

Impacts:

Garlic mustard outcompetes native wildflowers and deprives wildlife dependent on native early spring wildflowers of an essential food source. Phytotoxic chemicals may interfere with growth of native species, potentially through inhibition of mycorrhizal activity.



Suspected Means of Introduction: Garlic mustard was intentionally introduced into the northeastern United States in the 1800's for food, erosion control, and medicine. The medicinal purposes of garlic mustard include treatment for gangrene and ulcers.

BioBullies

Garlic Mustard

Alliaria petiolata



Description: Garlic mustard is a biennial herbaceous plant with triangular to heart-shaped, coarsely toothed leaves that give off an odor of garlic when crushed. First-year plants appear as a rosette of green leaves close to the ground. Rosettes remain green through the winter and develop into mature flowering plants the following spring. Flowering from May to late June, plants reach from 2 to 3½ feet in height and produce clusters of small white flowers, each with four cross-shaped petals.

Native Range: Europe

Resources for Identification and Control of Garlic Mustard

Headwaters Invasive Plant Partnership

University of Illinois Extension - Champaign, Ford, Iroquois, and Vermillion Counties

Plant Profile Database - USDA

Weed of the Week - USDA Forest Service

Midwest Invasive Plant Network



Garlic Mustard

Alliaria petiolata



Habitat: Garlic mustard frequently occurs in the moist, shaded soil of river floodplains, roadsides, edges of woods, trail edges, and forest openings. Disturbed areas are most susceptible to rapid invasions and dominance.

Biology: Beginning in May, seeds are produced in erect, slender pods and become shiny and black when mature. By late June, when most garlic mustard plants have died, they can be recognized only by the erect stalks of dry, pale brown seedpods that remain. These seed pods may hold viable seed through the summer. A single plant can produce thousands of seeds, which scatter several meters from the parent plant. Although water may transport seeds of garlic mustard, they do not float well and are not carried far by wind. Long distance

dispersal of seeds is most likely aided by human activities and wildlife.

Control Methods: The seeds of garlic mustard can remain viable in the soil for five years or more. Therefore, effective management requires a long term commitment. The goal is to prevent seed production until the stored seed is exhausted. Hand removal of plants is possible for light infestations and when desirable native species occur together. Care should be taken to remove the entire root system. For very heavy infestations, application of the systemic herbicide such as glyphosate is also effective. Herbicide may be applied at any time of year, including winter (to kill overwintering rosettes), as long as the temperature is above 50° F and rain is not expected for about 8 hours.