

Spencer Barrett

Proposal for Lesser Celandine Removal at Ann Lee Pond



Introduction: The Capital/Mohawk PRISM is a group that was founded to combat invasive species in the Capital Region from the Town of Catskill to the Town of Glen's Falls. Invasive species have varied impacts depending on the species, but are all classified by their weedy presence outside of their native range and their negative impact on the ecology, the economy, and/or human health in their new location. Removal efforts by the PRISM focus on emerging invasives, those that do not have an extremely established population in the region. The hope is that by focusing on these less present invaders, the overall effect of invasive species can be minimized through keeping new species at bay, especially in protected natural areas. All PRISMs work to coordinate management efforts regarding invasive species as well as educate the public about the threat these species pose.

Species of Focus: Lesser Celandine is one such species whose impact is mainly considered on an ecological basis. Historically, humans have put our wetlands under strain through development and as a result, many of our endangered plants and animals are those that make use of these areas for habitat and forage. Some of the most threatening invasive species are those that invade wet areas, putting those already imperiled species at further risk. Lesser Celandine, unfortunately, prefers these areas. It has been reported since the 1800s in Pennsylvania, and has spread west to Missouri, with populations also existing on the west coast. On state risk assessments for this plant, it scores 85.56, an invasive rank of Very High for the state of New York.

The plant itself is a spring ephemeral, completely dying back by summer. This makes it very hard to manage due to a limited management window. This window does exist in May. The plant can be removed by completely digging out the bulbils from the soil and disposing of them in dark plastic contractor bags, preferably on-site. Thankfully, the management of this plant is relatively low-intensity, straightforward, and with follow-up, can be successful. The highest priority should be placed on streambed locations as these have the highest risk of spread through water movement.

The Site: Reports of Lesser Celandine at Ann Lee Pond first reached the PRISM by way of third-party report from local naturalist David Behm, who has conducted a wildflower survey of the property. These reports were verified by Terrestrial Coordinator Spencer Barrett and PRISM Coordinator Kris Williams during the 2018 field season. The main population of the plant is near the northern parking lot in a drainage area leading into the pond, though it stretches in patches along the path leading south. The reason this find is significant and the reason the PRISM is proposing the removal of this plant is due to the geography of the infestation, the northernmost confirmed population of Lesser Celandine in the

region. Due to the hydrology of the site as well as the close proximity of the plant to the walking path, it is imperative to get a handle on this plant before further disturbance occurs and the risk of this plant spreading increases. It is also recommended that native species be planted in place of the plant to discourage other invasive species from making use of the disturbed area. While it is currently unknown if there are other Lesser Celandine locations in Albany County, it is the hope of the PRISM that involving Albany County DPW will increase the number of eyes on the ground looking for new infestations of this aggressive invader.

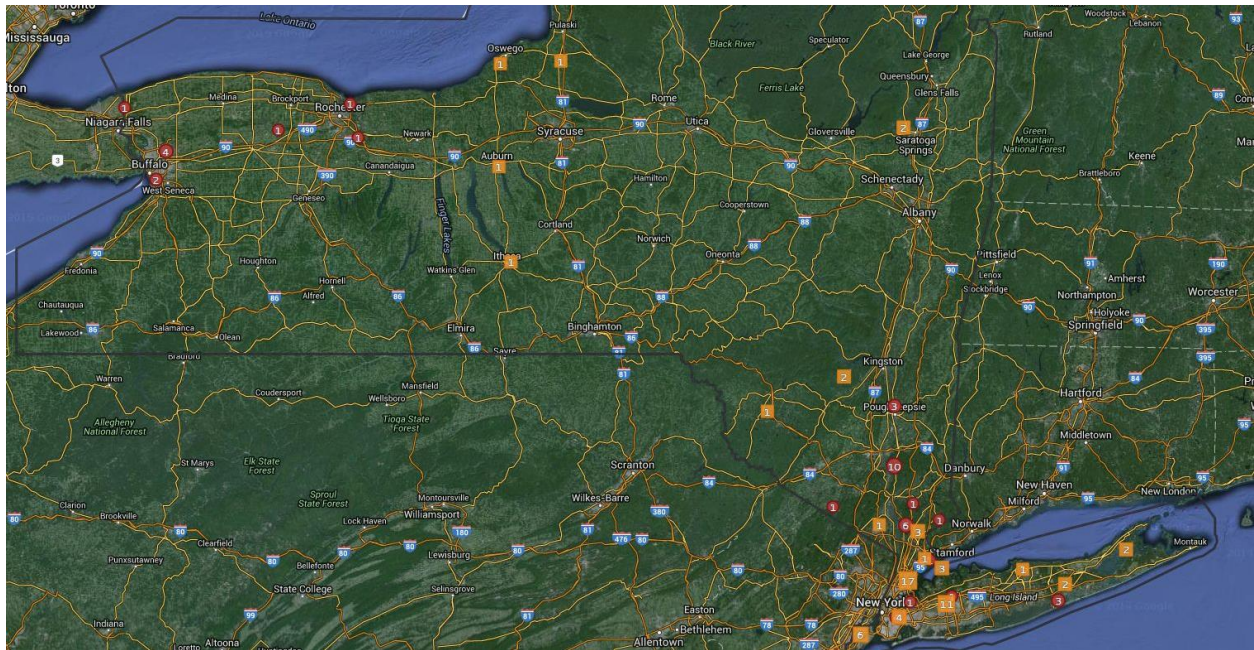
Synopsis: The proposed event is an invasive species removal project with an educational component for any DPW staff that wish to attend. The PRISM agrees to furnish the event with available tools and supplies, including black contractor bags for disposal, trowels, shovels, and gloves that we have on-hand, as well as making staff available for days of the proposed project. The goal of the removal is to reduce the amount of Lesser Celandine on site at Ann Lee Pond significantly, with follow up efforts to follow in coming years with an end goal of full on-site eradication. This work would be done with no monetary cost to the county. Proposed timing for this event is a two day time period (Monday-Thursday) occurring during the last two weeks of May.

