

SHADE 2010 – August 13th at the Renaissance Glendale Southwest Horticulture Annual Day of Education

Pest Management & Plant Health Track

Session: *New Weeds & New Tricks for Weed Control*

Presenter: Kai Umeda, M.S., Area Extension Agent, Turfgrass Science at U of A Cooperative Extension

Kai Umeda received his Master's degree in Plant and Soil Sciences from Southern Illinois University. Currently, he is the Area Extension Agent, Turfgrass Science, for the University of Arizona. He develops and conducts an educational extension program to assist professional turfgrass managers in solving priority problems using research based information and technology. A county-based applied research program addresses current and future turfgrass industry needs and areas for improvement in desert turfgrass management. Weed control and pest management are areas of emphasis with additional collaborations with research faculty and extension specialists at the Karsten Turf Research Center. Research and technology information transfer is coordinated with research faculty and extension specialists and then transmitted through newsletters, research reports, seminars, field days, and electronic media. Communications and interactions with other local, state, and federal agencies and organizations are conducted to promote and ensure the future viability of turfgrasses for landscapes, recreation, and sports in the desert.

Session Description: Many new weeds are appearing around turf and landscapes in central Arizona and many new herbicides are being introduced into the marketplace. Proper identification and appropriate control measures will be described for weeds.

Session: *Managing Ponds: Weed and Algae Control*

Presenter: Dr. Rick Amalfi, Lake Management & Effluent Toxicity Testing at Aquatic Consulting & Testing, Inc.

Rick currently works at Aquatic Consulting & Testing (AC&T), Inc. as a Lake Management and Effluent Toxicity Testing consultant. AC&T is a small business established in 1988 to provide expertise in aquatic biology and chemistry. Rick is a NALMS-certified professional lake manager and is available for lake and reservoir projects. He is a state-licensed aquatic pesticide applicator for aquatic weed, algae, and insect management.

Session Description: Many aquatic weeds and algae invade ponds and lakes to affect water quality and fish and other organisms. Chemical and cultural control techniques will be discussed to optimize pond and lake water quality.

Session Part 1: *From Cradle to Grave: Exploring the Pesticide Path*

Presenter: Vince Aguiar, Dow AgroSciences

Vince is a native of Northern California and graduated with his Bachelor of Science Degree in Agricultural Management from Cal Poly University, San Luis Obispo in 1978. Immediately after graduating, Vince accepted a sales position with ELANCO Products Company. He has since held various positions with ELANCO, DowElanco, and Dow AgroSciences throughout the West Coast. He is a licensed pest control advisor for both specialty and agricultural markets. He is the author of several continuing education approved

courses discussing weed control as well as articles for a variety of industry-related publications. He has served on the Board of Directors of the Cactus and Pine Golf Course Superintendents Association as well as the Arizona Agricultural Chemical Association. He is a member of numerous industry associations including three golf course superintendent chapters, the Southwest Vegetation Management Association, New Mexico Vegetation Management Association, Arizona Landscape Contractors Association, Arizona Nursery Association, and others. Currently, Vince is a field specialist with Dow AgroSciences covering the turf and ornamental, vegetation management and range and pasture market segments in Arizona, New Mexico, Nevada, Southern Utah, and the Palm Springs area in California.

Session Description: Pesticides undergo rigorous testing and development from the test tube to end-users. Toxicity and hazards to non-target organisms, short-term and long-term effects in the environment and to humans are investigated thoroughly. All of the paths to development of a product will be described.

Session Part 2: *Regulatory and New Pest Update*

Presenter: John Caravetta, Arizona Department of Agriculture

John received his Bachelor and Master's degrees in Agronomy from Purdue University in Indiana. Following completion of his Master's program, John spent five years as a County Agricultural Extension Agent in Indiana's largest agricultural county. Following development of a sound background in production agriculture, John joined American Cyanamid Company, a \$1 billion global agricultural chemicals enterprise. John ended his career with American Cyanamid as their Western States Regional Manager before coming to the Arizona Department of Agriculture in 1998. John has been with the department eleven years as the Associate Director overseeing the Plant Services Division. John currently oversees the Plant Services Division and agency Human Resources.

Session Description: Explore seen and unseen pests of current or emerging importance to the nursery trade and viability of the industry and how regulatory strategies involving industry stakeholders fit into the mix to address these threats.

Session: *New Products to Tackle Old Diseases*

Presenter: Gabe Towers, Plant Pathologist at Target Specialty Products

Gabriel Towers is currently employed at Target Specialty Products as a Plant Pathologist. Before joining Target, he worked for the University of Arizona, Maricopa County Cooperative Extension as a turf research specialist. He has been involved with turfgrass education and research for the past 10 years. Towers is currently completing a Master's of Science degree in Plant Biology and Pathology from Rutgers University. He graduated from The College of New Jersey with a Bachelor of Science degree in Biological Sciences.

