

Invasive Species

By: Naomi Lane

Did you know that invasive species have caused about 60% of the extinction in plants and animals? Invasive species are pests to the natural order of life and destroy forests that house our native species. Kentucky and many other states are in serious conflicts. Invasive species are everywhere and spread like the wildfires in California. However, anyone can help by doing small acts to prevent the spread of invasive species. So with this information in the following paragraphs, are you ready to take action?

Invasive species is an organism that was intentionally or unintentionally introduced to an ecosystem. When the invasive species is involved with an ecosystem it will typically disrupt the balance the native animals and plants have. This can develop a species going extinct in that cycle, it destroys the balance and kills most life in that area. For example: If an insect that kills trees is introduced to an ecosystem, the insect kills the forest that homes hundreds of native animals like squirrels or birds. However, not all invasive species will succeed in this and can be stopped before becoming hazardous. To avoid an invasive species crisis, a few methods are to burn firewood where it is bought, clean water out of boats, and check your items for any plants or animals.

Let's introduce a few invasive species. The Emerald Ash Borer, a small beetle of a metallic green color from Eastern Asia. As its name hints, it affects Ash trees. This little beetle seems small and insignificant but don't let its beautiful metallic colors fool you. This insect populates quickly, growing in numbers each year. The full grown adults are not the ones to directly kill the ash trees. The adults will lay eggs in the crevices of the bark on the ash tree. Once hatched, the larvae will eat into the bark. This feeding on the tree wouldn't harm it if it were not for the large numbers of larvae on the tree, ranging from 40-200 eggs from one Emerald Ash Borer. A recent update on the population of Ash trees in the United States in 2022 with less than 56,000 left! Once fully matured, Emerald Ash Borers will exit the tree, leaving a "D" shaped exit hole. Next we have Hemlock Woolly Adelgid. This can be classified as a parasite, white woolly masses at the underside of branches at the base of the needles on Hemlock trees. This parasite is thought to have hitchhiked on a Japanese plant from Asia. These parasites affect the trees by obstructing the cycle of Photosynthesis, the needles then turn grey and fall off. Lastly you have the Spotted Lanternfly. This insect has red, white, black and brown wings and a black body with a yellow abdomen. The Spotted Lanternfly originated from Southeastern Asia and is a major pest especially for farmers. These insects infest crops and hardwood trees covering it, covering the plants top to bottom. This reduces the plant's ability to use photosynthesis, weakening it and leads to the plant's demise. Spotted Lanternflies excrete a sappy sweet substance that drips under trees, mimicking rain drops falling. Spotted Lanternflies can be deterred by apple cider vinegar, neem oil, or essential oils like peppermint, lavender and eucalyptus oil.

Invasive species are damaging ecosystems severely. This effect on the ecosystem also destroys the economy, creating issues in timber industry and even tourism. It is called the ripple effect. Picture this, you drop a pebble in a pond and see the ripples eventually reach all across the pond, creating a bigger effect from the initial impact. Just like the water ripples, the destruction of invasive species not only destroys the ecosystem but also the people and animals that relied on it. Large timber industries can easily be shattered by invasive species like Emerald Ash Borers. All the fallen trees can not even be used typically, rendering it a huge issue on that alone. Even in cities or large towns invasive species remain pests. No one would want to visit, let alone live in, a large city infested with insects or other pests. This would and has caused many widely tourist filled areas to lose a massive amount of attraction. Not only are invasive species nearly everywhere, it is not very talked about among everyday issues. This results in not many people being aware of it.

People should not stay in the dark and not be ignorant about the situation. There are plenty of local and world wide organizations that are in action. Website "The Nature Conservancy" talks about how to prevent invasive species from spreading and the impact invasive species have. Local organizations take action all across the country, providing you the chance of taking matters into your own hands. These organizations protect forests from invasive species and save the economy and local businesses that run off them, they took the time to consider spreading and understanding this information.

Invasive species are harmful to our beloved ecosystems and continue to drop pebbles with the impact of a nuclear bomb. They cause hundreds of millions of dollars each year and continue to wreak havoc on our economy. If it keeps going at this rate our forests and the organisms within them will cease to exist. But we can take action. Even simple acts such as burning firewood where you bought it can prevent any hitchhiking pests from spreading. It can not be that much of a bother to do a bit of extra work, this is not to guilt trip anyone into joining an invasive species prevention group (though it would be appreciated.) Keep your forests safe, keep your economy from collapsing, and remember this is our only Earth.

References

Conservation forest: Strategies and insights. (2024).

<https://static1.squarespace.com/static/5d6e95a235c3de0001f8ab16/t/66e1a18b479d9365cf32bb3f/1726062993239/2024Conservation-Forest.pdf>

Cox, J. (2023, June 5). Six invasive insects to watch for in Kentucky. *Courier Journal*.

<https://www.courier-journal.com/story/news/local/2023/06/05/six-invasive-insects-to-watch-for-in-kentucky/70253444007/>

University of Kentucky. (n.d.). *Invasive and exotic pests.*

<https://entomology.ca.uky.edu/categories/invasiveexotic-pest>