



WNY PRISM

Partnering to Protect Western New York from Invasive Species

Best Management Practices: Lesser Celandine

Lesser celandine (*Ficaria verna*) is a low-growing, herbaceous perennial that can form dense, extensive mats across the ground. Its shiny, dark green, kidney-shaped leaves are 1.6 to 3.5 inches wide and have wavy margins. Lesser celandine produces glossy, bright yellow flowers on stalks up to nine inches tall and each flower has eight to twelve petals. Underneath the soil, it produces many finger-like tubers on its roots. It can also form pale bulbils in its leaf axils. Underground tubers and bulbils can be dispersed by animals, humans and flood events, which creates new infestations, making management difficult.

Lesser celandine prefers moist, well-drained soils, but it can also be found in low, open woods, meadows, roadsides and disturbed areas. It is a spring ephemeral (short-lived) and emerges earlier than native species, around late March to mid-April, with flowering occurring from late April to mid-May. Its dense growth impacts species diversity and may inhibit the growth of native spring ephemerals, threatening these plants and the native pollinators that rely on them for nectar and pollen.

Integrated Pest Management (IPM) is an adaptive approach that involves the selection of multiple control methods and appropriate timing to match the management needs of each specific site and species. The goal is to maximize effective control and to minimize any potential negative impacts.

Management efforts should begin with an invasive species survey and site assessment. This allows for the development of a management plan and selection of appropriate removal methods. Management for most well-established species and/or infestations will require dedication over a number of years, often 3-5. Once initial control is achieved, restoration and continued monitoring and management will likely be required to maintain success.



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Management

Manual

Individual plants or small infestations may be dug up with a hand trowel or shovel. Care must be taken to remove the entire plant including all of the tubers, roots and any bulbils that may be present. Excessive manual removal can cause significant damage to soil and plant communities, while also making the area more susceptible to future invasion, and should be avoided.

Mechanical

Mechanical management is not recommended. Lesser celandine is easily spread by mowers, which yank out the shallow-rooted plant and fling fragments outward.

Chemical

Systemic herbicides, such as glyphosate, are the most effective control method, particularly for large infestations. Apply via foliar spray to vegetative matter prior to flowering. Applications are most effective in early spring, which can be difficult due to the early emergence of this species, when snow may limit where applications can occur. However, early application minimizes impacts to native wildflowers, that have yet to emerge.

Spread Prevention

Care should be taken to limit seed dispersal by conducting management early and prior to flower production. Avoid mowing in areas infested with lesser celandine. If mowing, mow non-infested areas first and clean your mower. Mud and debris should be removed from shoe treads using a stiff bristle brush or [boot brush station](#) to prevent the movement of seeds.

Disposal

Plant material should be disposed of in a sealed garbage bag and placed in a landfill-bound trash receptacle. Composting should not be done with this species due to the risk of continued seed maturation and the plant's vegetative reproductive capabilities leading to the reestablishment of a population.

Restoration

Restoration using native plants should take place to ensure the long-term success of management. Restoration should be timed with seedbank depletion and when continued management requires only minimal manual removal efforts.

USE PESTICIDES WISELY: Always read the entire pesticide label carefully and follow all instructions. Pesticide regulations can vary widely between regions; please contact local authorities for additional pesticide use requirements, restrictions or recommendations. Mention of pesticide products by WNY PRISM does not constitute endorsement of any material.



Photos Front: Top- lesser celandine plant; Middle- infestation; Bottom (left to right)- flowers and leaves, bulbils, roots and tubers (Photo Credits: Leslie J. Mehrhoff, University of Connecticut, Bugwood.org).

Photos Back: Top- infestation in a homeowner's front yard; Bottom- infestation along a waterway.

Additional Resources:

WNY PRISM's Restoration Seed Mixes BMP
wnyprism.org/management/best-management-practices/

New York Invasive Species Information
https://nyis.info/invasive_species/lesser-celandine/



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