



74th Annual Kansas Turf & Landscape Conference

December 4 & 5, 2024 Manhattan, KS



Wednesday, December 4 7:30 am Registration & Exhibitor Set-up General Session - Flint Hills (Jack Fry, Moderator) 8:15 - 8:30 am Welcome, Orientation and Announcements - Jack Fry 8:30 - 9:20 am The Use of Adjuvants to Improve Pesticide Effectiveness - Fred Whitford (3A/3B - 1hr) (ISA) **BREAK** 9:20 - 9:30 am Disease, Insects & Weeds **Basic Turf** Nursery & Landscape Advanced Turf Kaw Nation/Big Basin Derek Taussig, Moderator McDowell/Tuttle Konza Prairie BC Flint Hills Matt Miller, Moderator Ethan Shamet, Moderator 9:30 - 10:00 am Turfgrasses for KS -Xeriscape - Man I Core Hour: Laws, Safety & **Best Cultivar Options** lack Fry Hate that Word! -**Environmental Concerns** for Warm-season and Holly Dickman Josh Gillespie (ISA) Cool-season Turfgrasses in the Transition 10:00 - 10:30 am Soils - Alex Stanton Zone - Ross Braun 10:30 - 11:00 am Turfgrass Diseases -**Exotic Landscape** Do Pesticide Products Get Effective Strategies for Megan Kennelly **Plants and Some** Old and Less Efficacious?-**Maintaining Golf Course** (3B - .5 hr)Native Alternatives -Fred Whitford (3A/3B - I hr) Ponds - Joe Gerken Jason Griffin (ISA) (ISA) 11:00 - 11:30 am **Mowing Basics -**Alex Stanton LUNCH (On Your Own) 11:30 - 1:00 pm **Basic Turf** Nursery & Landscape Disease, Insects & Weeds Advanced Turf McDowell/Tuttle Kaw Nation/Big Basin Flint Hills Konza Prairie BC Derek Taussig, Moderator Matt Miller, Moderator Ethan Shamet, Moderator 1:00 - 1:30 pm Turfgrass Insects -**Securing Your** Technologies to Scout for Braun Lab Research on and Manage Turf & Raymond Cloyd (3B - .5 hr) Equipment -Sod Production and Fred Whitford (ISA) Landscape Disease -Coated Seed - Ross Braun. Wendell Hutchens (3A/3B - I hr) Parul Mandal, Emmanuel (ISA) Nwachukwu 1:30 - 2:00 pm Fertilization -Steve Keeley 2:00 - 2:30 pm Turfgrass Weeds -**Insect and Disease Golf Course Renovation** Nursery & Landscape Ross Braun (3B - .5 hr) Interactions - Raymond Cloyd **Disease Update** - Judy & Construction Panel Discussion: Cory Griess, O'Mara/Megan Kennelly (3A/3B - I hr) (3A - I hr) (ISA) Pat Rose, Curtis Schriever 2:30 - 3:00 pm Cultivation - Ross Braun 3:00 - 3:30 pm First Green - Leann Cooper, Irrigation - Levi Dreiling Naturalistic Land-Awareness of Pesticide scaping Preferences of Labeling Changes in Turf & Ethan Shamet Kansas Homeowners -Landscape - Frannie Miller Cheryl Boyer (ISA) (3A/3B - .5 hr) (ISA) 3:30 - 5:30 pm TRADE SHOW - Meet with vendors, network, and chat with speakers in an informal setting (Refreshments available)

Thursday, December 5				
7:30 am	Registration			
General Session - Flint Hills (Jack Fry, Moderator)				
7:45 - 8:00 am	Welcome, Announcements, Awards - Chris Ryan, KTF President Each participant will be given a raffle ticket at the beginning of the General Session. Two lucky winners will each receive 2 tickets to the K-State vs. Drake Men's Basketball game at the T-Mobile Center in Kansas City on December 17.			
8:00 - 8:30 am	A Few Months of Life in Florida vs. Kansas: A Sabbatical Summary - Jack Fry			
8:30 - 9:00 am	Soil Surfactants and Wetting Agents: The State of the Science and Things to Think About - Becky Bowling (3B5 hr)			
9:00 - 10:00 am	Optimization of Fungicide Applications - Wendell Hutchens (3A/3B - 1 hr) (ISA)			
10:00 - 10:10 am	BREAK			

