

Invasive Species Awareness

Invasive species are defined as 'non-native organisms that cause economic, environmental or health harm,' often introduced through human activity. Invasive species adversely affect habitats by causing ecological and environmental damage. Nebraska agriculture, recreational areas and landscapes must be protected from these invasive pests.

Take for example, the Emerald Ash Borer, or EAB. EAB was accidentally brought into the United States where it's natural predators are absent. EAB attacks and will often kill ash trees. Ash trees make up a large percentage of urban tree cover and their native range is extensive. The damage EAB has done across the country has been massive and will take decades to recover from.

Preventing invasive pest introductions is ideal, but not always possible. Discovering an invasive pest introduction in its early stages helps mitigate the damage the pest can do if left unchecked. Trapping, surveying and inspecting are all tasks the entomology team here at the Nebraska Department of Agriculture carries out to help monitor pest introductions to the state, either via nursery stock, firewood from other states, or other seemingly innocuous trade practices.

Here we have compiled a list of some invasive species for you to better understand the importance of keeping these pests out of Nebraska and protecting our native environment and ecosystems.

Spotted Lanternfly



Asian Jumping Worm



Thousand Canker Disease



Spongy Moth



Asian Longhorn Beetle



Spotted Lanternfly

NOT CURRENTLY IN NE (MAY 2026)

Spotted Lanternfly are gregarious feeders, which means large groups will feed together, being a nuisance to homeowners, and anyone trying to enjoy the outdoors.

When Spotted Lanternflies feed on plants, they leave behind a sticky, oozing residue called honeydew. This substance attracts other insects, causes mold growth, and further hurts plants.



Adult Spotted Lanternfly wings.
Photo Credit: USDA



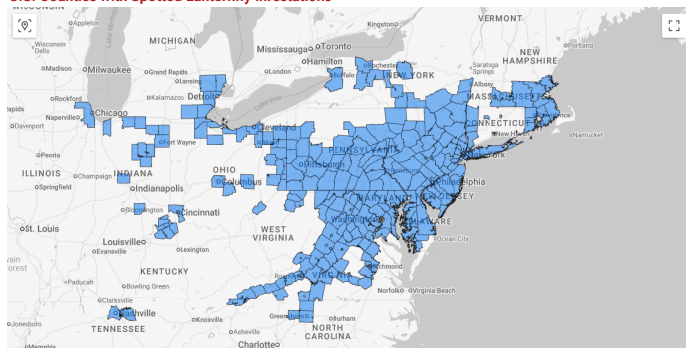
Cluster of Spotted Lanternfly adults and nymphs. Photo Credit: USDA



A favorite host plant is the non-native Tree-of-Heaven.

NDA inspectors monitor Tree-of-Heaven specimens for lifecycle stages of Spotted Lanternfly, and it is always part of the inspections we do on nursery stock.

U.S. Counties with Spotted Lanternfly Infestations



Current distribution map of Spotted Lanternflies.

Spongy Moth

ONLY MALES FOUND,
NO POPULATIONS IN NE (MAY 2026)

Spongy Moth is native to Europe and Asia and has been in the United States for over 100 years. It has slowly spread west (from the east coast).

Approximately 90% of the feeding damage caused by larvae is done by the last two larval stages before the adult stage. Generalist defoliators (insects that feed on a wide variety of plant species) can eat the leaves of over 300 species of trees and shrubs. This can cause significant damage to forests and crops.



Spongy Moth larva. E. Bradford Walker, Vermont Dept. of Forests, Parks, & Recreation, Bugwood.org

Caterpillars can be identified by five pairs of blue spots near the head followed by six pairs of red spots.

There is a federal quarantine for much of the northeastern U.S. This means that plant material cannot leave the quarantined area unless extra inspections and other protocol have been met to ensure the pest doesn't spread.



Adult Male Spongy Moth, USDA
Photo by John H. Ghent, Forest Service.

View the current [Federal Spongy Moth Quarantine map here](#).

