



VERMONT FOREST PEST PLANNING ROADSIDE ASH TREE INVENTORY

Bakersfield



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.

Dorothy Allard, Bakersfield Conservation Commission (BCC) member, was aware of the threat that the emerald ash borer (EAB) posed to her town of Bakersfield and the state in general. Dorothy and the other members of the BCC knew that action needed to be taken and began communicating with the bordering towns of Richford and Enosburg. Together, the three towns created a multi-town EAB planning commission, using each other as a resource during the ash tree inventory process.

The goal of Bakersfield's inventory was to document where the ash trees were on 20 miles of major town thoroughfares; the roads where dead ash trees could pose higher risk to drivers' safety. The focus was determined based on the amount of volunteer involvement and funding. The information collected from the inventory is being used by the road commissioner and Selectboard to make decisions about how to deal with the removal of ash trees after the arrival of the EAB.

Members from the BCC surveyed the selected areas by walking the roads and recording the data on field forms, including road name, side of the road, and diameter class. A GPS waypoint was also taken for each tree, with closely bunched stands being designated as a single waypoint. Dorothy then downloaded the GPS co-ordinates and created a map in ArcGIS on a town road map with an orthophoto layer for reference.

Dorothy found that inventory work is a great motivator for getting outside and getting some exercise. Furthermore, Dorothy encourages you that the time to start is now. "It doesn't take as long as it seems it is going to take once you start. Do it! It's [EAB] going to be here, we'll have to deal with it so it's better to be prepared."

FAST FACTS

LOCATION: The town of Bakersfield is located in northern Franklin County.

POPULATION: 1,215

LAND AREA: 44.6 miles²

MILES OF TOWN-MAINTAINED ROADS: 41.2

MILES OF ROAD INVENTORIED: 20

ASH TREES INVENTORIED: 412

TIME: 2 miles/hour, about 10 volunteer hours

PROJECT PARTNERS: Bakersfield Conservation Commission; Multi-town planning commission (Richford, Enosburg, Bakersfield); Road Crew, Selectboard

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

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

PLANNING RESOURCES: EAB planning templates and resources on VTinvasives.org



Look UP! Vermont

Our ash trees are at risk

Our Community ASHets Why are our Ash Trees Important? - Several popular items are made from ash wood—baseball bats, hockey sticks, tool handles, furniture, and even guitars. - They provide many public health benefits like respiratory and cardiovascular support. 201 native insects and spiders depend on ash, including the swallowtail butterfly. 41 of these feed exclusively on ash. - The decomposition of ash leaf litter contributes nutrients, especially nitrogen, which is used by other plants and organisms. Annual Benefits Provided by a 12" Ash Tree A 12" ash tree in Enosburgh, VT provides an estimated \$263 in annual benefits by filtering air pollutants, mitigating stormwater runoff, sequestering carbon, conserving energy, and increasing property values. Where are the ash trees in our town?	EAB is Coming for Your Trees What is Emerald Ash Borer? - Emerald Ash Borer (EAB) is an invasive insecticide beetle that was accidentally introduced to the U.S. in 2002. - EAB has killed over 100 million ash trees in the Eastern United States. - EAB will attack all species of ash native to Vermont: white, green and black. What to look for? Back, peeled off by woodpeckers Crown dieback Dead branches Wood boring Emerald Ash Borer	Help us Protect our pASHion What can you do? - Look UP for signs and symptoms of EAB. - Report a Forest Pest First Observer. - Learn more at www.vtinvasives.org Communities come together to protect their trees
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THIS IS THE POSTER USED BY THE BAKERSFIELD CONSERVATION COMMISSION ON TOWN MEETING DAY TO PRESENT THE RESULTS OF THEIR INVENTORY.



HOW THEY DID IT

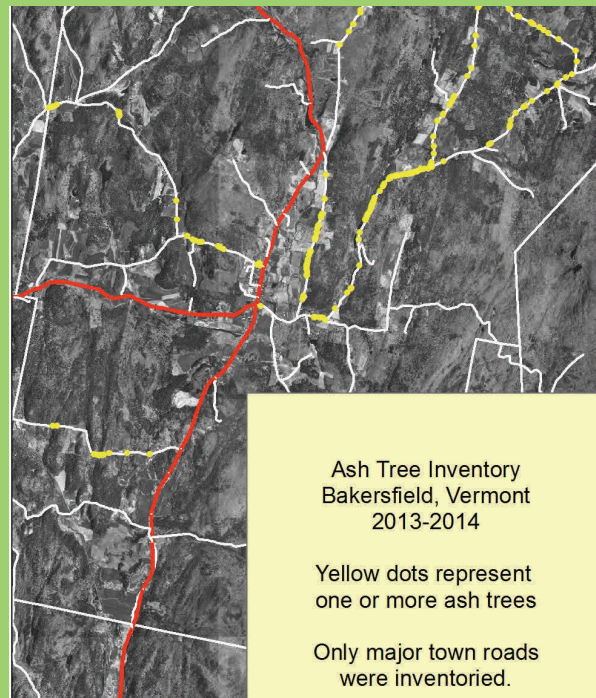
Roadside walking survey

1. Teams of 2 walked along both sides of 20 miles of roads.
2. Data was recorded for all ash with a diameter and breast height (DBH) of 6"+ 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 GIS.

Parameters Collected

Diameter at breast height in increments: 6-12", 12-18", 18-24", 24"+

Location—GPS waypoint marked for each tree and manual record of road name and side of road the tree is growing.



What surprised me was the variability in the number of ash trees from road to road and being an ecologist, I assumed that I could have predicted where they were going to be. I could to a certain extent but some parts of town that were totally forested had no ash and others were jam packed with ash.

-Dorothy Allard, Bakersfield Conservation Commission

LESSONS LEARNED

- A laminated sheet with ash tree identification characteristics is helpful to have in the field.
- It's important to involve the Selectboard and Road Commissioner in the inventory and planning process. As Dorothy shared, "They know what's going on, and ultimately, it is up to them to decide what to do."
- Dorothy collected the data in a manner similar to how the Road Commissioner collected data for the town culvert inventory. Dorothy "tried to mimic [the culvert inventory] so it was easier to understand and interpret."
- Working with other towns can be fun and important for not reinventing the wheel. They learned important lessons together and shared information and resources.