Milk thistle

Silybum marianum

Why is milk thistle a problem?

Milk thistle is a serious threat to livestock. It accumulates nitrogen and can cause potentially lethal nitrate poisoning in animals. Spines can also cause injury to animals. Often found in dense stands, milk thistle deters livestock from grazing areas, limits usable acreage and reduces crop yield.

This invasive is thought to be introduced to Washington through contaminated hay and medicinal gardens within the past few decades.

Recognizing milk thistle

Milk thistle is a tap rooted winter annual or biennial. It is sparsely branched and can reach up to six feet tall, forming dense stands. In Clark County, milk thistle typically grows to four feet in height.

Flowers can be seen from April to October. Each solitary flowerhead can reach two inches in diameter and contains one large pink-purple flower. Broad, spiny bracts surround the flower head and spines are found along leaf edges and stems.

Leaves are a shiny dark green and contain distinctive white marbling along veins, which distinguishes milk thistle from other types of thistle.

Seeds are dark brown, heavy (20mg), fall close to the parent plant, and can remain viable in the soil for at least nine years. Seeds germinate after fall rains and plants then overwinter as a rosette.

Milk thistle is typically found in full sun or partial shade pastures, on roadsides and in soils with high nitrogen content, such as dairies.

YOU can help stop the spread of noxious weeds

- Report infestations
- Actively control noxious weeds on your property
- Contact Clark County's Vegetation Management Program for more information on species ID and recommended control methods
- Spread the word about noxious weeds, and why controlling them is so important

Remember, weeds are everyone's problem. Controlling noxious weeds on your property is your responsibility and the law.

Online Resources

Clark County Noxious Weed Program
www.clark.wa.gov/weed

Washington State Noxious Weed Control Board
Www.nwcb.wa.gov

Early Detection & Distribution Mapping System
Mobile App: www.eddmaps.org/west

Scan this QR code to download

For more information:

Vegetation Management Program
(360) 397-6140
email: weed.management@clark.wa.gov

For other formats, contact the Clark County ADA Office:
Voice (360) 397-2322, **Relay** 711 or (800) 833-6388,
Fax (360) 397-6165, **E-mail** ADA@clark.wa.gov.

Controlling noxious weeds on your property is your responsibility and the law.

Chapter 17.10 RCW, County Code Title 7

Clark County Environmental Services
Don Benton, Director
(360) 397-2121
www.clark.wa.gov/environment

Milk thistle

Silybum marianum

CLARK COUNTY
ENVIRONMENTAL SERVICES
VEGETATION MANAGEMENT PROGRAM

Why control noxious weeds in Clark County?

Noxious weeds are non-native plants that can be toxic, destructive, competitive and difficult to control once established.

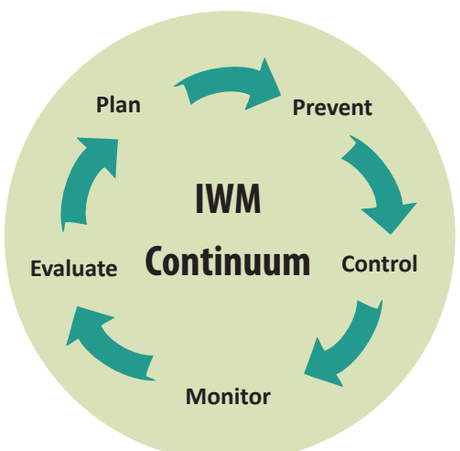
Economics - Noxious weeds cost the United States on average 30.6 billion dollars each year in decreased land value, money and time spent in control efforts, lower crop yields, reduced forage quality and impacts on animal health.

Environmental health - Noxious weeds displace native species, destroy natural habitat, clog waterways and increase erosion and fire risk.

Human & animal health - Many noxious weeds are toxic to humans and livestock. Contact or ingestion of some species can lead to serious health problems or death.

Recreation - Noxious weeds hurt recreation opportunities such as bird watching and fishing through reduced accessibility and destruction of native landscapes.

Integrated Weed Managment (IWM)



An Integrated Weed Managment plan is an ongoing, continuing cycle of weed prevention, control, monitoring, evaluation and planning

Managing weeds with Integrated Weed Management

The most effective way to manage weed infestations is to use a combination of control methods specific to the problem weed, where it is in its growth-cycle, and the location where it is growing. This approach is called integrated weed management, or IWM, which uses biological, mechanical, cultural, and chemical (herbicide) control methods that treat the problem weed yet protect human health, habitat, water, and other natural resources.

Prevention is better than control - The best control method of all is to prevent weeds in the first place. IWM starts with understanding the soil, water, natural resources and human impacts and uses on a site. For example, weeds often invade due to overgrazing, bare soil, or other factors that should be corrected for the control measures to be fully effective.

Long-term effectiveness – A good IWM plan is more effective than complete reliance on herbicide management. While not all control methods are useful for all weed species, taking an integrated approach to weed management can greatly increase the effectiveness of your efforts. As weed control is not a one-time fix, an IWM strategy should be practical, adaptable, cost-efficient, and effective.

IWM control recommendations for milk thistle

IWM control type	Control method		Effectiveness of control method							
			Small/backyard site				large/rural site			
			Good	Fair	Poor	N/A	Good	Fair	Poor	N/A
Physical & mechanical	digging		●							●
	hand-pulling		●							●
	mowing				●				●	
	tilling		●				●			
Cultural	bark mulch			●						●
	black plastic		●							●
	cover crop				●				●	
	native plant restoration				●				●	
	soil amendment				●				●	
Biological	managed grazing					●				●
	weed-feeding insects					●				●
		Product examples *								
Chemical	aminopyralid	Milestone	●				●			
	glyphosate	Roundup, AquaNeat, Rodeo	●				●			
	triclopyr amine	Garlon 3A, Lilly Miller Brush Killer	●				●			

** Brand names are listed as an example only. Other commercial products may contain the listed chemical control. Clark County does not endorse any product or brand name. Always read and follow the herbicide label. For more information on specific herbicides, please contact Vegetation Management.*

THE WEED CONTROL TOOLBOX

PHYSICAL
mowing
pulling
digging

Integrated Weed Managment uses multiple tools in combination for the most effective weed control.

CULTURAL
soil amendments
cover crops•mulch
native plants

BIOLOGICAL
weed-eating insects
managed grazing

CHEMICAL
herbicides