



Silybum marianum

WA – Class A Noxious Weed, Prohibited Plant List

OR – Class B Noxious Weed

Milk Thistle

Blessed Milk Thistle, St. Mary’s Thistle

Family: Asteraceae/Compositae

Origins: Native to the Mediterranean region of Europe, Milk Thistle seeds have been used since the first century as a medicinal plant. It is unknown when Milk Thistle was initially introduced to the United States; however, it is still used for medicinal purposes worldwide.

Range: Found throughout the Western United States.

Habitat: Prefers the fertile soils of improved pastures that have been overgrazed or poorly managed. Milk Thistle thrives along roadsides, waste areas, and recently disturbed areas.

Impact: Milk Thistle forms dense stands in rangelands and pastures, displacing native beneficial forage species. Each plant produces an average of 6,350 seeds, which remain viable in the soil for up to 9 years. Ingestion of Milk Thistle can cause lethal nitrate poisoning in grazing animals.

Description: Milk Thistle is an annual or biennial herb that may complete an annual life cycle if it germinates early enough in the growing season. Plants grow 2 to 6 feet tall, with alternating leaves along the stout and ridged main stem. A distinctive white marbling pattern accents the shiny, dark green leaves. Leaf margins are yellow and tipped with woody spines ½ inch long. Basal leaves are broad, deeply lobed, and can reach 20 inches long and 10 inches wide.

Each stem ends in a solitary purple to pink flower head about 2 inches in diameter. Milk Thistle’s flower differs from other thistles due to the broad leathery bracts at the flower head’s base. Rows of bracts are tipped with stiff spines 1 to 2 inches long.

Common Look-Alikes: Bull Thistle, Scotch Thistle, Slenderflower Thistle.

* *Milk Thistle is a nitrate accumulator, lethal when ingested by livestock, particularly in the early wilting stage.*



(Rosette)

Integrated Pest Management - Control Methods

Integrated Pest Management (IPM) combines various methods such as mechanical, cultural, biological, and chemical controls to manage pests. IPM offers the possibility of improving the efficiency of pest control while reducing its negative environmental impacts. For more information, see the Cowlitz County Noxious Weed’s IPM Resources & Strategy Guide or contact your local Noxious Weed Control Board to develop a customized IPM plan.

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Non-Herbicide Control

Mechanical (pulling, cutting, digging, etc.)	<p>Digging or hand-pulling (with gloves) is successful, especially for young plants. Cut, bag, and trash flower heads before seeds develop.</p> <p>Mowing 2 to 3 times throughout the year before the plant develops flower heads can help prevent seeding but may prolong plant survival for another year and produce plants more resistant to chemical control <u>and is not recommended</u> as the only means of control.</p>
Cultural	<p>Maintain healthy competitive grasses in pastures by fertilizing and reseeded. Integrated pasture management is effective.</p>
Biological	<p>Using goats to graze plants has been effective in controlling infestations.</p>

Herbicide Control: Foliar Broadcast Treatment

2,4-D (Many trade names)	<p>Timing: Fall to control rosettes; spring before flower stalk elongates.</p> <p>Remarks: Annual treatments needed to control seedlings; avoid drift to sensitive crops; do not apply near water.</p>
Aminopyralid (Milestone)	<p>Timing: Spring or early summer to rosettes or bolting plants; fall to control seedlings and rosettes.</p> <p>Remarks: Many forbs can be seriously injured or killed; using a non-ionic surfactant will help enhance control under adverse conditions; do not apply near the root zone of desirable trees; do not use compost plant material that has been sprayed by this product; do not use manure from fields that have been sprayed with this product; do not apply near water.</p>
Chlorsulfuron (Telar)	<p>Timing: Apply to young, actively growing plants.</p> <p>Remarks: Do not apply to the frozen ground; maintain constant agitation while mixing the product with water; avoid contact with sensitive crops; do not treat powdery, dry soils and light, sandy soils if rain is not likely after treatment; refer to the label for use in aquatic areas.</p>
Clopyralid + 2,4-D amine (Curtail)	<p>Timing: Apply to actively growing thistle after most basal leaves emerge, but before bud stage.</p> <p>Remarks: For best results, wait at least 20 days after application before disturbing treated areas (cultivation, mowing, fertilization with shank-type applicators) to allow thorough translocation; may damage crops; do not apply near water.</p>
Other Listed Chemicals	<p>Aminocyclopyrachlor + chlorsulfuron, clopyralid, dicamba, diflufenzopyr + dicamba, glyphosate + 2,4-D, metsulfuron, picloram, triclopyr + clopyralid</p>

* Cowlitz County Noxious Weed Control Board does not endorse any product or brand name. Brand names are listed as an example only. Other commercial products may contain the listed active chemical for herbicide control. Always read and follow the safety protocols and rate recommendations on the herbicide label. **The Label is The Law.**

This control sheet includes excerpts from the Written Findings of the Washington State Noxious Weed Control Board (WSNWCB), nwcb.wa.gov. Herbicide information from the PNW Weed Management Handbook (ISBN 978-1-931979-22-1) and product labels.