

# Milk Thistle

*Silybum marianum* (AKA Blessed Milk Thistle, Spotted Thistle, Variegated Thistle)

FACT SHEET

Squamish: Prevent | Whistler: Prevent | Pemberton: Prevent

## DISTRIBUTION



**Origin:** Milk Thistle is native to the Mediterranean region, western Asia, and Russia. Milk Thistle was originally imported as an ornamental or medicinal plant.

**Habitat:** Milk Thistle grows well in areas with full sun and moist soils. It prefers nutrient rich soils with high nitrogen levels. It can be found in disturbed soils such as roadsides, ditches, and pastures.

**Reproduction:** Milk Thistle is an annual or biennial herb that reproduces by seed. Each plant can produce up to 6,000 seeds per year. The seeds have a large pappus (tuft of hair) which allows it to be carried by the wind. Germination occurs in the fall. Milk Thistle seeds can stay viable for more than 9 years.

## IDENTIFICATION



J. Leekie

**Flowers:** Large reddish-purple flowers have long spines on the bracts. Flower heads are between 2 - 6 cm in diameter and are mildly scented. Flower bracts are hairless with long spines.

**Stems:** Mature plants range from 0.5 - 2.0 m in height. Large Milk Thistle has hollow stems. Both the stems and the leaves exude a milky sap when cut.

**Leaves:** Are shiny and green with distinct white marbling patterns along the veins on deeply lobed leaves. Basal leaves are 15 - 70 cm long with spiny margins. The clasping stem leaves are much smaller.

**Fruits:** The seeds are black and brown and 8 mm long, slightly flattened with a ring of bristles at one end.

**Roots:** Taproot

### Similar Species:

- **Native:** Wavy leaf thistle (*Cirsium undulatum*)
- **Non-native:** Bull thistle (*Cirsium vulgare*), Scotch thistle (*Onopordum acanthium*), Plumeless thistle (*Carduus acanthoides*), Musk thistle (*Carduus nutans*), and Marsh thistle (*Cirsium palustre*).

Milk Thistle has distinctive white marbling on the leaves.

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**Vectors of Spread:** Milk Thistle spreads by seed. The heavy seeds do not fall far from the parent plant but they are often transported by rainwater or streams. Animal and human activity also spreads Milk Thistle.

#### WHAT CAN I DO?

**Milk Thistle is found in communities the Sea to Sky Region, so PREVENTION of further spread is key:**

- Regularly monitor properties for weed infestations.
- Ensure soil and gravel are uncontaminated before transport.
- Remove plant material from any equipment, vehicles, or clothing used in infested areas and wash equipment and vehicles at designated cleaning sites before leaving such areas.
- Minimize soil disturbances (e.g. use grazing plans that prevent soil exposure from overgrazing), and use seed mixes with dense, early colonization (e.g. alfalfa or barley) to re-vegetate exposed soil and resist invasion.
- Ensure plants (particularly flowering heads or root fragments) are bagged or covered to prevent spread during transport to designated disposal sites (e.g. landfill). **Do NOT compost.**

**Canada Thistle can be controlled by:**

- **Mechanical Control:** Dig or excavate Milk Thistle, replacing any divots created to reduce soil disturbance. Regular mowing/tilling to reduce weed progression is an option and material can be left on site to decompose; if the plants have already reached the post-flowering stage, all plant parts must be bagged and deeply buried at landfill. When tilling, be sure to prevent machinery from spreading root fragments to new sites. The best time to remove Milk Thistle is April and May before the plant goes to seed. Wear protective clothing when removing to avoid puncture wounds from the spines.
- **Chemical Control:** Triclopyr, 2,4-D, aminopyralid, and glyphosate are effective herbicides. We recommend that any herbicide application is carried out by a person holding a valid BC Pesticide Applicator Certificate. Before selecting and applying herbicides, you must review and follow herbicide labels and application rates; municipal, regional, provincial and federal laws and regulations; species-specific treatment recommendations, and site-specific goals and objectives.
- **Biological Control:** There is no biocontrol available for this plant.

**If you suspect you have found Milk Thistle anywhere in the Sea to Sky region:**

**Contact** the Sea to Sky Invasive Species Council to report and for the most recent, up to date control methods. All reports will be kept confidential.

**References:** City of Victoria, Coastal Invasive Species Committee, District of Saanich, Invasive Plant Atlas of the United States, Invasive Species Compendium, King County Missouri Botanical Garden, Noxious Weed Program.

## IMPACTS

#### Ecological:

- Toxic to wildlife and livestock.
- Creates dense stands that are difficult to cross, reducing habitat and creating barriers.
- Reduces biodiversity.

#### Economic:

- Reduces livestock foraging areas.
- Reduces crop value

#### Human:

- Has large woody thorns that can pierce footwear
- Forms dense stands that are very uncomfortable for people to move through, even on horseback.



J. Leekie



B. Rice, sarracenia.com  
Bugwood.org



C. T. Bryson, USDA Agricultural Research Service,  
Bugwood.org

## REPORT SIGHTINGS

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