

# The Inquirer

(Front page article)

## Next arbor crisis: Insect that destroys ash trees

**SANDY BAUERS**, INQUIRER STAFF WRITER Published Sunday, March 16, 2014, 1:09 AM



Ravaged ash trunks like this could soon become a common sight in this area.

Ash trees are the pride of West Chester's public parks. One majestic specimen may be a state champion.

Falls Township's Lesha Drive is lined with ashes. When the houses were built, ashes were planted in every front yard.

When Mark Bayer built his Buckingham Township house, he took care not to disturb the ash, so big he and his wife together can't get their arms around it.

All are in jeopardy, as is every other ash tree in the region, thanks to a half-inch-long, glitter-green insect from Asia that kills nearly every ash tree in its path.



Even with Dutch elm disease and the chestnut blight, the emerald ash borer is "the most damaging pest we've ever gotten in North America in terms of trees," said Don Booth, an entomologist with Bartlett Tree Search Laboratories.

The insect has already killed tens of millions of ashes in the Midwest. Now it's here. "This is what's going to happen: **99 percent of your ash trees are going to die,**" said Donald Eggen, forest health manager with the Pennsylvania Department of Conservation and Natural Resources.

**It's not just a matter of losing trees. Dealing with the scourge is going to cost a lot for homeowners, towns, and anyone else with an ash.**

Arborists describe the insect's progression as a rampage, a tidal wave. One year, a community's ash trees look fine. A few years later, they're dead.

"Like forests need one more thing," said Michael Weilbacher, executive director of the Schuylkill Center for Environmental Education, set amid 340 mostly wooded acres in Roxborough. "We're nervous wrecks about it," he said of the borer. "We have so many ashes."

As do many others. It's a common street tree that, paradoxically, was often planted to replace dead elms and chestnuts.

Officials here have watched with dread as the borer crossed the state from the west. They thought they had time, until - surprise! - it was found in 2012 at a Warrington apartment complex.

They suspect it arrived in a load of firewood.

Last year, it was detected in Horsham's Graeme Park. So state forestry officials say people with ash trees in Southeastern Pennsylvania - the insect has not yet jumped the river to New Jersey - might as well assume the insect is nearby, ready to invade.

"It's pretty well got you surrounded," Booth said at a recent symposium on the insect. Held in Doylestown, it was hosted by the Pennsylvania Horticultural Society, which has been trying to get the word out.

Detection is difficult. Often, an infestation goes unnoticed at first. Three to five years later, "all hell breaks loose," one official said.

Buckingham's Bayer doesn't want to lose his ash. "It's a beautiful old tree," he said. But that will become harder. Not to mention budget-busting for homeowners, arboretums, towns, and anyone else with ashes.

**Basically, ash owners have two options.**

One, embark on an expensive round of chemical **treatments** - several are effective, including injections to the soil and to the tree itself - that have to be repeated indefinitely.

Or plan to shell out major bucks to **cut the trees down** now or soon after they die. **Although some trees are strong even in death, ashes disintegrate quickly, becoming a safety hazard.**

Two years ago, foresters were telling people they could hold off deciding until the insect was within 15 miles. Now, they figure it is. "We're telling people, 'You really need to get going this spring,' " Eggen said. Now it's decision time: Treat it or plan to cut it later.

The insect was first identified in 2002 in Detroit, where officials concluded it had entered the port on wooden packing material.

To contain it, they cut the equivalent of firebreaks. They instituted firewood quarantines. Still, the insect spread. It has left neighborhoods denuded and forests pocked with skeletal hulks.

**Officials in hard-hit towns said even residents without ashes would be affected - when taxes rise to pay for dealing with street and park trees.**

Officials urge residents and towns to map where their ash trees are and come up with a plan, deciding which trees to treat and which to cut.

So far, only two in the state have done so - Philadelphia and West Chester. A few others have inventories and plans are in progress, but Eggen and others fear most officials will be taken by surprise when the insect hits.

Philadelphia's 10-year plan, completed in 2012, calls for treating 500 ash trees and removing 5,000 others, plus replanting 2,000 trees of different species, at an estimated cost of \$5.35 million.

Last summer, with no formal inventory, Philadelphia sent interns into the city's parks to identify hazards - ashes close to paths or buildings, say.

