

# International Turfgrass

The Newsletter of the International Turfgrass Society

January 2017

## 13<sup>th</sup> International Turfgrass Research Conference Quickly Approaching

by **Dr. Bruce Clarke, ITS President**  
**Director, Center for Turfgrass Science,**  
**Rutgers University, New Brunswick, NJ USA**

The 13<sup>th</sup> International Turfgrass Research Conference (ITRC) that will be held at the Hyatt Regency Hotel in New Brunswick, NJ USA from 16-21 July, 2017 is quickly approaching.

### Conference and Hotel Registration is Open

Conference and Hotel Registration (<http://www.turfsociety.com/itrc2017/?p=reg>) is now open. *Discounts for conference registration are available until 30 April; however, many of the technical tours and special events have limited capacity so register early to ensure that you receive your first choices.*

### Conference Highlights at a Glance

#### Turfgrass Industry Session

There will be a special Turfgrass Industry Session Sunday afternoon, 16 July just prior to the evening welcome reception. This event will feature a brief mixer followed by a 1-hour session highlighting recent advancements in the turfgrass industry.

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The May edition of International Turfgrass will be the last before the 2017 ITRC. If you plan on seeing some of the very popular sights in the surrounding area, some ticket sales are available 3-4 months in advance. For best availability you may need to buy your tickets that soon. Save some money and join ITS. **If you don't know if you are a member, then go to <http://turfsociety.com/test/ismember.php>** and type in your email address that you used when first registering for ITS, and you will receive an instant response if you are in good standing.

Also, if you have any newsworthy stories or information for readers of International Turfgrass, I hope you will consider submitting an article for the next newsletter in May 2017.

I hope you enjoy the very good articles in this edition.

Sincerely,  
 Nathan R. Walker

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## Opening Reception

The Conference itself will kick off with an opening reception on Sunday night with a Mardi Gras theme. The reception is something that the entire family will want to attend and will feature a Dixieland band, jugglers, card tricks, and plenty of Mardi Gras beads. This is an opportunity to socialize and just sit back and enjoy a night of music, drinks and hors d'oeuvres. This will be followed by a week packed with educational and social opportunities (<http://www.turfsociety.com/itrc2017/pdf/Preliminary-Meeting-Schedule.pdf>) that will allow you to re-engage with old friends and network with new acquaintances from all over the world.

## Keynote Presentations

Keynote addresses will be presented on Monday morning, 17 July by internationally renowned scientists focusing on the conference theme “*Meeting the Challenges of a Changing Environment*” Dr. Timothy Colmer (University of Western Australia) will discuss “*Managing water use by warm-season turfgrasses in a drying climate.*” Dr. William Meyer (Rutgers University, USA), will present “*Breeding improved cool-season turfgrasses for stress tolerance and sustainability in a changing environment.*” Dr. Jerry Hatfield (National Laboratory for Agriculture and the Environment, Ames, Iowa, USA) will talk about “*Climate impacts on crops and turfgrass: Building effective adaptation strategies.*” Dr. Christine Hawkes (University of Texas at Austin, Austin, TX, USA) will discuss “*Can the plant mycobiome serve as a tool for improving grass stress resistance?*”

## Oral Paper Sessions

A draft of the scientific program is available at the conference website (<http://www.turfsociety.com/itrc2017/pdf/Preliminary-Meeting-Schedule.pdf>); however, the final program with the actual date and time of each presentation will not be released until the majority of manuscripts have been accepted. The current plan is to have oral sessions on Monday, Tuesday, Thursday and Friday (17, 18, 20 and 21 July). Every effort will be made to limit the number of concurrent sessions. Each oral session will include an invited presentation, as well as volunteered presentations that fit within the session theme/category.

## Poster Sessions

Posters will be displayed on Monday, Tuesday and Thursday (17, 18 and 20 July) and, for the first time at an ITRC, one-minute, rapid (oral) summaries will be presented by poster authors prior to each poster session. To entice meeting attendees to meet poster authors and discuss their latest findings, light refreshments and hors d'oeuvres will be provided at each poster session.

## Student Oral and Poster Competition and Travel Awards

A Student Competition will be held at the 13<sup>th</sup> ITRC to showcase some of the exciting, cutting edge research that students are conducting (see article on page 17). In addition, Student Travel Awards are available on a competitive basis (deadline is 31 January; <http://turfsociety.com/itrc2017/#student-travel-awards>).

## Dr. James Watson Celebration

ITS will host an evening program on Monday, 17 July highlighting the many contributions of Dr. James Watson, one of early leaders of ITS and a pioneer in the turfgrass industry (see article on page 16). Come listen to Dr. James Beard (President and Chief Scientist of the International Sports Turf Institute, Inc.), Dr. Paul Rieke (Professor Emeritus, Michigan State University) and others reflect on Dr. Watson's accomplishments and the founding of ITS, and socialize with other attendees at the reception that follows this special event.

## Technical Tours and a BBQ Dinner

A full day of technical tours is planned for Wednesday, 19 July highlighting the extraordinary range of turf venues in the New Jersey/New York City region. There are six tours from which to choose:

- 1) *The United States Golf Association Museum / Testing Facility and Baltusrol Golf Club* (the host location for the 2016 PGA Championship).
- 2) *The Red Bull Arena* (home of the New York Red Bulls Major League Soccer Team) and *Bayonne Golf Course*, called “the most audacious golf course in the world” by Sports Illustrated Magazine.

