

Help prevent this invasive from spreading in New England!

Garlic Mustard (*Alliaria petiolata*)

What is it?

Garlic mustard is an invasive herbaceous plant that was introduced to the U.S. from Europe in the late 1800s for culinary and medicinal purposes. It is a biennial plant, which means it needs two years to complete its reproductive cycle.

First-Year Plants

Clusters of 3-8 round or kidney-shaped leaves emerge in spring; they have scalloped edges, a wrinkled look, and remain green all winter.

Second-Year Plants

The surviving second year plants develop a flowering stalk 1-4 feet tall; the alternate leaves are heart-shaped to triangular with coarsely toothed edges and emit a garlic smell when crushed. Stem leaves are largest on the lower portion of the stem and smaller at the top of the stem. The small 4-petaled white flowers form on the end of the main stem and on side branches and bloom from April to June. The taproot is slender, white, and often has an s-shaped bend near the top. Seed capsules appear soon after flowering begins and quickly expand into long, narrow pods containing about 16 seeds.

Similar-looking plants

The rosettes of first year plants may resemble violets and coltsfoot (*Tussilago farfara*), but only garlic mustard smells like garlic when crushed.

Why is it a problem?

Garlic mustard is an *aggressive invader* and is difficult to control once established. If left unchecked it quickly expands into and dominates a woodland understory; its seeds remain viable in the ground for more than 5 years. The plant is allelopathic, whereby it emits chemicals that prevent the growth of other (native) plants. It also inhibits mycorrhizal activity, the fungi-root associations critical for nutrient and water uptake in native plants. Garlic mustard is not used by native insects or other animals.



How can I help?

- Learn how to identify garlic mustard.
- Join the **Garlic Mustard Challenge** and volunteer for a garlic mustard pull near you!

How can I control garlic mustard?

For small infestations or where large groups of volunteers are involved, *hand pulling* garlic mustard is effective. Large infestations may require other control methods.

The ideal time for hand pulling garlic mustard in New England is late April to mid May after the leaves emerge and the flowering stalks are visible, but before any seeds start to form.

Garlic mustard plants pull out of the ground easily unless the ground is hard. Grab the plant near its base and pull firmly to grab the whole plant including the root.

Multiple years of removal and monitoring at an infested site are required because of the plant's biennial nature and long seed viability.

How can I dispose of my garlic mustard?

The research is mixed on how best to dispose of pulled garlic mustard plants to ensure that they do not re-sprout or develop seeds. Here are several options for sites in New England:

- If garlic mustard is pulled before ANY seed formation, pile plants on site and cover with plastic to allow decomposition.
- If any chance of seed production, bag plants and dispose of at landfill or in a burn pile
- Do not dispose of plants in yard waste, backyard compost, or other sites where it could spread.



For more information or to join the
Garlic Mustard Challenge in New England:

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