# Garlic mustard
*Alliaria petiolata*



## Why is garlic mustard a problem?

Garlic mustard is a very aggressive, rapidly spreading weed with a dense growth pattern. It displaces native plants and has a long seed viability which makes the species difficult to eradicate. Garlic mustard also produces phytotoxins that inhibit the growth of other plants and fungi around it, harming native species regeneration and survival.



Garlic mustard is thought to have been introduced unintentionally through debris piles and/or carried by people and pets. It is avoided by deer, giving it a competitive advantage over native plants.

## Recognizing garlic mustard

Garlic Mustard is a tap-rooted biennial or sometimes winter annual that grows 2-3 feet tall. It usually produces one flowering stalk per plant with small, four-petal white flowers clustered at the top of the stem, blooming in April and May.

Seedlings emerge in the spring and form basal rosettes by midsummer. In the spring of the second year the rosette produces a flowering stalk. Basal leaves are kidney-shaped with scalloped edges. Stem leaves are triangular with longer teeth on leaf edges, with the leaves becoming smaller toward the top of the plant.



Garlic mustard is usually found in shaded woodlands and along stream corridors, though it can grow in sunny sites as well.





The plant reproduces by seed and can self-pollinate or cross pollinate. Seeds are viable in the soil for at least 10 years.

## 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**

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

Chapter 17.10 RCW, County Code Title 7

**Clark County Public Works**
**Vegetation Management**
**(360) 397-2121**
**www.clark.wa.gov/environment**

# Garlic mustard
*Alliaria petiolata*



**CLARK COUNTY**
**PUBLIC WORKS**
**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 Management (IWM)
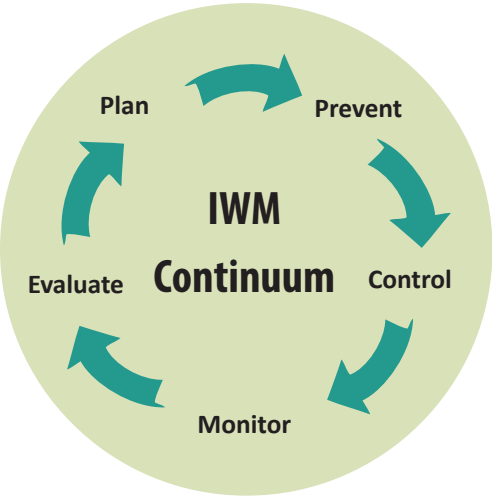


**An Integrated Weed Management plan is an ongoing, continuing cycle of weed prevention, control, monitoring, evaluation and planning**

## 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 garlic mustard

| IWM control type | Control method | Product examples * | 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 | | | | | ● | | | | ● |
| **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