UW-Madison Arboretum

INVASIVE SPECIES ALERT

"Jumping Worm" - Amynthas spp.

Other common names: crazy worm, Alabama jumper, snake worm

Amynthas agrestis, an invasive earthworm from temperate regions of Asia, was found in limited areas near the Visitor Center in fall 2013. Commonly called "jumping worms" or "crazy worms," Amynthas have been since been found elsewhere in Wisconsin.

Jumping worms have been in the eastern U.S. for decades. They alter soil structure and chemistry dramatically, leaving a distinctive grainy soil full of worm castings (feces), and they damage forest understory habitat. They are significantly more destructive and aggressive than European earthworm species. Their presence may facilitate spread of invasive plant species.

The worm reproduces without mating during its entire active season—populations grow rapidly and outcompete other species.

The Arboretum is facilitating much-needed research as well as public outreach and education. Staff are following DNR best management practices to limit spread of the worm.

Restricted Species

It is illegal to transport, transfer, or introduce *Amynthas* worms in Wisconsin without a permit.

Do not buy or use jumping worms for composting, gardening, or bait.

Jumping worms are restricted under Wisconsin DNR invasive species rule NR40.



Mature jumping worm, showing characteristic smooth light clitellum (band near head of worm).

Did You Know?

- All earthworms are non-native to Wisconsin glaciated regions.
- Earthworms are especially harmful to forest ecosystems.
- People spread earthworms—by using them for bait and compost, or unknowingly transporting worms or cocoons on shoes, wheels, mulch, or transplanted plants.
- Earthworms (e.g., bait) should not be discarded in or near natural areas—they should be put in the trash.
- Earthworms have been valued in yards and gardens, but in large numbers they harm beneficial soil life and plant growth. Jumping worms cause even greater damage in natural and cultivated environments.



Jumping worms, showing variations in size and maturity.



Soil infested by jumping worms (left side of photo) is notably different than uninfested soil (right).

What Can You Do?

- Check your property for earthworms. A mustard pour is an easy way to sample for worms: www.nrri.umn.edu/worms/ research/methods_worms.html
- Learn to recognize the soil signature.
- Be careful when sharing and moving plants—know where they came from and check for jumping worms. If you think you have them, don't transplant mulch, soil, or plants. Cocoons are hard to see—err on the side of caution.
- Contain their spread—don't buy or use jumping worms for composting or bait.
- If you suspect jumping worms, alert the DNR: Bernadette.Williams@wisconsin.gov

Suggested Reading

"Hungry, invasive 'crazy worm' makes first appearance in Wisconsin," Chris Barncard, UW-Madison: http://www.news.wisc.edu/22996

Wisconsin DNR invasive species rule NR40: dnr.wi.gov/topic/Invasives/classification.html

Great Lakes Worm Watch: www.nrri.umn.edu/worms/

Questions?

Amynthas at the Arboretum: Brad Herrick, Ecologist, bradley.herrick@wisc.edu

Outside the Arboretum: Bernadette Williams, Wisconsin DNR, Bernadette.Williams@wisconsin.gov

How to Identify Amynthas

You can help document the presence of jumping worms—and contain their spread. Here's what to look for:

- Very active (hence the "jumper" nickname), moves like a snake
- Smooth, light-colored clitellum (the glandular band near the earthworm's head; in other species it is raised and pink, or a color similar to the worm.)
- Can drop its tail if handled roughly
- Distinctive grainy soil full of worm castings

Jumping worms:

- Can extend range by 12 m / year
- Reproduce asexually (parthogenically) and more rapidly than European species
- Mature in about 60 days
- Can grow up to 8 in. long
- Coccoons are less than 2 mm in diameter and similar in color to dirt



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