They found 7,000.

Curtis Helm, a forester with the city's urban forestry department, said he was devising a plan to have the worst of them removed.

The choices may be tough. Some ashes are expendable - aside from "services" that include aesthetics, shade, storm-water retention, and air-pollution benefits.

But in Altoona, a main street is lined with ashes, each planted in someone's honor.

"The real dilemma are the monster trees, the ones we really care about," Eggen said. "These are priceless."

In West Chester, ash trees are the trophies of its parks - 85 in Hoopes Park alone. Marshall Square Park has only a few, but they're revered all the same.

Overall, West Chester's inventory identified 124 trees on streets or in parks. Two already in poor health - one near a ball field - were removed.

The plan calls for treating 106 trees and removing 18 others - two a year, for the next nine years.

The 10-year cost estimate: more than \$180,000.

As for Buckingham's Bayer, he started treating his ash last year, too. It cost him \$165, and it looks as though he'll need to repeat that annually.

"The initial cost may be very worthwhile, but the long-term costs can be quite high," said Bob McMullin, owner of Keystone Tree Experts and the arborist for Doylestown Borough and Township.

So far, he has advised treating only prized ash trees. "If you want to go farther, that's up to you and your wallet."

But taking a tree down can be expensive, too, depending on size and location. It's cheaper to remove a tree in the open instead of near a house.

For purposes of estimating, West Chester figured up to \$1,600 each.

The real danger - and the most expensive option - is not doing anything, arborists say. Waiting too long to take down a dead ash makes the job harder.

Pennsylvania officials are so sure the insect is here they have stopped putting out the purple sticky traps used for early detection.

Their trapping efforts are now focused on the state's northern forests, where ash trees are a valued source of Louisville Slugger baseball bats.

In New Jersey, trapping continues on a grid pattern set by the U.S. Department of Agriculture.

Rosa Yoo, assistant regional forester with the N.J. Forest Service, has been adding locations, especially at a few sites along the Delaware, opposite Bucks County.

Still, she knows the borer's progression isn't always linear or logical. "It can just show up anywhere," she said.

[http://www.inquirer.com/health\\_science/20140316\\_Next\\_arbor\\_crisis\\_Insect\\_that\\_destroys\\_ash\\_trees.html](http://www.inquirer.com/health_science/20140316_Next_arbor_crisis_Insect_that_destroys_ash_trees.html)

