

RIGHT OF WAY (ROW) VEGETATION MANAGEMENT: AN ECOSYSTEM OUTLOOK



OVERVIEW

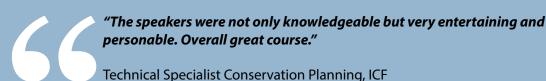
Many items impact the reliability of a utility system and vegetation is typically one of the largest. Our industry often discusses best management practices, new technologies and tools available to improve our vegetation management programs, but we rarely are able to get together in the same room to discuss solutions. By focusing on a systematic approach to right of way integrated vegetation management, this program will focus on sharing advanced solutions that have worked for complex problems in vegetation management facing utilities in the United States.

The goal of this symposium is to look at how specific challenges impact reliability and how utilities can reduce that impact, specifically the role of utilities in environmental stewardship along the ROWs.

Right of Way (ROW) Vegetation Management: An Ecosystem Outlook symposium will bring together speakers from VM groups within electric utilities companies, experienced arborists/tree consultants and vegetation management software specialists to identify how to improve utilities outage response, project planning and forecasting and overall environmental protection based on regional and seasonal changes.

LEARNING OUTCOMES

- Discuss how technology and data analytics are changing IVM and UVM standards
- Demonstrate how IVM and sustainability go hand in hand
- Explain techniques to manage ROWs in eco-sensitive areas
- Explain pollinator health and identify the challenges
- Explain the benefits associated with an ecosystem based approach to IVM
- Explain the value and necessity of environmental stewardship in the ROW
- Examine the positive and negative effects of herbicides in ROW
- Identify and explain FERC Standards in IVM



AGENDA

THURSDAY, JANUARY 16, 2020

7:30 – 8:00 am Registration & Continental Breakfast

8:00 – 8:10 am Welcome and Introduction

8:10 – 9:00 am Integrated Vegetation Management Best Practices

Energy corridors thread the landscape and provide cumulations of many miles of open tracts and flyways. These right of ways (ROW's) offer easy mobility to organisms from one location and/or geography to another. In many cases, land management techniques employed in these corridors focus on integrated vegetation management (IVM) techniques and coupled with best practices often subscribe to a higher standard for ecosystem health and services. Depending on adjacent land usage to ROW's, differing tactics sometimes may occur. For example, when adjacent lands are natural area tracts that abut the ROW, vegetation managers should employ mitigation management to restore or maintain any natural resource. This study presents data on several instances where ROW corridors may bisect or abut with natural areas and investigates plant species composition, dynamics and resulting invertebrate populations under differing tactics. By investigating the best management practices (BMP's) in use in either situation and analyzing the green space, we can determine effectiveness of strategies in providing green spaces that may promote more native species and be more sustainable in energy corridors.

9:00 - 10:00 am Herbicides in ROW - Where and When

To determine the best way to solve a problem with unwanted vegetation with the lowest practical environmental impact, ROW stewards must implement a risk-based approach to balance the positive and negative environmental effects of the chemicals typically used.

10:00 – 10:20 am Networking Break

10:20 am - 12:00 pm Pollinator Health in Utility Corridors

Utility corridors offer vast resources of green spaces, many often providing ideal habitat for native flora and fauna. Management of these green spaces are often governed by best management practices and integrated vegetation management (IVM) considerations. Pollinator health in these rights of ways (ROW) has become a much- emphasized metric to ecosystem health and worthiness and an indicator of how well we are doing and what we are leaving behind. This presentation looks at compliance in IVM tactics and bridges the BMP's we employ today with what more is needed to be prepared to face a future of increased challenges. A video of pollinators will be presented as part of the presentation.

12:00 – 1:00 pm Group Luncheon

1:00 – 2:30 pm UVM: Utility Vegetation Management-Technology and Work Planning Advancements

The proper distribution program assessments and business plans include diagnostic program assessments, statistical sampling to document vegetation workload, and development of comprehensive business plans. ECI will share a unique management optimization model that has been developed to assess alternative management strategies and their implications for return on investment and reliability, which results in alignment with performance goals.

