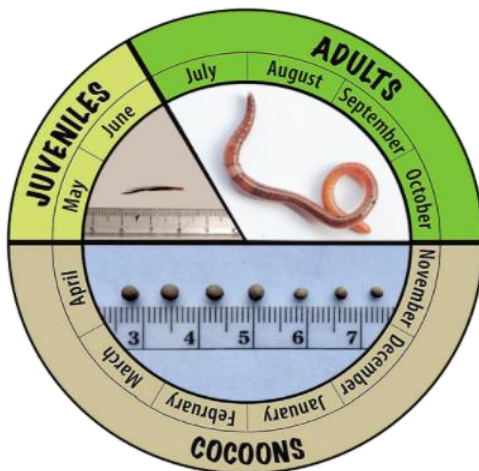




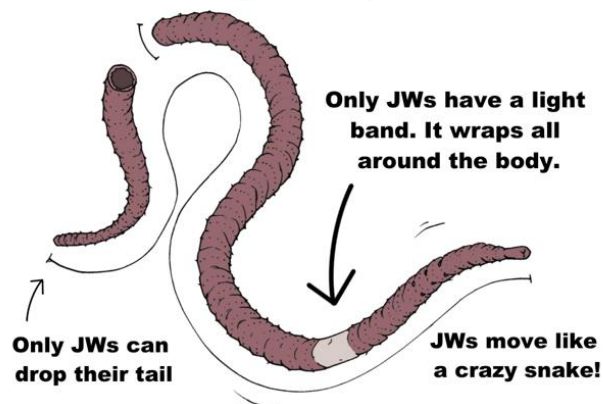
Stop the Spread of Jumping Worms – Information for Plant Sale Volunteers & Organizers

What you Need to Know

- All earthworms in Ontario are non-native and harm the environment.
- **However, invasive Jumping Worms (JWs) cause much more damage & spread much more quickly.** They can kill plants by removing nutrients from the soil, and leave behind bare, dry granular pellets. They are a threat to our gardens & lawns, farms & forests, as well as bird and animal life.
- Invasive Jumping Worms have been confirmed in Ontario. (Windsor-Essex County - 2014) (Dundas Valley, Toronto, Wheatley - 2021).
- There are currently **no controls or pesticides to stop** Jumping Worms once they are in a garden or natural area. **Early detection and rapid response are critical.** You can make a difference!
- **People spread worms** without realizing it. JW egg cases (cocoon) can be in soil, mulch, plants, landscaping equipment and in even the treads of shoes and tires. One cocoon or worm is enough to infest a garden.
- **Life Cycle & ID:** Plants and soil sold in spring may not show evidence of JWs. JWs die off in winter. Cocoon hatch when soil temperatures reach 10°C/50°F & continue to hatch throughout the summer. Cocoon are the size of a poppy seed and JWs will be tiny. When JWs mature (July to October), it's easier to tell them apart from other earthworms. This may be the best time to inspect plants and gardens.
- **Plant sales:** Plants sales have the potential to spread JWs, so careful preparation is essential. Your plant sale can also be an opportunity to education the public about JWs. Together, we can make a difference and stop the spread of invasive Jumping Worms in Ontario.



How to Identify Jumping Worms



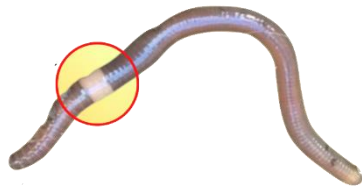
Jumping Worms die in winter and hatch from eggs in spring. From May to June, Jumping Worms are tiny. If you find a large worm in the spring, it won't be a JW. When Jumping Worms mature (July to October), they develop a **light band** (clitellum) nearer their head. If agitated, JWs can **drop their tail**. JWs **thrash wildly** from side to side when disturbed. No other earthworms have these three features.

MASTER GARDENERS of ONTARIO



Plant & Site Preparation

- If funds are available, have copies of our Information for Home Gardeners, poster and quick ID guide available to educate the public during the sale. (See list below)
- Have “on-site” demonstrations during the sale to enhance visual learning of JWs.
- Make sure ALL plant sale members are aware of Jumping Worms including what they look like and what contaminated soil looks like.
- DO NOT ACCEPT plants from gardeners with confirmed cases of JWs.
- Sell bare-root plants whenever possible. Completely submerge plant roots in water and wash away remaining soil. Actively check for JWs.
- If plants must be sold in soil, repot with clean potting soil.
- Do not use mulch, leaves, backyard compost or other material to repot as they may harbor jumping worm eggs.
- Gather and transport plants/pots where they cannot pick-up contaminated materials like soil, leaves or mulch, e.g., on concrete, tarps or trays.
- **Arrive clean and leave clean.** Ensure volunteers clean shoes/boots/tools before arrival and brush off any soil before returning home.
- **Vehicles:** Be aware that vehicle tires may also transfer JW cocoons to and from the plant sale site. Where possible park vehicles on paved areas such as the street or parking lot.



Look for this **light band (clitellum)** found near the head of mature JWs. It goes all around the worm. Other earthworms have a band that is red/pink and saddle shaped.



Jumping worm castings are dark and possess a similar size and shape as Grape Nuts cereal. They are also described as looking like coffee grounds.

Master Gardener of Ontario Information about Jumping Worms

- Invasive Jumping Worms – Information for Home Gardeners
- Invasive Jumping Worms – Dealing with Infestations in your Garden
- Spread the Word NOT the Worm (Poster)
- Spread the Word about Jumping Worms (Mini Info Guide)

More Information for your Plant Sale Team

- Invasive Species Center – [Jumping Worms](#)
- [Jumping Worms](#) - University of Minnesota Extension
- [Plant Sales and Jumping Worms](#)
- University Place: [Invasive Jumping Worms](#) (Video)
- [Map of Jumping Worm Sightings](#)
- [Confirmed invasive jumping worm sightings along the Canada-USA border](#)