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transport firewood more than fifty miles. It is also illegal to transport firewood that is contaminated with EAB.

Ash is a major timber tree. Ash is often used for lumber, and it makes good firewood. Ash trees have a rich history in American culture. Ash was for a long time the major choice for "Adirondack" baseball bats; ash lumber has been turned into all kinds of products, from furniture to boxes to many others.

"If most ash trees die off, it will take a wood supply out of our economy in the Adirondacks," Van Ryn says.

The U.S. Department of Agriculture (USDA) has studiously looked at biological controls, introducing new species into the environment to control the spread of invasive species. A certain stingless wasp will feed on the larvae of the EAB. In partnership with the DEC, Van Ryn hopes, the USDA will select the Adirondacks as a site for an experimental release of these predatory wasps.

"The hope is that they will control some of this infestation, so that when young ash trees come up there will not be any emerald ash borers to prevent them from reaching their full growth," she explains.

Van Ryn suggests that anyone who sees signs of infestations from EABs should take a picture, try to get a GPS location, and send the data to the DEC. "If it looks like an infestation, the DEC or Adirondack Park Invasive Plant Program may be able to confirm that," she says. ▲

Greg Hitchcock is a U.S. Army veteran and freelance journalist. He has written professionally since 1999 for a wide array of publications with a focus on conservation, sustainability, and outdoor recreation. A graduate of SUNY at Albany, he lives in Gloversville with his cat, Buster.

So, what is ADK doing about this?

ADK helps stop the spread of invasive species through education, early detection surveys, and, in Albany, advocacy for programs and funding to combat invasive species.

Working with our partners, the Adirondack Park Invasive Plant Program (APIPP) and the Catskill Regional Invasive Species Partnership (CRISP), ADK holds trainings for volunteers who want to help stop the spread of invasive species through identification and reporting. These partners are two of the eight statewide Partnerships for Regional Invasive Species Management (PRISM) programs of the New York State Department of Environmental Conservation's Bureau of Invasive Species and Ecosystems Health. You can get involved with events and trainings through your regional PRISM.

ADK's education team also helps members and the public understand the importance of Leave No Trace Principles, which include "Leave What You Find." In terms of invasive species, this means cleaning boots, gear, canoes and kayaks, and hike tires after use on trails and waterbodies in order to keep invasive species hitchhikers from being spread to remote areas of the Forest Preserve and other New York State wild lands.

The online databases and mobile apps of the New York Natural Heritage Program, another ADK partner, give volunteers the tools they need to report suspected invasive species quickly. One of these tools, iMapInvasives, compiles thousands of volunteer reports for identification, analysis, monitoring, and response by scientists and land managers.

The participation of members and volunteers like you is critical to stopping the spread of invasive species. By cleaning gear, learning to identify and report invasive species, and supporting advocacy and education actions and events, you are protecting native species and helping to reduce loss of habitat. ADK's work on stopping the spread of invasive species is supported by donations from the Lake Champlain Basin Program, the New England Interstate Water Pollution Control Commission (NEIWPCC, neispcr.org), and donors like you.

—Cathy Fuller



A MENACE TO THE

Emerald Ash Borer

The Adirondacks are known for their forested habitat.

In the higher elevations there are spruce and fir trees; hick, beech, and maple trees can be found in the mid-elevations; and lower areas and river valleys are home to ash trees—trees that may be in danger of extirpation in the Adirondacks from an infestation of emerald ash borers.

Adirondack Park Invasive Plant Program Manager Tammara Van Ryn says some invasive species, like the emerald ash borer (EAB) and the hemlock woolly adelgid, have the potential to cause great harm to the Adirondack forest.

Ash is not a major component of the Adirondack forest. The state estimates that 7 percent of the Adirondacks are covered with ash trees. But, according to Van Ryn, "that estimate depends on where you are."

"If you are at lower elevations, you may have much higher concentrations of ash," she says. "It can be three or four trees out of ten in a forest. And when an emerald ash borer infestation starts in that area, within three or four years the ash trees may well be gone."

INVASION OF AN INVASIVE

Emerald ash borers are not native to the United States. They are thought to have come from Asia, most likely in shipping materials or shipping containers, as well as logs or some other wood product. EAB was identified in the United States in 2002 in the Detroit area. Since then, it has spread across many states.

Jason Denham, New York State Department of Environmental Conservation (DEC) supervising forester with the Bureau of Invasive Species and Ecosystem Health, says EABs were spotted in western New York in 2009 before being transported to the Adirondacks, specifically Washington County.

"The Adirondacks are more fortunate than



*Above: Signs of an emerald ash borer infestation. Courtesy Greg Hitchcock
Top corner: Author rendering of the emerald ash borer.*

other states because the region has fewer ash trees," Denham says. He points out that the hemlock woolly adelgid, whose invasion has been discussed in several previous articles in *Adirondack*, is far worse than the EAB, killing off far more hemlock trees than EABs can infest and kill ash trees.

"We have way more hemlock trees than ash trees," he explains. "In fact, New York State has more hemlocks than any other state." However, Denham says, the EAB will kill ash trees more quickly than adelgids can kill hemlocks, often within just two to three years after initial infestation.

STOPPING THE SPREAD

"There is not much we can do about its spread," Denham says. "Emerald ash borers are distributed by people. One way to prevent their spread is to not move infested firewood. For landowners, plan and know the types of trees you have. By keeping a watch on trees, and not moving firewood around, we can help stop the borer."

Under New York State law, it is illegal to

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