55th Annual Penn-Del Chapter Shade Tree Symposium
February 10-11, 2020

Monday, February 10th

General Sessions

8:30 AM - 9:00 AM  Opening Ceremony                   Freedom Hall A
Description: Flag ceremony, officer and past president parade / ceremony, and opening remarks.

9:00 AM - 10:00 AM  Old-Growth Forest Network           Joan Maloof  Freedom Hall A
Description: Trees evolved within a complex web of relationships with other organisms. The conditions found in an urban area are vastly different than the conditions in a forest. For some tree species the urban environment is detrimental, but for others trees escaping the competition in a forest results in faster growth. Old-growth forest expert Joan Maloof will be discussing tree growth and form in environments that are unmanipulated by humans. There is beauty and mystery in the old-growth forests! Learn more about these unique environments, where they are located, and what is being done to preserve them. She will introduce participants to the Old-Growth Forest Network, its mission and its progress. Maloof is the author of four books about the forest ecosystem: Teaching the Trees; Among the Ancients; Nature’s Temples and The Living Forest.

CEU

Speaker Bio: Joan Maloof is a writer, an ecologist and a conservationist with a unique voice in today’s times. She has studied and worked with plants her entire life; her formal education includes a bachelor’s degree in Plant Science, a master’s degree in Environmental Science, and a Doctorate in Ecology. She is a professor emeritus at Salisbury University where she taught Biological Sciences and Environmental Studies. Maloof has published numerous research articles in publications such as Ecology; American Journal of Botany; and the International Journal of Environmental Studies. Maloof’s books include Teaching the Trees (2005), Among the Ancients (2011), and Nature’s Temples: the Complex World of Old-Growth Forests (2016).

In addition to her research and writing, Maloof founded an organization with the goal of creating a network of protected forests across the US. That organization, the Old-Growth Forest Network, now has thousands of supporters. Maloof travels widely to educate others regarding the extent and condition of our forests, and to encourage their preservation.
Biological Basis of Tree Action

Description: Successful tree preservation during construction assures the project's goals are achieved without jeopardizing the health and lifespan of protected trees. But how do you know if your actions, based on standards and Best Management Practices (BMP's), resulted in success or failure? In this session, you will hear a story about a cohort of trees that have been monitored for nearly 40 years by assessing tree condition and survival following construction activities versus a cohort of control trees. This story will enlighten and inform attendees on how a collaborative process by people from all disciplines involved with the construction process involving owners, decision-makers, and tree lovers.

This talk will detail a population of over 900 urban street trees in Milwaukee WI evaluated and monitored since 1979 (pre-construction assessment) and in 1989, 2005, and 2018 (control and construction trees). You will learn how to kill trees during construction. The steps are very easy. You will also learn how to reverse engineer tree damage and death to promote tree health and growth following construction. The current end game found trees and construction can co-exist with both infrastructures standing tall at the end of a project.

Speaker Bio: Richard Hauer, Ph.D. is a Professor of Urban Forestry at the University of Wisconsin – Stevens Point teaching courses in urban forestry, nursery management, woody plants, dendrology, and introduction to forestry. He received his B.S. from the University of Wisconsin – Stevens Point, M.S. from the University of Illinois, and Ph.D. from the University of Minnesota. Rich has conducted research in tree biology, urban forest management, emerald ash borer management, trees and construction, tree risk management, and ice storms. He recently was honored as the 2018 L.C. Chadwick Award for Arboricultural Research. He has written over 140 publications and presented over 370 talks throughout the world.

ANSI A300 Pruning

Description: Tree pruning is often cited as the most commonly performed arboricultural task. The ANSI A300 Pruning Standards (ANSI A300 Part 1) were revised in 2017, with significant changes, including a greater emphasis on objectives and specifications, and also a re-ordering of processes, and the introduction of new concepts and terminology. This presentation summarizes the changes and describes how arborists can use the standard to improve their service and write clear specifications and work orders for workers and clients.

