

Bull Thistle

Cirsium vulgare

Sunflower Family

Non-Designated Noxious Weed: Control Recommended

Identification Tips

- Branching, erect biennial, 2 to 5 feet tall
- Rosettes form in first year, flowering stem the next
- Sharp spines on leaf edges and stems
- Leaves hairy on both the top and underside and deeply lobed
- Numerous large rose to purple flower heads with spines around the base, up to 2 inches wide
- Flowers clustered at the ends of branches

Biology

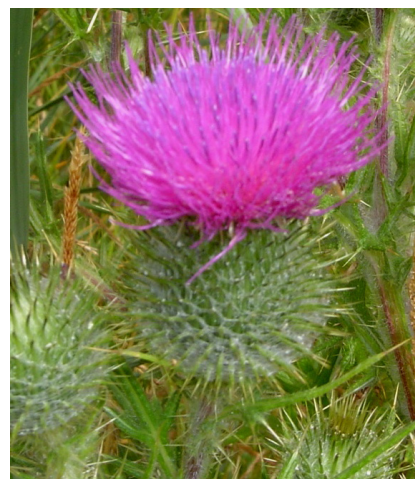
- Flowers June to September
- Reproduces by seed only, with up to 4,000 seeds per plant produced; buried seeds can remain viable for up to three years
- Has short, fleshy taproot with several primary roots
- Germinates in spring and fall

Impacts

- Single plants spread quickly to form dense patches
- Crowds out forage grasses in pastures and rangelands, especially when overgrazed
- Has been reported to cause hay fever symptoms in some individuals
- When not controlled, can reduce pasture productivity and stocking levels

Distribution

- Bull thistle is found throughout King County, in areas with disturbed soil such as roadsides, railway embankments, vacant lots, cultivated fields and pastures
- Can grow in any soil except soil that is constantly wet



Bull thistle has rose to purple flowers that bloom from June through September; sharp spines surround the flowerheads.



This weed can invade nearly any environment, from beachesides to pastures.

Questions?

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



What You Can Do

Bull thistle is a persistent and troublesome weed that was introduced to North America as a seed contaminant. It is found on every continent except Antarctica. In King County, bull thistle is already so widespread requiring control would not be feasible. However, the King County Noxious Weed Control Board recommends landowners voluntarily control it whenever possible.



Bull thistle rosette.

Control Methods

For best results, control methods should be employed throughout several growing seasons. A key principle to bull thistle control is preventing seed production. Most seeds germinate rapidly, usually in the spring and fall. Seeds on the surface typically do not survive for more than a year; seeds buried may remain viable for up to three years. Soil disturbance can stimulate germination and a flush of new plants.

Manual: For small sites with few plants, pull or dig up rosettes or the bolted plants before seed heads form. To avoid the plants' pervasive spines, chopping the leaves from one side of a rosette can provide access to the central growing point. Wear protective clothing including eye protection. To be fully effective, all mature seed heads need to be removed so no new seeds are left on the site.

Mechanical: Mowed thistles will produce new branches from basal buds but close mowing or cutting twice per season will usually prevent seed production. For more effective control, cut plants with a sharp shovel at 1" to 2" below the soil surface before flowering. Clean equipment and take care to avoid spreading seeds to un-infested areas. Plants can also be controlled by cultivation and tilling.

Cultural: Maintain healthy, competitive grasses in pastures by fertilizing and using proper pasture management techniques. Guarding against disturbances or overuse is also a good preventative measure. Bull thistle does not tolerate shade, so another cultural control option would be to plant tall grasses or other plants that would act to shade out the seedlings.

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. Selective broadleaf herbicides work well for areas with grass. Dicamba, triclopyr, aminopyralid or 2,4-D work best applied in spring before stem elongation and again in the fall to control rosettes. Metsulfuron can be applied

anytime plants are actively growing and clopyralid can be applied up to bud stage. (Metsulfuron may cause some damage to perennial rye and fescues.) Non-selective herbicides such as glyphosate (Round-up) can be used where damage to grasses is not a concern. Control will improve with the addition of a suitable surfactant. Do not cut treated plants until they have died. This can take two weeks or more. For questions about herbicide use, contact the King County Noxious Weed Control Program.

Milk Thistle: Removal Required by Law



Milk thistle

Milk thistle is a Class A noxious weed that is known to be toxic to cattle and sheep. Unlike other thistles, eradication of this plant is required by law; landowners must remove any infestations they have. Since milk thistle has a limited distribution in King County, it is hoped that full eradication will be achieved in the near future. Milk thistle is similar to other thistles in that it is a robust, branching plant, 2 to 6 feet tall with spines along the

leaf edges and stems. However, it is distinguished from other thistles by its white marbled leaves; it also only has one large purple flower per stem. If you see milk thistle, please contact the King County Noxious Weed Control Program.