Session Description: The presentation will include the basics of plant pathology; the disease triangle and disease cycle. It will then move on to discuss the concepts of turf diagnostics. In this portion of the presentation we will look at the culture of pathogens, concept of incubation, and incubation kits. We will discuss integrated pest management and the different strategies of control. We will have a more in depth look at advances in fungicide chemistries and how it affects turf diseases.

Session: *Utilizing Beneficial Insects and Organisms*

Presenter: Rob Deacon, Technical Sales Representative at Lebanon Seaboard Corporation

Rob received a Bachelor of Science (Agr.) degree from the University of British Columbia, Canada Past President of the Washington Floricultural Association Reside in Chandler, Arizona. He is currently employed by Lebanon Turf as a Technical Support Representative for the ROOTS and Emerald Isle product lines (Western 12 states). Rob has over 25 years of experience working in the manufacture and distribution of plant protection products for the landscape, nursery, greenhouse, and turf markets.

Session Description: Many microorganisms live in the soil and offer benefits for plant growth. Bacteria, fungicides and other organisms create nutrients and contribute to organic matter content in soils. Products may be added to soils to enhance microbial benefits.

Session: *Sea Shore Paspalum for Turf: What's the Story?*

Presenter: Dr. David Kopec, Extension Turfgrass Specialist, Plant Sciences Department at University of Arizona

Dr. Kopec received a Ph.D. in Turfgrass Science Breeding, Science and Culture from the University of Nebraska, Lincoln. He also has a Master's Degree in Turfgrass Breeding and Pathology from Rutgers University. At the University of Arizona, he teaches Golf and Sports Turf Management, Bermudagrass Greens Management, Irrigation Scheduling and Irrigation Water Quality. His research interests include weed control, specie and variety adaptation, overseeding and spring transition, new specie development and desert turf management. He is an instructor for the Golf Course Superintendents Association of America for Water Quality, Irrigation Scheduling, and Bermuda Grass Greens Maintenance. Dr. Kopec has authored numerous articles for publications including *Turfgrass Science* and the *Agronomy Journal*.

Session Description: Sea Shore Paspalum is highly salt tolerant and may have niches in desert sites for turf. Insects, diseases and weeds may invade Paspalum but the extent is unknown in Arizona. Potential pests will be described.

Design Track

Session: *Envisioning the Future of the Urban Forest*

Presenter: *Richard Adkins, Forestry Supervisor for the City of Phoenix and Irene Ogata, Urban Landscape Manager for the City of Tucson*

Richard Adkins is currently the Forestry Supervisor for the City of Phoenix, Parks and Recreation Department. He has 15 years of Arizona experience in commercial and urban arboriculture. Additionally, Richard has worked with industrial and community forestry activities, and natural resource extension programming in Nepal, New Zealand, the Pacific Islands, Utah and the southern U.S.

Richard is a Certified Arborist with a MSc in Forestry from Utah State University and a BSc in Resource Management from Virginia Tech.

Irene Ogata is the Urban Landscape Manager for the City of Tucson, under the Manager's Office in the Office of Conservation & Sustainable Development (OCSD). A registered landscape architect, she worked in the private sector for over 20 years, with 10 years as the Principal of a small Planning and Landscape Architecture firm with offices in Tucson, Arizona and Santa Fe, New Mexico. Projects she managed included public participation; assisting communities prioritize and develop community goals, visions, implementation strategies, along with landscape master planning and construction documents. As the Urban Landscape Manager, a major task is to connect and work with various internal city departments (i.e., Transportation, Water, Parks & Recreation, Environmental Services, General Service, Planning & Development Services,

Housing & Community Services, etc), a city appointed Landscape Advisory Committee, City neighborhood associations, non-profits, surrounding jurisdictions and City Ward offices to coordinate city-wide urban landscape issues. A few recent projects include developing water harvesting curb cut standards; street landscape maintenance manual; ordinance and maintenance practices for buffelgrass and an amendment increasing trees in parking lots; conducting an annual Urban Heat Island Workshop and a street tree inventory.

Session Description: Phoenix and Tucson are reassessing the role of the urban forest in planning for future sustainable development. The urban forest is a critical component of each city's developing infrastructure; helping to provide economic, environmental and social benefits for the community. Considered a keystone to creating a sustainable city, enlightened management of the urban forest resource by municipalities, in partnership with other public and private organizations, is imperative for the health, safety and welfare of citizens. This session will present the current vision and approaches being initiated by Phoenix and Tucson for developing and maintaining this valuable resource.