Speaker Bio: Geoff Kempter is Technical Services Manager for Asplundh with 30 years of experience in utility arboriculture and urban forestry. He is co-author of Utility Arboriculture, the Utility Specialist Study Guide, and author of the ISA Best Management Practices Guide for Utility Pruning. Geoff teaches tree risk assessment qualification (TRAQ) for the ISA. He is currently Vice President of the Utility Arborist Association, has served on the ANSI A300 Tree Care Standards Committee since 1996, and on the ISA Board, the TREE Fund Board and as ISA Certification Chair. He holds a degree in Natural Resources from the University of Michigan. Geoff is also a past President of the Penn-Del Chapter.
### Monday Afternoon Break-Out Sessions

**Tree Worker**

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<td>Tie In Points and Certifying Anchors for Life Support</td>
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<td>2:30 PM</td>
<td>Work Positioning Lanyards: Lots of Options, Lots of Functions</td>
<td>Phil Kelley</td>
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<td>3:45 PM</td>
<td>Component Compatibility... Good Functional Interaction</td>
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**Description**:
- Tie In Points and Certifying Anchors for Life Support
  - An in-depth discussion on what qualifies as a life support anchor and how we differ from other industries when doing so!

**CEU's**

**Speaker Bio**:
- Phillip Kelley started his arboriculture career at Wright Tree Service in 1994 performing line clearance in northeast Iowa and worked up the management ranks before moving to Georgia in the year 2000. While in Georgia, he worked for commercial and residential arboriculture companies and served as operation manager and safety coordinator for Arborguard Tree Specialists and Downey Tree Service. In 2009, Phillip joined North American Training Solutions and served as Vice President there until coming back to Wright Tree Service in the spring of 2018 where he is leading the safety training and field development of the company.
- Phillip has been a Certified Arborist for 20 years, past President and board member of ISA chapter organizations, served in numerous capacities for the last 16 years with local ISA chapter climbing competitions. Phillip is currently the head technician of the ISA International Tree Climbing Championship and has been for the past 2 years. He is was also head technician of the North American Tree Climbing Championship from 2015-2017. He is an active member of the rules committee for the ISA International Tree Climbing Competition.

**Description**:
- Work Positioning Lanyards: Lots of Options, Lots of Functions
  - Today's work positioning lanyards are perhaps the most underutilized and least appreciated tool that tree climbers have on their harnesses. They can also be very confusing. This presentation will review the modern work positioning lanyards and demonstrate some of the MANY advantageous configurations.

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- Phillip Kelley started his arboriculture career at Wright Tree Service in 1994 performing line clearance in northeast Iowa and worked up the management ranks before moving to Georgia in the year 2000. While in Georgia, he worked for commercial and residential arboriculture companies and served as operation manager and safety coordinator for Arborguard Tree Specialists and Downey Tree Service. In 2009, Phillip joined North American Training Solutions and served as Vice President there until coming back to Wright Tree Service in the spring of 2018 where he is leading the safety training and field development of the company.
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**Description**:
- Component Compatibility... Good Functional Interaction
  - Misconfigurations are becoming more common as the variety of ropes, connectors, arborist saddle hardware and pulleys continues to increase. Tim will set up the common misconfigurations, discuss the reason and review alternatives.
Utility / Municipal
1:15 PM - 2:15 PM The Z: Paragraphs to Live By Travis Vickerson Commonwealth Salon 4

Description: The “Z” - a document to live by as a Professional, takes a look at the standard that, to some, is this daunting piece of work that is just out to restrict and hamper work. We will dive into the characteristics of a professional and how the Z133 provides framework for that claim and isn’t the restrictive force that most feel it is. We will look at some of the sections and how they impact work but more importantly provide the path to ensure workers go home each and every day.