## MORE ABOUT THE BORER

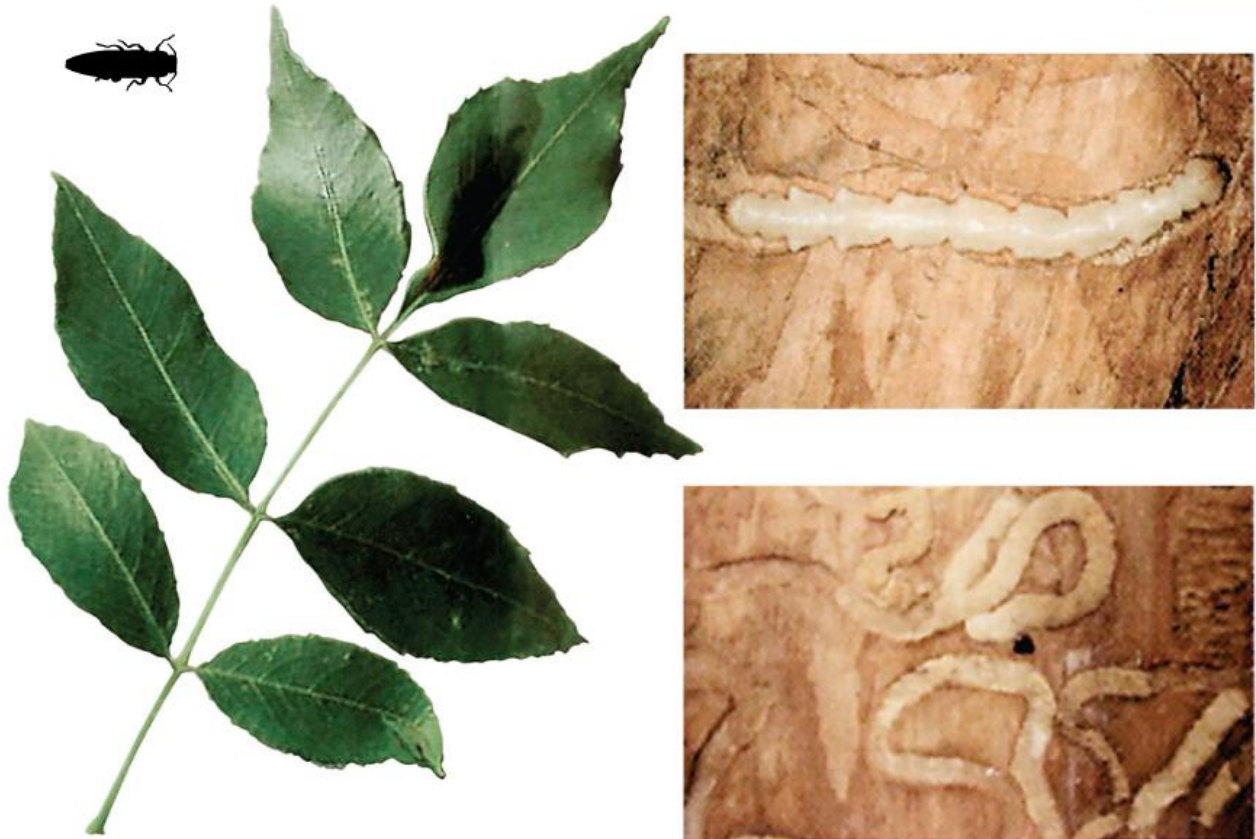


**THE BUG:** The emerald ash borer is about a half inch long and is a glittery, emerald green.

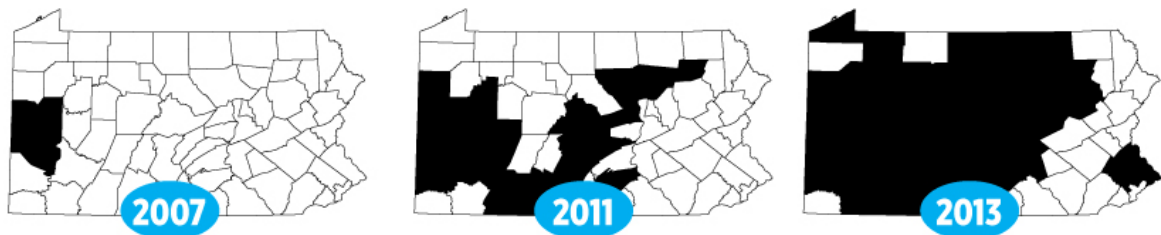


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**ITS TARGET:** All species of ash. Ashes have leaves arranged opposite one another — as opposed to staggered — along a stem.



**WHEN THE BORER DOES ITS DAMAGE:** Females emerge in May and lay their eggs in cracks in the bark. The larvae hatch in seven to ten days, and begin tunneling through the bark. When the tree is dead, peeling back the bark will reveal numerous s-shaped galleries where it has eaten through the tree, cutting off its transport of water and nutrients.



**INFESTATION IN PENNSYLVANIA:** The insect itself is difficult to detect, and an infestation may go unnoticed for several years. The beetle is native to Asia and was first detected in Michigan in 2002.

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**SYMPTOMS OF AN INFESTED TREE:** Eventually, an infested tree will begin to die back at the top and sprout numerous new branches at the base. Other signs are woodpecker damage and splits in the bark.

**IF YOU SUSPECT AN INFESTATION:** In Pennsylvania, call 1-866-253-7189

### **MORE INFORMATION, AND TREATMENT OPTIONS**

- <http://www.emeraldashborer.info>
- <http://www.dcnr.state.pa.us/forestry/insectsdisease/eab/index.htm>
- <http://ento.psu.edu/extension/trees-shrubs/emerald-ash-borer>

SOURCES: Pennsylvania Department of Agriculture; Pennsylvania Department of Conservation and Natural Resources; Penn State Cooperative Extension; U.S. Department of Agriculture and [www.invasive.org](http://www.invasive.org)

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<http://www.inquirer.com/exclusive/data/250265361.html?>

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