



Trees Rx *A Prescription for Best Tree Care*

EDUCATION FOUNDATION

Insect Pests and Diseases in a Changing Climate;
Sidewalks and Urban Plaza; Construction Management

**New Jersey Chapter of the American Society of Landscape Architects
Education Foundation**

Continuing Education Webinar

June 24, 2020, 8:30 - 12:30

8:30 – 8:50 AM Registration

8:50 AM Welcome and Introductions –

9:00-10:00 AM - Insect Pests and Diseases in a Changing Climate

Dr. Beth Brantley – Technical Support Specialist - Bartlett Tree Research Laboratories

This presentation will highlight climate, recent weather conditions, and impacts on trees in the landscape. Established and emerging insect pests and diseases in the eastern United States will be discussed. Highlights include emerald ash borer, southern pine beetle, spotted lanternfly, boxwood blight, beech leaf disease, oak decline, pear trellis rust and Phytophthora root rot. Strategies for insect pest and disease management as well as climate change resilience will be presented.

Learning objectives:

Objective 1: Teach audience about impacts of climate change on plants, insects and pathogens

Objective 2: Understand how to diagnose established and emerging insect pests and diseases in the eastern United States

Objective 3: Learn about best management practices in managing insect pests and diseases

Objective 4: Learn about strategies to mitigate climate change

1 Continuing Education Credit

Speaker: Dr. Beth Brantley's degrees are in Biology, Forest Management, and Plant Pathology. Her degrees include: BS from Stetson University, MF from Duke University and PhD from Penn State University. She has been with Bartlett Tree Experts since 2019, conducting research and providing technical support and outreach. Prior to joining Bartlett Tree Experts, she taught forestry and related courses at Penn State Mont Alto for 22 years.

10 :00 -10:10 AM - Break

10:10 - 11:10 AM- Improving sidewalk longevity and growing trees with a limited soil volume: *Dr. Tom Smiley – Bartlett Tree Research Laboratories*

This presentation will focus on research projects that compared different methods of reducing damage to sidewalks and the most successful procedures to use when a trees rooting area needs to be covered by pavement. Three research trials will be discussed. First is a 10-year study of treatments applied alongside or underneath suburban sidewalks. Large differences were found in damage to the pavement. Second is a 10-year study of trees planted in a simulated urban plaza

setting comparing supported pavement and structural soil. Third is a 4-year study that looked at newer options for structural soils including gravel and sand based, and two different supported pavement structures.

Learning objectives:

Objective 1: Understand the options for reducing sidewalk damage from trees.

Objective 2: Understand the options for growing trees with limited soil volume and root systems covered with pavement.

Objective 3: Learn about the best management practices for managing root growth under pavement.

Objective 4: Learn about the best management practices for maximizing root growth with limited soil volume.

1 Continuing Education Credit

Speaker: Dr. Smiley is a senior arboriculture researcher at the Bartlett Research Laboratory. He is known for his research on root management, tree risk assessment, tree support systems and lightning protection; and his numerous publication on research results, Best Management Practices in many area of arboriculture, and tree appraisal.

11:10 – 11:20 Break

11:20 - 12:20 – Best Management Practices for Managing Trees on Construction Sites

The American National Standards Institute has developed a series of standards to guide arboricultural practices and improve the quality of tree work. Standards are followed by the development of Best Management Practices (BMP) from the International Society of Arboriculture. This talk will discuss the Standard and BMPs for managing trees on construction sites to minimize tree loss and increase tree longevity.

Learning objectives:

Objective 1: Learn about how arborists can be used at each phase of development.

Objective 2: Understand the options for defining tree protection zones and the impact of cutting tree roots.

Objective 3: Learn about ways to minimize root damage near construction.

Objective 4 : Discuss how to work with consulting arborist and arborist representatives to reduce tree loss.

1 Continuing Education Credit

Speakers: Dr. Beth Brantley and Dr. E. Thomas Smiley

See speaker bios in above courses

*3 CEU's approved for NJ Landscape Architects