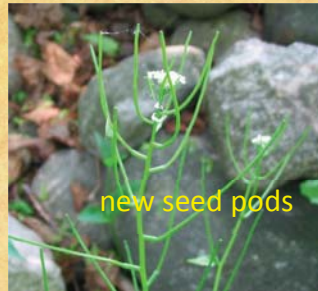


Hanover's

LEAST WANTED!



Garlic Mustard

Garlic Mustard (biennial, herbaceous)

- First year plant has low rosette, with round, evenly-toothed leaves, similar to violet
- Second year plant shoots up to >3' with heart shaped leaves
- Crushed leaves smell like garlic (to help distinguish from violet)
- Tap root is white with 'S' shaped curve near top of root
- Flowers appear in early May, are white with 4 petals and form needle-shaped pods
- Black seeds are ripe in late July - mid August, and can number 100 -1000 seeds/plant
- Seeds are viable for >10 years, making control a long-term project
- Plant is allelopathic; it releases chemicals that affect regeneration of neighboring plants and kill beneficial soil microbes
- Plant is shade tolerant and can spread over forest understory, crowding out native vegetation
- Plants stay green and photosynthesize over the winter
- The plant fools the native West Virginia White butterfly, which deposits its eggs on native mustard plants (toothwort); eggs don't mature if placed on garlic mustard
- Ripe seeds get spread from mowing mature plants or treads of tires or hiker's shoes

Control:

- Plants are easy to pull in early spring when ground is damp; focus on first year plants, not the seedlings that emerge with two long leaflets
- Pull from base of stalk to get the root out. The root crown will send up new shoots if left in the ground. *Best strategy for large colonies: start from outside edge*
- Plants can be mowed or weed-whacked soon after bolting and flowers start to bloom. This is especially effective for large infestations. Don't mow when seedpods have started to ripen
- **If not near a waterbody**, herbicide applied *on your land* to low rosettes late in the fall (October) or in early spring (mid-April) before the second year plants bolt, at a 2-3% concentration will kill many of the plants. Best done when other plants are dormant
- Check the treated area over the summer to catch any missed plants
- **Pulled plants should be bagged and placed in trash**; if left on ground or composted, the energy in the tap root can allow the plant to flower and set seed

Sources for more information and photos:

NH: <https://www.agriculture.nh.gov/publications-forms/documents/garlic-mustard.pdf>

VT: <https://vtinvasives.org/invasive/garlic-mustard> (see the link to 'treatment')

NY: http://nyis.info/invasive_species/garlic-mustard/

Ontario: <http://www.invadingspecies.com/garlic-mustard/> (see link to 'best management practices')

Research on garlic mustard, summary: https://www.fs.fed.us/nrs/pubs/rn/rn_nrs199.pdf