AGENDA

THURSDAY, JANUARY 16, 2020 (CONTINUED)

2:30 - 3:30 pm Managing for Sustainability in Utility Corridors: Restoration of Native Trees in Rights of Ways

The right tree in the right space, as we know is a golden rule especially in the areas under wire or near off-corridor areas and in natural areas. Tree restoration occurs in many areas in community spaces when trees are lost. Insects such as the Emerald Ash Borer and diseases such as Dutch Elm Disease and Oak Wilt may take a toll on community trees and have an effect on the tree population that warrants restoration activities. This presentation looks at tree species characteristics from a biomechanical standpoint and/or wind resistance after restoration and also delves into the growth characteristics of several commonly planted species. The added benefits of native trees and potential for early season blooms that may provide pollen and nectar for early arriving pollinators are also compared for trees that occurred before restoration and upon planting with native species.

3:30 - 4:00 pm **Round Table Discussion**

Wrap Up and Adjourn 4:00 pm

FRIDAY, JANUARY 17, 2020

7:30 - 8:00 am **Continental Breakfast**

8:00 - 9:30 am **Emerging Issues and Trends in ROW-IVM**

Leveraging mobile technology, electronic data and geographical information systems (GIS), utility foresters can help utility IVM leaders better plan how their maintenance dollars should be allocated. Additionally, they can provide better direction to field crews on where priority work exists. With a proper field data collection system, findings can help IVM leaders budget and forecast to ensure dollars are spent on priority maintenance. Plus, information can be accessed from any web-enabled device.

9:30 - 10:30 am Partnerships in Nature and how Energy Corridors Can Help

Tree and vegetation are a ubiquitous part of and provide ecosystem value to our energy corridors and rights of ways (ROW). While the role of ROW's in habitat creation is not new, increased focus in IVM and the added role of community partnerships with state and local bodies and utilities make for relationships that ultimately add value to these greenspaces. Many Utilities are prioritizing towards a healthier and more native ROW. This data driven initiative strives on information gleaned from current land management tactics, regulatory considerations and proposes to offer to the industry added value of ROW management that provide greenspaces and natural areas that are sustainable and maximize its ecosystem worth. Partnerships with entities such as the Natural Area Association also dovetails with the wider objective of cross-pollinating land management across industries.

10:30 - 10:50 am **Networking Break**

10:50 am - 12:00 pm Case Studies of Natural Areas Intersecting Utility Energy Corridors

Data is presented on emergent plant species that emerge in several regions of North America including Trumbull County, OH and Hamilton OH, on case studies where woody, invasive and right's of way (ROW) non-compatible material is removed by mechanical means or with herbicides or in the aftermath of wildfires.

12:00 pm Wrap Up and Adjourn

SPEAKERS



Anand Persad Ph.D.

Manager of Plant Sciences, Davey Institute

Dr. Persad pursued postdoctoral studies in 2001 -2003 at the University of Florida, Gainesville- in Invasive Species, Insect Molecular Genetics, Hi-Fidelity PCR. He has a PhD from the University of the West Indies in Entomology. Dr. Persad leads a team of industry focused educators and researchers at the Davey Institute, Kent, OH as Manager of Plant Sciences. His current activities include: Chair of the Sustainability Working Group (SWG) of the Davey Institute; Arboriculture and Improving Tree Care Technology; Tree Biology, Structure and Biomechanics; Restoration of Urban Landscapes; Invasive Species Research; Ecology and

Planning in Urban Landscapes Globally; Vertebrate and Invertebrate Interactions with Community Green Spaces. He is an Adjunct Professor at Kent State University Kent, Ohio: Department of Biology 2012- current and contributes regularly as a member of the Horticultural Advisory board. He has been an avid researcher and educator in the field of arboriculture within the Davey Tree Expert Company for about 11+ years and have been an invited speaker to numerous ISA chapter meetings, the ISA national meetings, ISA-Bio-Mechanics Weeks and the Utility Arborists Association meetings along with several related international events. He is the author of several peer-reviewed manuscripts and is instrumental in transferring technology to the broad tree and turf care industry groups through collaborative research and joint teaching with several national and international agencies.



