Upcoming Conference:

Tree Canopy Conference: Preserving Trees in Our Communities

Topics include:

- Insect and Disease Threats
- Tree Planting Ordinances
- Tree Pit Planting: Size and Soil
- Tree Tenders: A Successful Tree Planting Program
- New Tree Introductions and Heritage Trees

This conference will be held in Stokes Hall at Haverford College in Haverford, PA and carries 7 CEUs for ISA certified arborists. (S=2, P=2, M=3).

For more information, see page 8.
Increase your tree and landscape knowledge! Our courses, which offer CEUs for arborists and landscape architects, keep you at the forefront of your profession!

spring 2015 classes
The 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 Alliance of Museums.

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

More than 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 or need more information, please contact Jan McFarlan at (215) 247-5777, ext. 156 or jlm@upenn.edu. The ISA category code for CEUs is as follows: Science=S, Practice=P, Management=M.
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 5.75 CEUs for ISA certified arborists. (S=1, P=2.75, M=2)  
Tuesday, February 17  
9 a.m.—4 p.m.  
Fee: $135 (includes lunch)

The Future of Arboriculture in a Changing World  
Dr. Neil Hendrickson  
Director, Northeast Research Labs, R.A. Bartlett Tree Expert Co.  
Dr. Hendrickson will present an overview of past and current arboricultural practices and how they are evolving in light of current research on environmental stress. He will focus on the role trees play in our environment and the associated threats arising from the environmental changes like global warming that we are currently experiencing. He will help us to understand how we can continue to preserve the health and beauty of trees that are such a critical component of a sustainable, biologically diverse landscape. Dr. Hendrickson, who received his Ph.D. from the Yale School of Forestry, is nationally recognized as an expert arborist. He conducts research and provides technical support for Bartlett throughout the U.S. and internationally. This course carries 5.75 CEUs for ISA certified arborists. (S=1.75, P=2, M=2)  
Thursday, February 26  
9 a.m.—4 p.m.  
Fee: $135 (includes lunch)

New Methods of Tree Analysis  
Dr. Jerry Bond  
Principal Consultant, Urban Forest Analytics  
Join Dr. Jerry Bond, a leading expert in tree health and structure, as we explore the process of performing a systematic in-the-field tree evaluation. Using published protocols, we will go through a step-by-step process of assessing a tree’s biologic health, structural integrity, and the interactions between the two. Wind loading factors that can lead to tree failure will also be explored. This course carries 4.75 CEUs for ISA certified arborists. (S=2, P=1.75, M=1)  
Monday, March 2  
9 a.m.—3:30 p.m.  
Fee: $125 (includes lunch)
Plant Diagnostics: It’s not CSI!

Dr. John Ball
Professor, South Dakota State University

“What is wrong with my tree?” is probably the most common question posed to arborists and other landscape professionals. The first problem is that there is rarely just one reason for a tree’s decline and the second problem is that homeowner may be one of those reasons! This seminar will go step-by-step through the diagnostic process. Participants will learn the most common symptoms associated with abiotic agents and those more commonly caused by insects and plant pathogens. We will also explore how to investigate what has happened in the plant’s past that may be causing its decline. Another key topic for the day will be how to interact with clients so we can come up with the best options for them and their trees. In addition to teaching arboriculture, Dr. Ball instructs EMT and rock climbing courses. His research interests include tree worker safety. He previously managed tree care companies in the Midwest and East. 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 5.75 CEUs for ISA certified arborists. (S=2.75, P=1.5, M=1.5)

Saturday, March 7
9 a.m.—4 p.m.
Fee: $125 (includes breaks and lunch)

Sonic Tomography: Non-Invasive Tree Investigation

John Wickes
President, Ira Wickes Tree Care

One of the more interesting tools for allowing arborists to image the internal structure of a tree is the sonic tomogram. This is a device that uses sound waves to create a 3D screen image of a cavity or a disconformity in the trunk of a tree without using any drilling methods or tools. John Wickes of Ira Wickes Tree Care in Spring Valley, New York, is one of the few American distributors of this instrument and he is well versed in its use and application. We will review all current techniques of investigation including use of the tomogram and resistograph. This course carries 3 CEUs for ISA certified arborists. (S=1, P=1, M=1)

Monday, March 16
9 a.m.—12 noon
Fee: $90 (lunch not included)

Pruning Shrubs for Maximum Health and Beauty: A Hands-on Class

Vince Marrocco
Chief 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 4.5 CEUs for ISA certified arborists. (S=1, P=3, M=0.5)

Thursday, March 19
9:30 a.m.—3 p.m.
Raindate: Friday, March 20
Fee: $120 (includes lunch)
Crane Operator Licensing: CIC Certification Testing & Training

The Crane Safety Institute and Cranes 101
Three-day course and certification exam for small to medium sized mobile hydraulic cranes

As of September 26, 2014, OSHA instituted a series of new regulations regarding the operation of cranes. These regulations, which will become mandatory in 2017, will require all crane owners and operators to become certified. This will have a profound effect on arborists who offer tree removal with a crane as part of their services. Compliance involves completion of a training program that is administered by a licensed training company and the successful passing of a written exam and a field demonstration of skills. The Crane Safety Institute and Cranes 101 of Boston, Massachusetts, are a certified training company that uses Crane Institute Certification (CIC) protocols and will administer a three day-course in mobile hydraulic 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. 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 14 CEUs for ISA certified arborists. (S=1, P=10.5, M=2.5)

Wednesday, Thursday, Friday
March 25, 26, 27
9 a.m.—4 p.m.

