VERMONT FOREST PEST PLANNING

ROADSIDE ASH TREE INVENTORY

Montpelier

PLANT LIVE GROW

ABOUT THE PROJECT

The Vermont Forest Pest Planning Case Studies were developed to share the process that nine Vermont communities undertook to inventory their town's ash trees and develop an Emerald Ash Borer Preparedness Plan. These towns varied widely in population, size, and resources, which makes each town's experience and lessons learned unique.

John Akielaszek, one of Montpelier's First Detectors, and Geoff Beyer, Montpelier's Parks Director and Tree Warden, spearheaded Montpelier's ash tree inventory in order to better understand Montpelier's vulnerability to the emerald ash borer (EAB). Montpelier is vulnerable for one of the same reasons it became the state's capitol; it's at the crossroads of many important transportation routes. It also has several wood products industries nearby.

A previous inventory estimated only 30 ash trees within the City limits; a vast underestimate. Volunteers and members of the Montpelier Tree Board inventoried the majority of the street trees and trees along the recreational trails in Hubbard Park. The inventory work was broken into different neighborhoods, with some volunteers conducting a windshield survey while others preferring to walk. Most, if not all, of the streets in the City were surveyed specifically for ash trees. That inventory didn't include private trees, several of which could pose a hazard to public safety. A separate survey of ash trees on private land was later conducted during the summer and fall of 2014.

The data collected from the street tree inventory was presented in maps created by Montpelier Tree Board volunteer Bob Troester, who had seen the devastation of the EAB in his hometown of Detroit. The maps provided a visual for effectively communicating the distribution and density of the City's ash trees. As John shared, "A picture is worth a thousand words. We were able to plot the trees in a couple of different ways in order to show the City Council how important a component ash is to our urban forest."

The team then estimated the cost of removing dying ash trees and replanting a diversity of other species, and added this to the working version of their EAB preparedness plan. As John reflected, "One of the ideas behind the inventory, in addition to trying to give the City Council a dollar estimate, was to build awareness so that residents do their own ash tree walks and keep track of ash trees in their own neighborhoods." Early detection provides us with more management options and buys time for research on biocontrols for EAB.

FAST FACTS

LOCATION: Montpelier is located in Washington County in the center of Vermont.

POPULATION: 7,787

LAND AREA: 10.2 miles^2

MILES OF TOWN-MAINTAINED ROADS: 51.7

MILES OF ROAD INVENTORIED: An estimated 90% of City streets

ASH TREES INVENTORIED: estimated 600 in Hubbard Park, 535 street trees

TIME: 100 volunteer hours

PROJECT PARTNERS: Montpelier Tree Board, City Council, Tree Warden, 2 First Detectors

FINANCIAL RESOURCES: Urban & Community Forestry Program $500 EAB Incentive

EQUIPMENT: Survey sheets, Garmin GPS unit, clipboards, and maps

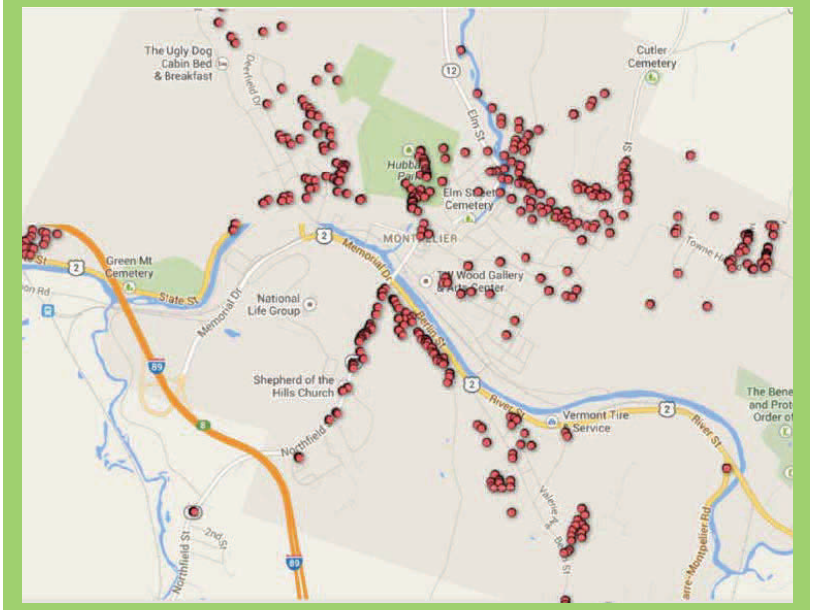
PLANNING RESOURCES: EAB planning templates and resources on VTinvasives.org and lessons learned and information from Midwestern states that have dealt with EAB.

MEMBERS OF THE MONTPELIER TREE BOARD TAGGED ASH TREES IN HUBBARD PARK TO RAISE AWARENESS ABOUT THE EMERALD ASH BORER.

HOW THEY DID IT

Walking and windshield surveys

1. Volunteers conducted a walking inventory of the Hubbard Park trails and a walking and windshield surveys of street trees.
2. Data was recorded for all ash within the road right-of-way. The ROW is 3 rods on all roads, which is 24.9' from the road center line.
3. Data was analyzed and trees were mapped using Google Fusion, an open source software allowing users to upload an Excel spreadsheet with data that then is used to create maps.



Parameters Collected

Tree health: broken limbs, dieback, woodpecker activity, anything unusual that could warrant priority management, such as removal or pruning

Diameter at breast height: minimum 4"

Location: GPS waypoint marked for Hubbard Park trees and street address was recorded for street trees.

I grew up in Detroit. When I used Google street view to take a look at the house I used to live in, I noticed the ash tree in front. The upper branches were dead. My tree was one of 8,000 ash trees in Detroit that were all dead or dying. Unless we find a way to control EAB or preserve individual trees with pesticides, Montpelier's trees will face the same fate.

-Bob Troester, Montpelier Tree Board volunteer

LESSONS LEARNED

- For those without access to GIS, Google Fusion is a great tool for presenting the data to decision makers and residents. There are some tricks that Montpelier learned in working with it. When there are multiple trees for one address the user may need to finagle with the address so that the trees aren't mapped on top of one another.
- Make it fun and the volunteers will come! Geoff shared that inventory "is a good excuse to get out there and enjoy time with your family, friends, kids, or dog. When you look for ash trees I bet you'll see a lot of other interesting things."

Case study prepared by the Vermont Urban & Community Forestry Program, a joint initiative between UVM Extension and the Vermont Department of Forests, Parks and Recreation, using a template created by the Vermont Green Infrastructure Initiative.