Speaker Bio: With eighteen years in the tree care industry, Travis has been honored to have owned a small company, work as a crew leader, contract climbed and has been an industry trainer prior to taking his current position within Chippers Inc., a green care industry company located in New England. Nine years ago a close friend of his died while doing tree work, and that event vaulted him towards safety in the tree industry and made his mission to teach until no more tree industry workers die from such accidents.

2:30 PM - 3:30 PM Ordinances and You Bill Elmendorf Commonwealth Salon 4

Description: Municipal Tree Commissions have been authorized in Pennsylvania since 1907. As an adjudicatory commission they are responsible for the management and protection of a municipality’s urban forest. This talk will describe the authority that tree commissions have in Pennsylvania, their main duties including developing community tree plans and developing and administering street and park tree ordinances, and their struggles. Along with tree commissions, many municipalities have street and park ordinances that protect both public trees and public safety.

Speaker Bio: Bill teaches urban forest management and human dimensions of natural resources at Penn State. He provides leadership for the Extension Urban Forestry Program which provides support to municipalities, agencies, and non-profits on a wide range of issues and opportunities associated with natural resources and community development.

Bill’s research interests include public landscape management, land use planning and regulatory policy, and peoples landscape preferences and behaviors. He has worked with a number of municipalities on ordinance development and enactment. He is past Chair of the State College Borough Tree Commission and current Chair of the Penn State University Tree Commission. Bill is a current member of the Society of American Foresters’ Educational Policy Review Committee, an Associate Editor of Economic and Social Urban Forestry for the journal Arboriculture and Urban Forestry, and Past President of the International Society of Arboriculture Penn-Del Chapter.
Wood Utilization

Description: Urban forests around the world yield millions of tons of biomass on a continual basis. All of this resource can be utilized and sold as wood products. Wood and brush have traditionally been dumped at landfills. Rising tipping fees and rapid filling of landfill space have created a need to recycle trees into useable products. This presentation discusses wood uses as mulch, firewood and lumber products. Sale of these products produces revenue and helps conserve resources and reduce the need for more landfill space.

Speaker Bio: Mr. Dincher is the owner of Totally Trees, Inc Horticultural Consulting, and Co-Owner, Dincher and Dincher Tree Surgeons, Inc. based in Williamsport, PA. He has been involved in tree care close to 50 years, full-time for 45 years and started wood recycling in late 1980s. He is the President of TreePennsylvania and is currently the Vice-President of the Penn-Del Chapter of ISA.

Insects That Damage Conifers

Description: In this presentation, we will discuss identification and management of insects and mites that damage conifers. Including: spruce spider mite, hemlock rust mite, sawflies, scale insects, hemlock woolly adelgid, pine bark beetles, and white pine weevil. Phenology, growing degree days, scouting, and IPM will be emphasized.

Speaker Bio: Sandy Feather is the ornamental horticulture educator for southwestern Pennsylvania with the Penn State Extension. She develops and delivers research-based educational programs for landscape professionals as part of Penn State Extension's Green Industry Team. These include sessions to help participants obtain professional certifications such as certified arborist and licensed pesticide applicator; plant identification and usage; and identifying and managing plant problems.

Utility Right-of-Way Applications Methods and Digital Record Keeping

Description: Todd will present on High Volume Foliar, Low Volume Foliar, Low Volume Basal, Ultra Low Volume Thinvert. A short video of each application method will be shown and then details about each application will be discussed including herbicides available for each application type. The second part of Todd's presentation will cover Herbicide Application Digital Recordkeeping and features, advantages, and benefits of using digital record keeping over traditional paper methods.