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The USGA Museum / Testing Facility

3) The *Met Life Stadium Practice Facility* (Home to the New York Giants and Jets American Football Teams) and *Yankee Stadium* (home of the world famous New York Yankees and the New York City Football Club of Major League Soccer).

4) *Tuckahoe Sod Farm* (one of the largest and most successful sod farms in the USA) and *Monmouth Park Racetrack* (the site of the 2007 Breeders Cup, one of the premier horse racing events in the world).

5) *Central Park* (the iconic green space on Manhattan Island) and the American Museum of Natural History /Hayden Planetarium (one of the world's pre-eminent scientific and cultural institutions renowned for its exhibitions and scientific collections).



The Great Lawn at Central Park

6) *The Bronx Botanical Gardens* (a National Historic Landmark and one of the greatest botanical gardens in the world, with its diverse landscape and extensive collection of plants and gardens).

Be sure to “register early” for the conference since many of these tours will fill up quickly and space will be limited. The day will conclude with

a cocktail reception, an American-style BBQ, and an opportunity to informally view research plots at the Rutgers Turf Research Facility at Hort Farm 2 in North Brunswick, NJ. Brief, YouTube videos of the research trials will be accessible during the evening via free wireless internet. Wednesday night’s BBQ will have a ‘Beach Party’ theme and live music, so dress casually and be ready to have a great time under the stars.

### Twilight Dinner Cruise of the NY/NJ Harbor and Statue of Liberty

Immediately following the ITS Quadrennial Business Meeting and the Graduate Student Awards Presentations on Thursday, 20 July, attendees will board buses for a night on the town featuring a Twilight Dinner Cruise of the NY/NJ Harbor and Statue of Liberty, with awesome views of the New York City Skyline, great food and dancing. This is a once in a life-time event that your entire family will want to see.



The views from the cruise

### Special Zoysiagrass Symposium

The last day of the conference will include oral presentations and a Zoysiagrass Symposium Friday morning (see article on page 6) showcasing invited speakers who will give a world-wide perspective on this important and underutilized turfgrass species.

**Optional Events** (Additional charges may apply; see online registration form for details)

- Wine and Cheese Tasting, Zimmerli Art Museum, Rutgers University - Tuesday, 18 July (19:00-22:00) (<http://www.zimmerlimuseum.rutgers.edu/>)

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- Night at Citi Field Major League Baseball Park, New York City - Tuesday, 18 July (16:30-23:30) (<http://newyork.mets.mlb.com/nym/ballpark/>)
- Rutgers Turfgrass Breeding Program Tour – Friday, 21 July (13:00-17:00) at the Rutgers Plant Science Research and Extension Farm, Adelphia, NJ (<https://turf.rutgers.edu/facilities/adelphia.html>). This tour will take place at the end of the ITRC. Come see the largest cool-season breeding program in the world, and hear about the latest advances in turfgrass breeding. Buses will leave from and return to the Hyatt. There is no additional charge for this tour, but pre-registration is required.

### Bring the Family

Accompanying persons will have a full range of enjoyable activities to choose from during the week of the conference (<http://www.turfsociety.com/itrc2017/pdf/Accompanying-Persons-Tours.pdf>) including: a trip to Longwood Gardens (one of the world's great gardens and a former summer estate of Pierre du Pont), the Bronx Zoo (one of the largest zoos in the United States), the Liberty Science Center (a state of the art science center with an IMAX theater), the Camden Adventure Aquarium (home to the largest collection of sharks on the East Coast, hippos, blue penguins and the longest shark bridge in the world), the American Museum of Natural History /Hayden Planetarium, and even a day trip to the beautiful white sand beaches of Point Pleasant, NJ.

### Outstanding Pre- and Post-Conference Tours

A Pre-Conference Tour will take in the sites of Washington, DC and Philadelphia, Pennsylvania during a 5-day trip that will provide a mix of history, fun, and of course turfgrass. Hotel accommodations will be in close proximity to the Nation's Capital, the Lincoln Memorial, and a myriad of museums including the Smithsonian in Washington, DC (see article on page 11). There will be plenty of time for sightseeing and visits to turf-related venues that will include the newly renovated National Mall, the Grass Roots exhibit at the National Arboretum, the National Botanical Gardens, Congressional Country Club, and National Park (home of the Washington Nationals Major League Baseball Team). In Philadelphia, participants will visit Lincoln Financial Field (home of the Philadelphia Eagles American Football Team),

PPL Park (home of the Philadelphia Union Soccer Team), as well the iconic Liberty Bell, Independence Hall, local museums, and Longwood Gardens.

A Post-Conference Tour had previously been planned for Miami, Florida; however, due to the recent Zika outbreak in southern Florida, this 4-day tour will be redirected to the beautiful mountains of Asheville, North Carolina (see article on page 14). [Asheville](#) is a city in western North Carolina's Blue Ridge Mountains known for its vibrant arts scene and historic architecture, including the dome-topped Basilica of Saint Lawrence. Participants will stay in the brand new [Village Hotel](#) at the world famous Biltmore Estate (America's largest house). The tour will include visits to several top-tier golf courses, as well as plenty of time for sightseeing in the nearby River Arts District. On the last evening, enjoy a [Pub Crawl](#) and sample the dizzying array of beer (> 100 local varieties) that Asheville offers. What a relaxing way to unwind after the 13th ITRC. Additional details and the cost of both tours are provided on the ITRC Website (<http://www.turfsociety.com/itrc2017/?p=home>).

