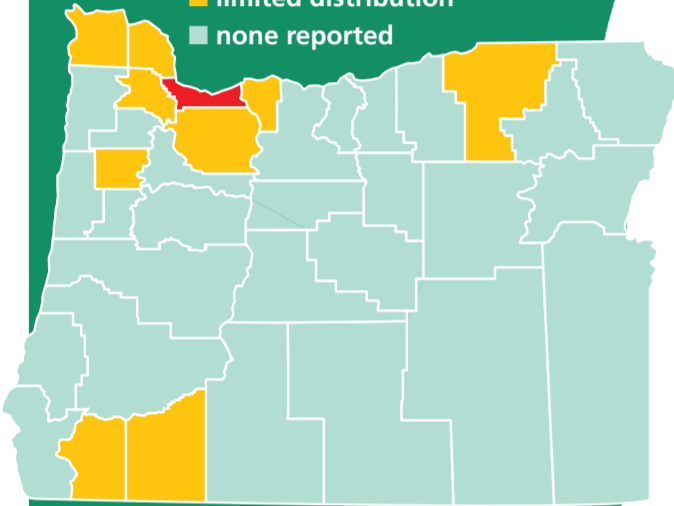


## Portland - Let's do our part!

### GARLIC MUSTARD IN OREGON

- abundant
- limited distribution
- none reported



source: www.weedmapper.org

## When Removing Garlic Mustard

### Do:

- Dig** Getting the root out reduces the number of re-sprouting plants.
- Bag** Be sure your plants don't cause a problem for someone else.
- Help** Neighborhood groups listed below may be sponsoring work parties.
- Watch** Keeping your patch clear prevents new seed from forming, even if the plants are past flowering.

### Don't:

- Mow** Mowing does NOT effectively control garlic mustard, since flowers and roots are still free to make seed.
- Throw** Throwing pulled plants on the ground or street allows them to continue flowering and setting seed.
- Compost** Putting garlic mustard in compost or yard debris bins risks spreading plants or seeds to new locations.

## Get Involved

- Portland Parks West Side Volunteer Coordinator** - Rachel Felice, 503-823-9423, or
- Willamette River Volunteer Coordinator** - Marissa Dorais, 503-823-7016
- Bridlemile Creek Stewards** - Steve Mullinax, 503-768-9065
- Friends of April Hill Park** - Jill Gaddis, aprilhillpark@gmail.com
- Friends of Dickinson Park** - Tony Hansen, 503-317-3914
- Friends of Marquam Nature Park** - Robin Jensen, 503-799-8435
- Friends of Marshall and Maricara Parks** - John DeLance, friendsom2p@gmail.com
- Friends of Terwilliger** - Robin Vesey, 503-293-1069
- Friends of Tryon Creek State Park** - 503-636-4398
- Friends of Vermont Creek** - Jen Seamans, 503-823-2862
- Friends of Woods Park** - Kevin Duff, 503-998-9417
- Multnomah Village Gateway Project** - Randy Bonella, 503-803-5963
- PCC Habitat Team at Sylvania Natural Area Park** - April Ann Fong, afong@pcc.edu
- South Portland Riverbank Partners** - Marissa Dorais, 503-823-7016
- Stephens Creek Stewards** - Jen Seamans, 503-823-2862
- Tryon Creek Watershed Council** - Corrina Chase, tcwc@tryonfriends.org or 503-636-4398
- West Willamette Restoration Partnership** - Watershed Resource Center, 503-823-2862

**Apply for a Community Watershed Stewardship Grant**  
Rebecca Hamilton, 503-823-7917, [www.portlandonline.com/bes/stewardship](http://www.portlandonline.com/bes/stewardship)

**Treebate – Plant a Tree in Your Yard and Get a Rebate**  
Jennifer Karps, 503-823-2263 or [www.portlandonline.com/bes/treebate](http://www.portlandonline.com/bes/treebate)

**Take a Naturescaping Workshop**  
503-797-1842 or [www.naturescape.org](http://www.naturescape.org)

**Columbia Land Trust and Audubon Society Backyard Habitat Certification Program**  
Gaylen Beatty, 503-841-5918 or [www.columbialandtrust.org](http://www.columbialandtrust.org)

**Southwest Watershed Resource Center**  
Jen Seamans, 503-823-2862, <http://wrc.swni.org>



Dan Saltzman, Commissioner  
Dean Marriott, Director

## CONTROLLING INVASIVE PLANTS FOR HEALTHY WATERSHEDS



Garlic mustard spring flowers



Garlic mustard in winter

## Garlic mustard - *Alliaria petiolata*

Garlic mustard is a cool season herb, native to Eurasia, that European settlers brought to North America as a garden herb. In its introduced range, garlic mustard's greatest threat is to native woodland wildflowers. It dominates and displaces most native understory species, reduces plant diversity and decreases forage for native wildlife, such as the Columbian black-tailed deer. Garlic mustard that invades road rights-of-way reduces visibility and significantly increases invasive vegetation control costs.