Spongy Moth has been caught occasionally in traps NDA set, but so far it is believed there are no established (overwintering) populations in Nebraska.

Asian Jumping Worm

FOUND LANCASTER, DOUGLAS, & PLATTE COUNTIES (MAY 2026)

Asian Jumping Worms (AJW) are not a regulated pest in Nebraska but are in other states. They are earthworms that voraciously feed on the soil's organic matter, so much that they can severely alter the soil structure.

Asian Jumping Worms are easily spread across locations in a load of compost, soil, or shared plants between neighbors.

Most naturalized earthworm manure (castings) contain nutrients and are beneficial to plants. These castings are mostly underground, and readily available to the plants. Conversely, Asian Jumping Worm castings are almost always left on the soil surface – unavailable to plants, and easily washed away by rainwater.

Asian Jumping Worms threaten native ecosystems by consuming the topsoil layer of organic matter. The casings of Asian Jumping Worms look like coffee grounds.

Learn more about [telling apart AJW from other earthworms here](#).



Asian Longhorn Beetle

NOT CURRENTLY IN NE (MAY 2026)

Asian Longhorn Beetle (ALB) is a large black and white beetle that is native to parts of Asia and most likely came into the U.S. on shipping products (like wood pallets). This beetle will attack maple trees and other hardwood trees.

Adult females will lay eggs just under the bark of the tree, and when the eggs mature and turn into larvae, the larvae will tunnel through the branches feeding along the way. Eventually they pupate, and the adults chew their way out of the tree leaving large round exit holes. They will continue to feed on the outside of the tree before they also mate, and the cycle continues. Feeding by the beetle will kill the tree.

ALB is currently found in four states (New York, Ohio, South Carolina, and Massachusetts). There is a federal quarantine on the infested areas and the area is currently small enough that eradication of this pest from the U.S. is the goal.

This pest is one of the many insect pests that is easily moved via firewood and spread to uninfested areas. Do not move firewood from one location to another.



Asian Longhorn Beetle larvae



Adult Asian Longhorn Beetle



Tree affected by Asian Longhorn Beetles.

Thousand Canker Disease

NOT CURRENTLY FOUND IN NE; HOWEVER, THE VECTOR (WALNUT TWIG BEETLE) HAS BEEN FOUND HERE.

Thousand Canker Disease, or TCD, is caused by a combination of the Walnut Twig Beetle (*Pityophthorus juglandis*) and the fungus *Geosmithia Morbida*. Walnut trees, including the primary hosts of Black Walnut, Arizona Walnut, California Walnut, English Walnut, and Butternut are all susceptible to this disease.

The disease is caused by a fungus, *Geosmithia Morbida*. The fungus overwinters in infected trees, and when the Walnut Twig Beetle (*Pityophthorus Juglandis*) burrow into an infested tree to feed and pupate, the spores of the fungus go with the beetle when it exits the tree and moves to another.

The fungus causes cankers (localized dead areas on a tree), that will eventually grow, and merge into large dead areas, and eventually kill the tree.

The disease has not been detected in Nebraska, but is found in nearby states such as Colorado. The Walnut Twig Beetle has been found in NDA traps sporadically in the last five years. We currently do not believe there is an established population, but will continue to monitor. This disease is also why Nebraska has a state quarantine on Walnut nursery stock and Walnut wood products including firewood. As we do not currently have the disease, we want to protect our Walnut trees as well as we can.



Walnut Twig Beetle, smaller than a grain of rice, carries Thousand Canker Disease fungus that affects Walnut trees. Photo by Javier E. Mercado, Bark Beetle Genera of the US, USDA APHIS PPQ, Bugwood.org.



G. Morbida Conidia and Conidiophores. Photo by Ned Tisserat, Colorado State University. Source: Bugwood.org.



Small cankers on Walnut branch caused by Thousand Cankers Disease. Photo by Whitney Cranshaw, Colorado State University. Bugwood.org



Little Walnut in end stages of Thousand Canker Disease. Photo by Whitney Cranshaw, Colorado State University, Bugwood.org.

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