Speaker Bio: Todd graduated Penn State University with a B.S. in Forest Science. He works with contractors, DOT's, Utilities, and Forestry Applicators all over the Mid-Atlantic and Mid-West, and provides technical advice and consulting on weed & brush management. He speaks at over 30 meetings per year on Vegetation Management and provides prescriptions to state agencies and private contractors to best manage weed issues in the field. Todd has over 25 years of Vegetation Management experience and is the Past President of Mountain Lake Vegetation Management Association and the Pinchot Chapter of Society of American Foresters.
Emerging and Common Disease Issues of Landscape Trees

Description: This talk will inform attendees about Caliciopsis Canker of white pine & White Pine Needle Damage, Verticillium Wilt, and Oak Wilt. In our region, a novel and poorly understood white pine dieback phenomenon has been attributed primarily to a scale insect and a putatively weak fungal pathogen. While White Pine Needle Damage is a complex mixture of native, foliar diseases that are being accelerated by the region's warmer, wetter springs, hampering the health of eastern white pine. Verticillium wilt is a common, but often overlooked disease that can destroy shade trees and shrubs by causing them to wilt and die. Sometimes within a few weeks or months. This fungal disease affects over 300 species of plants, including many common trees and shrubs in our region. Oak wilt is a serious disease that affects the vascular system of the tree. Quercus species in the red oak group are usually killed within one year of becoming infected, whereas white oaks frequently recover from infection or may take many years to die. This portion of the topic will focus on the biology of the fungus, how to prevent the spread, and control methods of this disease.

Business / Commercial

Building Street Tree Resiliency to a Construction Crisis:

Description: Successful tree preservation during construction assures the project's goals are achieved without jeopardizing the health and lifespan of protected trees. But how do you know if your actions, based on standards and Best Management Practices (BMP's), resulted in success or failure? In this session, you will hear a story about a cohort of trees that have been monitored for nearly 40 years by assessing tree condition and survival following construction activities versus a cohort of control trees. This story will enlighten and inform attendees on how a collaborative process by people from all disciplines involved with the construction process involving owners, decision-makers, and tree lovers.

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2:30 PM - 3:30 PM  Branding & Marketing Strategies  John Bartorillo  Federal Room

Description: The session will help participants gain a broader understanding of strategies to successfully market and promote their businesses. This process would work through an evaluation of capabilities, identifying the right target audiences, and honing their messages to create impact and response in a wide variety of media outlets—including web and social media.

Speaker Bio: John has been with MLB Advertising since its inception, and is responsible for client relations, marketing and creative strategies, as well as business development. He has worked with clients of all sizes over the span of his career and has won multiple advertising and design awards. John was behind the idea development of the most successful taglines and positioning statements the agency has developed for its clients. This experience has given him a broad understanding of service marketing, brand development and advertising strategies that have benefited clients of all sizes.

3:45 PM - 4:45 PM  Spider Lift Safety  Ben Miklos  Commonwealth Salon 1,2,3

Description: In the last couple of years the industry began heavily utilizing compact lifts. They are a great revolutionary tool that many companies now own. With the arrival of the Emerald Ash Borer, our area is now covered in dead and hazardous ash trees. A compact lift is a great way to access these often hard to reach trees. While the many available models of compact lifts are proven assets to production teams, they present some unique new challenges for all aspects of a tree company. This discussion will lead participants through the different topics related to compact lift safety and efficiency.

Ben will share his experiences of safely overcoming the multitude of different challenges presented with day-to-day operation of these complex new machines. The goal is to share the knowledge gained from experience to make anyone in attendance more educated on compact lift use. He will mainly cover subjects related to operator use such as site inspection/access, lift inspection, applicable safety regulations, lift set up, lift work positioning, and preparing lift for road travel and DOT compliances. Ben will also briefly cover some of wisdom gained from the Good’s Tree Care sales and management team about the addition of a compact lift to their company.

Speaker Bio: Ben has been in the green industry 10+ years and switched to tree work fulltime 8 years ago. He now works for Good’s Tree Care where he had spent the last 2 years as the full-time spider lift operator. Most of his time has been spent as a climber with a few local companies in the Harrisburg area. Unfortunately, he worked for a company that suffered a fatality where a piece of faulty equipment was involved. Since that unfortunate day, spreading a culture of safety has been his number one priority.

1:15 PM - 4:45 PM  First Aid / CPR Course  John Berry

Description: First Aid and CPR certification course. Pre-registration is required.