Session: *Lessons Learned from International Design Projects*

Presenter: *Jay Hicks, Landscape Architect and Principal, Vice President at AECOM*

Jay Hicks is a principal with AECOM (EDAW) with over 25 years of experience in high plains and desert environments. His work over the past 20-years has been based in Phoenix, Arizona. He is involved in both planning and design on a variety of projects at a broad range of scales, including a 275-square-mile new community in the Phoenix Valley, over 120-miles of desert river master planning and site specific urban designs that incorporate the latest technology and design philosophy that result in high performance projects.

His most noted local projects include Kierland Commons, a mixed use development in Scottsdale, AZ; the West Valley Recreation Corridor, a 42-mile desert river restoration project; Westgate Town Center, entertainment district for the Coyote's (NHL) and the Cardinals (NFL) in Glendale, AZ; and the Civic Space Park in Downtown Phoenix featuring a major work by international artist Janet Echelman. His international work includes work in Mexico, Morocco, Dubai and Bahrain.

Mr. Hicks' current work includes Centennial Plaza for the City of Peoria's celebration of the State of Arizona Centennial and the Be'er Sheva River Park Master Plan in the Negev Desert, Israel.

Mr. Hicks is very involved in his community where he is involved in regional growth issues within the Phoenix metropolitan area and the State of Arizona. He is currently the Chair of Urban Land Institute's Reality Check Program, Chair Elect for Valley Forward, Phoenix Community Alliance Board Member and a Founding Board Member of Arizona State University's Master of Real Estate Development.

Session Description: Phoenix is recognized internationally as a leader in landscape design and cultivation within a desert environment. The mention of Arizona immediately conveys a base understanding in developing landscape strategies within arid climates. This session will provide an overview of lessons learned while working in Middle East environments and how our local landscape knowledge has evolved over the past 30 years to give the landscape architects, designers and contractors a unique approach in creating great places and landscapes. This session will review Best Practices that have been developed locally and how they apply internationally.

Session: *Commercial Scale Water Harvesting*

Presenter: *Tim Johnson, Director of Landscape Architecture at The Planning Center*

Tim Johnson, RLA, LEED is Principal at The Planning Center. Tim's responsibilities include oversight, expansion and marketing of the firm's Landscape Architecture division, environmental and riparian mitigation,

recreational planning and design, and visual communications. Johnson has been with The Planning Center for over six years providing creative solutions to clients' needs and honoring the environment within which projects are designed.

Johnson holds a Master's of Landscape Architecture and Environmental Planning from Utah State University and brings more than 13 years of experience to this position. He is also a registered landscape architect in Arizona, California, Utah and New Mexico.

Session Description: The City of Tucson has experienced and continues to experience substantial growth. Harvesting rainwater is a useful strategy for providing supplemental irrigation water to commercial landscapes, making more efficient use of the desert's most limited resource – water. Water resources sufficient to meet the City's growing needs need to be ensured. To that end, the City of Tucson, Mayor and Council adopted the Commercial Rainwater Harvesting Ordinance in October of 2008 to increase the use of harvested rainwater at commercial sites in Tucson and to decrease use of potable and reclaimed water supplies. The ordinance took effect June 1, 2010.

The Ordinance requires that 50% of the landscaping watering be provided through harvested rainwater. The ordinance was developed through a cross section of community stakeholders comprised of real estate and development professionals to non-for-profit housing providers and sustainability professionals.

Session: *Measuring Green: An Introduction to Sustainable Sites*

Presenter: *Angela Dye, President, Principal at A Dye Design*

Angela Dye is a LEED-accredited, licensed landscape architect (Arizona, Colorado, Utah, and Ohio) with masters of Landscape Architecture and Community Development and Planning degrees from the University of Colorado/Denver. She founded A DYE DESIGN in 1998, an urban design/landscape architecture firm specializing in context-sensitive transportation and transit, site design, and public art-oriented projects. She is the Immediate Past President of the American Society of Landscape Architects (ASLA).

Recent completed projects include the Central Phoenix/East Valley Light Rail project, Phoenix Convention Center (certified LEED Silver), State Route 179/Sedona All America Road, and Tempe Transportation Center (registered LEED Platinum).

Session Description: The Sustainable Sites Initiative™ (SITES™) is an interdisciplinary partnership led by the American Society of Landscape Architects, the Lady Bird Johnson Wildflower Center at The University of Texas at Austin, and the United States Botanic Garden to transform land development and management practices with the nation's first voluntary rating system for sustainable landscapes, with or without buildings. The SITES rating system represents four years of work by dozens of the country's leading sustainability experts, scientists and design professionals, as well as public input from hundreds of individuals and dozens of organizations to create this essential missing link in green design. During this session, we will discuss the role of landscapes and the rating system used to rank landscapes. We will discuss not only design elements but also green nursery practices.

