Much as a virus or worm can infect an entire computer network, tiny insect invaders are threatening to wreak havoc on New York's forests. Two wood-boring insects, the sirex woodwasp and the emerald ash borer, have been spotted in or near New York State. Unwelcome visitors, both species are capable of quickly destroying an entire patch of forest. As such, these insects are the focus of intensive research and monitoring by the United States Department of Agriculture, the New York Department of Agriculture and Markets, and the New York State Department of Environmental Conservation (DEC).

Emerald Ash Borer

Adults: 2-1" long, bright green iridescent beetle with large compound eyes

Native to Asia, the emerald ash borer is a small, colorful wood-boring beetle that has already destroyed millions of ash trees in the U.S. It was first detected in Michigan in 2002, and is now causing problems in Ohio and Ontario, Canada as well. Like the sirex woodwasp, the emerald ash borer is thought to have entered this country via shipping material. While it has not yet been spotted in New York, it poses a real threat to the state's ash trees.

During summer, adult emerald ash borers emerge from small "D" shaped holes in ash tree trunks and begin eating the tree's leaves. They then begin to disperse in search of additional food and suitable mates, flying in short spurts of up to 50 feet, though sometimes traveling miles to find host trees. Following mating, female emerald ash borers lay their eggs in the crevices on the trunks of ash trees. The larvae burrow under the bark and eat their way through the cambium (the live inner bark) leaving winding, "s" shaped tunnels. These cause the trees to lose their ability to transport nutrients, and so they slowly starve.

To combat the spread of this pest, strict quarantines have been implemented in affected areas of Michigan, prohibiting the movement of any ash trees, ash wood and all hardwood firewood from a quarantine area. Unfortunately, in a violation of the quarantine, a nursery shipped more than 100 uninfected ash trees to Maryland. A year after these trees were planted, emerald ash borers were discovered in some of the trees. Maryland quickly set up a quarantine and removed not only the suspect trees, but also 1,000 and all hardwood firewood from a quarantine area.

Damage created by an Emerald Ash Borer

If you spot these symptoms, look closely at the tree trunk for cracked or loose bark and borer holes that are characteristic of emerald ash borer activity. Dieback and epicormic sprouting alone could also be signs of "ash yellows," a disease that has been killing many ash trees in New York.

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You can help scientists curb the spread of invasive species, and benefit our forests. It was sharp-eyed volunteers who first spotted a similar pest, the Asian longhorned beetle, when it infected trees in New York City and Chicago. If you spot signs of either sirex woodwasp or emerald ash borer activity, contact DEC Lands and Forests’ Forest Health office at: 625 Broadway, Albany 12233-4253; by e-mail at lllands@gw.dec.state.ny.us, or by phone at (518) 402-9425. Visit DEC's website at www.dec.state.ny.us for the latest information on these and other invasive species.

For more information, see The Asian Longhorned Beetle in the February 2001 Conservationist.