Speaker Bio: John Berry is with American First Aid.
Tuesday, February 11th

Tuesday Morning Break-Out Sessions

Tree Worker

9:00 AM - 10:00 AM  
Fundamentals of Gear Inspection  
Tim Bushnell  
Freedom Hall B

Description: When inspecting tree climbing equipment, if you can't say “YES” to passing a component or assembly, then the answer is “NO”. It is important to educate yourself as much as possible; because a high level of gear inspection knowledge often leads to an increased ability to say “YES”.

Speaker Bio: Tim started in the tree care industry in 1985 and with Davey in 2018. He’s been an ISA Certified Arborist since ’92 and is a TCIA Certified Treecare Safety Professional. Tim chairs the ANSI A300 Committee, participated as a voting member in the current and previous Z133 updates and sits on several ANSI Z133 tasks groups. Tim was head technician from 2005-2011 for ISA’s International Tree Climbing Championship and has been certified by Petzl America as a Competent Person regarding PPE. He is also a competent person in climbing/ rigging gear inspections to the United Kingdom standards and North American Training Solutions recognizes Tim as a qualified chainsaw technician and trainer. He brings with him an unparalleled passion for trees and safety.

10:15 AM - 11:15 AM  
A Climbing Revolution: Speed Safety and Innovations  
Kevin Bingham  
Freedom Hall B

Description: Over the last decade, advances have been made that have speed up production. These same advances can also be used to increase safety margins and redundancies in the. During this presentation, you will learn and understand the progression of techniques from the fundamentals to the most over complicated methods to enlarge your continually evolving knowledge and experienced bag of tricks.

Speaker Bio: Kevin has been climbing trees, rocks and other structures since as far back as he can remember. He began working in the tree care industry in 1996, and has spent the last 20 years constantly toying and tinkering with his climbing setup, yet he still doesn't have it quite right! This tinkering has lead him to discover the Rope Wrench as well as the Rope Runner, among other climbing ideas/techniques. Kevin currently owns a small tree care service in Detroit, Michigan where he lives with his wife and three daughters.

11:30 AM - 12:30 PM  
Single Stem Anchor Systems  
Aaron Feather  
Freedom Hall B

Description: This session will discuss the use of single stem anchoring and climbing systems. Long gone are the days of spikes and a sissy strap. New gear and techniques have turned the worst part of a climbing removal into a rather comfortable process.
Speaker Bio: Aaron is the safety and training director for Cumberland Valley Tree Service for the past three years, a Crew leader for 10+ years, he is an ISA Certified Arborist, TCIA CTSP, TCIA approved instructor in aerial lifts, climbing, SRT, EHAP, aerial rescue, and chainsaw operation. He was the 2014 Penn-Del Chapter climbing champion.

Utility / Municipal

9:00 AM - 10:00 AM  Crane Crew Operations and Safe Practices  Peter Nieves-Sosa  Commonwealth Salon 4

Description: This presentation will focus on key points to ensure safe and successful crane operations. Proper techniques used in crane removals will be covered; including options for rigging off of a crane, as well as procedures for hoisting the climber and commonly used saw cuts for crane assisted removals. We will review key points to look for before the job even starts that can be indicators for potentially unsafe situations, and obstacles to look for during the crane set-up.

Speaker Bio: Peter Nieves-Sosa has been a crane operator since 1999. He started The Crane Man, Inc. in 2008. Peter has 20 years of crane experience, and specializes in large and hazardous tree removal. He is a member of the ISA and TCIA. He is NCCCO Certified crane operator. He is the founder of the Crane Safety Climber School which is now in its 10th year.

