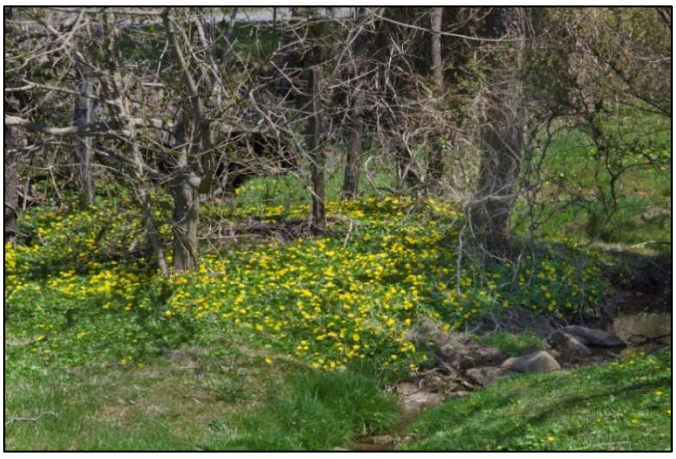
EARLY DETECTION AND RAPID RESPONSE

INVASIVE PLANT ALERT

Lesser Celandine (also called Fig Buttercup) discovered in Greene and Albemarle Counties

THIS NONNATIVE, INVASIVE PLANT is listed as a weed with high risk for invasion by the U.S.D.A. and is banned for sale in several states. Lesser celandine is native to Europe, where it is considered a weed. It escapes from gardens and naturalizes in forested and open land and in shady lawns, especially where soil is moist. It out-competes and smothers desirable plants and is a threat to livestock. Lesser celandine is a serious problem in national and county parks in Maryland and D.C., but until recently it was found only in a few locations in Virginia. Populations are now beginning to explode. Yet, the plant is still sold by nurseries and plant purveyors.



Lesser celandine along Parker Branch near Route 810.

Why it's bad: Lesser celandine (*Ficaria verna* previously named *Ranunculus ficaria*) grows so densely and rapidly that it forms a continuous thick mat of foliage. This smothers low perennials and prevents seeds of wild-flowers, grasses and trees from germinating. A stand of nothing but lesser celandine exists until dormancy, when the bare ground invites warm-season weeds.

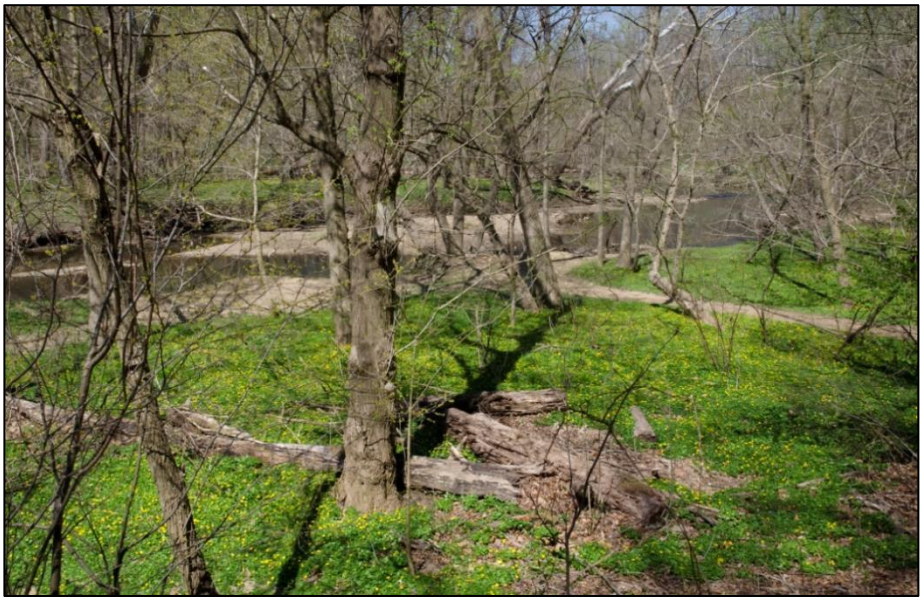
Toxicity: This plant is used as an herbal remedy and has toxic properties. Protoanemonin, a chemical present in the fresh leaves of all species of buttercups*, is poisonous to all mammals.* Livestock that graze on fresh leaves of buttercup family plants, including lesser celandine, can become ill. According to many states' extension publications, cattle are highly susceptible. Although cattle usually avoid eating buttercups if they have adequate food sources, cattle may consume enough to taint milk or to become ill if pastures are poor or heavily infested with buttercups. This is most problematic in spring because forage may be scarce, making the fleshy leaves of this invasive plant more attractive.

