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Jackson, Lenawee and Washtenaw Cooperative **Invasive Species Management Area Bulletin**

Many environmental organizations have begun their field season and are recruiting volunteers to help pull invasive species. We urge those working outside to take some time to familiarize themselves with area ticks as blacklegged (deer) ticks can transmit Lyme disease to people. If you work in forested or grassy areas, wear long- sleeved shirts and pants, tuck the bottom of pants into light-colored socks, and apply insect repellent when appropriate.

Purple Loosestrife and Garlic Mustard: Potential Bio-Control Options

Purple loosestrife (PL) and garlic mustard (GM) plants are two of the most recognizable invasive plants in the Great Lakes region! Both species were introduced to eastern North America in the mid-1800s from Eurasia (PL) and Europe (GM) respectively. Both species have aggressively spread throughout North America and displaced many native species. Until recently, most have been mainly managed by physical or chemical means, however some bio-control options may be available! Much care and years of research are undertaken before biological control agents are released, much of which occurs at the Institute of Biological Control (located in Switzerland) in conjunction with Canadian and United States scientists.



Purple loosestrife (A) and garlic mustard (B) are invasive species that displace native species. The golden loosestrife beetle (C) and recently discovered garlic mustard aphid (D) could help land managers decrease the size of infestations on their land.

Black-margined (Galerucella calmariensis L.) and golden (Galerucella pusilla) loosestrife beetles eat leaves that reduces growth and seed production. Loosestrife root weevils (Hylobius transversovittatus) lay eggs in the roots and, when they hatch, larvae destroy the plant's root. Finally, the flower feeding loosestrife seed weevil (Nanophyes marmoratus) decreases the amount of seed production by primarily attacking flowers but also eats leaves. Galerucella sp. have been used by a variety of organizations and residents here in Michigan, with people reporting decreased sizes of infestations. Garlic mustard aphids (Lipaphis alliariae) were recently discovered after holes were noticed on the plant. It is not yet known the impact of this aphid on garlic mustard infestations and, as such we are asking people to report sightings at the EDDMapS website (EDDMapS.org/Report). This aphid sucks sap from the plants, resulting in wilted and damaged leaves and twisted seed pods. Early observations include fewer seed pods and decreased biomass at sites with the aphids!

Upcoming Events

May 25th—JLW CISMA Washtenaw County Invasive Species Training Session, 10:00am to 12:00pm. Washtenaw County Road Commission (555 N. Zeeb Rd). Registration required: Email shikha.singh@macd.org or call 517 -395-2089 to register.

June 6th—JLW CISMA Jackson County Invasive Species Training Session, 1:00pm to 3:00pm. American 1 Credit Union Event Center (128 W. Ganson St.). **Registration required:** Email shikha.singh@macd.org or call 517 -395-2089 to register.

June 13th—MIPN: Emerging Midwest Invasives: Black & Pale Swallow-wort (speaker is Shikha Singh from JLW CISMA), 12:30pm to 1:30pm. **Registration required:** mipn.org/presentations



Website of the Month

We mentioned how blacklegged ticks can pass on Lyme disease to people. This website provides information on how to identify the ticks, the signs and symptoms of lyme disease, and some statistics and maps of reported cases. cdc.gov/lyme/index.html

Invasive Species Spotlight—Lesser Celandine

- Ranunculus ficaria L., also known as fig buttercup, is a perennial herbaceous plant native to Europe, Asia, and northern Africa
- Leaves are green and heart shaped (0.5-1 inch wide)
- Yellow flower with 7 to 12 petals
- Typically found near damp areas
- Forms large, dense patches; shades out native ephemeral plants



Photo Credit: S. Singh

Native Species Spotlight—Great White Trillium

- Trillium grandiflorum is a herbaceous perennial wildflower found in deciduous or mixed deciduous-coniferous forests
- Has one whorl of three green leaves up to 6 inches in diameter
- White flower with 3 petals (older flowers turn light pink)
- It can take 7 to 10 years for a plant to produce its first flower



Photo Credit: S. Singh

If you have questions, please contact JLW CISMA Coordinator Dr. Shikha Singh at shikha.singh@macd.org or (517) 395 - 2089. Visit our website for more events and resources: jlwcisma.weebly.com



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