehicles and animals when exiting an area known to have milk thistle.

King County

Control Methods

If you find milk thistle on your property, choose one or a combination of the control methods listed below.

Milk thistle

Manual: For small sites with few plants, pull or dig up rosettes or the bolted plants before seed heads form. Use a shovel to cut the plant off about one inch below the ground so the plant will not re-sprout. Chopping the leaves from one side of a rosette can provide access to the central growing point. Wear protective clothing. To be fully effective, all mature seed heads need to be bagged and removed so no new seeds are left on the site. Immature seeds can continue to develop in cut plants, and the less stem that remains attached to the flower head, the faster the seed head will dry out.

Mechanical: Plants can be controlled by frequent cultivation. Mowing is generally not recommended as it may prolong plant survival for another year and spread seeds. For mature plants, clear dense stands with manually operated tools: brush cutters, machetes or loppers. Cut plants below ground level to prevent regrowth. Clean equipment and take care to avoid spreading mature seeds to un-infested areas.

Cultural: Maintain healthy, competitive grasses in pastures by fertilizing, reseeding and using proper pasture management techniques. Goats reportedly can graze milk thistle with no ill effects, so it is possible to control small infestations with these animals. Keep other livestock from eating milk thistle; it can cause nitrate poisoning.

Chemical: Follow labels exactly as written and only use products appropriate and legal for the site. Herbicides should only be applied at the rates specified on the label. Be aware there may be additional herbicide restrictions when pastures are grazed, especially by lactating dairy animals. Foliar, broadleaf herbicides are most effective if applied to actively growing plants in the spring and in the fall. Control will improve with the addition of a suitable surfactant. Selective broadleaf herbicides with active ingredients such as triclopyr, 2,4-D, or aminopyralid applied before flowering work well and won't harm most grasses. Metsulfuron works but can cause some damage to perennial rye and fescues. Non-selective herbicides such as glyphosate, which will harm grasses, can be used where damage to other vegetation is not a concern. Do not cut treated plants until they have died. This can take two weeks or more. Reseed bare areas with grass or desired species. For questions about herbicide use, contact the King County Noxious Weed Control Program at **206-296-0290**.

Other Thistles

*There are several types of thistles in addition to milk thistle. The most common are Canada (*Cirsium arvense*) and bull (*Cirsium vulgare*) thistle. Due to their widespread distribution, control of these thistles in King County is not required, but it is recommended whenever possible. While all thistles share similarities, only milk thistle has green and white marbled leaves. Both bull thistle and milk thistle have sharp, spiny bracts surrounding the flower head, but those found on bull thistle are smaller and denser.*

Bull thistle

Canada thistle

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King County
Department of Natural Resources and Parks
Water and Land Resources Division
Noxious Weed Control Program
206-296-0290 TTY Relay: 711