



## Greater and Lesser Celandine

*Prepared by Leslie A. Weston, Environmentals L.L.C and former member of CU*

*Landscape Horticulture Program Work Team*

**Description:** Greater and lesser celandine are unrelated non-native invasive weeds that were introduced to North America from Eurasia. Greater celandine (*Chelidonium majus*) was introduced in the 1600's as a medicinal herb or sedative. It also produces a golden colored latex which can be used as a dye. It contains many alkaloids in its leaves, stem, roots and seeds and is generally toxic to mammals, causing contact dermatitis and irritation if ingested. Lesser celandine (*Ranunculus ficaria*), also known as fig buttercup, was introduced as an ornamental in the 1800s. It has many colorful varieties but the yellow flowered biotype has invaded at least 20 northeastern states as well as Washington and Oregon. Both lesser and greater are invaders of shaded landscapes and turf, and prefer moist soils. Lesser celandine is found now in turf and woodlands, whereas greater celandine is found widely in landscape beds, fencerows and roadsides.

**Reproduction:** Lesser celandine is a low-growing perennial which typically spreads by bulblets and tubers. The small whitish bulblets are attached to leaf stalks and are easily dislodged to form new plants. The grayish short tubers are small root like organs which also can be dislodged by disruption. This plant emerges in very early spring and starts to crowd out native perennials. Plant parts and pieces of lesser celandine can be transported by animals or the flow of streams. Greater celandine is an upright annual which reproduces by prolific production of small black seeds. The seeds contain natural attractants of ants that help to disperse the seeds, which easily germinate.

**Habit/Distribution:** Greater celandine can reach a height of about 2-4 feet and exhibits deeply lobed long leaves and a bright yellow flower with 4 petals; it is a member of the poppy family. It tends to establish in clusters of several seedlings but can be easily uprooted due to its shallow fibrous root system. It prefers moist woodland soils, but is now found in fence rows, landscape beds and roadsides. Its latex can be quite irritating to skin and stains skin and clothing bright yellow. It was originally used to treat warts and as a sedative. Greater celandine is found throughout landscapes and woodlands in upstate New York. Lesser celandine is a low growing perennial with glossy dark green leaves which are stalked and kidney-shaped. It flowers in late spring and flowers are attractive with



Greater celandine photo from Kulichki.com



Lesser celandine photo from Plant Conservation Alliance web site



Photo from Fuglenatur.dk

*Helping You Put Knowledge to Work*

bright yellow color and 8 petals. It seems to prefer sandy moist soils and tends to form a blanket of leaves as it spreads across turf and shaded sites. It can be very difficult to eradicate manually due to its tubers and rhizomes. Lesser celandine is found in moist shaded sites in turf in central and western New York where it has become prevalent.

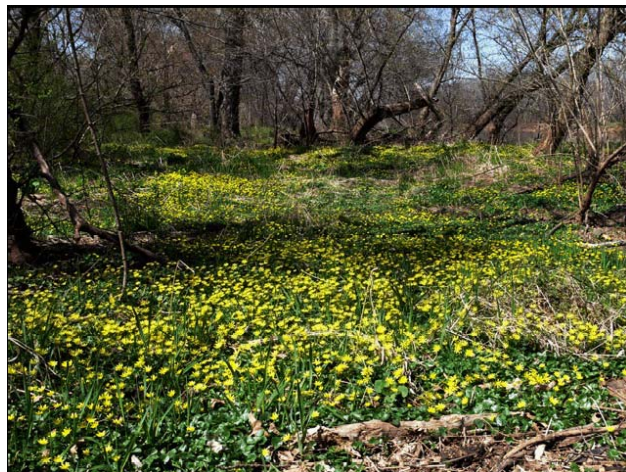


Photo from Canal Photos

**Control:** Greater celandine can be controlled by preventing the plant from flowering and going to seed. It is a prolific seed producer and soil disruption, rainfall and insect activity help to disperse the seeds. It is easily removed by hand from landscape beds. Preemergent or postemergent herbicides can also be utilized to treat infested areas. Seedlings are very sensitive to herbicide application. Lesser celandine is harder to control once established. Its tubers and bulblets will dislodge during hand pulling or removal from soil, and form new plants. It is insensitive to many herbicides applied preemergent and many postemergent herbicides will injure established turf, so it can be difficult to eradicate from the landscape. Careful digging and sifting of soil will allow one to remove established stands. A selective broadleaf postemergent herbicide containing triclopyr (Weed B Gone for Difficult to Control Perennial Weeds) or clopyralid (Lontrel) for difficult to control weeds in turf could be utilized for control. In wetland areas, a higher rate of Rodeo, an aquatic form of glyphosate (Round Up) can be utilized. Glyphosate can be applied in other areas and a 1.5 % solution of 40% glyphosate will be effective in obtaining control.

#### References:

- Greater celandine, Wikipedia.com
- Greater celandine, Government of Canada, Poisonous Plants.  
<http://www.google.com/search?q=Greater+celandine&hl=en&rls=GGLG,GGLG:2005-39,GGLG:en&start=10&sa=N>
- Greater celandine, Dave's Garden. [www.dave'sgarden.com](http://www.dave'sgarden.com)
- Greater celandine, sponsored by iherb.com.  
<http://healthlibrary.epnet.com/GetContent.aspx?token=e0498803-7f62-4563-8d47-5fe33da65dd4&chunkiid=108307>
- Lesser celandine. Plant invaders of Mid-Atlantic Natural Areas.  
<http://www.nps.gov/plants/ALIEN/pubs/midatlantic/rafi.htm>
- Lesser celandine fact sheet. Plant conservation alliance's alien fact sheet.  
<http://www.nps.gov/plants/alien/fact/rafi1.htm>
- Lesser celandine. Wikipedia.com

Photo from Canal Photos

This publication contains pesticide recommendations. Changes in pesticide regulations occur constantly, some materials mentioned may no longer be available, and some uses may no longer be legal. All pesticides distributed, sold, and/or applied in New York State must be registered with the New York State Department of Environmental Conservation (DEC). Questions concerning the legality and/or registration status for pesticide use in New York State should be directed to the appropriate Cornell Cooperative Extension Specialist or your regional DEC office.

**READ THE LABEL BEFORE APPLYING ANY PESTICIDE.**

Updated 2008

Source: