

News Article

By: John E. Woodmansee, Extension Educator, Agriculture/Natural Resources

E-mail: jwoodman@purdue.edu Phone: 260-244-7615 Web: www.extension.purdue.edu/whitley

Date: August 21, 2020

Please use by: September 3, 2020

Use Extreme Care When Trimming Trees Near Power Lines

This week I turn our attention to a matter of safety when trimming trees near power lines. A Purdue expert warned that this could be a matter of life and death.

“Homeowners can easily become injured – often fatally – while attempting to trim trees near overhead electrical wires,” said Lindsey Purcell, Purdue Extension urban forester. “Though it is tempting to try to save money with this ‘do-it-yourself’ approach, the potential for electrocution is not worth the risk.” He said it is important to recognize when to call a professional arborist.

“Terrible accidents can happen when a homeowner uses any type of cutting tools and/or ladders when attempting to trim backyard trees and shrubs,” said Purcell. “Overhead wires are often unnoticed and is touched by directly or indirectly, causing injury or death.”

Fatalities have occurred when limbs come in contact with power lines and become energized with dangerous electricity that injure or kill the person doing the trimming. This may occur with a standing tree or with limbs that are pruned and contact overhead wires.

Purcell said that tree limbs can conduct electricity. When trees grow near overhead wires, they can contact the wires and become energized. Trees and wires are dangerous, full of electrical power that can injure or kill humans. “How do we know which lines are energized?” said Purcell. “WE DON’T!” Purcell urged homeowners to assume that all are carrying dangerous electrical current and they should be avoided when working around them.

Purcell explained that a common house switch carries 120 volts, but the electric flow is usually limited to 10, 15 or 20 amps. A common “house drop” (service wire) contains 240 volts and up to 20 amps or more. Given the right set of circumstances, even the shock a person gets from a common light switch can kill, but at the same time, it is easier to break electrical contact while standing inside a house. “If a person is climbing a ladder or is in the tree, it may be more difficult to break contact with the energized wire,” he said. “This means that the service line over a typical yard could easily kill a person.”

Purcell offered a few tips to avoid trees in wires:

1. Look for power lines before pruning trees and large shrubs. If lines are anywhere near the tree within 10 ft., don’t attempt any tree work. Tree care professionals have the training and equipment needed to perform these tasks safely.

2. Never climb a tree in order to prune it. Even if the wires aren't currently touching the tree, remember that the tree's branches will shift once you begin climbing or removing limbs.
3. Don't move ladders or long-handled pruning tools around the yard without first looking up. Always read and heed ladder-use safety labels.

Purcell said to be sure to always hire an insured, tree care professional, preferably an ISA Certified Arborist with the experience, expertise, and equipment to safely take down or prune trees in wires. Require proof of liability insurance to protect yourself as well.

Another easy way to find a tree care service provider in your area is to use the "Locate Your Local Tree Care Industry Association Member Companies" program at <https://www.tcia.org/>.

For more information, refer to the publication "Trees and Electric Lines" at the Purdue Education Store, www.edustore.purdue.edu. Find a certified arborist in your area by going to www.treesaregood.org. Find Purcell's original article at: <https://www.purduelandscapereport.org/article/dont-touch-those-wires/>.