### How to Identify Garlic Mustard

Garlic mustard is a biennial herb that forms a basal rosette of kidney-shaped, scalloped leaves in the first year, and an elongated flower stalk in the second year. Its triangular leaves are alternate on the smooth stem and sharply toothed.

Garlic mustard flowers between April and May and forms seeds in early June, which ripen after several weeks. Plants generally have one flowering stem with numerous four-petaled white flowers. Crushed leaves and roots often have a distinct garlic odor. Plant height ranges from 12 to 48 inches, though plants as short as 1 inch or as tall as 72 inches are not unusual. The black, oblong seeds are in rows within a long, narrow pod and can survive in the soil for at least five years.

### How to Contain Garlic Mustard

Garlic mustard spreads exclusively by seed. Hikers, animals and road maintenance equipment spread the seeds. Wind dispersal is minor, but flowing water in stream corridors can also spread the seeds. Clean your shoes after walking in areas of known garlic mustard infestations so you don't spread seed to yards and parks.

### Garlic Mustard Look Alikes ← please don't pull these native plants

- Fringecup, *Tellima grandiflora* - watch for hairy leaves and stems
- Piggy-back Plant, *Tolmiea menziesii* - watch for hairy leaves and stems
- Wild Ginger, *Asarum caudatum* - watch for glossy, dark green leaves



Fringecup



Piggy-back



Wild ginger

Information source: Oregon Department of Agriculture Garlic Mustard brochure

# Controlling Garlic Mustard

working for clean rivers, healthy watersheds, and a livable, sustainable community

## FANNO CREEK WATERSHED Current Program and Partners

As in previous years, Portland's Environmental Services will survey and treat for garlic mustard on roadsides and along the banks of Upper Fanno Creek and its tributaries Pendleton, Vermont, Woods, North Ash, South Ash, Restoration and Bridlemile creeks.

Environmental Services will contact property owners along Fanno Creek and its tributaries to request permission to look for garlic mustard on their property and treat it if necessary for up to five years. The city will mail reminders of upcoming treatment to property owners with current agreements.

If you are a streamside property owner in the area mapped on the right and you have not yet signed up to have your property inspected, treated or both, please call Mitch Bixby at Environmental Services, 503-823-2989.

## Garlic mustard stages

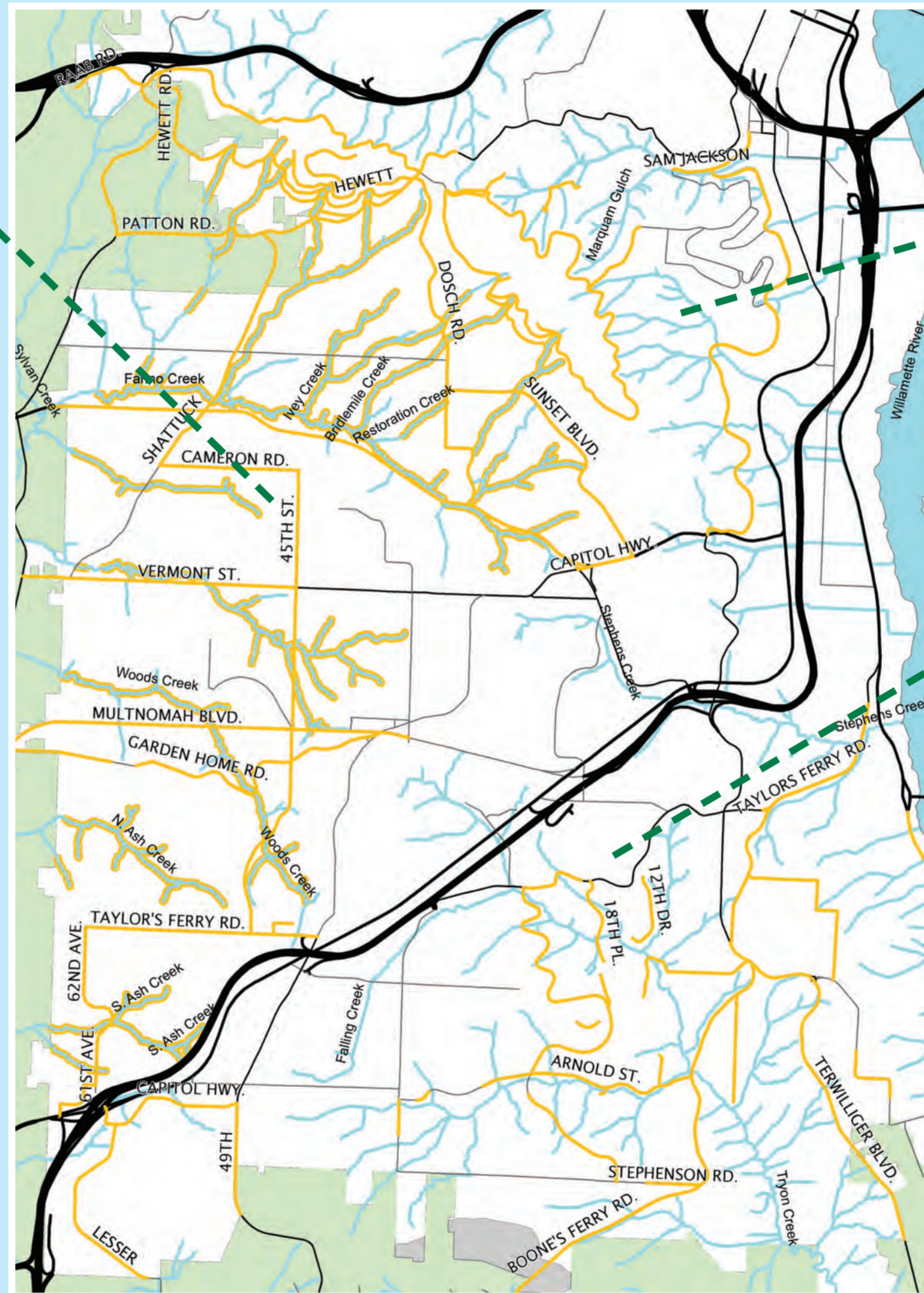
- Rosette: early Nov-early April
  - Bolting: early-late April
  - Flowering: late April-late May
  - Seeds forming: late May-early June
  - Seeds ripening: early June-early July
  - SEEDS RIPE: mid July-late Oct: **DON'T PULL**
- remember:  
put pulled plants into a bag and then into the trash