10:15 AM - 11:15 AM  Right of Way Management:  Drew O'Neill  Commonwealth Salon 4

Concerns, Options, and Outcome Expectations for Utilities, Municipalities, and Others

Description: We will review the various types of ROW, and who could be or is responsible for their ongoing maintenance. I will then review the diversity of environments and varied terrain that ROW’s traverse. In addition, I will then go over the different vegetation that is expected to be seen in different environments. The good, the bad, and the ugly invasive/noxious of vegetation. I will review options to control the ugly invasive/noxious weeds. I will also go into longer-term options for maintenance, but also techniques and methodologies that benefit the environment such as the creation of meadows and pollinator habitats.

People who should attend should include utility ROW managers, municipality workers, those who work on ROWs, and those who do work on ROWs.

Speaker Bio: Drew O'Neill has a B.S. in Business Logistics with a minor in Economics from Penn State University. Since the age of 17 he has worked part-time for Weeds, and full-time since 2006. He started as the service and sales manager for the Aston office and has since become the Vice President of Operations. As a licensed applicator in various categories including 5,6,7,9,10,18,28 in PA and a wide range in multiple states in the mid-Atlantic region. He splits his time between office and field duties including sales and specialty applications. With 19 years of on the job training, he has become an expert in a wide range of herbicide application and techniques. Weeds Inc. specializes in contractual spraying in a wide range of industries including bareground weed control, field spraying, turf management, and invasive weed management.
Tree Risk Assessment for Utilities
Geoff Kempter
Commonwealth Salon 4

Description: Utilities have been in the business of reducing risk from trees since the first overhead communication lines were strung in the 19th Century. Today, industry standards, best management practices and qualification programs provide utilities with the ability to focus their efforts more on the trees and branches most likely to fail and cause a service interruption. This presentation shows how to use tree risk assessment standards, BMPs and TRAQ to improve the effectiveness of utility VM programs.

Speaker Bio: Geoff Kempter is Technical Services Manager for Asplundh with 30 years of experience in utility arboriculture and urban forestry. He is co-author of Utility Arboriculture, the Utility Specialist Study Guide, and author of the ISA Best Management Practices Guide for Utility Pruning. Geoff teaches tree risk assessment qualification (TRAQ) for the ISA. He is currently Vice President of the Utility Arborist Association, has served on the ANSI A300 Tree Care Standards Committee since 1996, and on the ISA Board, the TREE Fund Board and as ISA Certification Chair. He holds a degree in Natural Resources from the University of Michigan. Geoff is also a past President of the Penn-Del Chapter.

Plant Health Care

Tree and Shrub Pest Update
Sandra Feather
Freedom Hall A

Description: In this presentation, we will focus on common insect, disease, and environmental issues that we saw on woody plants in 2019 and look at some problems that could be in our future such as beech leaf disease and box tree moth caterpillar. Phenology, growing degree days, scouting, and IPM will be emphasized.

Speaker Bio: Sandy Feather is the ornamental horticulture educator for southwestern Pennsylvania with the Penn State Extension. She develops and delivers research-based educational programs for landscape professionals as part of Penn State Extension's Green Industry Team. These include sessions to help participants obtain professional certifications such as certified arborist and licensed pesticide applicator; plant identification and usage; and identifying and managing plant problems.

Spotted Lanternfly Update and Treatment
Amy K. Korman / Bob Dolan
Freedom Hall A

Description: The Spotted Lanternfly has been in Pennsylvania for at least five years and has now spread to other states. Its status evolved from a relatively unknown nuisance of woody plants to an invasive species that is a threat to billions of dollars of the commonwealth's economy. State and federal assets have been fighting it for years. Everyone is talking about it. However, what can we (you) do about it? Penn State's Amy Korman and Rainbow Tree Care's Bob Dolan will present on what we have learned about the lanterfly in the past few years and how to treat this pest as part of a PHC-type program. We know what products work to kill it and, if we understand more about its biology, it will help us understand and control it. The bad news is that there is a lot of bad news focusing on impractical solutions - information that is not helpful to the arborist, homeowner, the nursery, grape growers, and others. "What We've Learned" will highlight the good news on lanternfly biology and management, as well as answer your questions about how best to treat this emerging pest, or not, depending on your particular situation.

