

MONITORING GARLIC MUSTARD POPULATIONS IN ANTICIPATION OF FUTURE BIOCONTROL RELEASE. Laura C. Van Riper, Luke C. Skinner, and Bernd Blossey, Research Associate, University of Minnesota, 411 Borlaug Hall, 1991 Upper Buford Circle, St. Paul, MN 55108, and Natural Resources Specialist Sr., MN Department of Natural Resources, 500 Lafayette Road, Box 25, St. Paul, MN 55155, and Associate Professor, Cornell University, 122E Fernow Hall, Ithaca, NY 14853.

Garlic mustard (*Alliaria petiolata*) is native to Europe, but has become invasive in forested regions throughout the United States. Garlic mustard is a concern because of its ability to invade high quality forests, form dense populations, and decrease abundance of native species. The evaluation of potential biocontrol agents may result in the availability of *Ceutorhynchus* weevils for biocontrol. Accurate and well-designed monitoring is essential to provide data as to the success of the biocontrol agents and the status of the ecosystem. Monitoring data can be used to determine if the target species has been reduced and if the native species are returning. Garlic mustard is a biennial and its populations can vary from year to year. Early monitoring is necessary to accurately characterize the population before biocontrol release. Two years of garlic mustard monitoring data from 12 sites has provided information about garlic mustard population dynamics, a characterization of the plant communities associated with garlic mustard, and a documentation of the low levels of herbivory currently found on garlic mustard in Minnesota (USA). Pre-release monitoring is an important component of biocontrol release.