The battle with woodborers

There are a lot of enemies in the gardening world – squash bugs, drought, extreme temperatures, aphids, hornworms and more. Something else that can wreak havoc in the horticultural arena are wood-boring insects. They are among the most difficult pests to control in nurseries, forests and ornamental landscapes.

Just as their name suggests, woodborers live and feed as larvae within trunks and limbs of woody plants, especially trees and shrubs. They often go unnoticed until infested plants begin to show damage and decline in health. Usually by this point it’s too late to control the pests and restore the health of the plant.

Something that makes them tough to control is they’re well protected from adverse environmental conditions that would otherwise limit their population growth. Insect sprays and even most natural enemies have little effect.

While they are quite destructive, these pests could be a much larger problem. Fortunately, trees have a remarkably complex array of biochemical and physical weapons that have evolved in response to attacks from woodboring insects. However, these protective measures break down when trees are unhealthy and under stress, such as the extreme heat and drought Oklahoma is experiencing.

There are two major groups of woodborers – wood-boring beetles and several moths (Lepidoptera), especially clearwing borers. While not preventable, these pests are manageable. Larvae feeding within the tree can be controlled with systemic insecticides, which are transported throughout the tree via the phloem tissue. This method is limited to controlling flatheaded borers and bark beetles because they feed primarily within these shallow layers. Most roundheaded and clearwing borers tunnel too deeply into the tree to come into contact with insecticides. The most successful strategy for managing woodborers is prevention.

Healthy trees are more resistant to these pests, so proper placement and care is essential. Protect trunks of young or transplanted trees with nursery wrapping paper, burlap, aluminum foil or newspaper to prevent egg laying. Spray trunks with insecticide before wrapping. This process should be done in the fall when leaves begin to drop. Leave the wrap on until full leaf expansion in the spring. Repeat this process the following fall.

Stimulate vigorous growth with proper fertilization and watering to help ensure healthy trees. More information can be found in Oklahoma State University Extension fact sheet HLA-6412, Fertilizing Shade and Ornamental Trees and Shrubs. In addition, prune out all dead and dying
branches. Another option is to select trees that are locally adapted and less susceptible to borer attack.