Successful Strategies for Preserving Tree Canopy in our Communities

Upcoming Conference..

University of Pennsylvania Morris Arboretum

Official arboretum of the Commonwealth of Pennsylvania

100 E. Northwestern Avenue

Return Service Requested Philadelphia, PA 19118

Topics include:

- canopy disappeared and • Why the American elm will it return.
- Penn State manages its Model program: how tree canopy.
- emerald ash borer in the mid-west and what to The effect of the expect here.
- disease resistant hybrids What is the future for

Co-sponsors: John B. Ward Tree Experts, The School of in the Philadelphia area?

Arboriculture at Morris Arboretum, and Haverford College

This course carries CEUs for ISA certified arborists and PA landscape architects

Location: Haverford College, Haverford, PA Tuesday, March 11

(see page 8 inside for more information)









Morris Arboretum W

spring 2014 classes





The Morris Arboretum is proud to print on FSC (Forest Stewardship Council) certified paper, which supports the growth of responsible forest management worldwide through its international standards.

PAID Philadelphia, PA Permit No. 1417

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Morris Arboretum of the University of Pennsylvania

is an educational institution that promotes an understanding of the important relationships between people and plants. Founded in 1887 as the private estate of John and Lydia Morris, brother and sister, the Arboretum today is an interdisciplinary center that integrates art, science, and the humanities. It is the official arboretum of the Commonwealth of Pennsylvania. It is listed in the National Register of Historic Places and is accredited by the American Association of Museums.

The 167-acre public garden, located in the Chestnut Hill section of Philadelphia, provides an idyllic setting for historical architectural features. Specialty garden areas include the Rose Garden, Swan Pond, English Park, Asian gardens, meadows, and woodlands.

Over 12,000 labeled woody plants from around the world grow here along with superior plants for urban and community landscapes. The Arboretum provides internships, school tours, adult and professional education, lectures, and other special events.

The School of Arboriculture at Morris Arboretum

offers high-quality courses designed for arborists, landscape architects and designers, urban foresters, land managers, and other tree care professionals. Classes cover a wide range of topics including climbing techniques and safety, tree identification, pest and disease problems, tree health, and land management practices. The School of Arboriculture is committed to providing first-rate educational and professional development opportunities led by world-renowned instructors and experts in the field.

International Society of Arboriculture Continuing **Education Units**

The Arboretum's professional training courses carry International Society of Arboriculture Continuing Education Units. If you are an ISA certified arborist and need to maintain certification by taking 30 credits over a three-year period, you may want to sign up for classes at the Arboretum. If you have questions about this, please contact Jan McFarlan, (215) 247-5777, ext. 156 or jlm@upenn.edu. The ISA category code for CEUs is as follows: Science=S, Practice=P, Management=M.

Diagnosis and Identification of Plant Disorders

Richard Buckley

Manager, Plant Diagnostics Laboratory, Rutaers University

Join us as New Jersey's premier plant diagnostician leads us on a day of discovery. This session will present an overview of the major causes of abiotic and biotic plant disorders in North American woody stemmed plants. Biotic plant problems are caused by living organisms, such as fungi, bacteria, viruses, nematodes, insects, mites, and animals. Abiotic disorders are caused by non-living factors, such as drought stress, sunscald, freeze injury, wind injury, chemical drift, nutrient deficiency, or improper cultural practices, such as overwatering or planting too deeply. Unfortunately, the damage caused by these various living and nonliving agents can appear very similar. A systematic approach to the identification of environmental, fungal, and bacterial causes of plant disorders and diseases will be considered along with common sense approaches to their control. This course carries 6 CEUs for ISA certified arborists. (S=3, P=1.5, M=1.5)

Friday, February 14 9 a.m. - 4 p.m.

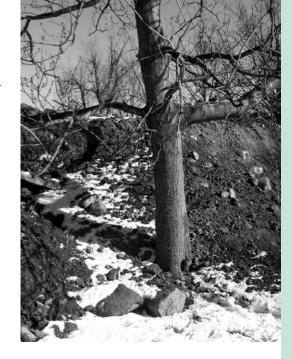
Fee: \$135 (includes lunch)

Protecting and Preserving Trees during Construction

Jason Lubar

Associate Director, Urban Forestry, Morris Arboretum

Trees are valuable assets to commercial and residential property, contributing up to 25% of the property's assessed value. Successful tree preservation during construction assures the project's goals



are achieved without jeopardizing the health and lifespan of protected trees. Since there must be a collaborative process by decision-makers for this to occur, people from all disciplines involved with the construction process, such as landscape architects, builders, developers, architects, and arborists will benefit from this presentation. Information presented includes how to designate adequate tree protection zones based on the tree's structural and biological needs, specifying and installing protective fencing, and how construction processes such as cut/ fill, trenching, and soil compaction effect both existing and proposed trees. Valuable lessons learned from working on a variety of construction jobs will be presented, tree protection specifications will be discussed, and tree protection myths will be presented and dispelled. This course carries 6 CEUs for ISA certified arborists. (S=2, P=2, M=2)

Tuesday, February 18 9 a.m. - 4 p.m.

