# Adelges tsugae

## **Invasive to Maine**

Hemlock Woolly Adelgid - HWA Hemlock Woolly Aphid

Upland Forests

### **Larval Form**



Look for white waxy tufts covering the numphs. These tiny nymphs (less than 1 mm) settle at the base of the needles on the underside of hemlock trees.

### **Habitat**



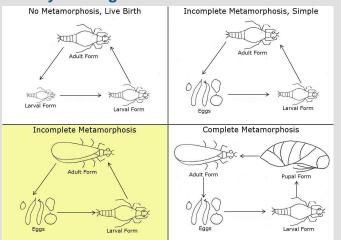
Look for hemlock trees with white fuzz on the UNDERSIDE of stems. Affected Hemlocks often have a grayish-green appearance with branch dieback.

## **Life Cycle Description**



HWA are barely visible, though their white waxy covering is visible. When first laid eggs are reddish but then darken. Nymphs crawl, settle in one spot to feed, and secrete wax.

## Life Cycle Diagram



#### **Adult Form**



Half of the nymphs mature into winged adults. The other half of nymphs mature without wings and stay on the host tree. All adults are females and repoduce asexually.

## Similar Species

Hemlock woolly adelgids are similar to aphids and other adelgids in that they bore into the plant to feed on its sap. HWA feed only on hemlock trees. There is a balsam woolly adelgid that feeds only on balsam and Fraser fir trees.

#### **Fun Fact**

The hemlock woolly adelgid has a thread-like mouth tube that it uses to pierce the tree to get sap. This mouth part is more than twice as long as its body! One HWA can be the grandparent of more than 22,500 HWA in a single year!