	Advanced Turf Konza Prairie BC Mark Lytle, Moderator	Nursery & Landscape Flint Hills Ryan Varns, Moderator	Sports Turf McDowell/Tuttle Brad Lackey, Moderator		
10:10 - 11:10 am	Irrigation Spacing & Combating Windy Conditions - Erik & Pete Christiansen	Moles, Pocket Gophers and Other Critters that Dig in the Landscape - Drew Ricketts (ISA)	Best Practices for Managing Secondary & Community Sports Fields - Steve Keeley		
	Updates in Irrigation Infrastructure: Considerations for Investment & Renovations - Becky Bowling	Vision Quest: Aligning Your Team with a Shared Purpose - Audrey King	Strategies for Enhanced Quality of Sports Fields - Panel Discussion: Rex Evans, Garret Kathman, Dave Stokka		
12:10 - 1:30 pm	Trade Show (Lunch served in Big Basin/Kaw Nation Room)				
	Advanced Turf Konza Prairie BC Mark Lytle, Moderator	Nursery & Landscape Flint Hills Ryan Varns, Moderator	Dealing with Pests McDowell/Tuttle Brad Lackey, Moderator		
1:30 - 2:30 pm	WATER You Doing About Water Quality? - Becky Bowling	Kansas Climate, Observed Impacts and Projected Changes - Chip Redmond	Understanding Fungicide Physical and Chemical Properties - Wendell Hutchens (3A/3B - I hr.) (ISA)		
2:30 - 3:30 pm	How Irrigation Can Impact Growth and Disease - Jack Fry (3B - 1 hr)	Systemic Insecticides - Raymond Cloyd (3A - I hr)	Herbicide Resistance - Sarah Lancaster (3A/3B - 1 hr) (ISA)		
3:30 pm	Conference Adjourned				
3:30 pm	Commercial Pesticide Exam - Konza A room				

SPEAKERS

Becky Bowling, Plant Sciences, University of Tennessee

Cheryl Boyer, Horticulture, K-State Ross Braun, Horticulture, K-State Erik Christiansen, EC Design Group, W. Des Moines. IA

Pete Christiansen, EC Design Group,

W. Des Moines, IA

Raymond Cloyd, Entomology, K-State Leann Cooper, GCSAA, Lawrence, KS Holly Dickman, City of Hays, KS

Levi Dreiling, Horticulture, K-State

Rex Evans, Hugoton USD #210 Jack Fry, Horticulture, K-State Joe Gerken, Wildlife & Outdoor Management, K-State

Josh Gillespie, Kansas Dept. of Agriculture, Manhattan, KS

Cory Griess, Prairie Dunes CC, Hutchinson, KS

Jason Griffin, Horticulture, K-State

Wendell Hutchens, Horticulture, University of Arkansas

Garret Kathman, Holcomb USD #363

Steve Keeley, Horticulture, K-State

Megan Kennelly, Plant Pathology, K-State

Audrey King, Agricultural Communications,

Oklahoma State University

Sarah Lancaster, Agronomy, K-State **Parul Mandal**, Horticulture, K-State

Frannie Miller, Pesticide Safety, K-State Emmanuel Nwachukwu, Horticulture, K-State

Judy O'Mara, Plant Pathology, K-State

Chip Redmond, Agronomy, K-State **Drew Ricketts**, Wildlife & Outdoor

 $Management, \, K\text{-}State$

Pat Rose (CGCS), Kansas City CC Curtis Schriever, Wichita CC

Ethan Shamet, Heritage Park GC, Olathe, KS

Alex Stanton, Horticulture, K-State

Dave Stokka, Leavenworth USD #453

Fred Whitford, Botany & Plant Pathology,

Purdue University

PRESENTATION DESCRIPTIONS

Wednesday, December 4

General Session - Flint Hills

Welcome, Orientation and Announcements - Jack Fry

The Use of Adjuvants to Improve Pesticide Effectiveness - Fred Whitford

Think of pests as the bullseye on a target. The basic premise is that the application will get the highest scores when the right rate of the pesticide is delivered directly to the center of the bullseye. Not understanding the relationships between water, leaf surface, pesticide, and poor application equipment can result in the application hitting one of the concentric circles surrounding the bullseye. Adjuvants can improve the biological performance of the pesticide by modifying the spray pattern, droplet, or deposit properties (spray quality) up to and including the rate of movement of the pesticide into the plant (uptake and penetration). Learn details about the benefits of adjuvants. (3A/3B - 1 hr)

Basic Turf - McDowell/Tuttle

A series of presentations that cover the basic knowledge needed to manage turf in the Midwest. A great starting point for new employees.