Fee: \$135 (includes lunch)

Contemporary Tree Appraisal

David Hucker

Registered Consulting Arborist

Join us as we explore the history and process of valuing and appraising trees. The process of assigning a value to a tree has changed dramatically over the past several years. We will approach the new methods being developed and describe the issues involved in the process. There will be classroom and in-the-field appraisal exercises, so bring a calculator. Our instructor, David Hucker, has over 35 years of experience as an arborist in southeastern Pennsylvania and is a member of the Council of Tree and Landscape Appraisers. This course carries 6 CEUs for ISA certified arborists. (S=1, P=3, M=2)

Friday, February 21 9 a.m. – 4 p.m.

Fee: \$135 (includes lunch)

Introductory Tree Climbing

Zac Shechtman

Owner, Shechtman Tree Care

Rob Thigpen

Foreman, Shechtman Tree Care and ISA Penn-Del Chapter Climbing Champion

This class provides an introduction to tree climbing and features the opportunity to have supervised climbing instruction in trees. It is ideal for tree companies looking to advance promising groundsmen, or for gardeners and landscapers looking to add new skills. Effective methods for climbing trees will be demonstrated by instructors and practiced by students. Safety rules will be reviewed. Students will learn how to tie critical knots regularly used by arborists. Included in the fee, each student will receive a copy of The Tree Climbers Companion, by Jeff Jepson, a great resource for climbers. Bring an arborist's rope and saddle, a hard hat, gloves, safety glasses, and insect repellant to the class. Wear boots, long pants, and dress for the weather. This course carries 18 CEUs for ISA certified arborists. (S=0, P=18, M=0) We will meet at Bloomfield Farm. Look for the paved road across Northwestern Avenue from the public garden entrance. Park in the lot and follow the signs to the Horticulture Center.

Wednesday, Thursday, Friday March 12, 13, 14 9 a.m. – 4 p.m.

Fee: \$525 (includes lunches)



Mobile Crane Operator Training and Certification

Larry DeMark

President, Equipment Training Solutions

In recent years OSHA has recommended a series of new regulations regarding the operation of cranes that will require all crane owners and operators to become National Commission for the Certification of Crane Operators (NCCCO) certified by the end of 2014. This will have a profound effect on arborists in the Philadelphia region who offer tree removal with a crane as part of their service. Compliance involves completion of a training program that is administered by an NCCCO licensed training company and the successful passing of a 90 question written exam and a field demonstration of skills. Larry DeMark is the President of Equipment Training Solutions (ETS), which is an NCCCO Certified training company, will administer a three day course in mobile crane operation that will lead to certification upon passing the test on the final day. Students are expected to arrive having studied the training material that will be provided in advance. This course carries 15 CEUs for ISA certified arborists. (S=1, P=11.5, M=2.5) We will meet at Bloomfield Farm. Look for the paved road across Northwestern Avenue from the public garden entrance. Park in the lot and follow the signs to the Horticulture Center.

Monday, Tuesday, Wednesday March 17, 18, 19 9 a.m. – 4 p.m.

Fee: \$1,650 (includes lunches)



Pruning Shrubs for Maximum Health and Beauty: A Handson Class

Iana Turner

Horticulturist, Morris Arboretum

Shrubs require special pruning techniques. Learn when to prune for maximum bloom and fruit set, and how to rejuvenate overgrown flowering shrubs. We will review techniques for maintaining a thick, vigorous hedge. After the morning lecture and demonstration, the afternoon will feature supervised, hands-on pruning. Please bring pruning tools for the afternoon session. This course carries 5.5 CEUs for ISA certified arborists.

(S=1, P=4, M=0.5)

Friday, March 21 Rain date: Monday, March 24 9 a.m. – 3:30 p.m.

Fee: \$125 (includes lunch)



Advancing Your Climbing Skills: Pruning, Rigging, and Removal with a Crane

Zac Shechtman

Owner, Shechtman Tree Care

Rob Thigpen

Foreman, Shechtman Tree Care and ISA Penn-Del Chapter Climbing Champion

This class, taught by experienced professionals, consists of three days of advanced arboricultural techniques.

April 2: Practical Pruning

The first day will focus on the theory and practice of large tree pruning, including a component on tree physiology, structural pruning, and the latest ANSI standard. Each student will receive a copy of the ANSI Z133.1 standards and will have the opportunity to climb a tree for supervised instruction.

April 3: Rigging for Removal

This class will focus on the techniques and gear involved in the process of safely lowering wood as part of the removal process. Each student will have an opportunity for hands-on experience using proper rigging techniques to safely lower wood from a standing trunk. Proper use of the latest equipment as well as the critical knots involved will be demonstrated. Safe felling techniques will also be demonstrated.

April 4: Crane Use and Safety

The last day of this course will consist of instruction and demonstration of the safe use of a truck mounted crane for tree removal. Emphasis will be given to site selection, weight calculation, load distribution, and safe cutting techniques.

Each student will receive a copy of *How* to Fell a Tree by Jeff Jepson, a book with step-by-step methods for taking down a tree. Bring an arborist's rope and saddle, a hard hat, gloves, safety glasses, and insect repellant to the class. Wear boots, long pants, and dress for the weather. We will meet at Bloomfield Farm. Look for the paved road across Northwestern Avenue from the public garden entrance. Park in the lot and follow the signs to the Horticulture Center. This course carries 18 CEUs for ISA certified arborists. (S=3, P=12, M=3)

Wednesday, Thursday, Friday April 2, 3, 4 9 a.m. – 4 p.m.

Fee: \$525 (includes lunches)

Introductory Tree Climbing for Women

Rachel Brudzinski

ISA Michigan Tree Climbing Female State Champion, 2012 and Arborist, New York Botanical Garden

Women can be talented, successful climbers even in a field traditionally dominated by men. This course, taught by ISA state champion tree climber, Rachel Brudzinski, will demonstrate climbing techniques geared toward female climbers. It will also provide a basic understanding of tree biology that is so critical for practicing arborists. The class will focus on teaching women with a passion for arboriculture how to create and maintain a safe working environment, develop fundamental arboricultural skills, and learn the professional techniques necessary to plan a logical approach for climbing a tree. You will learn some of the latest professional tree climbing advancements and have the opportunity to participate in supervised in-tree climbing. This class will give you the chance to experience trees in a whole new light. Novice to advanced women climbers are welcome. Wear long pants and comfortable, hard soled shoes. If you have regulation climbing gear including a rope, harness, hardhat with chin strap, and eye protection, please bring it. You may also want to bring gloves. We will meet at Bloomfield Farm. Look for the paved road across Northwestern Avenue from the public garden entrance. Park in the lot and follow the signs to the Horticulture Center. This course carries 6 CEUs for ISA certified arborists. (S=0, P=6, M=0)

Saturday, April 5 9 a.m. – 4 p.m. Raindate: Saturday, April 26

Fee: \$125 (includes lunch)

Designing Multi-functional Ecological Landscapes

Andrew Kirkpatrick

Urban Forestry Intern, Morris Arboretum

Healthy landscapes, both large and small, perform important functions. These positive environmental impacts are called ecosystem services and include the economic, ecological, and cultural benefits provided to us by plants, soil, and water in the landscape. To get the most from these services it is necessary to restore the structure and function of our urban forests, streams, and wetlands. This can be accomplished by applying the principles of ecological restoration, landscape ecology, and ecological engineering to the design of our urban landscapes including parks, detention basins, and even our own backyards to solve the issues of stormwater, soil erosion, exotic invasive plant species, and air pollution. These concepts will be explored using a restoration plan for the Cresheim Valley section of Fairmount Park as a case study and discussing how to incorporate these concepts into the built environment. Andrew received his masters in landscape architecture from Temple University. This course carries 1.5 CEUs for ISA certified arborists and 1.5 CEUs for PA landscape architects. (S=0, P=0, M=1.5)

Wednesday, April 9 7 – 8:30 p.m.

Members: \$25 Non-members: \$30

Field Identification of Landscape Trees

Ken LeRoy

Certified Arborist Representative, John B. Ward Tree Experts

Join us for a two-day class on the identification of woody landscape plants for urban and suburban landscapes. The class will cover both deciduous trees and conifers. Arborist and Horticulturist, Ken LeRoy, will show us how to use a dichotomous key to identify plants and will explain the terminology used in keys to describe plant characteristics. He will also discuss the physical characteristics used to group plants into families. We will go on a tour of the Morris Arboretum to see specimens of the plants we discuss. You may want to purchase the Sibley Guide to Trees, available in the Arboretum bookstore, that is a good reference for tree identification. We will meet at Bloomfield Farm. Look for the paved road across Northwestern Avenue from the public garden entrance. Park in the lot and follow the signs to the Horticulture Center. Please dress for the weather. This course carries 12 CEUs for ISA certified arborists and 6 CEUs for Pennsylvania landscape architects. (S=4, P=4, M=4)

Thursday, Friday April 17, 18 9 a.m. – 4 p.m.