Fee: $1,695 (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 grounds staff, or for gardeners and landscapers who want to develop new skills. Effective methods for climbing trees will be demonstrated by instructors and practiced by students. Safety rules will be reviewed and stressed. 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. 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 17.25 CEUs for ISA certified arborists. (S=0, P=17.25, M=0).

**Wednesday, Thursday, Friday**  
**April 8, 9, 10**  
9 a.m.—4 p.m.

*Fee: $525 (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 training in advanced arboricultural techniques. Instruction will cover the theory and practice of large tree pruning, including a component on tree physiology, structural pruning, and the latest ANSI standard. Each student will have an opportunity for hands-on experience using proper rigging techniques to safely lower wood from a standing trunk. Safe felling techniques and proper use of the latest equipment, as well as the critical knots involved will be demonstrated. The last day of this course will consist of instruction and demonstration on 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, and a copy of the ANSI Z133.1 standards.

We will meet at the Horticulture Center 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 17.25 CEUs for ISA certified arborists (S=2, P=13, M=2.25).

**Wednesday, Thursday, Friday**  
**April 15, 16, 17**  
9 a.m.—4 p.m.

*Fee: $525 (includes lunches)*

### Single Rope Techniques

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

Climbing techniques for arborists have advanced significantly in the last 20 years, with the adaptation of practices that were first developed by rock climbers and cave explorers. These techniques have made tree climbing easier and safer, and have brought a greater degree of professionalism to arboriculture. The use of throw balls to advance the lead into the tree canopy has introduced the use of a single line to ascend into a tree rather than the more traditional double line technique. The use of one line in climbing is known as Single Rope Technique (SRT) and has become a skill that has proved invaluable to many working arborists. Please join us for a day with one of the masters of SRT, Rob Thigpen of Shechtman Tree Care. This course will include some in-the-tree climbing, and is open only to arborists with field experience. Personal Protection Equipment (PPE) and individual
climbing gear are mandatory. 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 11.5 CEUs for ISA certified arborists (S=.75, P=10, M=.75)

Thursday, Friday
April 23, 24
9 a.m.—4 p.m.

Fee: $285 (includes lunch)

Introductory Tree Climbing for Women

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

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 especially geared to 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 develop an approach for climbing a tree. You will learn some of the latest professional tree climbing advancements and you will 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 5.75 CEUs for ISA certified arborists. (S=1, P=4, M=.75)

Saturday, May 30
9 a.m.—4 p.m.

Raindate: Saturday, June 6

Fee: $125 (includes lunch)
Advancing Your Climbing Skills for Women

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

This course is designed for intermediate to advanced female climbers seeking to experience a deeper understanding of innovative arboriculture techniques. Students will learn essential knots, daily gear maintenance, and safety regulations mandated for climbing arborists. During the course, students will have a minimum of six hours of personal in-tree climbing instruction. This class will focus on climbing skills and various ascension and positioning techniques meant to further your comfort within the canopy.

Prerequisite: Students must have previously taken Introductory Tree Climbing for Women, or have a minimum of 30 hours of in-tree experience. (Students can register for both Intro. and Advanced courses in the same weekend.) Please wear appropriate clothing, including long sleeves, flexible and durable pants, and high ankle/light weight footwear. 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).

Sunday, May 31
9 a.m.—4 p.m.
Raindate: Sunday, June 7
Fee: $125 (includes lunch)
Tree Canopy Conference: Preserving Trees in Our Communities

A healthy tree canopy provides important ecosystem services including air pollution removal, storm water runoff reduction, and building energy conservation. Abundant tree canopy provides habitat for wildlife and also has a positive impact on human mental health and well-being, community cohesion, and economic stimuli. In this conference we will look at tree canopy preservation and reduction both nationally and locally, and consider some of the greatest challenges communities are facing as they try to preserve canopy cover.

Topics covered include:
• Insect and Disease Threats
• Tree Planting Ordinances
• Tree Pit Planting: Size and Soil
• Tree Tenders: A Successful Tree Planting Program
• New Tree Introductions and Heritage Trees

This conference will be held in Stokes Hall at Haverford College in Haverford, PA and carries 7 CEUs for ISA certified arborists. (S=2, P=2, M=3)

Tuesday, March 10
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.
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 our spring and fall course brochures on our website under the Education tab.

Location of Classes

All classes will be held at the George D. Widener Visitor Center unless otherwise noted.

Parking areas may be reached by entering the Arboretum off of Northwestern Avenue. Students should arrive at least ten minutes before the start of the class to allow time to check in.

Please note: Parking adjacent to the Visitor Center is sometimes at full capacity on nice weather weekends. If you visit after noon, you may be required to park at the bottom of the hill and be shuttled into the garden.

If you are a person with a disability and require an accommodation to participate in classes, please contact Jan McFarlan at (215) 247-5777, ext. 156, Monday through Friday, to discuss accommodation. For people who use TTY, please call PA Relay at 1-800-654-5984.

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. There will be a $5 processing fee associated with refunds. The Arboretum reserves the right to cancel any program if necessary. Refunds take approximately three to four 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.
<table>
<thead>
<tr>
<th>Course Title and Names of Attendees</th>
<th># Students</th>
<th>Date</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory Tree Climbing for Women Jane Smith</td>
<td>1</td>
<td>4/25/15</td>
<td>$125</td>
</tr>
</tbody>
</table>

Please make membership and course payments separately.

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

Name______________________________________________________________

Address_________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

Phone  
home __________________________________ work _________________________ cell _________________

Email Address ________________________________________________

☐ Member ☐ Non-member

☐ My check or money order payable to the Morris Arboretum is enclosed.