

Garlic Mustard

Alliaria petiolata

Biology:

An obligate biennial herb with prolific seed production. Seedlings emerge in early spring and form basal rosettes in the early summer. In the spring of the second year plants produce flowering stems and die. First year rosettes are 4 inches tall and second year flowering stems can reach 2-4 ft. Leaves on first year plants are kidney-shaped. Leaves on flowering stems are large-toothed, triangular, and alternate. Plants usually produce single or double branched flower stalks that bear white flowers in the spring and early summer. Seeds are viable up to 5 years.

Habitat:

Thrives in deciduous forest communities and partially shaded moist habitats. Most invasive in disturbed areas where it can dominate herb strata within ten years. It cannot tolerate acidic soils.

Origin:

Native to Europe.

NY and Adirondack Range:

Throughout NYS.

Spread:

Brought by settlers as an early spring potherb. First recorded in Long Island, NY in 1868. Now it is mainly spread by humans and wildlife that track seeds and by floodwaters that disperse seeds along river corridors. Roadside mowing, cars, rodents, and birds also contribute to the spread. Plants can also self-fertilize.

Problems:

Garlic Mustard is one of the few invasive plants that dominates the understory of forested areas by growing during early spring when native species are dormant. Prolific seed production and lack of natural predators allow it to quickly dominate the herbaceous layer. In stands dominated by Garlic Mustard, studies have shown that total perennial cover declines by 33-46%. It invades species-rich areas as readily as species-poor areas. Phytotoxins in the root tissue may suppress adjacent plants.



(Main Illustration provided by Invasive Plant Council of NY State)