### Excellent Sponsorship Opportunities are Still Available

More than three dozen companies and organizations including Syngenta, Bayer, Aquatrols, the USGA, BASF, TORO, DLF, PGG Wrightson Seeds, Ocean Organics, and the New Jersey Turfgrass Association / Foundation have already become major supporters of the 2017 ITRC (<http://www.turfsociety.com/itrc2017/?p=reg%20-%20sponsors#sponsors>) and plenty of excellent sponsorship opportunities are still available (<http://www.turfsociety.com/itrc2017/pdf/ITRC-Sponsorship.pdf>). *So show your organization's support of turfgrass research and become a 2017 ITRC Sponsor today!*

So, **REGISTER TODAY** (<http://www.turfsociety.com/itrc2017/?p=reg>) to attend one of the largest and most comprehensive gatherings of turfgrass professionals anywhere in the world. Learn about the latest discoveries in turfgrass science and get inspired by the scientific sessions, field tours, and stimulating discussions. Share your research with colleagues from throughout the world, and meet friends, network and see all that the New York City/New Jersey area has to offer. I look forward to seeing all of you at the 13<sup>th</sup> ITRC in July!

# 13<sup>th</sup> International Turfgrass Research Conference Sponsors

To become an ITRC Sponsor see (<http://www.turfsociety.com/itrc2017/pdf/ITRC-Sponsorship.pdf>)

**Legacy Premier Sponsor** 

**Premier Sponsors**   

**Gold Sponsors**  **Silver Sponsors**  

  
Seaweed Processors and Premium Fertilizer Manufacturers

**Bronze Sponsors**    



**Student Oral/Poster Comp**   

**Student Travel Sponsors**   

**Technical Tour Dinner Sponsors**   

**Pre-Conference Tour Sponsor**  **Session Sponsor** 

**ITRC Supporter**      

# Zoysiagrass Symposium Speakers and Panelists Set for International Turfgrass Research Conference

by Jack Fry, Ph.D.,  
Kansas State University  
Manhattan, KS, USA

There is worldwide interest in zoysiagrass (*Zoysia* spp.). In 2015, an International Zoysiagrass Symposium was held in Okinawa, Japan with speakers from Japan, Korea, China, and Australia. Interest arising from this gathering led to an informal meeting of those involved with zoysiagrass research and management at the Golf Industry Show in San Diego in 2016 at which individuals from eleven countries attended.

We will continue building on this interest by holding a half-day zoysiagrass symposium on the morning of Friday, 21, July 2017 at the International Turf Research Conference (ITRC) in New Brunswick, NJ USA. Invited speakers will provide a worldwide view of zoysiagrass research, use, and culture. In addition, a panel including industry professionals will offer their perspective on zoysiagrass management. Before and after the symposium, and during a one-hour break, attendees will have an opportunity to view posters and interact with others conducting research on *Zoysia* spp. Those presenting research on zoysiagrass at the ITRC in an oral session earlier in the week have the additional option to create a poster for viewing during the symposium, and those presenting a poster earlier in the week can show their poster again during the symposium (there is no need for these authors to submit an additional title summary).

Speakers will give 30 minute oral presentations covering material contained in manuscripts that will be published as part of the ITS Conference.

If you have questions, contact Jack Fry (USA) at Kansas State University: email [jfry@ksu.edu](mailto:jfry@ksu.edu) or call 785-532-1430.

## **Titles and presenters:**

Implications of *Zoysia* Species, Distribution and Adaptation for Management and Use of Zoysiagrasses  
Don Loch, The University of Queensland, Brisbane, Queensland Australia

Evaluation and Breeding Zoysiagrass using Japan's Natural Genetic Resources  
Masumi Ebina, Forage Crop Genome Unit, Institute of Livestock and Grassland Science, Tochigi, Japan

Zoysiagrass Use and Culture in Europe  
Simone Magni, University of Pisa, Pisa, Italy

Occurrence, Distribution and Introduction of *Zoysia* spp. and their Management and Current Use in Australia  
Peter McMaugh, Turfgrass Scientific Services, Carlingford, New South Wales Australia

Zoysiagrass History, Utilization, and Improvement in the United States  
Aaron Patton, Purdue University, West Lafayette, Indiana USA

Molecular Advances in Zoysiagrass Development  
Ambika Chandra, Texas A&M AgriLife Research, Dallas Texas USA

Industry panelists who will share their experiences and perspectives on zoysiagrass are:  
Tim Bowyer, Ph.D., Patten Seed Company, Lakeland, Georgia USA;  
David Doguet, Bladerunner Farms, Poteet, Texas USA;  
Jim Prusa, Sky72 Golf, Incheon, South Korea;  
David Stone, The Honors Course, Ooltewah, Tennessee USA.