## How To Control Garlic Mustard

**Hand pulling** garlic mustard requires care and persistence, and thoughtful disposal of the plants. When pulling garlic mustard, be sure to get as much of the root as possible. Roots left in the soil typically re-flower as shorter plants, making the infestation harder to manage. Mowing presents the same risks. A large percentage of newly-sprouted plants flower in May, requiring additional hand pulling work.

**Dispose of pulled plants** in trash bags and put them in your garbage. Yard debris bins or composting may not kill the plants, risking spread to new locations. Be sure to tightly tie the bags so pieces don't fall out and start a new infestation.

**Revisit your site.** It's critical to watch for new plants to prevent formation of more seeds. Garlic mustard plants flower for several weeks, and then ripen seed for several weeks. You can safely pull ripening plants until the seed pods begin to dry. Then the risk of spreading new seed outweighs the value of pulling the plants.



MAP LEGEND - Garlic Mustard Treatment

- watershed within City of Portland
- outside the City of Portland
- outside the watershed
- streams

proposed treatment areas:

- roads
- streambanks
- roads with no treatment

If you see garlic mustard somewhere other than noted on these maps, please report it to Mitch Bixby at 503-823-2989 or [mitch.bixby@portlandoregon.gov](mailto:mitch.bixby@portlandoregon.gov).

## WEST WILLAMETTE WATERSHED Current Program and Partners

The West Willamette Restoration Partnership (WWRP) is a collaborative effort among the City of Portland, West Multnomah Soil & Water Conservation District and local and volunteer organizations to control invasive weeds. WWRP's focus is the southwest hills of Portland along Terwilliger Boulevard and Marquam Nature Park. WWRP members are working to control garlic mustard on trails, in road rights-of-way and in stream corridors as noted on these maps. From April through June, expect to see contractors working on garlic mustard control.

These are licensed contractors using treatment methods consistent with the city of Portland Integrated Pest Management Strategy. They will hand pull garlic mustard and apply herbicide.

## TRYON CREEK WATERSHED Current Program and Partners

In spring 2012, Environmental Services staff and licensed contractors will treat roadside garlic mustard infestations along Boones Ferry Road, SW Maplecrest, SW Stephenson and SW Capitol Highway. Volunteers with the Friends of Tryon Creek State Park and Portland Parks & Recreation staff will remove garlic mustard in Marshall Park and Foley Balmer Natural Area.

Do you want to know more about garlic mustard in Portland?

For more information about the current development stage and recent treatment areas visit:

[www.portlandonline.com/bes/garlicmustard](http://www.portlandonline.com/bes/garlicmustard)