

Dead Ash Tree Removal? Think Twice!

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I am a climbing arborist and so this article is written from the viewpoint of an arborist who climbs. I recently had a customer hire our company for the removal of a declining ash tree. This is a regular customer. We visit the property steadily throughout the year. Over the last year I was able to see the decline of this tree. The tree was about 50% defoliated when we suggested removal. We were contracted a few months later. The tree was not accessible by a bucket truck and too far of a reach for a crane. I evaluated the tree and decided it was safe to climb. I chose a tie in point (TIP) where the central leader split from being 8" in diameter to being two 4" diameter leaders. After installing my climbing line from the ground, the crew did a load test by pulling on the line with three workers.

The tree was in a wooded area and the initial plan was to use rigging to keep the branches from damaging nearby trees or getting stuck in these other trees. The first branch to be removed was one of the leaders above my TIP. After cutting my face notch, I noticed the branch was significantly more decayed than expected. After a reevaluation, the plan was changed. The branch would not be rigged and instead just dropped to the ground. Inspection after the piece was removed showed the branch was about 50% decayed. I was surprised by the amount of decay as I knew it had not been long since the tree was showing only 50% dieback. I reevaluated the tree and the risks involved in the job. I decided it was safe to complete the removal by climbing, but changed the plan to make smaller cuts and not use rigging. The tree was removed safely with little damage to the surrounding trees.

Emerald Ash Borer has started to significantly affect the ash tree population in Connecticut. "Blonded" trees are scattered throughout the landscape and now homeowners, municipalities, and utilities have to deal with the dead and declining trees. Experienced tree workers can tell you ash trees do not die with dignity. Ash trees quickly decay and, in the process, lose structural integrity. A study published in *The Journal of Arboriculture and Urban Forestry* (Jan 2013) entitled "[Effects of Emerald Ash Borer Infestation on the Structure and Material Properties of Ash Trees](#)" shows decline may begin as early as two years after initial infestation by the insect. The study found that the wood of EAB infested trees tends to have a lower moisture content and be subject to cracking. It also found that, different from other declining ash trees, EAB infested trees tended to show branch failure at the union. As to failure at the base of the trees, as the authors put it in the scientific style of writing, "These data suggest that the variation in the integrity of the wood at the base of ash tree stems compared to 1 meter above may indicate material degradation with advanced EAB infestation. Material degradation may be indicative of strength loss and may introduce potential risk factors." In other words, watch out!

The study is preliminary but it does suggest that EAB may be affecting the strength of ash trees in ways that should be of concern both to the public and to those who undertake the removal of these trees. Due to the risk that quickly decaying trees pose, their timely removal is necessary. In creating a removal plan, extra care and consideration should be given to the hazards inherent in these trees.

Before starting any tree job, a Job Risk Analysis should be conducted and this should include a tree hazard evaluation. Dead or declining ash trees should be inspected for dead or broken branches, large hollows, indications of fungi and for decayed sections. Don't forget - if the crown is dying the roots may be also! Consider sounding the trunk and doing load tests before any climbing or rigging.

Climbing and, especially, rigging may create forces on trees that can lead to failure. Rigging from an aerial lift presents its own hazards, as the forces created can cause the tree to fail onto the aerial lift. Felling a large branch or top out of a tree with or without rigging is always a reason for great care. Forces are introduced within the tree that can quickly change the balances within the tree.

The safest way to remove a dead or declining ash tree may be to fell it from the ground. This removes the need to climb the tree or rig down branches. However, even that might not be so easy. Precision felling relies on sound hinge wood. Decayed wood will not be reliable. If there are immovable, valuable targets nearby, it may be difficult to accurately fell the tree to avoid the targets.

If climbing a tree for removal, consider using nearby healthy trees for a TIP. Climbers should be well educated and experienced in advanced climbing techniques. Special consideration needs to be given as to how the climber will be tied in and the risk of an uncontrolled swing.

An option for difficult-to-access removals may be a portable lift. While I do not own a portable lift, they can be rented and I have subbed other colleagues with lifts to help complete removals unsafe to climb. Being a member of professional associations such as the CTPA introduces you to people who can help you. Draw on these resources to find a different way to get the job done safely.

This article is only meant to address the hazards of removing dead trees. No two tree removals are the same. Every situation you find yourself in requires special planning. When faced with a difficult tree, look into the database you have of your own experiences and ask others about their experiences and insights - use all of the resources you have available to you. The safest professional decision may be to admit you do not have the skills or equipment necessary to complete a removal. Always remember that no tree is worth your life.

Also – think about this. Due to emerald ash borer, there will be an increased demand for tree removals. This is likely to put less experienced individuals in a situation in which he or she is not aware of the hazards. I encourage you as professionals to empower yourself to stop someone if you see something about to occur that you consider to be hazardous. You could help save a life.



"Ash blonding", due to woodpeckers as they remove the outer bark ridges in their search for EAB larvae, has become an increasingly common sight in Connecticut.