



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

The JLW Cisma is happy to report that we received another year of funding from the Michigan Invasive Species Grant Program! In addition to education and outreach, we will continue our Japanese stiltgrass and mile-a-minute weed surveys, and soon begin swallow-wort management efforts!

## Irish potato famine: origins of the pathogen and lessons learned!

In this country, March is known for three things: March Madness Basketball, the JLW Cisma Coordinator's birthday (?), and celebrating Ireland. So this month we thought we would take a look at how a pathogen originating from the Americas led to the Irish potato famine! Potatoes are an internationally beloved vegetable, but they were originally cultivated in South America where genetics traced it back to present day Peru. Spanish explorers brought the potato to Europe in the 16th century, where it quickly became a staple for both people and livestock as it was cheap, grew in poor soil, had a long shelf life, and was high in calories. While there were over 5000 varieties of potatoes available, Ireland predominantly grew the "lumper" variety.



Origin of the pathogen (top left) that resulted in the Irish potato famine (Photo credit: Yoshida et. al. 2013).

In the early to mid 1800s, potato crops experienced blights caused from the pathogen *Phytophthora infestans*, which attacks the leaves and tubers of the potato, eventually leading to the plant rotting. Because potatoes can be propagated vegetatively (clones), Ireland had low genetic variability, leading to catastrophic losses. One in eight Irishmen died during the Irish potato famine, and many emigrated to other countries. While neither the potato nor the pathogen are native to Ireland, the pathogen's center of origin, through genetic examination, was traced back to Mexico, or it may have diverged from the origin population north of Mexico in the 1800s, not from Peru where potatoes came from! This also highlights the dangers of putting all your stock in one crop with limited varieties being grown.

### For more information:

Yoshida et. al. 2013. The rise and fall of the *Phytophthora infestans* lineage that triggered the Irish potato famine. eLife 2:e00731. Link: [doi.org/10.7554/eLife.00731](https://doi.org/10.7554/eLife.00731)

## Invasive Species Spotlight—Beech Leaf Disease

- *Litylenchus crenatae* is a foliar nematode that is associated with the disease
- Has distorted or curled leaves, and/or dark green bands of tissue between leaf veins
- Relationship between symptoms and the presence of the nematode is not fully understood
- Affects American (native), European and Asian beech varieties
- Restrict beech tree movement out of diseased areas



Photo Credit: J. Chatfield

## Native Species Spotlight—Ruby Meadowhawk

- *Sympetrum rubicundulum* dragonflies are in the skimmer family (hunt flying insects such as flies and mosquitos while skimming the surface of the water!)
- Males have a red body with black triangles on the side of the abdomen (females are tan-orange)
- Body length is about 1.3 in. long
- They have a yellow-brown face
- Prefer temporary ponds, can be found near forests or marshes

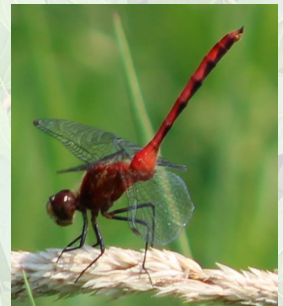


Photo Credit: S. Singh

## Upcoming Events

**March 13th**—ISAN: Lessons Learned: Pet Rehoming Efforts in the US; 3pm to 4:30pm. Registration required: [register.gotowebinar.com/register/3937556077612867673?utm\\_medium=email&utm\\_source=govdelivery](https://register.gotowebinar.com/register/3937556077612867673?utm_medium=email&utm_source=govdelivery)

**March 21st**— Not MI Species: Rowing The Boat: The Michigan Invasive Species Program 2022 year in review; 9am to 10am. Registration required: [us06web.zoom.us/webinar/register/4tugSN-cRXuuwayoCmYK5g](https://us06web.zoom.us/webinar/register/4tugSN-cRXuuwayoCmYK5g)



## Website of the Month

The Midwest Invasive Plant Network (MIPN) is an organization whose primary focus is on invasive plants and shrubs. Their website contains a database for plant control & management, Midwest invasive plant list, educational resources, and publications. They also host informative virtual webinars!

[mipn.org](https://mipn.org)

If you have questions, please contact JLW Cisma Coordinator Dr. Shikha Singh at [shikha.singh@macd.org](mailto:shikha.singh@macd.org) or (517) 395 - 2089.

Visit our website for more events and resources: [jlwcisma.weebly.com](https://jlwcisma.weebly.com)



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