# State Turfgrass Foundations/Associations in U.S. Support the ITRC

by Clark Throssell

As most of you know, the United States is hosting the International Turfgrass Research Conference (ITRC) in New Brunswick, NJ USA from 16-21 July 2017. This is the first time an ITRC has been held in the U.S. since 1993. To showcase the turfgrass industry in the U.S. and to make sure all participants have a great experience, the ITRC Sponsorship Committee is reaching out to state turfgrass associations /foundations for financial support.

Financial support from state turfgrass associations/ foundations will be used to help defray the cost of students attending the 13<sup>th</sup> ITRC or to provide general support for the conference. The ITRC Sponsorship Committee has asked university scientists in the U.S. to ask their state turfgrass association/foundation for a donation to support the 13<sup>th</sup> ITRC.

To date, university scientists in over 35 states have been contacted and the response has been very positive. Already several foundations/associations have made a financial commitment to support the ITRC and many more are considering the request. The two sponsorship opportunities that the Sponsorship Committee is encouraging state turf association/foundations to consider include:

1. **STUDENT TRAVEL SPONSOR:** \$ 2,000 U.S. per student. This sponsorship will provide funding for students to attend the ITRC. This is a great opportunity to help support a future leader in the turfgrass industry! Each sponsorship will *pay for one student's travel expenses* to the meeting along with conference registration and a student membership to

ITS. Contributions can be provided for the general pool of applicants to support student travel, or can be designated for a specific student to receive funding from a state turfgrass association /foundation. As an ITRC student travel sponsor:

- The organization's logo will be listed on the *conference website* as a student travel sponsor, and will be listed on all *conference registration panels* indicating the organization's name and the number of students supported.

2. **ITRC SUPPORTER:** \$500 - \$1,000 U.S. This contribution will be used to provide general support of the ITRC.

- As an ITRC Supporter, the organization's logo will be listed on the *conference website* as an ITRC supporter.

If a student(s) from your university/institution will be attending the 13<sup>th</sup> ITRC, please consider asking your state turf association/foundation to become a Student Travel Sponsor. They will be supporting the professional development of a student and will receive recognition for their support. Alternatively, please consider asking your state turf association/foundation to become an ITRC Supporter to help advance turfgrass science in the U.S. and around the world.

Contact Clark Throssell at [clarkthrossell@bresnan.net](mailto:clarkthrossell@bresnan.net) if you should have questions about state turfgrass foundation/association sponsorship of the 13<sup>th</sup> ITRC.

# 2016 Fall Annual Meeting, Obihiro, Hokkaido, Japan

by Yoshi Ikemura<sup>1</sup> and Hideaki Tonogi<sup>2</sup>

<sup>1</sup>Shizuoka Prefectural Research Institute of Agriculture and Forestry

<sup>2</sup>International relations committee

Director, Japanese Society of Turfgrass Science

The Japanese Society of Turfgrass Science (JSTS) 2016 fall annual meeting was held in Obihiro, Hokkaido, Japan on September 23-25. Obihiro is in the southeastern region of Hokkaido, and the climate has warm summers and very cold winters. We enjoyed the fine weather it was neither too warm nor too cold during the fall annual meeting.

The morning session on the first day at the fall annual meeting had four separate meeting groups. These groups included golf courses, ground cover plants, school turf, and parks. For the afternoon session, the general meeting and keynote lectures were held. The keynote lecture speakers and their titles were as follows:



Welcome message by the president of Tokachi-Mainichi Press at Tokachi Millennium Forest



At Memuro Park, there are dozens of big Japanese emperor oak trees. Some of the trees are over 350 years old and as old as the history of the development in Hokkaido. However, these heritage trees are in danger because of environmental changes caused by the park improvement construction including planting turf. The trees and the turf, their coexistence is a challenge.

## 2016 fall annual meeting in Obihiro, Hokkaido

Mr. Hiroshi Tezuka, Senior vice-president of Japan Golf Management Association, “Approaches to golf course revitalization”

Dr. Yoichi Ohara, AGE Research Institutes, “Turfgrass research and education in Hokkaido”.

Ms. Midori Shintani, Tokachi Millennium Forest, “Contribution by culture of green and gardening”.

On the second day of the meeting, we visited turfgrass sites around the Obihiro area and these were as follows: 1) Obihiro Forest Park, 2) Memuro Park, 3) Tokachi Millennium Forest, 4) Park Golf site at Makubetsu-cho, and 5) Tokachi Ecology Park.



Earth Garden at Tokachi Millennium Forest

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Park golf which was invented in Makubetsu-cho, Hokkaido.

Tokachi Millennium Forest has beautiful award-winning gardens. The Forest was established on the idea of “carbon offset,” an environmental conservation activity to reduce greenhouse gas emissions. The Park golf site was invented in Makubetsu-cho, Hokkaido. All you need to play park golf is one club, a ball and a tee. Everyone from children to elderly people can enjoy this community sport. It is becoming very popular in the Hokkaido area specially, so now it has spread to of all Japan including Okinawa, the southern part of Japan.

On the last day, we played golf at Tokachi Country Club as technical tour. The next JSTS meeting will be held in Tokyo City University from May 19<sup>th</sup> to 21<sup>th</sup> in 2017.