Nursery & Landscape

Kaw Nation/Big Basin

Xeriscape - Man I Hate that Word! - Holly Dickman

Xeriscaping is often misunderstood and therefore often "sold" as rock-filled, limited plant material, "ZERO-scapes" which just don't fit in well with the Kansas environment. Learn why Holly Dickman, Water Conservation Specialist for the City of Hays, chooses to no longer use that word as she shares tips on how to create a landscape that is both beautiful and "WaterSmart."

Exotic Landscape Plants and Some Native Alternatives - Jason Griffin

Our nurseries, parks, and landscapes are filled with beautiful plants, many of which are native to regions around the globe. Consumers often ask about native alternatives for their home landscapes. This talk will cover some of the popular exotic landscape plants we often encounter and suggest some native alternatives to consider.

Securing Your Equipment - Fred Whitford

Equipment and supplies such as trailers, pesticides, application equipment, hand tools, mowers, bulldozers, backhoes, skid steers, sprayers, off-road bikes, boats, and 4-wheelers are easily sold on the black market. Most of these types of stolen items can never be traced back to the original owner. However, you potentially may be held liable if pesticides are stolen from your trailer and misused, leading to human health risk or environmental contamination. Learn tactics that will better protect a trailer and its pesticides from falling into the wrong hands.

Nursery & Landscape Disease Update - Judy O'Mara/Megan Kennelly

This session will take a look at introduction and movement of emerging diseases within nursery and landscape settings. (3A - I hr)

Naturalistic Landscaping Preferences of Kansas Homeowners - Cheryl Boyer

Landscape design is an individual expression of creativity showcasing interests of the designer. Learn results of a survey-based research study examining consumer preferences for naturalistic landscape characteristics like reduced lawn, edging, color, height, plant composition, maintenance, and more.

Diseases, Insects & Weeds - Flint Hills

Core Hour: Laws, Safety & Environmental Concerns - Josh Gillespie

Regulatory information required for certified applicators.

Do Pesticide Products Get Old and Less Efficaious? - Fred Whitford

With the high costs associated with purchasing, applying and disposing of pesticides, it seems more important today to make sure that these products are being stored correctly and inventory managed to move the pesticides in and out quickly. Learn how to better manage your inventory of pesticide products so you will no longer have to ask, "Is this product on my shelf still good?" (3A/3B - 1 hr)

Technologies to Scout for and Manage Turf & Landscape Disease - Wendell Hutchens

Emerging technologies such as drones, GPS-guided sprayers, various sensors, etc. have become commonplace in agriculture. The turf and landscape industries are also starting to use these technologies more regularly. This presentation will highlight some of the practical uses for these technologies in managing pests (diseases, insects, weeds) in turf and landscape settings. $(3A/3B-1\ hr)$

Insect and Disease Interactions - Raymond Cloyd Learn about the fundamental interactions between turf and ornamental insects and diseases and how interactions can

ornamental insects and diseases and how interactions can influence management. (3A/3B - 1 hr)

Awareness of Pesticide Labeling Changes in Turf & Landscape - Frannie Miller

This presentation will explain why it is important to check the active ingredients in the pesticides you are using. Products with similar looking labels may be labeled for use in different sites. Be aware of the issues that can result when you don't read the label! (3A/3B - .5 hr)

Advanced Turf - Konza Prairie BC

Best Cultivar Options for Warm-season and Coolseason Turfgrasses in the Transition Zone - Ross Braun Growing healthy grass in Kansas, which is in the "transitional climatic zone," is tough. Learn how and why selecting the best cultivars can potentially make your job easier by saving money and time on maintenance inputs.

Effective Strategies for Maintaining Golf Course Ponds - Joe Gerken

Learn about techniques to help maintain ponds and water features at golf courses. Topics will include methods to manage the watershed for overall pond health while reducing unwanted pond vegetation and improving water quality.

Braun Lab Research on Sod Production and Coated Seed -

Ross Braun, Parul Mandal, Emmanuel Nwachukwu

The Braun turfgrass lab has been up to quite a bit over the last two years. Learn more about recent findings related to sod production, coated turfgrass seed, sodding vs. seeding advantages and disadvantages, and more!

Golf Course Renovation & Construction - Panel Discussion:

Cory Griess, Pat Rose, Curtis Schriever

Several golf courses in Kansas are in the process of renovation and construction. Hear some details from the golf superintendents that are overseeing these changes.

First Green - Leann Cooper and Ethan Shamet

GCSAA's First Green program brings students out of the classroom to a local golf course for a fun, hands-on field trip to explore the living laboratory that is the golf course! Since 2018, over 15,000 students nationwide have participated in First Green learning about the STEAM (science, technology, engineering, art and mathematics) skills used every day by golf course superintendents and their teams. Presenters will share their insight on First Green, including the numerous events that have taken place in Kansas, and the impact it is having on schools and students and how you can get involved in your community.