Session: *Trash to Treasures: Infusing New Life into Residential Landscapes*

Presenter: *Janet Rademacher, Mountain States Wholesale Nursery*

Janet has worked at Mountain States Wholesale Nursery for 23 years. During that time, she has educated hundreds of landscape architects and designers in the Southwest about the beauty of desert plants. Janet is a graduate of the University of Arizona with a B.S. and a M.S. in Ornamental Horticulture. Her awards include

the “Master of the Southwest” award from Phoenix Home and Garden magazine, Outstanding Customer Service Award from the Arizona Landscape Contractors’ Association, and the Young Achiever Award from The University of Arizona College of Agriculture. Janet has contributed articles and photographs to publications such as Sunset Magazine, Phoenix Home and Garden magazine, and American Nurseryman Magazine.

Session Description: This presentation will look at new plant materials offering colors and characteristics unique to residential landscapes in the desert. It will be fun and interactive as renovated items are used to create new and innovative design ideas.

Trees and Plants Track

Session: *Planting Too Deep and Other Problems Below Ground*

Presenter: John Eisenhower, Certified Arborist and Treecare Safety Professional and Owner of Integrity Tree Service

John Eisenhower is the owner of Integrity Tree Service in Scottsdale, Arizona, the first tree care company in Arizona to receive Accreditation through the Tree Care Industry Association.

As a Certified Arborist, Master Gardener and Certified Treecare Safety Professional, John enjoys working with trees and helping others to care for them. He is Past President of the Arizona Community Tree Council, an organization dedicated to the planting and care of trees in communities throughout Arizona. John is a member of the American Society of Consulting Arborists and holds a degree in English Literature from Arizona State University.

Session Description:

Tree Problems and Our Approach to Dealing with Them

Trees have a wide variety of biotic and abiotic problems. These range from soil compaction to infertility, from insects to soil borne pathogens. Because the trunk, branches and leaves are easily seen, we often focus our attention on these parts of a tree at the neglect of the roots. A balanced approach to diagnosing plant problems considers both above and belowground plant parts.

Planting Too Deep

Planting too deep is a primary cause of tree decline and death. Because oxygen is essential for cell metabolism in root tissue, trees often struggle to stay alive when roots are buried too deep. When oxygen is lacking, roots don’t function at their optimum level. And when roots don’t work, the entire tree system suffers. As go the roots, so go the shoots.

Can Trees Adapt to Deep Planting?

Most trees don’t adapt well to deep planting. They begin to suffocate resulting in root dieback followed by corresponding dieback of foliage above. Some tree species adapt to deep planting by sending roots into the upper layers of soil where there is more oxygen. But these new roots often lose their normal outward orientation and can wrap around the main stem or buttress roots. So even if a tree survives deep planting, it may deal with future stem- and root-girdling roots.

Other Causes of Girdling Roots

Girdling roots can also be caused by poor nursery stock and improper installation practices. If undetected, girdling roots can result in tree decline or death.

Why are Trees Planted Too Deep?

- Trees are planted too deep for several reasons.
- Planting holes are often dug too deep at the time of installation. Unfortunately this is often done intentionally to help stabilize the tree.
- Finish landscaping can add soil over the top of the root ball. Even fine mulch like unscreened ¼” minus decomposed granite can be a problem.

- Tree wells built with excavated soil can erode causing soil to migrate back over the top of the root ball.
- Nurseries sometimes bury the root collar when bumping up a tree to a larger container. The result is that the tree is too deep even if the soil in the planting container is level with the surrounding grade.

Avoiding Planting Problems

- Be sure to look for the root collar before buying a tree to be sure it isn't too deep. If you don't see the flare, beware!
- Plant trees at grade, even a little proud to allow for settling. It has been said, "Don't plant trees; Plant roots."
- If applying mulch, only apply a thin layer over the original root ball planted at grade.
- Dispose of excess backfill soil. Don't build giant tree wells that tend to find their way back to the base of the tree.

Help is available!

- If root problems are identified early, there are remedial measures that can be taken.
- Trees planted too deep can be reset.
- Tree planted too deep can be re-landscaped.
- When girdling roots or other root malformations are found, they can be pruned out and corrected.

Air Technology

In the past, root collar examinations required hours of tedious work with hand tools. Invariably, damage to roots would occur while excavating around them. Air excavation tools now make it possible to examine a tree's root system quickly, safely and thoroughly without damage to the roots or underground utilities. Soil is displaced and a full view of the root collar can be seen within minutes. If girdling roots or other problems are detected, they can be dealt with immediately.

Session: *New and Intriguing Varieties of Agaves and Aloes*

Presenter: Chad Davis, Curator of Agavaceae, Aloaceae and Nolinaceae at the Desert Botanical Garden

Chad has been with the Garden since 2002. Prior to his promotion to Curator of Agavaceae, Aloaceae, & Nolinaceae in 2003, Chad served in the Security Department as a Ranger at the Garden.

