RENÉE LOTH

## Hemlock Hospice is an elegy for the dying New England hemlock forest



DAVID BUCKLEY BORDEN

An installation at the Hemlock Hospice at Harvard Forest in Petersham.

## By Renée Loth

GLOBE COLUMNIST DECEMBER 11, 2017

YOU'RE WALKING ALONG in the vast Harvard Forest in Petersham, the air sharp and redolent of fallen leaves, when suddenly you reach a brightly painted wooden barrier. "Trail closed," it reads. "Safety hazard." It's the first stop of the Hemlock Hospice, an art

installation and interpretive trail by designer David Buckley Borden and his team of forest ecologists. As its name suggests, the mile-long project is an elegy for the New England hemlock forest, which is dying. "People who walk these trails expect a certain experience and then they run into this," said Borden. "It's meant to jar them, to say, 'You have to think about your woods in a whole new way.'"

Part sculpture, part pedagogy, part citizen science, the project speaks largely in artistic metaphor. But the popular Black Gum trail really is off-limits to the public, because its towering eastern hemlock trees have been infected by the <code>invasive woolly adelgid</code>. These tiny beetles suck all the nutrients out of the hemlock's needles and leave ghost trees, bare and vulnerable to toppling over in the wind. Another stop along the hospice trail offers visitors a row of brightly decorated hard hats.

Smaller than George Washington's eye on the US quarter, the adelgid probably arrived from Japan on a shipment of ornamental wood. It was first noticed in Virginia in 1951 but was mostly contained until the climate began warming. Then it started a steady, deadly march northward. Whole forests have been decimated; there are almost no large stands of eastern hemlock in Pennsylvania, where it was once plentiful enough to be named the state tree. "You can track this very predictably up the East Coast," said Aaron Ellison, senior research fellow in ecology at Harvard University.

The bug has no known lethal parasites, and attacking it with a chemical insecticide has dire implications for the rest of the environment. It may be possible to save a few isolated legacy trees, but nothing can be done on a landscape scale. Even Hemlock Hill at the Arnold Arboretum is completely infested; with about one-third of its 1,900 hemlock trees gone. "It's more like Birch Hill now," said Ellison.

Well, birches are nice; what does it matter if the hemlock disappears? For one thing, the hemlock is what is known as a foundation species; its role in the forest can't easily be swapped with another tree. Because it is a conifer, it begins photosynthesis in late winter — pulling in water at the roots, stabilizing the land, and preventing flash floods. It's a cultural touchstone for New England; Emily Dickinson and Robert Frost wrote some of their most famous poems about the familiar woodland sentry. And the hemlock is a marker for climate change — the canary in the forest. The adelgid can't survive if temperatures reach about 13

degrees below zero Fahrenheit; Petersham, near the Quabbin Reservoir, used to see those temperatures in winter, but Ellison says it hasn't been that cold for at least 10 years. "We speak of invasive species as if they have agency," he says. "But we carried it here."

As we walk along the trail, we arrive at a large wood sculpture tipped on its side, looking rather like a giant circular hairbrush painted yellow. It represents a hemlock carcass, and visitors treat it like a shrine, leaving messages scrawled on blue tape and tied to the branches. "We will miss you," one reads. And: "Sorry, human race."

For Borden, who has a degree from Harvard in landscape architecture, the Hemlock Hospice is a way to build awareness of forest ecology, even if he can't stop the ravaging. "It's end-of-life care not just for the thing that's dying, but for the living," he said. The idea is to "not be overwhelmed by fear and to learn something from the loss."

It's getting late in the afternoon, and turning cold, and suddenly the season's first sugary snowfall is upon us. Later, I'll dig through my Robert Frost and find that poem where he describes a crow shaking down the dust of snow from a hemlock tree, which "saved some part of a day I had rued."

It's hard not to feel rueful about the fate of the hemlock, some of which have been growing in the Harvard forest for 200 years. But the Hemlock Hospice will be open for another year, a long goodbye for this magnificent tree. Go pay your respects before it's gone.

Renée Loth's column appears regularly in the Globe.