Thursday - December 5

General Session - Flint Hills

Welcome and Announcements - Chris Ryan

Each participant will be given a raffle ticket at the beginning of the General Session. Two lucky winners will each receive 2 tickets for the K-State vs. Drake Men's Basketball game at the T-Mobile Center in Kansas City on December 17.

A Few Months of Life in Florida vs. Kansas: A Sabbatical Summary - Jack Fry

Multiple positive effects resulted from spending time in Florida: former K-State students; similar research being done there as in KS; enhancing golf knowledge for young students going to a First Green event.

Soil Surfactants and Wetting Agents: The State of the Science and Things to Think About - Becky Bowling

This talk explores some of the latest research in wetting agent use for turfgrass and discusses the nuances of how wetting agent programs can influence water, nutrient, and pest management programs throughout the year. (3B - .5 hr)

Optimization of Fungicide Applications -

Wendell Hutchens

Fungicides can be effectively used to manage many turf and landscape diseases. However, optimizing their efficacy against diseases is challenging. Learn ways to get more out of your fungicide applications through proper selection, timing and methods, as well as delineate the difference in application strategies for foliar vs. root diseases. (3A/3B - I hr)

Advanced Turf - Konza Prairie BC

Irrigation Spacing and Combating Windy Conditions -

Pete & Erik Christiansen

This presentation focuses on ensuring efficient water distribution through proper spacing and strategies to mitigate wind interference. Learn about practical solutions with real world applications to optimize water usage and maintain consistent turf quality despite adverse weather.

Updates in Irrigation Infrastrcture: Considerations for Investment & Renovations - Becky Bowling

Reliable irrigation is integral to the success of many facilities. Evolving technology can raise many questions about where investments in time, labor, and money offer the greatest resource-use efficiency and return on investment. An overview of the evolution of irrigation technology with considerations for practical decision making and resources which may be instrumental in communicating the importance of maintaining and investing

WATER You Doing About Water Quality - Becky Bowling Diminishing water quality is a growing challenge for many. Learn how water quality can impact turf management, basic parameters to keep an eye on using water and soil tests, and pathways for addressing water quality problems as they arise.

How Irrigation Can Impact Growth and Disease - *Jack Fry* (3B - 1 hr)

Irrigation uniformity and frequency can have a significant impact on growth of numerous grasses. See the research results that have been reported across several states, and the impact of water on common disease problems, such as brown patch. (3B - 1 hr)

Nursery & Landscape - Flint Hills

Moles, Pocket Gophers and Other Critters that Dig in the Landscape - Drew Ricketts

Digging activity by moles, pocket gophers, and larger wildlife can cause considerable damage to turf and landscaping in general. This session will cover identification of and effective control options for landscape damage commonly caused by mammals in the Great Plains and Midwest.

Kansas Climate, Observed Impacts and Projected Changes

- Chip Redmond

Weather changes occur quickly and are sometimes disruptive. Long-term changes in climate are also impacting us daily. We will discuss these agriculture-related changes, including nursery and landscape production, and look forward to expected conditions for 2025. We will also examine available Kansas tools for garden center retail sales and associated labor/production that can be used to avoid loss.

Vision Quest: Aligning Your Team with a Shared Purpose - Audrey King

Dive into the art of internal branding and create a unified vision that energizes your team. This interactive presentation will guide you through aligning goals, fostering buy-in, and turning your collective vision into actionable steps. Perfect for teams eager to collaborate and thrive together!

Systemic Insecticides - Raymond Cloyd

This presentation will cover background information on systemic insecticides and how to effectively use them to manage insect pest populations on ornamental plants. (3A - I hr)

Sports Turf - McDowell/Tuttle

Best Practices for Managing Secondary & Community Sports Fields - Steve Keeley

Learn about the fundamentals of turfgrass management in the context of the special challenges and limitations of sports turf. Football will be used as the primary example, but the principles and practices can be applied to all sports. The focus will be to help managers who are caring for fields on a limited budget.

Strategies for Enhanced Quality of Sports Fields - Panel Discussion: Rex Evans, Garret Kathman, Dave Stokka Hear from the sports turf managers at schools about how they enhance quality of their field facilities. Multiple things can be involved in management of the sites, including soil type, seed selection, fertilization, irrigation, total use of game vs. practice fields, and more.