As the Curator of Agavaceae, Aloaceae, & Nolinaceae, Chad curates and maintains three primary plant collections in the Garden. This entails tracking of collections, acquisition and propagation of suitable plant material, designing and planting of garden displays, and serving on internal Garden committees. He regularly works with volunteer groups, has obtained and maintains a Certified Pesticide Applicator License, as well as teaching in the Garden's Desert Landscaper School. Chad has designed and installed the New Arizona Agave Beds, expanded the Aloe Collection/display in the Garden, and overseen the design and installation of seasonal plantings in the Marshall Butterfly Pavilion. He has given numerous presentations to environmental groups and garden clubs such as the Arizona Native Plant Society, Central Arizona Cactus and Succulent Society, and McDowell Park Association, as well as leading a workshop during the Cactus and Succulent Society of America National Convention. He is a regular contributor to the Garden's Sonoran Quarterly, and has been appeared on local and nationwide television shows.

Chad received an Associates of Applied Science in Urban Horticulture from Mesa Community College, and is currently pursuing a Bachelor of Interdisciplinary Studies (BIS) degree combining the disciplines of Landscape Architecture and Urban Horticulture at Arizona State University.

Session Description: Agaves and aloes are fascinating plants that feature bold forms, dramatic colors, and a range of sizes and textures in our hot desert landscapes. This vast array of size, color, and form makes them useful both as accents, and as specimen plantings. This presentation will focus on some spectacular, yet underused agaves, and beautiful and durable aloes that can tolerate our climatic extremes and offer additional

layers of colors, interest, and enjoyment. We will discuss preferred site selections, maintenance practices, and potential cultural and pest problems of these amazing plant groups. Special attention will be given to large arborescent (tree-like) aloe species.

Session: *Arboriculture Starts in the Nursery: Improving Root Systems of Container – Grown Trees*

Presenter: Brian Kempf, Director of the Urban Tree Foundation

Brian Kempf is the director of the Urban Tree Foundation, an organization dedicated to improving the state of California's urban forest. He has formed a work group, which drafted the statewide tree specifications for nurseries and strategies for nursery production, and provides education for tree growers as well as for the buyers. Brian speaks regularly for tree industry professionals on the subjects of Nursery Trees, Tree Pruning, general tree care, and urban forestry related topics. In his own city of Visalia, CA, Brian has planted approximately 10,000 trees. Brian received a degree in Geography with an emphasis in Regional Analyses from the University of California, Davis.

Session Description: The importance of young tree structure both above and below ground is leading to changes in nursery tree production. The presentation shall cover the following:

Root Production the problems and Problems - State of the industry in regard to tree production; Root systems in nature: what they look like and how they differ from planted trees; Root problems in landscapes originating in the nursery; Growing good root systems in the nursery: containers types, timing, root pruning and more; Growers perspective, the changes being made in the industry. Root deformities: are they really a problem?

Pruning for Structure: Problems and Solutions - Pruning strategies for developing strong crown in young nursery trees; Pruning strategies for developing strong crown in larger nursery trees;

A brief discussion of the documents entitled "Guideline Specifications for Nursery Tree Quality" and the "Strategies for Producing High Quality Container Root Systems, Trunks, and Crowns."

Session: *Cool Plants for the Hot Desert*

Presenter: Janet Rademacher, Director of Business Development at Mountain States Wholesale Nursery

Janet has worked at Mountain States Wholesale Nursery for 23 years. During that time, she has educated hundreds of landscape architects and designers in the Southwest about the beauty of desert plants. Janet is a graduate of the University of Arizona with a B.S. and a M.S. in Ornamental Horticulture. Her awards include the "Master of the Southwest" award from Phoenix Home and Garden magazine, Outstanding Customer Service Award from the Arizona Landscape Contractors' Association, and the Young Achiever Award from The University of Arizona College of Agriculture. Janet has contributed articles and photographs to publications such as Sunset Magazine, Phoenix Home and Garden magazine, and American Nurseryman Magazine.

Session Description: This presentation will look at new plant materials offering colors and characteristics unique to residential landscapes in the desert. It will also describe diseases and pests that are a potential threat in these materials and how you can combat them.

Session: *Pruning: Fundamental Skills for Success*

Presenter: Jack Kelly, M.S., Commercial Horticulture Agent at the U of A Extension

Jack is currently employed as Commercial Horticulture Agent by the University of Arizona and the Pima County Cooperative Extension in Tucson. He offers pruning and tree care classes as part of the SmartScape (for professional landscapers and maintenance professionals) in cooperation with the University of Arizona and the City of Tucson Water Conservation Office. He also offers classes to Master Gardener trainees in the areas of pruning, fertilizers, cactus and succulents, and plant propagation and other horticultural topics.

