June 13, 2019

East Kingston Conservation Commission
c/o Dennis Quintal, Chair
24 Depot Road
East Kingston, NH 03827

Dear Dennis,

It was a pleasure meeting with you and Cory Keeffe, Community Forestry Specialist, NH Division of Forests and Lands, on the morning of May 29th to locate and inspect ash trees (Fraxinus spp.) on town-owned properties in East Kingston. Because emerald ash borer (Agrilus planipennis) was detected in East Kingston in 2018, the purpose of our inspection was to determine which (if any) ash trees might be good candidates for systemic insecticide treatment. In addition to a quick, visual assessment of roadside trees, the following properties were visited: East Kingston Town Office, East Kingston Public Library, East Kingston Police Department, Public Works Facility, East Kingston Elementary School, Foss Wasson Field, Trickling Falls Dam, Hillside Cemetery, Union Cemetery, and Old Cemetery.

If an ash tree was observed on town property, we conducted a quick assessment of each tree, including estimating diameter at breast height (DBH), assessing tree health and obvious structural defects, and determining if the tree exhibited any symptoms of emerald ash borer (EAB) infestation. Binoculars were used to observe upper portions of the trees. In total, we assessed 8 different trees; however, because school was in session, we were unable to closely inspect all school grounds.

Systemic insecticides, such as Emamectin benzoate, imadacloprid, or dinotefuran, can be applied as a soil drench or injected directly into the base of ash trees to protect them from EAB. Since the insecticides are transported within the vascular system of the tree from the roots and trunk to the branches and leaves, trees must be healthy to be strong candidates for treatment. Therefore, when dieback of the canopy is 50% or greater, removal is recommended over insecticide treatment.

Trunk injection of Emamectin benzoate is the recommended treatment for ash trees greater than 18” DBH. Research suggests the most successful time to treat trees is during the spring; however, treatments can also be done in the fall. The insecticide persists in the tree for a long duration; however, to be effective, treatments need to be repeated every 2-3 years.

Candidates for treatment are typically referred to as “high value.” This is a subjective term that may include historically significant trees, ecologically valuable trees (such as very large or old trees), or trees located on the south side of buildings that provide important summer shade. Only the tree’s owner—in this case the Town of East Kingston under the auspices of the Conservation Commission—can determine what is a “high value” tree. Based on our assessment, the most likely candidate for treatment in town is the 30”+ ash at Union Cemetery. In addition to its large size, the tree is
generally well-formed and aesthetically pleasing. Also, failure of this tree might endanger historically significant headstones. Unfortunately, the tree is exhibiting modest crown dieback (15-20%) and damage to roots as a result of lawn maintenance (mowing). If the community decides to treat this tree, it would be wise to reassess its health prior to treatment (Cory and I are happy to revisit the tree at a later date). The tree should also be properly mulched to reduce additional damage to the root system.

Although many of the other ash trees we assessed appeared healthy, it is unlikely that they would be considered “high value” by many town residents – especially when considering that a long-term commitment must be made to the use of systemic insecticides for them to remain effective against EAB. It should also be noted, that although many ash trees are found within the right-of-way along town and state roads, by NH law, they generally belong to abutting landowners and should not be treated without landowner permission (as well as a long-term agreement for the tree’s care).

Many residents of East Kingston will feel the sting of losing their ash trees; however, because the ash population in East Kingston is relatively low, others may not even notice the loss. Fortunately, due to the hard work of forest health experts, I am still hopeful about the long-term outlook for ash in New Hampshire. If the Conservation Commission needs any further assistance, please do not hesitate to contact me or Cory at any time.

Greg Jordan, Rockingham County Forester
UNH Cooperative Extension
NH Licensed Forester #420
Certified Arborist, NH Arborists Association

Cory Keeffe, Community Forestry Specialist
NH Division of Forests and Lands
Certified Arborist, International Society of Arboriculture
Certified Arborist, NH Arborists Association