Dealing with Pests - McDowell/Tuttle

Understanding Fungicide Physical and Chemical Properties

- Wendell Hutchens

Fungicides are compounds that suppress fungal growth and are applied to control fungal pathogens in turf and landscape plants. These chemistries are simple in theory, but there are many complexities with fungicides that need to be parsed out to properly understand them. We'll look into what fungicides are, how they work, and how their physical and chemical properties influence their efficacy. (3A/3B - 1 hr)

Herbicide Resistance - Sarah Lancaster

This presentation will discuss how herbicide resistance develops, what types of resistance are known, and how to mitigate the development of resistance. (3A/3B - 1 hr)

Conference Location

The Kansas Turf & Landscape Conference will be held at the Hilton Garden Inn, 410 S. 3rd St., Manhattan, KS.

Hotel

Hilton Garden Inn (410 S. 3rd St., Manhattan.). Room rate: \$115 Reservations can be made online by November 3 at https://www.hilton.com/en/attend-my-event/mangigi-91h-574acdddebde-4956-b95e-f2aefe292a54/

OR, call the hotel directly at (785) 532-9116 (please mention you are part of KS Turfgrass Assn. Group code: 91H).

Registration



■ To register online and pay by credit card go to https://2024turfandlandscapeconference.eventbrite.

> OR fill out the registration form and send in by November 22.

Special Assistance

A conference participant who needs accommodations due to a disability or special dietary requirement, should indicate services needed on the registration form. Early notification is requested to ensure that accommodations can be provided in a timely manner.

Cancellation/Refund Policy

If cancellation is necessary, substitutions with another person from the same company is allowed. A written request for a refund must be received before Nov. 22, 2024. The amount refunded will be less a \$25.00 processing fee. No refunds will be made after this date. Email your request to cdipman@ksu.edu

If inclement weather should prevent your attendance, no refunds are provided. Significant expenses occur on behalf of the KTF in its commitment to hold this conference.

Pesticide Recertification Credit Hours



The Kansas Turf & Landscape Conference has been approved for state pesticide applicator recertification credit:

I Core Hour 3A - 7 hrs 3B - 7 hrs

Presentations qualifying for 3A or 3B credit are noted after the title. Pick up a form at the registration table to record pesticide recertification credits. A monitor must sign each form before you leave the session. At the end of the conference, return the form to the registration desk.

If your license expires this year, go to https://www.agriculture.ks.gov/pfrenew to pay the fees and renew before December 31.



GCSAA Education Points

December 4 - .55 ed points December 5 - .55 ed points



Int'l. Society of Arboriculture (ISA)

CEUs available for Certified Arborists. Presentations qualifying for ISA credit are noted after the title.

Kansas Turf & Landscape Conference December 4 & 5, 2024 Pre-Registration Form

Register online at: https://2024turfandlandscapeconference.eventbrite.com

FULL Registration (2 days) (\$275.00 at conference) Includes 2-day conference, lunch on Thursday, complementary KTF membership dues, and trade show.		\$250.00 x	
Additional persons from same firm (\$140.00 at conference No dues included.	nce)	\$115.00 x	
WEDNESDAY only-Dec. 4 (\$150 at conf.) Includes trade show,	no dues.	\$125.00 x	
THURSDAY only-Dec. 5 (\$150.00 at conference) Includes lunch, trade show; no dues.		\$125.00 x	
2025 Kansas Turfgrass Foundation Membership Dues A 2025 Kansas Turfgrass Foundation Directory will be sent to a Name of individual(s) joining association: 2025 KNLA Membership Dues can be paid at http://ksnla.org/join-knla		\$ 75.00 x	
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Horticulture and Natural Resources1712 Claflin, 2021 Throckmorton Plant Science Cntr.
Manhattan, KS 66506-5507

Kansas Turf & Landscape Conference December 4 & 5 Manhattan, KS

Featured Speakers



Dr. Becky Bowling is the Extension Specialist in the Plant Science Dept. at the University of Tennessee. Her research and extension efforts have focused on evaluating and communicating best management practices for turfgrass to promote environmental stewardship and resource-use efficiency in turfgrass systems and related urban green spaces with an emphasis on water efficiency, water capture, and water quality protection.



Dr. Fred Whitford is the Clinical Engagement Professor and Director, Pesticide Programs at Purdue University. His focus is on extension outreach, pesticide safety education, pesticide registration and regulation, insurance, and environmental safety audits.



Dr. Wendell Hutchens is an assistant professor of turfgrass science in the Horticulture Department at the University of Arkansas. His main areas of expertise are turfgrass pathology, precision management of turfgrass pests using emerging technologies, and winterkill mitigation strategies in warmseason turfgrasses. His research program is centered around maintaining healthy turfgrass and combating turfgrass stressors with traditional cultural and chemical practices, as well as with cuttingedge new technology.