



Michigan Invasive Plant Council

Michigan Plant Invasiveness Assessment System (MPIAS June 2008)

Alliaria petiolata, Garlic mustard

Summary and Recommendations for Michigan: *Alliaria petiolata*, Garlic mustard has a long history of establishment and is ubiquitous throughout Michigan's Lower Peninsula. It is biennial, and a prolific seeder with a persistent seed bank. Garlic mustard spreads into high quality forests (both upland and floodplain forest), not just into disturbed areas. Invaded sites undergo a decline of native herbaceous cover within 10 years. The most prevalent invasions begin at wood's edge and progress via streams, campgrounds, and trails—seeds dispersed on mammal's fur and birds, rodents (deer, horses, squirrels) by flowing water and human activities. Wind dispersal is limited, most seeds fall within a few yards.

Invasiveness in Michigan: *Alliaria petiolata*, Garlic mustard's potential invasiveness is considered high due to its seed reproduction and dispersal. Its invasiveness rank is consistently high across natural and managed systems with regional importance varying between medium and high in the Upper and Lower Peninsula ecological regions. For more information consult the complete MPIAS assessment.

Value in Michigan: Used in salads and recipes by a few creative amateur chefs. Not offered commercially. Not reported to have any other value.

Responsible Use: Not recommended for any purpose. It should be removed if found.

Early detection/rapid response: Garlic mustard has a first year rosette of 3 or 4 round, scalloped-edge dark green leaves, 2-4 in. high that remain green throughout the winter. Second year plant is 12-48 in. high, produces fruits 1-1 ½ in long, the black, oblong, ridged seed coats contain 28 seeds in a single row. Usually 1 flowering stalk per plant, but can be up to 12 in robust plants. Consult printed or on-line resources for pictorial descriptors of the plant.

Long term control/management: Top priority should be given to removal of satellite infestations as this is a disturbance adapted plant (trails, roads, forest edges, parking areas, and recreation sites are known sites of early infestation). For small infestations, hand clipping and pulling rosettes or flowering plants prior to seed set is recommended. Mulch or tamp down disturbed soil. For long established dense populations, it is recommended to apply herbicide in the spring or in the dormant season if non-targets are present. Also use a mid intensity burn late in spring as possible in fire adapted communities followed by herbicide applications, cutting, or pulling of surviving plants. Chemical applications should be performed in accordance with the manufacturer's label. Gardeners may simply remove plants as encountered.

Restoration: Following removal of extensive colonies of *Alliaria petiolata*, a natural area may require restoration due to the risk of facilitating invasion by other undesirable plant species.. In

such case, a competent restoration ecologist should be consulted for appropriate species and planting procedures.

For complete information from the Michigan Plant Invasiveness Assessment System
Consult: <http://invasiveplantsmi.org>