Fee: \$270 (includes lunch)

Insect Pests of Trees and Shrubs

Sandra Feather

Extension Educator, Penn State Cooperative Extension, Allegheny County, PA

A Plant Health Care Program (PHC) is designed to recognize issues in advance that may affect the long-term health and aesthetic value of a landscape. The key to any Plant Health Care Program is the correct identification of insect pests, what plants they are likely to affect, and when they will do most of their damage. Plant specimens and a walk through the Arboretum's collection will be used to acquaint students with actual insect damage to live specimens. Insect pest control thresholds and management strategies will be discussed. We will meet at Bloomfield Farm. Look for the paved road across Northwestern Avenue from the public garden entrance. Park in the lot and follow the signs to the Horticulture Center. This course carries 6 CEUs for ISA certified arborists and update credits from the PA Department of Agriculture. (S=2, P=2, M=2)

Friday, April 25 9 a.m. – 4 p.m.

Fee: \$135 (including lunch)



special conference

Successful Strategies for Preserving Tree Canopy in our Communities

Despite outbreaks of insects and diseases in certain tree species, there are success stories of replanting, managing, and sustaining the tree canopy. Model programs with demonstrated success against some of the known pathogens affecting trees such as elm, ash, and London plane will be addressed in this day-long symposium.

Topics covered include:

- Why the American elm canopy disappeared and will it return.
- How the Quakers saved the lineage of the Penn Treaty elm.
- Model program: how Penn State manages its tree canopy.
- How to prune to avoid spreading canker stain disease in London Plane trees.
- The effect of the emerald ash borer in the mid-west.
- What to expect from emerald ash borer in our area.
- What is the future for disease resistant hybrids in the Philadelphia area?
- Replanting strategies on the Haverford College Campus.

Co-sponsors are John B. Ward Tree Experts, The School of Arboriculture at Morris Arboretum, and Haverford College Arboretum. **This course carries 6.5 CEUs for ISA certified arborists.** (S=2, P=2, M=2.5)

Location: Stokes Hall, Haverford College, Haverford, PA Tuesday, March 11 8:30 a.m. – 5 p.m.

Fee: \$125 (includes breaks and lunch)

To register for this conference visit *online.morrisarboretum.org/canopy* or call 215-247-5777, ext. 125.



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general class information

The Morris Arboretum is located in the Chestnut Hill section of Philadelphia. For further information or directions, call (215) 247-5777 or check the Arboretum website at www.morrisarboretum.org. Go to "Plan your Visit."

The Green Choice

We need your input. In the interest of sustainability, if you would like to opt out of receiving our course brochure, please e-mail us at education@morrisarboretum.org with the subject line, "Opt out." We always offer the fall course brochure on our website under Education tab.

Location of Classes

All classes will be held at the George D. Widener Visitor Center unless otherwise noted. During the months of January through March, the front entrance of the Visitor Center will be closed due to construction. Signage will direct you to the temporary entrance please follow signs where you can check in for your class. We apologize in advance for any inconvenience. Parking areas may be reached by entering the Arboretum off of East Northwestern Avenue. Students should arrive at least ten minutes before the start of the class to allow time to check in.

Refund and Cancellation Policy

In order to receive a refund for a class you must call (215) 247-5777, ext. 125 at least two business days before the class start date. The Arboretum reserves the right to cancel any program if necessary. Refunds take approximately 3 to 4 weeks to process. There will be no refunds after a class begins.

Weather Information

In case of inclement weather conditions on the day of your class, please call the Education Department, (215) 247-5777, ext. 156, for information on possible cancellation or rescheduling of the class.

registration form

Course Title and Names of Attendees		# Students	Date	Fee
Introductory Tree Climbing for Women	EXAM	DT TE		
Jane Smith	EXAM		4/5/14	\$125
		Total En	closed	

To register online, visit https://online.morrisarboretum.org/arboriculture.

To register by mail, send this form along with check payable to the "Morris Arboretum" to:

Education Department Morris Arboretum 100 East Northwestern Avenue Philadelphia, PA 19118-2697

To register by phone, have your credit card ready.

Call the Education Dept. (215) 247-5777, ext. 125.

Payment Information

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Company Name		
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Fmail Address		