# INVASIVE SPECIES FACT SHEET


# Garlic Mustard

***Alliaria petiolata***

**THIS PLANT IS HIGHLY INVASIVE**

## THE PROBLEM

Garlic Mustard is a shade-tolerant biennial plant that thrives in woodland settings. It is considered a serious invasive pest of natural areas, particularly woodlands, displacing native flora and severely reducing species diversity. Its aggressive, rapid growth allows it to form dense carpets that prohibit growth of other species. Recent research shows that Garlic Mustard can release chemicals that destroy the mycorrhizal fungi that many trees depend on for nutrients. When Garlic Mustard invades a site, growth of tree seedlings is reduced. Like many non-native plants, Garlic Mustard has few natural enemies to help keep it in check.

- Leaves are bright green, triangular, deeply toothed. The white flowers have four petals and are produced in terminal racemes (flowers arranged singly along a stalk). As many as 22 linear, upright seed pods can be produced per plant and each pod can contain an average of 16 seeds. Garlic Mustard generally blooms in late April through early May.

- Plants can reach a height of 90 centimetres. The name comes from the strong garlic smell of young leaves.

- Garlic Mustard is insect pollinated but can also self-pollinate. Reproduction is by seed.

Seedpods forming on a Garlic Mustard plant

This species is native to Europe and parts of India and Sri Lanka. The first known occurrence of Garlic Mustard in North America was on Long Island in New York State in 1868. Since then, the plant has spread vigorously in eastern USA and Canada and there are spreading populations in the Pacific Northwest.

Many attempts to control this plant have been tried but none has been very successful. Biological control probably offers the best hope but this is a lengthy process. However, several species of weevils are being looked at as possible control agents.

## CONTROL

Because Garlic Mustard seeds can remain in the soil for 5 or more years, the same site will need to be monitored for some time until the seed bank is depleted. This species also undergoes considerable fluctuations in density, leading to assumptions that it has been controlled when in fact, it is still very much present.

Hand pulling works best for small infestations. Be sure to pull the entire root as new plants can grow from root fragments left in the soil. Roots pull out more easily in damp soil than in dry.

It is best to remove and bag pulled plants, particularly if they are flowering, because viable seeds will form even in cut or pulled flowers.