References:

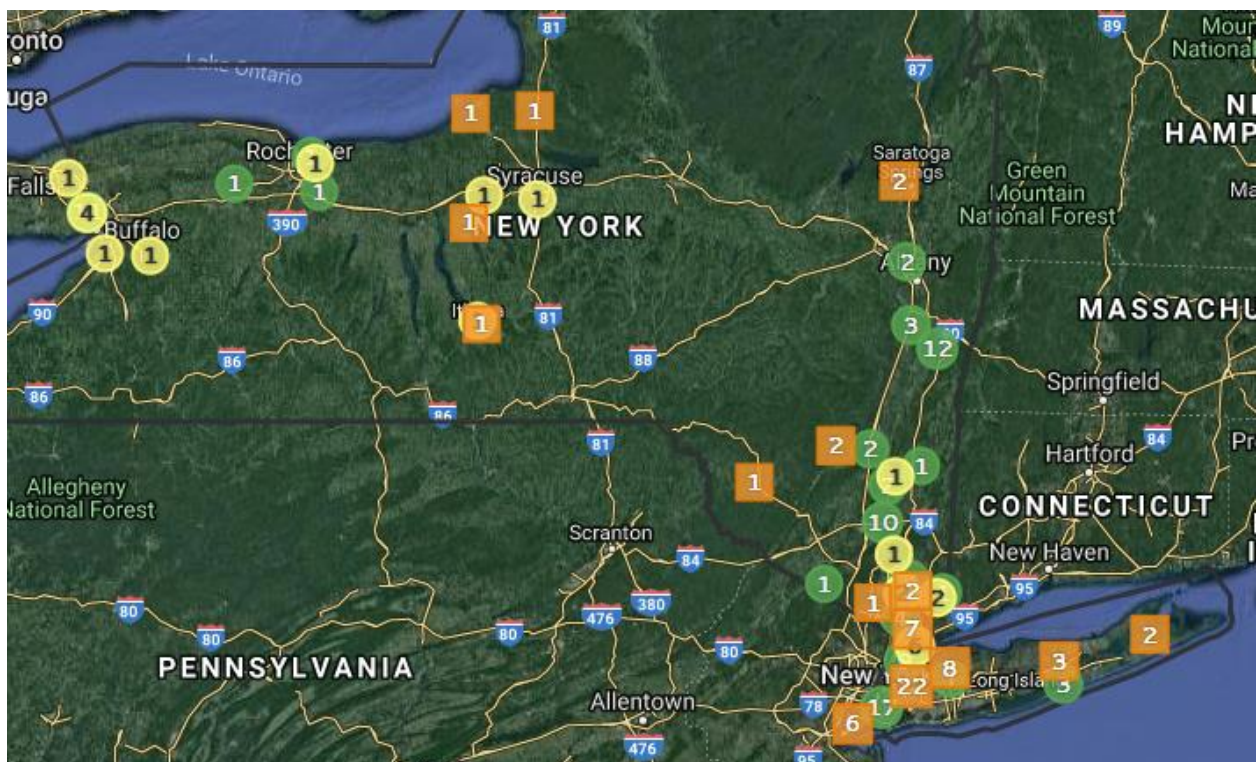
- NY Invasive Species Information: http://nyis.info/invasive_species/lesser-celandine/
- Cap/Mo PRISM Website: <http://www.capitalmohawkprism.org/>
- PRISM Lesser Celandine Factsheet: http://www.capitalmohawkprism.org/uploads/8/1/4/0/81407728/ficaria_verna_lesser_celandine.pdf
- DEC PRISM Information: <https://www.dec.ny.gov/animals/47433.html>

The Capital-Mohawk PRISM is funded by the New York State Department of Environmental Conservation through the Environmental Protection Fund. The PRISM is hosted by the Cornell Cooperative Extension of Saratoga County.

2015 Map of Recorded Lesser Celandine Locations: (Orange= Historical Record)



Current Map of Lesser Celandine (December, 2018):



Locations of Lesser Celandine at Ann Lee Pond:



Lesser Celandine illustration showing the characteristic bulbils which are the target of removal.



Lesser Celandine Infestation photos (not in flower) at Ann Lee Pond:

