Hemlock Wooly Adelgid

Defoliated Forest Trees

Insects In Action

Hemlock Wooly Adelgid feeds on hemlock trees throughout eastern North America. Hemlocks that have been affected often have a grayish-green appearance (hemlocks naturally have a shiny, dark green color). The egg sacs look like the tips of cotton swabs clinging to the undersides of hemlock branches. There are two generations per year. The mobile larvae, known as crawlers, emerge from the eggs in April or May to search for suitable feeding sites. Wind, birds and mammals often spread crawlers to nearby hemlocks. Once settled at the base of hemlock needles, crawlers become immobile nymphs which feed by sucking fluid from the needles and mature into wingless or winged adult females by early summer. The wingless form lays another 100 to 300 eggs on hemlock and crawlers emerge from these eggs to search for suitable feeding sites. Once settled, the hemlock woolly adelgid becomes dormant until October or November, when it resumes development. Feeding continues throughout the winter and early spring. This insect may also inject toxins into the tree as it feeds, accelerating needle drop and branch dieback. Trees may die within four years. Drought and fungi can weaken hemlock and cause them to become more susceptible to insect damage. Low winter temperatures, cold snaps, and heavy thunderstorms can reduce populations and mild winters can result in sharp increases in populations. Tress should be sprayed by licensed professional with horticultural oil or insecticide.