

Garlic Mustard Facts

- Garlic mustard is a serious threat to native habitat. It thrives in the understory and edges of forests. Garlic mustard plants mature early, out-competing many northwest native plants.
- There are no natural enemies in this area to slow its spread.
- It is self-pollinating so can reproduce and from a single plant produces 500 to 1000 seeds per plant.
- DO NOT COMPOST GARLIC MUSTARD! Plant fragments can re-sprout.
- It produces a phytotoxin which inhibits beneficial mycorrhizae, interfering with the growth of other plants, including trees.
- Garlic mustard has been observed to interrupt the life cycle of some butterfly species as well as salamanders.
- Deer tend to avoid garlic mustard and favor other plants, causing habitat disturbance and giving garlic mustard an advantage over native plants.
- Rosettes resemble some other plants but only garlic mustard leaves have garlic odor.
- First-year plants appear as a rosette of leaves that remain green through winter, maturing the following spring. Button-like clusters of white flowers give way to erect, slender pods by May.
- Dead stalks of dry, brown seedpods hold viable seed throughout the summer.

For More Information

Herbicide Recommendations:

<http://uspest.org/pnw/weeds>

Biocontrol:

<http://www.oregon.gov/ODA/PLANT/WEEDS/biocontrolprogram.shtml>

Weed Biology:

<http://extension.oregonstate.edu/coos/sites/default/files/Forage/knotweedmanageoregon.pdf>

ODA : Noxious Weed Control:

<http://www.oregon.gov/ODA/PLANT/WEEDS/index.shtml>



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Garlic Mustard

Alliaria petiolata



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Suggestions for Chemical Control

Always follow label instructions and take precautions to avoid drift when using chemical means of control.

Herbicides can be used for large infestations, but should be used cautiously to avoid damage to desirable native vegetation. Spray applications that kill the native vegetation in areas where garlic mustard has gone to seed will result in less competition for the garlic mustard that germinates the following year.

Herbicide will not kill garlic mustard seed.

- **IMPORTANT:** Herbicide treatments should be applied in early flower stage (typically early April through late May). Use products that contain glyphosate or triclopyr.
- If garlic mustard is found near water, use herbicides approved for riparian use such as Rodeo™, Aquamaster™ or Garlon 3A™.
- Coverage is critical. Take care not to spray foliage of non-target shrubs and trees.
- Hand pull a few weeks after spraying to remove plants missed by the spray or grew after spraying occurred. **These plants will need to be bagged and disposed of in the trash.**

For more information on herbicide use please visit: <http://uspest.org/pnw/weeds>

Suggestions for Mechanical Control

Once established, garlic mustard is extremely hard to eradicate.

Manual Pulling/Cutting

- It's best initially to pull during flowering, before the plants produce seed.
- Pulled garlic mustard material will still complete flowering and set seed – do not leave it on the ground! Be sure to bag and dispose of pulled plants as garbage.
- Mowing garlic mustard is *not* an effective control because plants will still bolt (send up flowers) and seed. To prevent spreading, do not mow garlic mustard when seed pods are present (May-September).
- Revisit cleared sites often to pull plants that sprout from root fragments. This is especially important later in the spring as seeds develop.



Garlic mustard is extremely invasive – once it spreads, it will blanket natural areas and crowd out native plants.

Biological Control

Oregon does not have an approved biological control for garlic mustard. Researchers are investigating potential biological agents for garlic mustard which may greatly improve the control of this insidious weed. Some control candidates are *Ceutorhynchus alliariae* and *C. roberti*, shoot-mining weevils that attack rosettes and bolting plants; *Ceutorhynchus constrictus* larvae destroys seeds; *Phyllotreta ochripes*, a flea beetle larvae found mining the root and root crown; *Ophiomyia alliariae* a shoot-mining agromyzid; and a weevil, *Ceutorhynchus scrobicollis*. As these and other trial controls are studied we are hopeful for the future of biological controls.

Suggestions for Integrated Pest Management

The preferred approach for weed control is Integrated Pest Management (IPM). IPM involves selecting from a range of possible control methods to match the management requirements of each specific site. The goal is to maximize effective control and to minimize negative environmental, economic and social impacts.

