

Invasive Weed of the Week: Garlic Mustard (*Alliaria petiolata*)



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Garlic mustard is a biennial plant that spends its first year as a low basal rosette and its second year as an upright flowering forb. It is native to Europe, Africa, and Asia, and was first introduced to North America as an edible herb planted in subsistence gardens on Long Island in 1868. It quickly escaped the confines of household gardens and began aggressively invading native woodland, grassland, and riparian ecosystems, as well as pastures, fields, forest edges and openings, roadsides and disturbed sites. Currently, it is present in 25 states and parts of Canada.

Garlic mustard forms dense stands that suppress the growth of native plants, particularly spring wildflowers. Roots exude biochemical compounds that inhibit the growth of soil fungi and native plants, especially tree seedlings. It is toxic to butterfly larvae and unpalatable to deer, reducing insect populations & increasing grazing pressure on native plants.

How Can Invasive Garlic Mustard be Identified?

Garlic mustard emerges from late March to early April. Second-year plants produce small white flowers from April to early June; green seed pods form from mid-May to mid-June, and soon after the plant senesces, turns brown, and dies. Plants remain upright, dropping hundreds of seeds which remain viable in soil for up to 10 years. Leaves are kidney-shaped with coarsely-toothed margins and smell of garlic when crushed; leaves on second-year plants tend to be less round, with pointed tips. Roots are tuberous, white, and S-shaped. Native look-alikes include Saxifrage (*Saxifraga virginiensis*), sweet cicely (*Osmorhiza claytonia*), toothworts (*Dentaria*), ginger (*Asarum canadense*), & wild anise (*Osmorhiza longistylis*).

When and How Can Invasive Garlic Mustard be Removed?

Garlic mustard is easy to pull: just grab plants by the stem near the soil and wriggle until the taproot comes up. The best time to pull plants is just after seed pods have formed but before they turn brown. Pulling sooner than this will likely cause dormant garlic mustard seeds in the soil bank to germinate. Larger infestations can be burned when green seed pods are present but before they turn brown, or mowed repeatedly until taproots are exhausted. Garlic mustard is susceptible to broad-spectrum systemic herbicides: spray when green seed pods have developed but before they turn brown. Goats enjoy the zesty taste of garlic mustard and can be used as a biological control option.

Garlic Mustard in Bloom:



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