# Agenda

### Presented by John Palmer

### The Scientific, Economic, and Aesthetic Benefits of Trees

Physical benefits Environmental benefits

Social benefits Health benefits

**Economic benefits** 

### If Trees Could Talk – The Secrets of Healthy, Mature Trees

Biology and anatomy Soil Roots Oxygen

Stress Native vs. non-native

### **Trees Are Infrastructure: Design Elements That Appreciate**

Placement and value Benefits

Deforestation By Design™ Structural cells

Planning vs. design After the job

### **Trees And Site Requirements: Always At Odds?**

Compaction and proctor density

The brown infrastructure

Screened soils: the silent killer

Root myths

Avoidable conflicts

### Trees That Outlive Designs: After The Project Is Finished

Trees in teacups Lifespan

Soil volume Increasing value

Proper structure

### Threats To Trees

Biotic and abiotic Neglect

An ounce of prevention Computer modeling risks

### Can't Attend? Order the CD/Manual Package:

An audio recording of this seminar is available for \$289 (including shipping). Allow five weeks from the seminar date for delivery. Please refer to specific state licensing rules or certification requirements to determine if this learning method is eligible for continuing education credit.

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Science, Design, and Sustainability
Coraopolis, PA - Friday, December 7, 2018

The Tree Course:



## **Learning Objectives**

### You'll be able to:

*Identify* the social, economic and health benefits of trees.

**Learn** about the biology and anatomy of healthy, mature trees.

**Explore** the use of native and non-native trees in design.

**Consider** tree placement and the lifespan of trees when designing sites.

**Understand** root myths and learn how compaction can effect trees.

**Discuss** strategies for achieving balance between the tree environment and construction site goals.

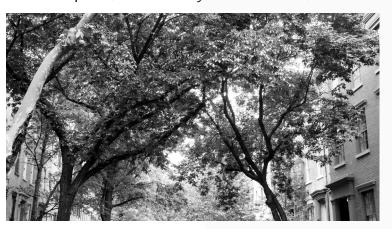






# The Tree Course: Science, Design, and Sustainability

Coraopolis, PA - Friday, December 7, 2018



**Learn** about the scientific, economic, and aesthetic benefits of trees **Understand** the how biology, soil, oxygen, stress and other factors impact trees

**Consider** design elements that incorporate new trees plantings and design elements that preserve trees

**Understand** how long term design impacts add additional value (sustainability, increased canopy) beyond building project lifespan

**Review** threats to trees and learn how to prevent these threats from damaging trees

### **Continuing Education Credits**

#### Architects

6.5 HSW Continuing Ed. Hours6.5 AIA HSW Learning Units

### **Professional Engineers** 6.5 PDHs

**Landscape Architects**6.5 HSW Clock Hours
6.5 LA CES HSW PDHs

# Pennsylvania Landscape & Nursery Association 6.5 CEUs

### International Society of Arboriculture

6.5 Certified Arborist Credits6.5 Municipal Credits(see more credits inside)

### **Society of American Foresters** 5.0 Category 1 CFE Credits





### **Faculty**

John Palmer PlanetCare Landscape and Arboricultural Services - Lakewood, OH Mr. Palmer is a consulting arborist, certified by the International Society of Arboriculture, and an advanced tree risk assessor. He is an author, speaker, and trainer, on subjects including The Future of Urban Forestry, Deforestation By Design™, The New Construction Paradigm, and The Leadership Laws of Nature. His focus is on trees in urban and construction environments, soil deficiencies and the importance of soils for sustainable mature trees, increasing urban tree canopies by ensuring trees live to maturity, and unsustainable landscape designs. His areas of expertise include young tree training, proper pruning and planting practices, biomechanics, soil and water management, urban forestry, tree biology, and healthy root system development.

# **Seminar Information**

### **Pittsburgh Airport Marriott**

777 Aten Road Coraopolis, PA 15108 (412) 788-8800

Registration 8:00 - 8:30 am Morning Session

8:30 am - 12:15 pm

Lunch (On your own) 12:15 - 1:15 pm Afternoon Session

1:15 - 4:30 pm

### Tuition

\$279 for individual registration

**\$259** for three or more simultaneous registrations.

**Included with your registration:** Complimentary continental breakfast and printed seminar manual.

Receive a reduced tuition rate of \$101 by registering to be our on-site coordinator for the day. For availability and job description, please visit www.halfmoonseminars.org.

#### **How to Register**

- · Visit us online at www.halfmoonseminars.org
- · Mail-in or fax the attached form to 715-835-6066
- · Call customer service at 715-835-5900

**Cancellations:** Cancel at least 48 hours before the start of the seminar (CDT), and receive a full tuition refund, minus a \$39 service charge for each registrant. Cancellations within 48 hours will receive a credit toward another seminar or the CD/manual package. You may also send another person to take your place.

