

Garlic Mustard

Alliaria petiolata

(also known as *Alliaria officinalis*, *Alliaria alliaria*, *Sisymbrium alliaria*, *Sisymbrium officinalis*, and *Erysimum alliaria*)

Background: Garlic Mustard first showed up in the U.S. in 1868. It was first recorded in Long Island, NY. Garlic mustard was brought over by European settlers, perhaps for food and medicinal purposes. It is still a very popular herb in Europe today – most commonly used to flavor sauces – and it is not known as a weed on any other continent! Unfortunately, it poses a big threat in North America to our native West Virginia white butterfly (*Pieris virginiensis*). The W. Va. White butterfly needs native toothworts as a host during the caterpillar stage though it often mistakes garlic mustard for toothwort and lays its eggs on the garlic mustard's toxic (to the butterflies, not us!) leaves. Garlic mustard is great for humans – it's not only a yummy additive but its leaves contain a natural anti-septic that was historically used for treating skin ulcers and eruptions. The leaves also have natural anti-freezes that lower the boiling point of water.



Identification: Garlic Mustard is a biennial herb of the mustard family. It has heart-shaped leaves that give off a garlic odor when crushed, especially in the younger plants. During the winter it produces green rosettes that develop into white, cross-shaped flowers by spring. It spreads only by seed (which is viable for 4 to 5 years!), which is primarily dispersed by humans! It dies around the end of June during its second year and leaves brown stalks of seedpods behind. Garlic mustard loves to invade species-rich forests and steal all of the nutrients from the native species. It has the advantages of low-light tolerance, rapid reproduction and disturbance adaptation that enable it to be one of the few herbaceous species capable of invading and dominating the understory of our native forests.



Under canopy garlic mustard!

Control: Garlic mustard can be pulled by hand but it is best if the roots are intact. Now is a good time for hand-pulling because the plants have not set seed. Cutting and mowing are suggested when garlic mustard is in full flower, however, mowing may distribute seeds. Because garlic mustard is disturbance-adapted, it can be very stubborn! To further insure that seeds do not get dispersed, please bag any garlic mustard you pull!

Natives groundcover alternatives include:

wild ginger (*Asarum canadense*), lady fern (*Athyrium filix-femina*), evergreen wood fern (*Dryopteris marginalis* or *intermedia*), New York fern (*Thelypteris noveboracensis*), and creeping phlox (*Phlox stolonifera*)



Wild Ginger – Also edible!

Photo source: database for the National Park Service, nps.gov (garlic mustard stalk, garlic mustard in flower, and wild ginger), database for the joint project of The University of Georgia's Bugwood Network, USDA Forest Service and USDA APHIS PPQ invasive.org (under canopy of garlic mustard), database for the North Branch Restoration Project in Illinois, northbranchrestoration.org (drawing of garlic mustard on the next page)