## Ten new fact sheets about turfgrass winter stress management

by Maria Strandberg  
STERF, Sweden



# STERF

The Scandinavian Turfgrass and Environment Research Foundation (STERF) and the Canadian Turfgrass Research Foundation (CTRF) have created and published ten central fact sheets with practical advice and recommendations related to turfgrass winter stress management. The fact sheets cover the following topics:

- Acclimation and winter stresses - What is killing our greens?
- Grass species and varieties for severe winter climates
- Preparing golf greens for winter survival
- Winter protective covers - Usage of wraps to improve winter survival of golf greens
- Anoxia. When to break the ice?
- Winter work on golf greens
- Warm spells during the winter
- Spring stresses - The difficult transition into a new growing seasons
- Re-seeding and spring recovery from winter injuries
- Winter play on summer greens.

This is the first outcome of ready-to-use research results based on a joint research and development programme and research collaboration between STERF and CTRF. All fact sheets are available on

<http://www.sterf.org/sv/library/fact-sheets-winter-survival>

STERF and CTRF have identified ‘Winter Stress Management’ as a high priority area of research and development for the period 2014-2020. The ultimate goal of this joint research programme is to provide the golf industry with information and tools to minimize turfgrass winter damage. Based on the programme, STERF and CTRF are taking an international lead in directing and supporting turf grass winter stress management and research for the next five years.

Winter injuries are a significant economic burden for golf courses in the Nordic countries and Canada. About 70% of the golf courses in the Nordic

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countries suffer from winter damage every year, and the associated average annual costs per golf course are an estimated €35,000-40,000. Winter damage also has great environmental implications, as re-establishment of dead turf in spring increases the need for energy, fertilizer, pesticides and irrigation water, with concomitant risks of leaching and surface runoff. Because of the economic and environmental impact, golf course superintendents throughout Scandinavia consider 'Winter Stress Management' to be the most important of STERF's thematic areas for research and development. A similar level of prioritization can be anticipated in Canada and other countries with similar climate conditions.

The extent of winter damage is a result of complex interactions between turf grass plants and a number of environmental factors. International and interdisciplinary projects are therefore needed to develop guidelines. An equally important consideration is that these guidelines are efficiently communicated to golf course superintendents and other turf grass managers.

The research programme and information about on-going research projects within winter stress management can be found at [www.sterf.org](http://www.sterf.org).

