TREE NEWS
YOU CAN USE

JULY 2023

CONTRIBUTING AUTHORS

Dr. Sharon Jean-Philippe
Professor
Urban Forestry

Dr. Natalie Bumgarner
Associate Professor
Residential & Consumer Horticulture

Sam Adams
ISA Certified Arborist
UT Knoxville Facilities Services

Lee Rumble
Extension Agent & ISA Certified Arborist
UT Extension, Knox County

Neal Vercler
Senior Arborist Tech, BCMA #SO-7529B
UT Knoxville Facilities Services

Walker Fowler
Tree Care Technician
UT Knoxville Facilities Services

UTILITY VEGETATION MANAGEMENT

There are several types of utilities (i.e., gas, electric, water) buried belowground or aboveground that can interact with trees and associated vegetation. Vegetation management is the practical application of managing (removing or modifying) vegetation to reduce the potential for conflict. Of particular interest is the interaction between trees and other woody vegetation and utilities, hence called Utility Vegetation Management. Vegetation that is close to utility lines should be maintained to reduce the risk of outages, fires, and other disruptive or dangerous situations. When potential conflicts are ignored, both plant health and utility structures may be negatively affected. However, with planning and proper maintenance, trees and utilities may coexist with minimal issues. This newsletter will discuss trees and associated woody vegetation and proper planting around service and distribution utility lines.

How do we mitigate tree/utility issues? The first step is proper space and tree selection. Be cognizant of nearby utilities when selecting both tree species and planting location. Overhead utilities should be considered when selecting tree species. Remember to account for expected tree size at maturity! Species which may develop great height and broad canopies should be planted a minimum of 30 feet away from powerlines. To avoid pruning entirely, consider planting large species 50 feet or more from overhead lines. Only trees with expected mature height of 15 feet or less should be considered when planting beneath powerlines. In the southeast region, this can include redbud, dogwood

species, ornamental cherry varieties, Japanese maples, and many others! One final thing to consider when planting beneath powerlines: Vegetation in a utility right-of-way will likely be exposed to direct sunlight. Be sure to select species which can tolerate full-sun conditions!

Underground utilities can often go overlooked but are of great importance for planting consideration. Tree roots can grow to interfere with underground pipes or cables. Even if no interference occurs, root systems may be damaged by necessary trenching or maintenance activities undertaken by utility workers. The best way to ensure plant health and utility integrity is by maintaining proper distance. When you consider planting a tree, be sure to call 811 and have nearby utilities marked! This will allow you to maintain proper planting distance and avoid damaging any utility structures while digging. A good rule of thumb is to plant trees at a distance greater than or equal to expected mature plant height from underground utilities to avoid any chance or interaction. You can also consult your local extension agent or arborist about plants with non-invasive roots.

SPONSORED BY:

KNOX COUNTY UTEXTENSION INSTITUTE OF AGRICULTURE THE UNIVERSITY OF TENNESSEE

SCHOOL OF NATURAL RESOURCES

THE UNIVERSITY OF TENNESSEE KNOXVILLE FACILITIES SERVICES

PLANT SCIENCES UTIA INSTITUTE OF AGRICULTURE THE UNIVERSITY OF TENNESSEE