

Will the Emerald Ash Borer and Climate Change Affect White Ash Baseball Bats?

Much of the white ash wood used to manufacture baseball bats comes from trees in Northern Pennsylvania and New York (figure 2). The white ash trees in these areas are experiencing problems. One problem is the emerald ash borer (figure 3). The emerald ash borer is a beetle that is **native** to Asia. The beetle was first found in Detroit, Michigan, in 2002. Since that time, the beetle's range has spread. The range of emerald ash borer now includes Pennsylvania and New York, where much of the white ash for bats is harvested. The **larval** stage of the beetle feeds on the inner bark of white ash trees. Feeding by the beetles causes trees to have problems with transporting water and nutrients, which weakens the tree. Over time, the trees can become so weak that they die.

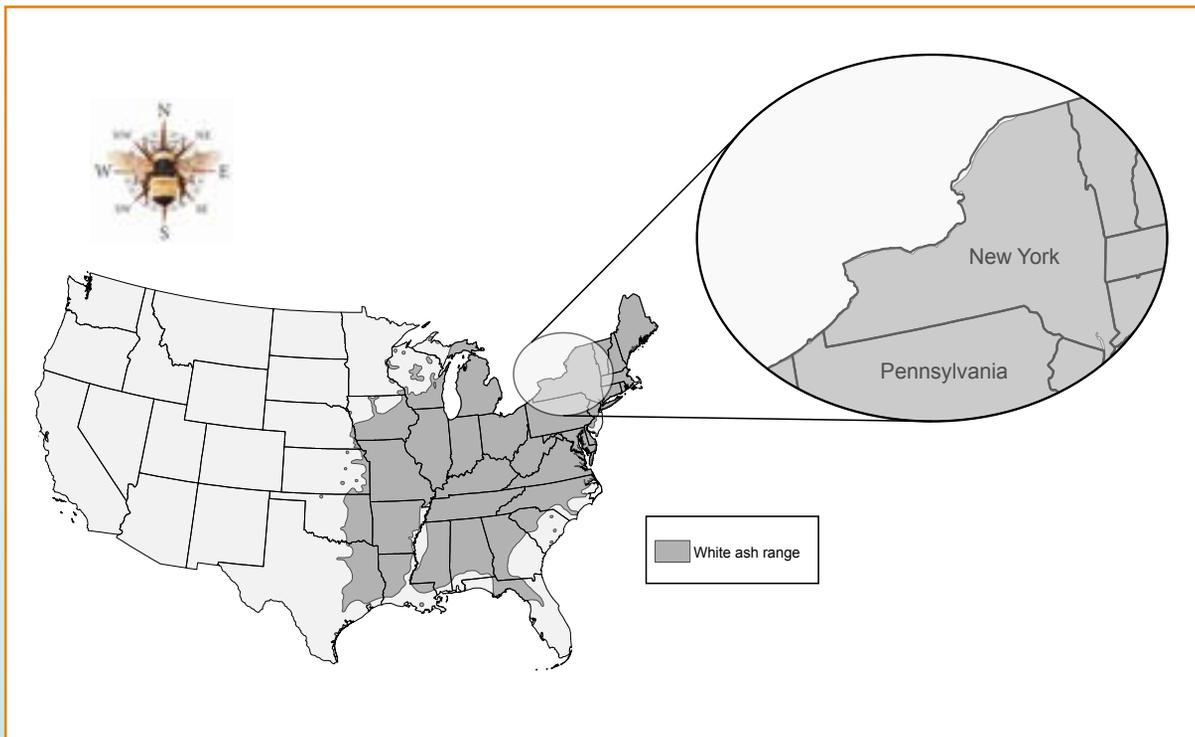


Figure 2. Have you seen white ash trees near where you live?

Map by Carey Burda.



Figure 3. Emerald ash borer is a beetle native to Asia. Since its arrival in the United States, the beetle has caused problems for white ash trees.

Photo by Debbie Miller, USDA Forest Service, via <https://www.bugwood.org>.

Another problem white ash trees are facing is climate change. Climate change refers to how Earth's climate may be changing over time. In the past few years, most scientists have agreed that measured and recorded changes in Earth's climate over the past 100 or more years point to a warming of Earth's surface. Extreme cold temperatures in Northern Pennsylvania and New York help to kill the emerald ash borer and provide relief to the white ash tree. However, if the climate warms in this area, the emerald ash borer may be able to live through the winter. If more emerald ash borers survive the winter, the trees will be under greater threat and may not be able to survive.

Due to the challenges facing white ash trees, baseball bat manufacturing companies have tried new types of wood to make baseball bats. For more information, visit <https://www.scientificamerican.com/article/baseball-bats-made-from-ash-may-fall-victim-of-climate-change/>.