Jack works closely with landscapers, nurseries, property management companies, schools, municipalities and commercial property owners on problems dealing with landscape maintenance, plant care and irrigation.

Session Description: Pruning Basics is an introductory presentation on how to correctly prune a tree. You will learn why we prune trees and shrubs, what the terms included bark, branch bark ridge, branch collar, callus, and other terms commonly used in the trade. You will get an opportunity to see good pruning and incorrectly executed pruning cuts, the effects of topping, shearing and leaving unsightly stubs. It is a good refresher class for those with some pruning experience and an excellent introductory presentation for novice maintenance personnel.

Irrigation Track

Session: *Evaluating Irrigation Systems*

Presenter: Bryan Condray, Irrigation Division Manager at DLC Resources

With over 20 years in the landscape installation and maintenance industry, it's reasonable to assume one might earn an industry certification or two. Bryan Condray has acquired enough certifications that it would require two business cards to list them all, thus his title of "Mr. Acronym."

Bryan is a Certified Backflow Tester through Piping Industry and Education (P.I.P.E.), Certified Irrigation Landscape Auditor and a Certified Irrigation Contractor, both through the Irrigation Association (I.A.), and Maxi Com Level 1 and Level 2 Certified. He's also one of a small handful EPA Watersense Partners in the landscape business in the state of Arizona.

A "water guy" through and through, Bryan has also found time between his duties as DLC's Irrigation Operations Manager to become an ISA Certified Arborist, AZ OPM Certified Spray Tech, 301 Dust Control Certified, and Smartscape Certified.

Session Description: This presentation discusses the importance of constant irrigation system evaluation to prevent inefficiency, unsightly turf and plant material, and costly water bills. Nothing beats putting in the field work, and this class focuses on recognizing and solving problems with your irrigation system in the field.

Session: *5 Ways to Increase Irrigation Efficiency*

Presenter: Jeffery Knight, Central Region Education Manager at Ewing Irrigation

Jeffrey Knight is from Austin Texas and is the Central Regional Education Manager for Ewing Irrigation. He has been in the irrigation industry for 20 years. 10 of those years were spent as an irrigation contractor. He has taught irrigation training courses for over 12 years. Jeffrey has a bachelor's degree in Biology and Secondary Education. He holds the Irrigation Association's certifications for Certified Irrigation Contractor, Certified

Irrigation Designer, and Certified Landscape Irrigation Auditor. He is a Texas Licensed Irrigator and licensed Backflow Prevention Assembly Tester.

Session Description: 5 Ways to Increase Irrigation Efficiency If your irrigation system is not performing as well as it should be, you can improve it by altering one or more of the following five areas:

1. Equipment. Do you have the best equipment your budget will allow, or is your system a proverbial who's who of irrigation manufacturers?
2. Spacing. Was an accurate measuring device used to transfer the head placement of the design to the field, or was the time-honored tradition of "stepping-off" the heads used? Are your drippers positioned correctly in the dripline of the vegetation, or at the base?
3. Pressure. Do you know how much pressure your system requires to operate properly? You can't accurately determine your spacing until you know the available pressure.
4. Matched Precipitation. How do you know if you are applying water evenly throughout the entire area? Can you accurately calculate the precipitation rate of your drip system or conventional spray/rotary system?
5. Management. Who is managing and repairing the system? Are they aware of the importance of their job? A perfectly designed/installed system can waste a lot of water if it falls in the wrong hands.

Session: *Irrigation Budgeting and Scheduling*

Presenter: Jeff Lee, Water Conservation Specialist for the Town of Gilbert

Jeff Lee has been a Water Conservation Specialist with the Town of Gilbert since August of 2006. Jeff works with a wide variety of customers including residential, commercial, HOAs, and internal water users helping them increase their water efficiency indoors and out. Prior to this position, Jeff worked at the City of Mesa Water Conservation office for 8 ½ years working with large landscape water users helping them achieve a savings of 900,000,000 gallons collectively.

Session Description: Landscape maintenance customers are feeling the effects of the economy and are looking to save money wherever they can. Often they look to reduce the water costs of the landscape irrigation. You can't know if or how much you can cut if you don't know how much water should be used. This class will show you how to use a simple landscape water use calculator that will show not only how much water should be used but also a comparison of what has been used. Instead of waiting for your customer to come to you about the water use you can show the professional level of your services by bringing this to them. This water budget calculator can also be a great asset in marketing your company to new clients. Also covered in this class will be some quick tips to create schedules that will meet the budgets.