CEU's: Pest Ed
Speaker Bio: Amy Korman is a native of Lancaster County and a graduate of Penn Manor High School, Millersville, Pa. She received her B.S. (biology) from Juniata College and M.S. and Ph.D. degrees (entomology) from North Dakota State University and Louisiana State University, respectively.

She joined the Penn State Extension Green Industry Team following her military retirement in 2017. She is a member of the Entomological Society of America (ESA), the American Mosquito Control Association, Pi Chi Omega, and the American Society of Tropical Medicine and Hygiene. She is Board Certified under the ESA certification program. She is also a member of the Order of Military Medical Merit.

Speaker Bio: Bob Dolan is the Mid-Atlantic Territory Manager for Rainbow Treecare Scientific Advancements. As a former Landscape Business Development Manager for one of the country's largest landscape maintenance companies, Bob looks forward each day to bringing first class customer service and knowledge to his clients. Bob has an education from Penn State University in Agricultural Science and extensive industry experience in both the field and as a manager.

Description: Scale insects are often some of the most difficult group of insect pests managed in either landscape or nursery settings. These insects are small and are frequently overlooked by homeowners, arborists, or landscape specialists until the impacts of their feeding is readily noticed by casual observation.

This presentation will review the differences between these groups and discuss other scale species that may present challenges to landscape professionals. For example, the crape myrtle bark scale is an invasive species infesting crape myrtles in the South. It has not been located in our area yet, but will be discussed to increase awareness.

Also discussed are common armored and soft scale species and insecticides available for managing these pests. Soft scale species include cottony camellia/taxus scale, calico scale, lecanium scales, and magnolia/tuliptree scales. Armored scale species to be discussed include Japanese maple scale, white peach/white prunisola scales, greedy scale, oystershell scale, and euonymus scale.

Speaker Bio: Brian graduated with a Ph.D from Ohio State University. His research focused on non-target impacts of insecticides, biological control, and the turfgrass ecosystem. He briefly worked at TruGreen Chemlawn as a research scientist and a spray technician before he began post-doctoral work with the USDA-ARS Small Fruit & Tree Nut Laboratory in Byron GA working on biological control of peach and pecan pests. In 2006, he started at the University of Delaware as the Ornamentals IPM Extension specialist where he had conducted research projects relevant to landscape, nursery and greenhouse pests. Some of his projects have examined armored scale, soft scale, redheaded flea beetles, azalea lace bugs, spider mites, borers, mealybugs, thrips, whiteflies, root aphids, and Japanese beetles.
Description: IML wood inspection drills, both the digital PD-Series and wax paper version, the F-Series, will be demonstrated live on a wood product to show how the resistance technology is used by arborists today and how they conduct and interpret the results. The inspection drills are developed to be minimally invasive on live wood all the while capturing some of the most accurate data of the internal workings of the tree both above and below ground. Team members, Kevin and Amber, will present an overview of how the drills operate along with graphs and real-life examples of reporting options and data taken by IML and our customers in their tree inspections.

A common procedure of using the inspection drill includes conducting your visual tree assessment and determining areas of concern seen from the outside where the inspection drill can provide the next step and capture data of the state of the wood internally by drilling down into the trunk, branches or roots of the tree. The drilling, using a 1/10" bit, provides a graph and supportive evidence to help determine the state of the wood.

Speaker Bio: Kevin Keenan completed a career in Law Enforcement and retired as a Police Chief. During his years in law enforcement he worked part time for Alamon where he worked with the IML F-Series drills and PD Series drills inspecting poles for the local phone company in New Hampshire. During this time he gained the skills and working knowledge of the IML equipment and started his education on the utility system. Spending time learning about utility poles and everything attached to them and why to greater assist him with inspections. During his time with Alamon he inspected tens of thousands of poles utilizing the IML drills. After retiring he works full time for IML-North America as their director. Kevin is responsible for the sales, training and some repairs of the drills. He travels North America to meet with utility companies, arborists, wooden bridge engineers and anyone interested in the use of the IML equipment. Kevin has been extensively trained in the use and repair of the IML equipment.

