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OU biologist studying spread of invasive worm in Michigan

“Anything you do to the soil in a forest is going to have ramifications for how that forest system functions ecologically.”

And that, Oakland University Professor **Scott Tiegs** said, is why the Asian Jumping Worm’s growing presence in Michigan soil is a real concern.

“We don’t know a lot yet about how these relatively recent invaders, this Asian species, are going to impact our forests,” said Tiegs, an associate professor of biology at OU. “So that’s one thing we’ve set out to determine.”

Tiegs said he plans to apply for a grant from the Michigan departments of Environmental Quality, Natural Resources, and Agriculture and Rural Development that would allow him to study the worms and how they spread.

“One thing we want to address is that we really don’t know anything about their distribution in Michigan,” he said. “For example, we have some soil that is very rich in organic matter and some that is very sandy, and I suspect that the abundance of the Asian Jumping Worm is going to vary across these different soil types, as well as across different landscapes.”

“Just from my own observations, they seem to do really well along streams and rivers where the soil tends to be moist. Are they thriving there because of a particular soil type, or are they using the river as a way of dispersing? We don’t know that yet, so that’s another thing we would like to address with the grant.”

According to Tiegs, the MDEQ/DNR grant is funded through the Michigan Invasive Species Grant Program, which was created to address strategic issues of prevention, detection, eradication and control for both terrestrial and aquatic invasive species in Michigan.

“If we can educate people about the problems associated with this species, maybe they’ll be more likely to minimize activities that result in spread,” Tiegs said. “For example, if you know you have Asian Jumping Worms in your garden, maybe you won’t take a potted plant from your home and transfer it to your cousin in another state because you’re going to be bringing the worms with you.”

Tiegs, along with Holly Greiner-Hallman, a special lecturer with the **Department of Biological Sciences**, first discovered the worms in Michigan on the grounds of the Oakland University Biological Preserve in 2008.

“We were both brand new here at OU and had discussed the potential of doing an invasive earthworm research project,” Greiner-Hallman said. “We decided to go out just to do an informal survey of the preserve. We truly did not expect to find anything new, and we were shocked at the abundance of (the worms), particularly in soils right around Galloway Creek.”

According to Tiegs, the Jumping Worm is an invasive earthworm native to East Asia. It gets its name from the way it reacts when handled jumping and thrashing about.

“All of the other earthworms we have in the Great Lakes region are from Europe,” he said. “The European species is a ubiquitous part of the soil in North America, and they’ve been pretty well studied. One of the things we’ve set out to do is compare the impact of the Asian species with that of the better understood European species. There are some unique traits that these earthworms from Asia have that their European counterparts don’t.”

For example, the Asian Jumping Worm completes its entire lifecycle in a single growing season.

“They’ll go from a cocoon to a sexually mature adult between the months of March and July or August,” Tiegs said. “So they have a really rapid growth rate as a consequence of that trait.”

Jumping Worms, also known as crazy worms, Alabama jumpers and snake worms, can grow to be up to 8 inches long and have a narrow white band around their body. They are considered an invasive species by the Michigan DNR.

“An invasive species is a species that causes unwanted economic or ecological impacts,” Tiegs said. “Usually more often than not, it’s not



The Asian Jumping Worm was first discovered in Michigan on the grounds of the Oakland University Biological Preserve in 2008.

“In other parts of the United States where they’ve documented the presence of the Asian Jumping Worm, they’ve become really abundant and have a demonstrated impact on native flora and fauna in the forests, ranging from amphibians to plants.”

Since they were initially observed at the OU Preserve, sightings of Asian Jumping Worms have been reported in various locations throughout the state of Michigan, including Chelsea, St. Clair and Jackson County, as well as in other states, including Wisconsin and Minnesota.