

# Invasive Plants in Pennsylvania

## Lesser Celandine

*Ranunculus ficaria*



Leslie J. Mehrhoff, University of Connecticut  
[www.forestryimages.org](http://www.forestryimages.org)

### Background:

Lesser celandine was introduced into the United States as an ornamental plant. It is still commercially available. All varieties should be assumed to be invasive.

### Range:

Native to Eurasia, lesser celandine can now be found in the Northeast and Pacific Northwest regions of the United States.

### Description:

Lesser celandine is a perennial herbaceous plant that forms low-growing mats. Plants consist of a basal rosette of dark green, kidney-shaped leaves. The bright yellow flowers are borne singly on stalks that rise above the leaves. Abundant, finger-like tubers are produced by the roots.



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### Habitat:

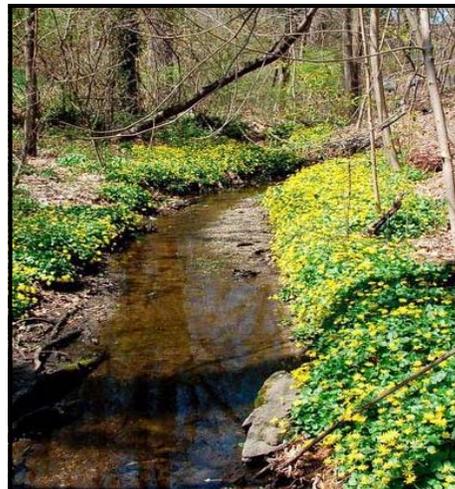
Lesser celandine is characteristic of moist alluvial soils in forested floodplains. It can also be found in low open woods, meadows, roadsides and waste places. It seems to prefer moist, sandy soils. Less frequently, it will invade drier soils.

### Biology and Spread:

Lesser celandine spreads primarily through vegetative means. Its abundant tubers and bulblets may be unearthed and scattered by animals, well-meaning weed pullers and flood events.

### Ecological Threat:

An exotic vernal plant, lesser celandine is aggressive and emerges earlier than most native species. It easily displaces native spring ephemerals with its thick carpet of vegetation. This, in turn, negatively affects native pollinators, which rely on spring ephemerals for nectar and pollen during a time when other food sources are scarce.



John M. Randall, The Nature Conservancy  
[www.forestryimages.org](http://www.forestryimages.org)

## How to Control this Species:

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### Physical

Lesser celandine is very difficult to control. Persistence is key.

Small infestations may be pulled up by hand or dug up with a trowel. Be sure to remove all bulblets and tubers. Deal with small infestations early before things get out of control.

Physical removal causes soil disturbance, which can lead to further infestation by lesser celandine and other invasives. Keep this in mind when dealing with high-quality natural areas.

### Look-A-Likes:

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Lesser celandine closely resembles marsh marigold (*Caltha palustris*), a native wetland plant. Please take steps to ensure proper identification before any treatment is initiated.



Joseph O'Brien, USDA Forest Service  
[www.forestryimages.org](http://www.forestryimages.org)

### Chemical

The window of opportunity for the chemical control of lesser celandine is very small. Herbicide should be applied in late winter to early spring (March through May) in order to minimize impacts to native wildflowers. Be careful to apply the herbicide to lesser celandine only, and be aware of the site's proximity to breeding amphibians.

Use a wetland-approved concentration of glyphosate, which is a systemic herbicide that will kill the roots.

### References:

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D&R Greenway Land Trust: <http://www.drgreenway.org/documents/Invasives/Lesser%20celandine%20fact%20sheet.pdf>

Plant Conservation Alliance's Alien Plant Working Group: <http://www.nps.gov/plants/alien/fact/rafi1.htm>

### For More Information:

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DCNR Invasive Species Site: <http://www.dcnr.state.pa.us/conservationscience/invasivespecies/index.htm>

DCNR Invasive Exotic Plant Tutorial for Natural Lands Managers: [http://www.dcnr.state.pa.us/forestry/invasivetutorial/Lesser\\_Celandine.htm](http://www.dcnr.state.pa.us/forestry/invasivetutorial/Lesser_Celandine.htm)

## Native Alternatives:

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Many beautiful native spring-flowering plants are available.



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