Gabriel Hack
Project Developer, Davey Resource Group

Gabriel Hack is a project developer for DRG's Pacific Region with a focus on the ongoing and successful partnership with Pacific Gas and Electric Company. He is responsible for developing, improving, and expanding new and existing relationships to better facilitate UVM success and meet the growing needs of the industry. Gabe leverages his 10 years of experience and a network of nearly 200 professional foresters and program managers to provide vegetation management solutions throughout California. Gabe joined Davey Resource Group in 2009 as a Consulting Utility Forester in PG&E's Central Coast division, and has a wide breadth of industry experience holding such elevated posts as Customer Care Specialist, Enhanced

Reliability forester and supervisor, and as an Estimating Arborist for electrical construction projects. He also has many years of experience in storm restoration operations as a Vegetation Resource Coordinator and Emergency Standby/Assessment forester. He most recently served as Project Coordinator of the North Bay division before being elevated to his current role. Gabe is an ISA-certified arborist and holds a Bachelor's Degree in Plant Sciences from the University of California at Santa Cruz.



Scott Rogers
Chief Technology Officer, ECI Consulting

Scott provides executive level consulting services to assist customers as they develop strategies to deploy advanced technologies including remote sensing for vegetation and asset management, geospatial software applications, Unmanned Aerial Systems (UAS) and others.

Scott has over 30 years of experience in operations and technology sectors, specifically within the utilities industry. Mr. Rogers is a hands-on leader, providing leadership and support to Sales, Marketing, Operations, and Corporate Development. Mr. Rogers has a successful track record of applying his deep

utility experience to establish creative, risk-balanced strategies for process optimization that result in strong financial returns and improved customer satisfaction.

Prior to joining ECI, Scott was Senior Vice President of Product Management and Strategy at GeoDigital, a leader in 3D services and geospatial intelligence software. Prior to GeoDigital, Scott was CEO of Powel Incorporated, a developer of mobile work management software for engineering and vegetation management. Prior to Powel, Scott was a 20-year veteran of Allegheny Energy, where he held roles in Engineering and IT.

Scott graduated from the University of Pittsburgh with a Bachelor's Degree in Electrical Engineering. Scott is a 13-year member of the DistribuTECH advisory committee.

SPEAKERS



Mike Sultan
Project Developer, Davey Institute

Michael Sultan joined Davey in 2011 as a project developer. In this role, Sultan partners with energy delivery companies and communities to manage tree and land resources in the central Southern region. Sultan acts as a positive link between public utilities, energy delivery companies, right-of-way managers and the communities they serve. In addition, he manages utility right-of-way corridors to provide important environmental benefits and critical wildlife habitats. Before working with public utilities and energy delivery companies, Sultan spent more than a decade as an urban forester in Texas. With nearly 20 years of experience practicing community forestry and right-of-way land management, Sultan

understands the economics and social implications of being a right-of-way steward.

Sultan holds a bachelor's degree in forestry from Texas A&M University. He is an ISA Certified Arborist® and Municipal Specialist and a graduate of the Municipal Forestry Institute. Sultan is a past president and board director of the International Society of Arboriculture Texas Chapter and currently serves as chair of the Utility Arborist Association event committee and strategic planning team.



Anna De Toro
Research Scientist, Davey Tree Expert Company



Sara Dreiser Project Manager, Davey Resource Group

Sara Dreiser is the Upper Midwest Project Manager for Davey Resource Group. Sara has been with the Davey Resource Group since November 2012. Sara began as a distribution field utility forester in Northern Illinois, and has hands on experience work planning, performing quality control audits, and interacting with homeowners. Sara moved into the Quality Assurance Field Supervisor role before taking on her current position. Before coming to Davey Sara worked as a Research Assistant in Urban Forestry at The Morton Arboretum. Sara has presented as a guest instructor at the Davey Institute of Tree Science, and has attended many Davey trainings such as Safety Leadership, Personal Excellence, and Growing Leaders. Sara is an ISA Certified Arborist and has a Biology and Environmental Science Degree from Knox College.

