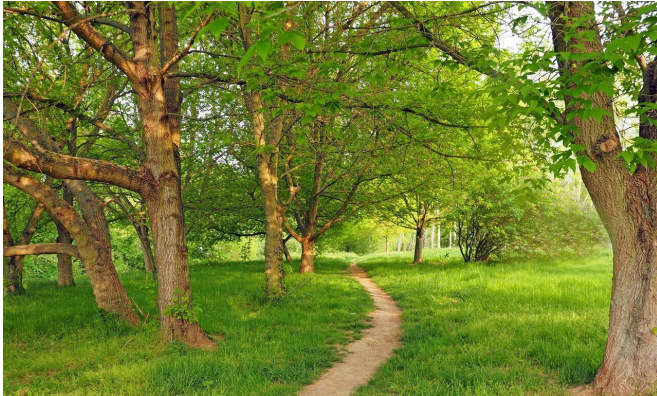


August is open season for hunting invasive insects

27 August 2020, by Kelly P. Franklin, Austin American-Statesman



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It's a busy time of year for the Texas A&M Forest Service—many highly destructive pests are emerging in their adult form to reproduce and lay eggs. One such pest on the Forest Service's most wanted list is the emerald ash borer.

"I'll be out in the woods all day tomorrow chasing something down," Allen Smith, regional forest health coordinator, said on a recent summer day.

Shining in the sun, the wings of the emerald ash borer catch the light and reflect back iridescent shades of green and blue. As the insect prepares for flight, its wings part to reveal an equally shimmering ruby-red abdomen. But its brilliant appearance only momentarily distracts from its devastating potential.

The emerald ash borer is an invasive beetle, introduced to North America from Asia. The pest, smaller than a penny, has caused the demise of tens of millions of ash [trees](#) across the continent since it arrived. Although the beetle is a specialist, feeding only on ash trees, there are nine species of ash trees in North America that are affected by it. The list of susceptible species includes the

Texas ash tree, found from Dallas to Central Texas and west to the Edwards Plateau.

Adult emerald ash borers feed on the edges of leaves of the ash tree and, after mating, lay their eggs in crevices in the bark. Larvae hatch from the eggs and start to eat their way through the bark into the woody tissue of the tree, leaving S-shaped "galleries" or tunnels in the wood. The larvae develop into adults over winter, and the new adults emerge from D-shaped holes in the bark the following summer to start the cycle over again.

The tunnels formed by larvae inside the tree disrupt the transport of nutrients and water between the roots and the leaves, and the infested tree typically dies within two to four years.

The beetle was originally discovered in Michigan in 2002 but has expanded its range in the U.S. every year since, making its way down to Texas by 2016. It can now be found in 35 states from Maine down to Florida and as far west as Colorado. The emerald ash borer first appeared in Harrison County in northeastern Texas but now can be found in Cass, Marion and Bowie counties—and most recently in Tarrant and Denton counties as well.

Smith said the emerald ash borer "is most worrisome because it impacts not only our rural forests, but in a big way our urban forests."

City trees provide a wide variety of benefits to residents, such as reducing cooling costs with their shade, mitigating storm water runoff and improving air quality. Infected trees also "present a problem for cities and municipalities to manage," Smith said. "Trees dying by the hundreds of thousands becomes a disposal issue," and "restrictions and quarantines are put in place for businesses and cities" affected by the insect.

To deal with the emerald ash borer invasion, cities

across the U.S. have reported spending millions of dollars to remove infected trees or treat them with pesticides. Ann Arbor, Mich., spent nearly \$4 million to remove 10,000 infected trees. Milwaukee spent \$600,000 to inject pesticides into 13,000 infected ash trees. The emerald ash borer has been the most expensive invasive insect in the U.S. to date, and the cost of managing the pest across the country could exceed \$12.5 billion in 2020.

Smith said the appearance of the emerald ash borer in the Dallas-Fort Worth area, separated from where the insect first arrived in Texas by about 200 miles, was probably the result of "people bringing infested firewood" from an invaded area. That's how the emerald ash borer has made such a rapid advance through so much of the country, and it is why affected counties institute quarantines to try to slow the spread. The insect's "eggs and developing larvae live under the bark," Smith said, "even in downed trees, chopped up into firewood."

To those trying to help combat the spread of the insect, Smith offers some advice: "Don't move firewood. I know that sounds pretty basic, but don't move firewood. Buy it where you burn it, and burn it where you buy it."

For areas where the emerald ash borer already lives, Smith recommends that municipalities and homeowners alike "keep an eye on the canopies of your ash trees. They will start to decline and look worse and worse," as the beetle damages the tree's woody tissue. The leaves at the top of the canopy will die back, and the tree will become defoliated from the infestation.

Thankfully, there are some treatments that have proved effective if the infestation is caught before too much damage has been done to the tree.

"If your canopy has less than 40% dieback and you start a treatment method, there's a pretty decent chance you can save your tree," Smith said.

But the treatment for emerald ash borers has to be administered every other year for up to 10 years, and can be quite costly to complete. Therefore, the Texas Forest Service recommends that this type of management not be instituted until the emerald ash

borer is "within about 15 miles of your location."

For Travis County, the time to act might still be a little while off, since the closest sighting of the emerald ash borer is still about 200 miles away. But leaps of that size have already been seen in Texas, thanks to the insects getting a lift from transporters of infected firewood.

Austinites should keep an eye on the condition of their [ash trees](#) but shouldn't worry that the [emerald ash borer](#) is going unnoticed in the city. The Forest Service "puts out about 500 monitoring traps every year looking for this insect," Smith said. "The monitoring season is winding up, and the reports I've gotten from y'all's area down there is no beetles caught."

So rest assured that people like Smith are out in the woods of Texas hunting down these invasive pests.

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