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The All-Important Tree

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The All-Important Tree

Mallory R



It's not rocket science, Maine hemlock trees are vital to their environment and they are experiencing some upheaval. Hemlock trees are tall, green, conifers. They're identifiable by their shorter square needles. They create dense, cool forests. The hemlock tree provides shade for many animals and shelter for others. These trees are very important to their environment, they affect many other species. Take the brook trout, which benefits from hemlocks by residing in the streams that the trees cast their shade on. Squirrels also nest in hemlocks. As well as the deer who use hemlocks as a place to take

cover in the winter.

Unfortunately, the hemlock woolly adelgid (HWA) is taking down the hemlock trees. They bore into the branches where the needles attach and feed on the tree's sap. The hemlock woolly adelgid was first spotted in Virginia but it has now spread across the Northern East Coast. It is thought to have originated in Japan. The nymph-like bug travels from tree to tree-killing each one as it goes. Some of this problem can be attributed to climate change. As the environments increase in temperature, the HWA is able to survive the mild winters and begin reproducing sooner in the spring. These creatures are prime examples of an

invasive species. They are foreign. They are disrupting the local ecosystems. They have no natural predators. And the species affected have no defense.

Luckily, throughout our hometown of Bethel, Maine at the site of Telstar Middle/High School on March, 30 at 8:50 am, hemlock woolly adelgid was not found likely because our winters are still too cold. Several classes of students ventured out into the forest and took observations of various different hemlock trees. Each tree branch that they noted measured 1 meter in length. First, they would search for HWA at the base of the needles and throughout the branch. Then, they would record their findings, all of which came back negative for HWA. The town of Bethel is seemingly lucky for these results.



In 2003 HWA was first discovered naturally spreading in Maine throughout Kittery and York forests. Before that, it was first brought to light in Virginia in 1951. Since then, it has spread vastly across the country, working its way up the coastline of northern states. 2010 was a terrible year for the Hemlock forests of Maine, there were over 22 new infestations discovered. From there, it only got worse. In 2016, the HWA moved inland for the first time arriving on Frye island located on Sebago Lake. As the climate warms and winters grow shorter, the HWA is going to spread farther inland. In 5 years, there is likely to be quite a bit of brown seeping its way into our forests. In 20 years, the forests will presumably be dying as a result of this insect. By 2122, 100 years from now, if we do not take preemptive actions, the forests of Maine will be substantially affected by the HWA leaving most if not all Hemlock trees browning and dead. To help keep the HWA from spreading farther, one could think about what they may be contributing to global warming. When one thinks of this they could think of things they could do to cut down on their use of greenhouse gases; even little preventative actions help fight climate change.

If we don't take action on this menacing crisis, it will reach severe measures. The hemlock woolly adelgid is a grim sight in our skies, showing no mercy and most if not all of this problem can be attributed to humans and climate change. It is important that we take steps to prevent this from happening in the future. Even small steps help because small steps lead to larger ones.

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