

LESSER PEACHTREE BORER

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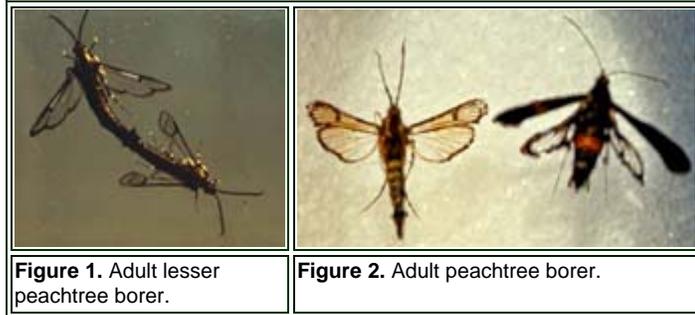
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The lesser peachtree borer, *Synanthedon pictipes* (Grote & Robinson), like its relative the peachtree borer, is a native insect that is an important pest of native and introduced *Prunus* species. Lesser peachtree borer is found in most peach-growing areas east of the Rocky Mountains.

DESCRIPTION

Lesser peachtree borer adults (Figure 1) are metallic, blue-black, clear-winged moths that somewhat resemble dark wasps. They have a wingspread of about 3/4 to 1-1/4 inches (19 to 30 mm). Males and females are similar in appearance; both sexes resemble male peachtree borer moths (Figure 2). Yellow crosswise bands are usually present on the second and fourth abdominal segments, although the second band may be indistinct. The wings are clear except for dark borders. In male lesser peachtree borers, the tip of the abdomen is pointed; the abdomen of peachtree borer males ends in a triangular tuft of scales. Lesser peachtree borer larvae are creamy-white caterpillars with dark-brown heads, and are very similar to, but smaller than, peachtree borer larvae. They are about 1 inch (25 mm) long when fully grown. Larval feeding habits and appearance are almost identical to those of the peachtree borer larvae, but lesser borers are usually found higher in the tree. Lesser peachtree borer larvae will attack any above-ground structural wood.



PLANT INJURY



Figure 3. Larval feeding damage, "bleeding limbs."

Damage to trees is caused by the larval stage. Lesser peachtree borer larvae burrow, feed, and develop in the inner bark and cambium, primarily in the upper trunk and large branches. Masses of gum mixed with frass and wood borings normally exude from infested areas. Infestations are most common under loose bark in crotches and around wounds or cankers. "Bleeding" dark, dead, or swollen areas on the trunk or scaffold limbs may indicate infestations (Figure 3). Larval feeding can reduce tree vigor and weaken limbs, and damaged areas may provide entry sites for other pests, such as *Cytospora* canker or shothole borers. In heavily infested trees, large scaffold limbs may be completely girdled by borers and die. Lesser peachtree borer infestations frequently worsen

as orchards age, because of the wounding inherent in heavy pruning and the overall weakening of trees as they age. Uncontrolled infestations are severely injurious and may render trees unsalvageable.

SEASONAL HISTORY AND HABITS

Lesser peachtree borers overwinter as partially grown larvae in galleries beneath the bark. Overwintering larvae range in size from 1/4 to 1 inch (6 to 25 mm). They feed periodically during warm spells through the winter and complete development in the early spring. Older, more mature larvae may begin to pupate as early as January in the Southeast's warmer production areas. Prior to pupation, each larva constructs a hibernaculum, a silken, frass-covered protective structure, under the bark near the exit of its gallery. Pupation occurs in the hibernaculum. The mature pupa works its way out of its silken sac and partially through the bark. The empty light-brown pupal skin normally can be found protruding through the bark surface after moth emergence.

Emergence patterns for lesser peachtree borer adults differ according to region. In Georgia's lower coastal plain, adults may begin to emerge in January and February. The seasonal low of lesser peachtree borers and peachtree borer moths in the lower coastal plain may occur in August. Emergence of lesser peachtree borer normally peaks again in the coastal plain by late August or early September. It lasts until cold weather forces it to a halt, normally sometime in November.

In the fall-line production area of Georgia, South Carolina, and Alabama, lesser peachtree borer adults begin to emerge in March, but peak emergence of first brood lesser peachtree borer moths is typically in April and May. First brood emergence is normally over by mid-June. The second moth flight normally peaks between July and September.

Shortly after emerging, lesser peachtree borer females mate and begin to lay small, reddish-brown eggs along the trunk and limbs. Eggs are usually laid singly in cracks in the bark, frequently in the crotch. Females seem to prefer laying their eggs around wounds or injuries such as sunscald, winter injury, mechanical injury, broken or cracked limbs, *Cytospora* cankers, or existing borer infestations.

Eggs hatch in one to three weeks, depending upon temperature. Upon hatching, young larvae immediately bore into the bark. Larvae find it more difficult to establish in healthy undamaged bark. Most larvae feed and develop beneath the bark for about 40 to 60 days, then pupate to give rise to another brood of moths.

Larvae hatching from eggs laid by second brood moths normally overwinter. A few late first brood larvae may also overwinter.

CONTROL

Lesser peachtree borer infestations are more common in poorly managed orchards of low vigor where limb breaks due to overloading with fruit or wind damage are left unattended. Proper canopy management and fruit thinning reduces an orchard's attractiveness to lesser peachtree borer. Presence of borers can be determined by inspecting scaffold wounds for the light brown pupal skins.

Adult populations should be suppressed either with well-timed, residual insecticide applications or by use of pheromone mating disruption. Adult activity can be monitored using pheromone traps. In southeastern production areas, in-season cover sprays, followed by handgun application of a residual insecticide after harvest, are the current standards for control of peachtree borer and, to some extent, scale and lesser peachtree borer. In the coastal plain, populations of both lesser and greater peachtree borer species and scale are often high. Additional control of these three pests can be gained by use of a residual insecticide with superior oil at delayed dormant. Delayed dormant drench application of a residual material to trunks and scaffold wounds is an effective alternative against both borer species. In many instances, mating disruption may be a viable control option. Please refer to the peachtree borer chapter for discussion of mating disruption.

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