

Dispelling Thirteen Garlic Mustard Myths

by Roma Lenehan

Myth 1: Garlic Mustard does not matter.

Fact: If Garlic Mustard, a non-native species that few native animals eat, is not controlled, it will take over much of the Preserve, forming dense monocultures which will kill many spring woodland plants and inhibit tree regeneration. By decreasing native plants, Garlic Mustard decreases foods for insects reducing insect diversity. Insects feed birds and other animals. Thus, unlimited Garlic Mustard decreases spring wildflowers and the diversity of animal life. In addition, abundant Garlic Mustard makes it difficult to restore native habitats.

Myth 2: Garlic Mustard cannot be controlled.

Fact: Since 1997 the Preserve management team and volunteers have significantly decreased Garlic Mustard populations in many areas including Muir Woods, Tent Colony Woods and much of Frautschi Point. Due to intense volunteer efforts, the goal of having no second year seeding Garlic Mustard has been approached in much of the Preserve.

Myth 3: Garlic Mustard blooms the first year.

Fact: Garlic Mustard is a biennial. The first year plant is about the size of a violet. Its few leaves smell like garlic when crushed. Leaves usually stay green all winter. Second year Garlic Mustard bolts and blooms early (mid May to early June), shading out most other spring plants. About six weeks after blooming, each plant begins to shed its hundreds of tiny seeds. A single Garlic Mustard plant can produce up to 1000 seeds. These seeds continue to germinate for up to seven years. Consequently, eliminating Garlic Mustard from an area where a single plant has gone to seed can take years.

Myth 4: All Garlic Mustard is similar.

Fact: A population includes a range of sizes from very small to more than three feet tall. In poor soil or where crowded by other plants, Garlic Mustard plants are much smaller and may bloom at three inches. In established Garlic Mustard patches, the largest and most prolific seed producers are usually on the edges. In full sun it forms multiple stems with many blooms. A population of Garlic Mustard blooms over the course three to six weeks. The smaller plants usually bloom later and are often hidden by vegetation. These smaller plants produce a smaller number of seeds, but these seeds remain viable seven years.

Myth 5: Garlic Mustard is equally likely anywhere.

Fact: Garlic Mustard usually becomes established in disturbed areas. Weeding, brush removal, or planting provides opportunities for new invasion or expansion of existing small populations. Garlic Mustard seeds can arrive in mulch, soil, or dumped weeds. Once present, Garlic Mustard is spread by water, humans (shoes and tires), pets and wild animals. Often new Garlic Mustard

patches begin at the base of big trees where rodents leave seeds. Garlic Mustard frequently grows near fallen trees. Garlic Mustard also grows in Stinging Nettle and Motherwort and any place where competition from other early spring ground layer plants is decreased, such as under Honeysuckle and Buckthorn.

Myth 6: Poisoning Garlic Mustard is an easy answer.

Fact: For poisoning with Roundup to work best, the temperature should be above 50 degrees for several days and it should not rain for at least eight hours after application. Poisoning works best before plants bolt, but should be done at least a week before blooming. Roundup kills all plants, so care must be taken to poison only the Garlic Mustard. Poisoning works best in areas with abundant Garlic Mustard and few desirable plants. Usually some plants are missed, so any surviving Garlic Mustard must be found and pulled in order to maintain control. In some cases, the poisoned Garlic Mustard fails to die and either forms seeds or re-blooms and forms seeds later. These "poisoned, not dead" plants must be removed to prevent the potential development of resistance and to maintain control since any seeds will germinate for years.

Myth 7: Pulling Garlic Mustard once will get rid of it.

Fact: Pullers often miss Garlic Mustard that is small, not in bloom, or hidden by vegetation. When roots are left, plants may regrow. People often fail to find scattered outlying Garlic Mustard, which forms new circles, expanding the infected area. Therefore, the best strategy is to begin pulling or treating from the outside, looking for outliers, and work on the thickest part of the patch last. Check the area several times to find all the plants.

Myth 8: Mowing or burning Garlic Mustard will kill it.

Fact: Repeated mowing or cutting will cause the Garlic Mustard to bloom and seed at a small size, making it hard to find and remove. Burning will delay the flowering of second year plants several weeks, but they bloom and seed later in the summer. Hot fires do kill first year plants, but multiple consecutive annual hot burns will be required for Garlic Mustard control.

Myth 9: Pulling is best done when the plant blooms.

Fact: Unfortunately, the blooming season is very brief. Once they finish blooming, second year plants become hard to locate and within weeks will have seeds to spread. In fact, Garlic Mustard can be removed any time from the cotyledon stage (these can be killed with a rake) until the second year plants begin to shed their seeds (July). The best time to control Garlic Mustard varies with locality. In areas with a great deal of Buckthorn and Honeysuckle, pulling, or at least marking the patches, is easier before these shrubs leaf out. **When you pull bolting, blooming,**

(continued on page 6)