What it looks like: Lesser celandine resembles a common buttercup and indeed it is in the buttercup family. The leaves are shiny and dark green and vary in shape from oblong to rounded, but all have a heart-shaped base. They grow on short stems that form ground-hugging mats of rosettes. The foliage sprouts from underground roots and tubers and appears in late winter before anything else greens up. The flowers have six or more (usually eight) golden-yellow petals and a tuft of stamens in the centers. There are *three green sepals (leaflike structures) beneath the petals.* The undersides of the leaves are pale with a prominent network of veins. Flowers begin blooming in March or early April and stop when it becomes hot. When blooming finishes, the leaves begin to yellow and plants go dormant. Some forms develop small "bulbils" at the bases of the leaves after flowering.

Lesser celandine flowers.

Preferred conditions: Lesser celandine thrives in moist to seasonally wet sites and is especially common along streams and ditches and in shaded lawns. However, once it becomes established, it can move into drier sites. It grows in full sun where soil is wet or very moist and in dry sites if shaded.

How it spreads: Plants spread several ways. The root system expands and sends up new crowns. Underground tubers, which are shaped like figs (hence the common name fig buttercup) lie near the soil surface and are easily disturbed and spread by animals and flowing water, such as high water in a stream after a thunder-storm. Plants that form bulbils are the most aggressive, because the bulbils drop to the ground and can travel via water or soil movement and then take root at a distance to form new colonies. Seed formation is another way this rapidly spreading invasive gets around.

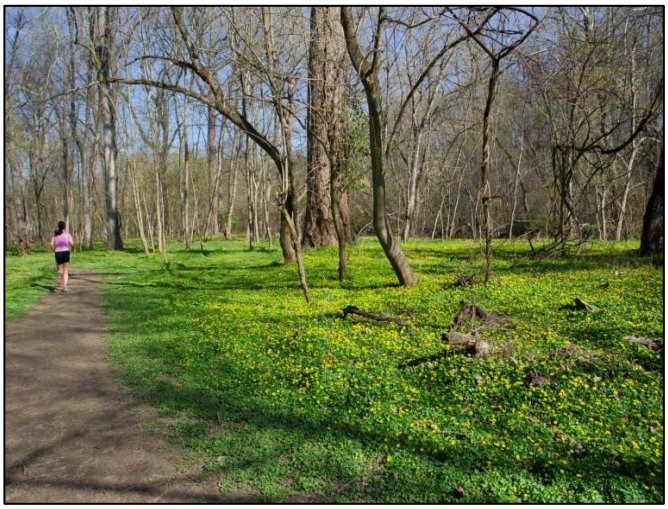


Lesser celandine carpets the forest floor here along Rock Creek, covering acres of land that should be carpeted with spring wildflowers.

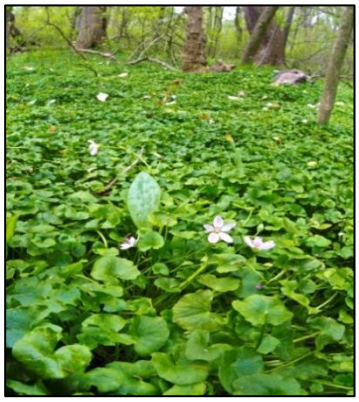
How to control it: Technicians at the National Park Service use a foliar application of a low concentration of Rodeo applied in late winter, before desirable plants sprout new leaves, to kill lesser celandine without harming other plants. It requires several consecutive years of treatment to wipe out lesser celandine, due to missed plants and the tenacity of the tuberous roots.

Native look-a-like: Marsh marigold, an early-blooming native wildflower that grows only in wet or marshy sites, is a buttercup family member that resembles lesser celandine. Its flowers have 5 to 9 golden-yellow petal-like sepals and *no green sepals.* The plant grows taller than lesser celandine and forms separate clumps, not mats. Its leaves are attached directly to the stems and have toothed edges. The plants do not form basal rosettes that characterize lesser celandine.

Marsh marigold.



Everything green shown in this photo of a Maryland park in April is lesser celandine



Spring beauties and trout lilies smothered by lesser celandine.

Lesser celandine leaves vary in shape. Flowers have three greenish sepals beneath the gold petals.