### Can't Attend? Order the CD/Manual Package:

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### **Additional Learning**

### **Webinar Series**

### **Geothermal Heating and Cooling**

- Thermodynamic Basics of Geothermal Systems Thurs., Nov. 1, 2018, 11:00 AM - 12:00 PM CDT
- Understanding Earth Loop Systems Thurs., Nov. 1, 2018, 12:30 - 2:00 PM CDT
- Choosing and Designing Geothermal Systems Fri., Nov. 2, 2018, 11:00 AM - 12:00 PM CDT
- · Evaluating and Maintaining Geothermal Systems

Fri., Nov. 2, 2018, 12:30 - 2:30 PM CDT

#### **Cogeneration System Principles and Practice**

- Understanding the Benefits of Cogeneration Thurs., Nov. 8, 2018, 11:00 AM - 12:30 PM CST
- · Laws, Regulations and Building Codes **Impacting Cogeneration**
- Thurs., Nov. 8, 2018, 1:00 PM 2:30 PM CST Examining Cogeneration Technologies Fri., Nov. 9, 2018, 11:00 AM - 12:30 PM CST
- Moving to Cogeneration: Analysis, Modeling and Case Studies

Fri., Nov. 9, 2018, 1:00 - 2:30 PM CST

#### **Shallow Foundation Design and Construction**

• Evaluating Building Sites

Wed., Nov. 14, 2018, 11:00 AM - 12:30 PM CST

- Shallow Foundation Design Wed., Nov. 14, 2018, 1:00 - 2:30 PM CST
- Special Considerations in Foundation Design and Construction Thurs., Nov. 15, 2018, 11:00 AM - 12:30 PM CST

· Soil Improvement and Foundation Diagnosis and Repair

Thurs., Nov. 15, 2018, 1:00 - 2:30 PM CST

### **Roadway Design**

Roadway Design

Thurs., Nov. 29, 2018, 11:00 AM - 12:30 PM CST

Roadway Design Process

Thurs., Nov. 29, 2018, 1:00 - 2:00 PM CST

- Typical Roadway Sections and Alignment Fri., Nov. 30, 2018, 11:00 AM - 1:30 PM CST
- · Intersections, Drainage and **Pedestrian-Bicycle Facilities**

Fri., Nov. 30, 2018, 2:00 - 3:30 PM CST

For more information visit: www.halfmoonseminars.org/webinars/

### **Continuing Education Credit Information**

This seminar is open to the public. It offers 6.5 HSW continuing education/clock hours to architects and landscape architects and 6.5 PDHs to professional engineers in most states, including Pennsylvania. Educators and courses are not subject to preapproval in Pennsylvania.

This seminar is approved by the American Institute of Architects for 6.5 HSW Learning Units (Provider No. J885) and the Landscape Architecture Continuing Education System for 6.5 HSW PDHs. Only full attendance can be reported to the AIA/CES and LA/CES.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP00000700), New York (NYSED Sponsor No. 35), North Carolina, and North Dakota. HalfMoon Education is deemed an approved continuing education sponsor for architects and landscape architects in New York.

The Pennsylvania Landscape & Nursery Association has approved this event for 6.5 CEUs.

The International Society of Arboriculture has approved this activity for the following credits: 6.5 Certified Arborist, 6.5 Municipal, 3.5 BCMA Practice and 1.0 BCMA Management.

The Society of American Foresters has approved this seminar for 5.0 Category 1 CEF credits.

This seminar offers a non-mandatory continuing education opportunity for construction contractors. It has not been reviewed by any state contractor licensing entity with a continuing education requirement.

Attendance will be monitored, and attendance certificates will be available after the seminar for most individuals who complete the entire event. Attendance certificates not available at the seminar will be mailed within 15 business days.

### Registration

**How to Register** 

www.halfmoonseminars.org

HalfMoon Education Inc.,

PO Box 278, Altoona, WI

Complete the entire form. Attach

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duplicates if necessary.

The Tree Course: Science, Design, and Sustainability

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	Registrant Information
٦	Name:
	Company/Firm:
	Address:
٦	City:State: Zip
	Occupation:
	Email:
٦	Phone:
	Additional Registrants:
4	Name:
	Occupation:
	Email:
	Phone:
	Name:
	Occupation:
	Email:
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( ) I am not attending. Please send me the CD manual package for \$289.00. (S&H included. Please allow five weeks from seminar date for delivery)	
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