Session: *Understanding and Selecting Smart Technology*

Presenter: Kevin Oglesby, Water Conservation Product Sales at Ewing Irrigation Products

Kevin has been in irrigation distribution, design, sales and troubleshooting for over 32 years. Kevin is currently employed by Ewing Irrigation, Golf and Industrial in Phoenix, Ariz.. During his nineteen years with Ewing he has been responsible for managing a branch and central warehouse. Kevin is currently responsible for water management products sales, service, specification and support to Green Industry Professionals serving Arizona, Colorado, and Utah markets. Oglesby also serves as an education provider for water management products, trends and best management practices.

Kevin is currently a sitting Board Member for the Southwest Chapter of the ASIC. Kevin also sits on the irrigation advisory council for the Arizona Nursery Association's Shade convention. He is also a past board

member for the Arizona Landscape Contractors Association and is currently involved in their Arizona Certified Landscape Contractors testing program. As an IA Certified Irrigation Auditor, Kevin works with consultants, contractors and commercial end users to improve water management practices that will withstand challenges presented to our industry in the present and future. Kevin believes that good water management begins with good design.

Session Description: This presentation will be an explanation of the latest water conserving/water management devices related to landscape and irrigation industry. Products will include rotator nozzle technology, controller add on devices such as rain shut offs and moisture sensors and all available SWAT controllers provided to the presenter.

Session: *Reclaimed Water: Panacea or Pandora's Box*

Presenter: Andy Terrey, Project Coordinator at the City of Phoenix

Andy Terrey is a project manager for the City of Phoenix Water Service Department, Distribution & Collection Engineering Division. Mr. Terrey received a B.S. in Agricultural Engineering from the University of Arizona in 1987 and has worked for the Phoenix Water Services Department since 1989. His areas of expertise include water conservation, water reuse, water quality, and groundwater recharge. Since 2003, Andy has been director of the Water Services Department's internal water loss management program, the first of its kind in Arizona.

Session Description: Reclaimed water for irrigation is a great resource to alleviate the demand for our scarce water. This presentation will cover the positives and negatives of using reclaimed water. It will also discuss the proper ways of using reclaimed water to produce a solid product. We will discuss its effects on turf and why it is a good match for turfgrass irrigation.

Business Track

Session: *Arizona Economic Standpoint 2010*

Presenter: Brian Cary, Principal Planning Analyst at SRP

Brian Cary is the corporate economist for Salt River Project (SRP). With more than 25 years of business experience, mostly focused in the energy and financial industries, Brian is responsible for monitoring and reporting economic conditions, customer growth and energy sales forecasts, and assisting the company's strategic planning initiatives. Prior to joining SRP, Brian served as principal economist for the Arizona Joint Legislative Budget Committee, where he forecasted corporate and sales tax revenues and analyzed tax and economic development legislation.

From 1997 through 2003, Brian was a forecast consultant with Pinnacle West Capital Corporation and its affiliated companies. He also served as vice president of Elliott D. Pollack and Company, an economic and real estate consulting firm based in Scottsdale, Arizona. From 1988 to 1996, Brian was vice president and senior economist for First Interstate Bank (now Wells Fargo). He managed the regional economics unit, which provided economic and financial advisory services to the bank's planning, marketing, credit, and commercial banking groups.

Brian began his career in the oil industry with Conoco Inc. (now Conoco Phillips) in Houston, where he worked in supply and trading, scheduling, forecasting, and exchange contract negotiations. A Phoenix resident, Brian earned his bachelor's and master's degrees in economics from the University of Arizona in Tucson. He is a past

president of the Arizona Economic Roundtable and serves as a financial advisor to the Arizona Joint Legislative Budget Committee.

Session Description: The presentation will provide a chronology of events that led to the financial crisis and the subsequent policy responses. Although a recession already appeared to be on the way, the collapse of the capital markets amplified what proved to be the deepest business slump since World War II. The presentation also will address how economic assumptions and forecasts are used in developing energy sales forecasts.

Session: *Identifying and Capturing Your Market Niche*

Presenter: Julie Murphree, Public Relations, Marketing and Education and Promotion Director at the Arizona Farm Bureau

As marketing, PR and Ag Education director for Arizona Farm Bureau, Julie Murphree brings more than 20 years experience in messaging, marketing, content development and management working with traditional and new media. Murphree last worked as president of her own company, where she supported several clients with their content development, public relations and marketing requirements.

Prior to that, she was vice president of AberdeenAccess for Aberdeen, a Boston-based IT research firm spearheading an online membership-based research repository. Additionally, Murphree served as editor-in-chief of *Supply and Demand Chain Executive*, a business publication she helped launch in 2000 with a circulation of 55,000 and was editor for the Institute of Supply Management's magazine *Inside Supply Management* from 1993 to 2000.

Murphree holds a Bachelor of Arts in Journalism from Arizona State University in addition to a management certificate in strategic sourcing and supply chain management from the University of North Carolina at Chapel Hill. She also graduated from a concentrated two-year leadership program called Project CENTRL, sponsored by the University of Arizona.