Speaker Bio: Amber Howie came to work for IML a few years ago as the marketing manager. During her time with IML she has taken on the responsibility of learning how the IML drills work and has the gained the skills and confidence to use the drills in the field, attend trade shows, demos and provide trainings for customers. Amber continues to develop her skills and knowledge of the utility system. Amber serves a reservist in the United States Coast Guard during her spare time as a public affairs specialist. Amber is responsible for the IML marketing and sales support. She researches and organizes IML’s attendance at trade shows across North America as well as help support customers with software inquiries.

Description: The use of battery operated chainsaws and other tools is becoming more common in arboriculture. This session will cover the benefits and drawbacks to this type of equipment as well as safety concerns.

Speaker Bio: Megan Bujnowski is a Product Training Specialist with the Husqvarna Group. Megan has an Associates Degree and a Bachelors Degree in Forestry from the University of New Hampshire. She has been with Husqvarna for the past two years and has recently presented at the ISA's Conference in Knoxville, TN.
Maintenance of the Urban Forest

Description: The urban forest affords great aesthetic and ecological reward. It also is expensive to maintain, potentially damaging to people and property, and, on occasion, the destroyer of neighborliness and common courtesy. Questions concerning responsibility for maintenance of the urban forest abound. This presentation will attempt to answer some of them. It will suggest ways in which arborists can protect themselves from legal liability. Finally it will look at the role of arborists as expert witnesses.

Speaker Bio: Gilbert High Jr. is a senior partner in the regional law firm of High, Swartz LLP with offices in Norristown and Doylestown, Pennsylvania. He is a graduate of Princeton University and the University of Pennsylvania Law School. Currently the majority of his practice is concentrated in the field of municipal law. He is a well-known speaker in the arboricultural community. He has many years of experience in dealing with legal liability issues faced by homeowners, arborists, municipalities and utilities, including issues related to the maintenance of the Urban Forest, a subject on which he has lectured nationally.

First Aid / CPR

Description: First Aid and CPR certification course. Pre-registration is required.

Speaker Bio: John Berry is with American First Aid.

General Sessions

1:30 PM - 2:30 PM Housing Developers

Description: The urban forest that we observe and experience today is an inherited landscape, shaped by the legacies of past events and decisions. Current species composition reflects choices made many decades prior. This presentation explores the history of the London plane tree (Platanus x hispanica, syn. Platanus x acerifolia) in Philadelphia. The London plane is said to be the most ubiquitous urban tree in the world, and particularly widespread along city streets. The story of the London plane in Philadelphia is a compelling one, and illuminates intersecting drivers that have shaped street tree composition, with sometimes competing priorities among various actors.

Speaker Bio: Lara Roman is a research ecologist with the USDA Forest Service, Philadelphia Field Station. She also grew up in Philadelphia, and now studies the trees in her hometown and other cities. Specifically, she studies the temporal dynamics of urban forests, including tree mortality and growth, canopy cover change, historical development of urban forests, species composition change, and citizen science monitoring. She has been funded by the National Socio-Environmental Synthesis Center, the TREE Fund, and the Garden Club of America. She holds a PhD from the University of California, Berkeley, in forest ecology, and a Bachelors in Biology and Masters of Environmental Studies from the University of Pennsylvania.
Description: Anyone that has ever handled chemicals – from 2-stroke fuel mixture to insecticides- has had the chance to come in contact with the material. This presentation will discuss the relationship between hazard, toxicity, and exposure. Furthermore the talk will cover the types and effects of pesticide exposure, and the proper PPE needed to reduce the risk.

Speaker Bio: Tracey Harpster is a retired Extension Educator in the PSU College of Ag Science. Tracey has experience in agronomic, turf, ornamentals, and nursery production and maintenance systems. Basically if it is green on top and roots on the bottom she has worked with it.