INSTRUCTIONAL METHODS

This program will use PowerPoint presentations and group discussions, as well as active participation.

REQUIREMENTS FOR SUCCESSFUL COMPLETION

Participants must sign in/out each day and be in attendance for a minimum of four hours to be eligible for any continuing education credit.

IACET CREDITS



AUTHORIZED EUCI has been accredited as an Authorized Provider by the International Association for Continuing Education and Training (IACET). In obtaining this accreditation, EUCI has demonstrated that it complies with the ANSI/ IACET Standard which is recognized internationally as a standard of good practice. As a result of their Authorized Provider status, EUCI is authorized to offer IACET CEUs for its programs that qualify under the ANSI/IACET Standard.

EUCI is authorized by IACET to offer 1.0 CEUs for the symposium

EVENT LOCATION



Plaza Tower One Conference Center

6400 S Fiddlers Green Cir. Greenwood Village, CO 80111

The EUCI conference center is conveniently located adjacent to the Arapahoe at Village Center Light Rail Station, allowing easy access to and from DIA, Downtown, and Local Area Attractions.

NEARBY HOTELS

Each of these hotels offers a complimentary shuttle to and from the EUCI conference center.

Springhill Suites DTC 7900 East Peakview Ave. Greenwood Village, CO 80111

303-721-3321 .3 miles away

Wingate by Wyndham 8000 E. Peakview Ave. Greenwood Village, CO 80111

303-626-2641 .3 miles away

Hyatt Place DTC 8300 E. Crescent Pkwy Greenwood Village, CO

80111 303-804-7000 2.1 miles away **Hyatt Regency Denver Tech**

7800 E. Tufts Ave. Denver, CO 80237 303-779-1234 2.8 miles away

Denver Marriott Tech Center

4900 S. Syracuse St. Denver, CO 80237 303-779-1100 3.1 miles away

REGISTER 3, SEND THE 4TH FREE

Any organization wishing to send multiple attendees to this event may send 1 FREE for every 3 delegates registered. Please note that all registrations must be made at the same time to qualify.

REGISTRATION INFORMATION

Mail Directly To:

EUCI

4601 DTC Blvd., Ste. 800, Denver, CO 80237 OR, scan and email to: conferences@euci.com

WWW.EUCI.COM

p: 303-770-8800 f: 303-741-0849

EVENT LOCATION

Plaza Tower One Conference Center

6400 S Fiddlers Green Cir. Greenwood Village, CO 80111

See nearby hotels on page 7

PLEASE REGISTER

RIGHT OF WAY (ROW) VEGETATION MANAGEMENT: AN ECOSYSTEM OUTLOOK SYMPOSIUM

JANUARY 16-17, 2020: US \$1395 Early bird on or before January 10, 2020: US \$1195

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Company			
What name do you prefer on y	your name badge?		
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List any dietary or accessibility	y needs here		
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Name on Card		Billing Address	
Account Number		Billing City	Billing State
Exp. Date	Security Code (last 3 digits on the back of Visa and MC or 4 digits on front of AmEx)	Billing Zip Code/Postal Code	
OR Enclosed is a check for \$	to cover	registrations.	

Substitutions & Cancellations

Your registration may be transferred to a member of your organization up to 24 hours in advance of the event. Cancellations must be received on or before December 13, 2019 in order to be refunded and will be subject to a US \$195.00 processing fee per registrant. No refunds will be made after this date. Cancellations received after this date will create a credit of the tuition (less processing fee) good toward any other EUCI event. This credit will be good for six months from the cancellation date. In the event of non-attendance, all registration fees will be forfeited. In case of course cancellation, EUCI's liability is limited to refund of the event registration fee only. For more information regarding administrative policies, such as complaints and refunds, please contact our offices at 303-770-8800. EUCI reserves the right to alter this program without prior notice.