Murphree, a native of Arizona, grew up on a cotton and alfalfa farm with three brothers. She partnered with her parents, Pat and Pennee Murphree, through 2005 in a cotton, wheat and alfalfa farm. Because of her love for agriculture and country life, she wrote a book called *Fresh Air*

Session Description: Struggling to stand out amongst the competition? Having a challenge managing all the marketing outreach opportunities today? You may have determined what customers suit you — or which ones are your best clients — but how do you grow your business around them? In this hour-long session, Murphree will give you some quick tips on nurturing your key customers and how to keep them coming back.

Session: *Securing Financing in Tough Economic Times*

Presenter: Todd Gerber, Agriculture Banking Manager at Wells Fargo Arizona

Session: *Recognizing and Retaining Top Talent*

Presenter: Joan Jordan, Managing Director at Sanford Rose Associates - Arizona

Joan Jordan is the Managing Director of Sanford Rose Associates®-Phoenix, an Executive Search and Recruitment firm. Prior to founding the Phoenix office she held various positions in manufacturing sector firms where she hired, directed, and motivated global staffs. Her 30 years of technology based industrial experience

have led her to work in many different countries and with very diverse cultures; she leverages this experience in her current profession where she meets client challenges by “Finding People Who Make A Difference”. Joan joins the SHADE Conference at the invitation of the ANA as she recently completed Certified Desert Landscaper coursework and is a proud graduate of the 2010 class.

Session Description: Why do employees stay? Why do they leave? The answers may surprise you. In this session we will discuss the role that YOU play in co-worker and employee retention. We will learn techniques to identify those “best fit” assignments for your staff and approaches to dealing with common workforce issues. We will do a fun exercise in the session which may provide some insight about yourself and the way that you work with your key employees.

Session: *Navigating Small Business Regulatory Issues*

Presenter: Julie Pace, Senior Member Attorney at The Cavanagh Law Firm

Julie A. Pace is a partner in the Phoenix office of The Cavanagh Law Firm PA. Ms. Pace’s practice is concentrated in the field of commercial litigation, construction, and employment law, with particular emphasis in the defense of sexual harassment, employment discrimination, wrongful discharge suits, EEOC and ACRD charges, matters involving OSHA, ICE, OFCCP, DOL, NLRB, wage and hour laws, conducting sexual harassment investigations, and providing training to managers and employees. She also counsels employers on non-compete contracts, confidentiality agreements, employee discipline, drug testing, accommodation of disabled individuals, safety policies, and other human resource policies and procedures.

For over the past two decades, Ms. Pace has regularly represented companies in OSHA proceedings. She has been working on fall protection issues since the fall protection standard went into effect in 1995. She has handled hundreds of OSHA matters and numerous fatalities in the workplace.

Ms. Pace has handled over one hundred I-9 audits, addresses E-Verify issues, and has provided I-9 and immigration compliance training for thousands of supervisors. Ms. Pace is one of the lead attorneys in the lawsuit challenging Arizona’s immigration employer sanctions law.

Ms. Pace is a frequent speaker and author on a variety of employment topics. She is co-editor of the Arizona and Federal Employment Law – An Employer’s Guide, which is published by the Arizona Chamber of Commerce. Ms. Pace is a recipient of Arizona Business Magazine’s 2008 Centers of Influence Award, which recognizes the ten leading attorneys, accountants, and bankers in Arizona. She has served as Co-Chair of the Arizona Chamber of Commerce’s Immigration Taskforce Committee, Judge Pro Tem for the Arizona Court of Appeals and is a former judicial law clerk to the Honorable Joe W. Contreras of the Arizona State Court of Appeals. Ms. Pace is a fourth generation Arizonan.

She received her J.D. degree, cum laude, from Arizona State University, where she was also Symposium and Articles Editor of the Arizona State Law Journal. She received her B.S. degree in Business Administration, magna cum laude, from Arizona State University.

Ms. Pace’s past honors include Mesa’s 1993 Outstanding Young Woman of the Year Award and the 1994 American Institute of Architects’ Rio Salado Community Vision Award. She also was co-founder and Co-Chair of Mesa’s Dr. Martin Luther King, Jr. Celebration and cofounder of the Southwest Shakespeare Company, and co-founder of the East Valley Economic Forum. Ms. Pace may be reached at (602) 322.4046 or jp pace@cavanaghlaw.com.

Session Description: Regulatory Issues and Laws Affecting your Company:

- Learn about the latest federal and state regulations and laws that may impact your business regarding employment, immigration, and other areas
- Learn about the latest regarding immigration compliance, SB 1070, I-9 audits, and raids and E-Verify
- Learn about strategies to minimize risk and protect your company
- Learn about upcoming government audits involving independent contractors, wage and hour issues, benefit plans, government contracts, and more