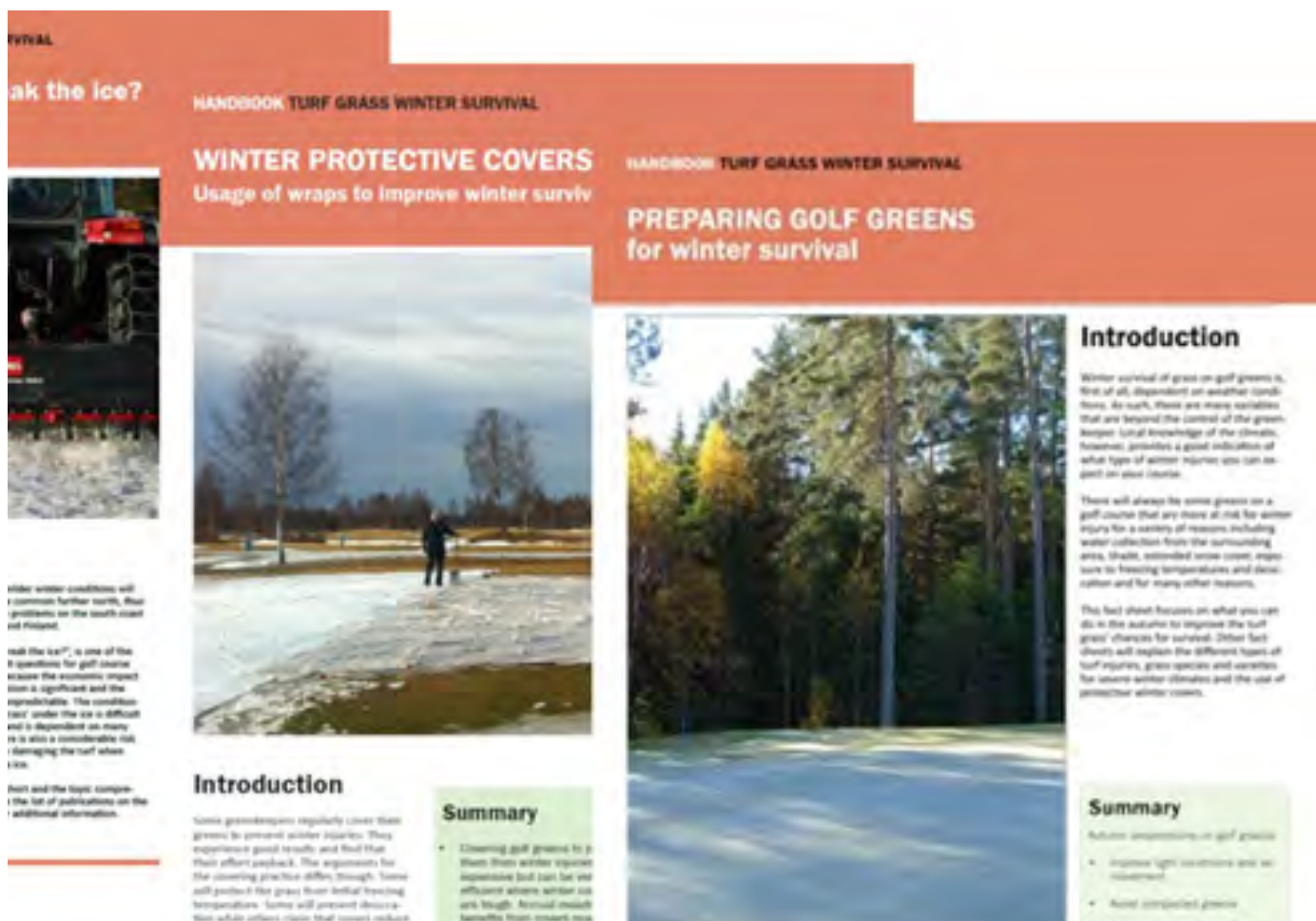


Figure 1. Ten new fact sheets about turfgrass winter stress management are available at <http://www.sterf.org/sv/library/fact-sheets-winter-survival>

# Pre-Conference Tour, ITRC 2017 Washington, DC and Philadelphia, PA USA

July 11 – 15, 2017

by Dr. Mike Agnew, Syngenta  
Dr. Michael Fidanza, Penn State University  
Dr. Nancy Agnew, Longwood Gardens

## Overview

The Nation's capital, Washington, District of Columbia is home to the United States' most significant buildings, National parks, museums, monuments and memorials. The city is rich in arts and culture and has a vibrant restaurant scene. Both reflect the eclectic nature of America's heritage. Attendees will have the opportunity to learn about the extensive turf and grounds renovations just completed on America's Front Yard, the National Mall; visit the U.S. Botanic Garden; observe turf exhibits at the National Arboretum; and visit Nationals Park, home of the Washington Nationals' Major League Baseball team. This is the nation's first LEED certified ballpark that boasts cutting-edge game presentation and fan experience. Time has been allotted for attendees to explore Washington, DC's significant and historic sites by day and to enjoy DC arts, culture, and restaurant scene by night. (Visit <https://washington.org/> for Washington, DC tourism information.)

We will be staying at **The Jefferson Hotel, Washington DC**. (Visit <http://www.jeffersonhotel.com/>) Conveniently located north of the White House and The National Mall.

**Philadelphia, Pennsylvania**, known as the Birthplace of the Nation, is where the Founding Fathers debated, drafted and signed the Declaration of Independence and, eleven years later, wrote the U.S. Constitution. The Independence National Park Sites including Independence Hall, The Liberty Bell Center, The National Constitution Center, Carpenter's Hall, Franklin Court and many others are located here. Philadelphia is home to several modern sports complexes, is a significant arts and cultural center, is known as America's Garden Capital, and has one of the hottest restaurant scenes in the country. (Go to [www.visitphilly.com](http://www.visitphilly.com) for Philadelphia, PA tourism information.)

We will be staying at the **Sheraton Philadelphia Society Hill** Hotel in the heart of Philadelphia's original city, steps from The

Independence National Park Sites, and at the epicenter of Philadelphia's restaurant scene. (Visit <http://www.sheratonphiladelphiasocietyhill.com/>)

## Transportation

Attendees should plan to arrive in Washington, DC by Tuesday July 11, 2017. Washington, DC is served by Reagan Washington National Airport, Washington Dulles International Airport, and the Amtrak train station at Washington, DC Union Station. Hotel check-in is at 3:00 PM (early arrivals can check bags at the front desk). All transportation during the pre-conference tour is included in the tour package. This includes coach transportation to all organized tour sites, transportation from Washington, DC to Philadelphia, PA and transportation to the ITRC Conference Hotel, the Hyatt Regency in New Brunswick, NJ.

## Itinerary

### Tuesday, July 11, 2017

Hotel Check-In. Early arrivals can check their bags at the front desk and are at leisure to explore historic Washington, DC.

**Welcome Reception and Dinner.** To be held at **The Jefferson Hotel**.

### Wednesday, July 12, 2017

Depart for tours of sites in DC.

- **The National Mall**, located at the heart of Washington, DC, is considered America's Front Yard and serves as the world's window to America. The park is home to some of our nation's most recognizable monuments, memorials and important events. The National Mall has 1,000 acres of greenspace and hosts 33 million visitors per year. This has caused significant wear and tear

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on the once-grassy lawn which extends from the Lincoln Memorial to the U.S. Capitol Building. In response, the National Park Service has just completed a massive restoration project. The turf restoration project was designed to create a healthy and water efficient landscape. All aspects of this restoration will be discussed on our tour by a representative from the National Park Service.



The National Monument

- **National Museum of Natural History**, is located on the National Mall and is one of 19 museums managed by the Smithsonian Institution (Go to <http://si.edu/> to learn more.). Attendees will be provided a behind-the-scenes tour that gives unparalleled opportunities to hear directly from the Natural History Museum's renowned scientists and curators as they walk you through collections not on view to the general public and update you on their latest research and fieldwork conducted around the globe.

**Lunch at the National Museum of Natural History (or similar venue).** Lunch vouchers will be provided.

Afternoon and evening to explore Washington, DC on your own OR University of Maryland Turfgrass Field Day (1:00 pm to 7:00 pm) with barbeque dinner.

Return transportation to the hotel (pick-up at the National Mall).

- For those interested, arrangements will be made to attend the University of Maryland Turfgrass Field Day in College Park Maryland. This biennial field day highlights turfgrass research conducted at the University of Maryland and will include a Barbeque dinner at the research site.

