March 16, 2023

Native Nurseries and the Invasive Jumping Worm Question

There's a growing awareness in Indiana about jumping worms. We've seen more local news articles and social media posts this year than in past years. We've had some questions about our sale, and what is being done at nurseries to keep from spreading jumping worms. We promised to look into it, and we've received encouraging news from the nurseries we use!

If you don't know what they are, this very thorough, recent post "All About Invasive Jumping Worms", will help. It even includes a list of native plants that can survive in infested areas.

Photo credit: Hamilton Conservation Authority, Blog 03/22/2022

The growers we buy our plants from have been aware of jumping worms for some time. But, by virtue of how native plants (and most greenhouse plants in general) are propagated in nurseries, it is unlikely that worms will be spread from them. Several specific growing practices make this unlikely. First, the soil-less growing medium that is

the standard among commercial growers comes to the grower in sealed bags, and is sterile. (Note that the soil-less medium can look like soil but made of one or more components like peat, coco coir, perlite, sand, bark chips, etc.)

Second, the plant trays are on wire bottom tables and benches, at least 6” off the ground (since air circulation is critical for mould management and drainage). Usually, the ground is either concrete, or layers of rock for drainage. Growers are subject to inspections by the respective states to monitor for all sorts of pests and diseases, invasive and native alike. For instance, growers in states where the invasive spongy moth is present must treat with a short term insecticide prior to shipping to curtail their spread.

For our fall sale plants that are grown on the ground, pots sit on crushed limestone gravel. This isn’t conducive for jumping worms to live. They need a LOT of organic material to consume to survive.

In transit, the trays and pots aren’t in contact with the ground.

Jumping worms were originally introduced as fishing bait, and are still often associated with areas around lakes, ponds, and rivers, or where people have dumped unused bait. *Indiana has no regulations against non-native bait worms*; the sole reference to worms as bait is "Fishing worms should be discarded in trash containers." Indiana code detailing the regulations for bait dealer licenses says nothing at all about bait worms.

While we will be taking steps at Geist Nursery as soon as we can to reduce the chance of their spread, from what we can tell commercial native plant growers aren't a significant source of jumping worm spread.

What can you do to curtail the spread of these pests?

- Demand **native species only** for fishing bait. Destroy any unused bait. Spread the word, not the worms!

- When hiking, especially in areas near public fishing spots, take a second pair of shoes to change into, and clean your treads before hiking again (being careful to get the soil into the trash). This will will remove any worm cocoons and also help to stop the spread of non-native plants and pathogens like the fungus that causes white-nose syndrome in bats.

- Be very aware when purchasing and moving leaves, mulch, and soil. Ask your suppliers about steps they're taking to curtail the spread of jumping worms - for many, your question will be the first they've heard of it.

- When sharing plants with friends and neighbors, it's best to share seeds if there's any doubt. If you do get plants, thoroughly wash the roots before transplanting. A worm cocoon is tiny brown pellet, about .25 cm, or 1/10 of an inch wide.

- Test your soil if you have any suspicions, so that you can take steps not to let them spread from your area. (See above.)

- Report any findings to DNR.

- Talk to your representatives about non-native species in general, and ask them to support legislation to protect our native habitats and wildlife.

Other than that, a ounce of prevention is worth a pound of cure. If you DO think you have jumping worms, you can investigate by watering the area with a solution of ground mustard. This will not harm the worms, but all worms in the area will come to the surface to escape the irritant. Then you can collect, rinse, sort, and compare to catalog the various types of worms you find. We haven't yet done this ourselves, but we understand that the jumping worms will live up to their name. However, it does take patience and a careful observation to determine the species. All worms are going to be very wiggly when irritated and grabbed up. There are good resources on the internet from various organizations and universities that can help you make the ID.

How to hunt for and collect worms.

How to ID jumping worms, how they damage North American ecosystems, and steps you can take to curtail their spread.

Also see Prairie Moon's FAQ (last topic under "Plant & Seed Questions" heading.)