

Knox County Cooperative Invasive Species Management Area

Invasive Species of the Month for February 2020

Lesser Celandine (Ficaria verna)

Origin: Northern Europe

Introduction: Date and time unknown, but presumed to be introduced as an ornamental. First known collection in Pennsylvania in 1867.

Interesting Fact: British poet William Wordsworth wrote a poem about the Lesser Celandine.

Botanical Terminology:

Bulbil – small bulb-like structure that can produce a new plant

Tuber – enlarged storage structure in some plants that can produce new plants

Description: Lesser Celandine is a perennial herbaceous species that mostly grows as a carpet of groundcover. It has conspicuous, eight-petaled, yellow flowers; kidney shaped basal leaves, and bulbils/tubers.

Defining characteristics:

- Basal, kidney shaped leaves that can grow as dense groundcover
- Leaves appear in late winter and disappear in early summer
- Around 3 in. wide, eight-petaled, yellow flowers that bloom in early spring
- Bulbils that can be found along the stem at the ground surface after flowers and leaves fade
- Underground tubers



<u>Left Image</u>: Foliage and flowers of Lesser Celandine (Leslie J. Mehrhoff, University of Connecticut, Bugwood.org)

Right Image: Exposed tubers of Lesser Celandine (Leslie J. Mehrhoff, University of Connecticut, Bugwood.org)



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Habitat: Floodplain areas, riparian areas, wet wooded areas, field/forest edges



<u>Above Image</u>: Lesser Celandine spreading as dense groundcover in a wooded setting (David L. Clement, University of Maryland, Bugwood.org).

Ecological threat: Lesser Celandine mostly spreads vegetatively through bulbils and tubers. Over time it can form dense patches, inhibiting other native early spring plant species. Lesser Celandine has also been shown to be allelopathic, exuding chemicals that inhibit other plant species.

Control Methods:

- <u>Manual</u>: Digging up tubers can be effective for small patches, but care must be taken to remove all tubers and dispose of them properly.
- <u>Chemical</u>: Probably the most effective method on large, dense patches. Foliar applications of herbicides with an 1-2% aquatic glyphosate* solution are effective when applied when plants have just started to flower or are almost in full flower.

References

Cipollinin, K., Titus, K., and C. Wagner. 2011. Allelopathic effects of invasive species (*Alliaria petiolata, Lonicera maackii, Ranunculus ficaria*) in the Midwestern United States. *Allelopathy Journal* 29(1): 63-76.

Frey, M.N. and J.P. Schmit. 2017. Early-Season Treatment of Fig Buttercup (*Ranunculus ficaria*). *Invasive Plant Science and Management* 10: 191-200.

Kaufman, Sylvan R. and Wallace Kaufman. 2012. Invasive Plants. Stackpole Books.

^{*}Always follow herbicide label instructions.