**Thursday, July 13, 2017**

Depart for Tours of Sites in DC and Philadelphia, PA

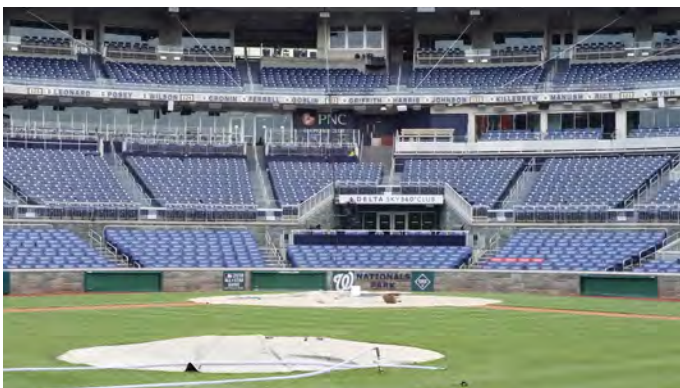
This is moving day!

- **The U.S. National Arboretum's Grass Roots Initiative** is a four-year, in-depth look at the science behind "Turfgrass," this familiar, but often misunderstood, landscape plant. Grass Roots is an interactive display at the arboretum and a cooperative initiative of the U.S. National Arboretum, USDA-ARS, and the National Turfgrass Federation, Inc.
- **Nationals Park**, home of the Washington Nationals Major League Baseball team. The grounds manager will provide a guided tour of this outstanding modern sports facility.



The United States Botanic Garden

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Nationals Park in Washington, D.C.

- **Arlington National Cemetery** is a lasting tribute to the men and women who made the ultimate sacrifice while serving our nation. This hallowed ground is where more than 400,000 United States service men and women and their family members are laid to rest.



Arlington National Cemetery

- **Congressional Country Club** was constructed in 1924 as place where Members of Congress could meet with businessmen. Today is a world class golf course that has played host to US opens, and PGA tour event.

Arrive at the Sheraton Philadelphia Society Hill Hotel.

Dinner on your own. Dining options will be provided.

## Friday, July 14, 2017

### Visits to Philadelphia's Independence National Park Sites

- **Independence Hall.** The Declaration of

Independence and U.S. Constitution were both debated and signed inside this building.

- **The Liberty Bell Center.** View the bell that bears a timeless message: *“Proclaim Liberty Throughout All the Land Unto All the Inhabitants thereof”*. A must see location when visiting historic Philadelphia.

### Visits to Philadelphia's Sports Complexes

- Walk onto **Lincoln Financial Field** and observe a state of the art stadium that play host to the Philadelphia Eagles football, collegiate football, concerts and more.
- **Talen Energy Stadium**, a state-of-the-art 18,500-seat Major League Soccer stadium, serves as home to Philadelphia Union.

### Visits to Philadelphia's Cultural Centers (<http://withart.visitphilly.com/>) and (<http://www.avenueofthearts.org/>)

- **The Philadelphia Museum of Art** is a landmark building with a world-renowned collection. Climb the steps and have your picture taken with the statue of Rocky.
- **Rodin Museum** is a unique ensemble of Beaux-Arts architecture and a formal French garden in which to experience the sculpture of Auguste Rodin, the Museum was designed by French architect Paul Cret (1876–1945) and French landscape designer Jacques Gréber (1882–1962).
- **Barnes Foundation** holds one of the finest collections of post-impressionist and early modern paintings.

## Saturday, July 15, 2017

Free morning to explore Philadelphia.

Lunch on your own.

### Afternoon departure for The Brandywine Valley, Chester County, Pennsylvania.

- **Brandywine River Museum of Art** is renowned for its vast collection of the Wyeth family of artists, the Museum features galleries dedicated

*Continued on next page*

to the work of N. C. Wyeth, Andrew Wyeth and Jamie Wyeth. The Museum's outstanding Heritage Collection is a cross section of American art, with a special focus on artistic practice in the Brandywine valley. In summer 2017, an exhibition entitled, Andrew Wyeth: In Retrospect will bring together both well-known and rarely seen works that reveal the subjects that continually inspired Wyeth and the evolution of his imagery. Attendees will be offered a guided tour of the exhibition and Andrew Wyeth's studio. (Go to <http://www.brandywine.org/museum> for more information.)

- **Longwood Gardens** is one of the world's great gardens. Longwood Gardens is the living legacy of Pierre S. du Pont, inspiring people through excellence in garden design, horticulture, education, and the arts. From the intricate fountain systems, to the meticulous gardens, to the architectural grandeur, awe-inspiring discoveries await at every turn. Years before it was a public

garden, the land on which Longwood Gardens stands was home to the native Lenni Lenape Indian Tribe and Quaker farmers. Since then, the land has undergone significant transformation to become the magnificent property that is enjoyed by more than a million guests each year. (Go to <https://longwoodgardens.org/> for more information.) Attendees are free to explore Longwood Gardens on their own during the late afternoon. Dinner will be provided at Longwood Gardens and attendees will have the opportunity to view the magnificent fountain and light shows in the gardens after dark.

### **Sunday, July 16, 2017**

Depart Philadelphia on bus for New Brunswick, NJ for the ITRC.

For additional information contact Michael Agnew' at [Michael.agnew@syngenta.com](mailto:Michael.agnew@syngenta.com).

## **Post-Conference Tour, ITRC 2017 Asheville, NC USA**

**July 21 – 26, 2017**

**by Dr. Lane Tredway, Syngenta**

**Dr. Jim Kerns, North Carolina State University**

### **Overview**

[Asheville](#) is a city in western North Carolina's Blue Ridge Mountains. It's known for a vibrant arts scene and historic architecture, including the dome-topped Basilica of Saint Lawrence. The vast 19th-century Biltmore estate displays artwork by masters like Renoir. The Downtown Art District is filled with galleries and museums, and in the nearby River Arts District, former factory buildings house artists' studios.

Participants will stay on the Biltmore estate in the brand new [Village Hotel](#). Nestled in Antler Hill Village just steps from the Winery, Village Hotel occupies a central-to-everything location near quilt-like farm fields that stretch along the banks of the French Broad River. The hotel is close to shopping, dining, exhibits, and an exciting range of outdoor activities.

### **Itinerary**

#### **Friday, July 21, 2017 (optional night):**

Travel Day; Optional hotel night at additional cost (\$270 per night).

#### **Saturday, July 22, 2017:**

Morning – Travel Day. Afternoon at leisure; optional [outdoor activities](#) at Biltmore estate for those arriving early. Welcome reception and dinner at the [Inn on Biltmore Estate](#).

#### **Sunday, July 23, 2017:**

Full day at [The Biltmore Estate](#), including tour of the Biltmore House, a private group lunch, and tour of the Gardens.

*Continued on next page*



The Biltmore House

- [The Biltmore House](#), also known as America's Largest Home, is a 250-room French Renaissance chateau built by the Vanderbilt Family in the late 1800s. Get a close look at original art by Pierre-Auguste Renoir and John Singer Sargent. Marvel at magnificent 16th century tapestries, a Library with 10,000 volumes, a Banquet Hall with a 70-foot ceiling, 65 fireplaces, an indoor pool, and a bowling alley. Almost all of the priceless objects that you will see throughout the house are from George and Edith Vanderbilt's original collection.
- [The Gardens at Biltmore Estate](#) were designed by America's foremost landscape architect, Frederick Law Olmsted. From the beauty of the Italian Garden to the breathtaking trees in America's first managed forest, Biltmore's lush landscape is a living tribute to Olmsted's genius. Our horticultural experts continually work to preserve the original vision for the gardens and grounds, including our Rose Garden that features more than 250 varieties.



The Gardens at Biltmore Estate

## Monday, July 24, 2017

Bus trip to Cashiers, NC to visit Wade Hampton Golf Club and Highlands Country Club. Optional accompanying person's tour – shopping and lunch in Biltmore Village.

- Cashiers is a 1.5 hour drive from Asheville and is located in the heart of the Nantahala National Forest. This is the only temperate rainforest on the east coast of North America, averaging over 100 inches of rain per year, which presents some unique challenges for golf course managers.
- [Wade Hampton Golf Club](#) is often referred to as "Tom Fazio's Masterpiece". The course was named as the "Best New Private Course for 1987" by Golf Digest magazine, and is one of only three courses built in the last fifty years to be currently ranked in their top 20 courses in the United States. When we visit they will be in the early stages of a major reconstruction project. We will discuss their extensive tree inventory and management program, management of their naturalized fescue areas, and tour their new irrigation water treatment facility featuring acid injection and reverse osmosis.



Wade Hampton Golf Club

- [Highlands Country Club](#), founded in 1928, is the premier, family-oriented private club in the North Carolina mountains. It is steeped in rich history and tradition, starting with its Donald Ross designed golf course. The club's founders, including the Colonel Robert P. Jones (Bobby Jones' father), had engaged the well-known Scottish architect to carve a golf course out of the

*Continued on next page*

beautiful Appalachian Mountains. We will discuss management of their creeping bentgrass greens with significant nematode, *Pythium* root rot, and *Poa annua* pressure, as well as creeping bentgrass fairways and Kentucky bluegrass roughs, and creeping bentgrass croquet courts.

## Tuesday, July 25, 2017

Morning tour of Biltmore Forest Country Club, Asheville NC, return by lunch, afternoon at leisure. Evening Pub Crawl in Downtown Asheville

- [Biltmore Forest Country Club](#) has played a significant role in the distinguished social history of Asheville and the Carolinas. Mrs. Edith Vanderbilt was instrumental in acquiring the land for the town of Biltmore Forest from the Biltmore Estate in 1920. Included was a site for a country club, and construction began the following year. The club has undergone many changes and renovations over the years with the most recent being a 6.4 million dollar restoration of the golf course, including new 'A-1' creeping bentgrass greens and 'Zeon' zoysiagrass tees and fairways, all established by sod, and an 1.8 million dollar restoration of the clubhouse.



### The Biltmore Forest Club

- On our evening [Pub Crawl](#), we will have the opportunity to sample the dizzying array of beer that Asheville offers. From hoppy IPAs to dark stouts, the city's breweries keep beer flowing like mountain water. Boasting more breweries per capita than any U.S. city, roughly 100 local beers can be enjoyed in Asheville. Asheville was first named Beer City USA in 2009 and has swept the competition almost every year since.

## Wednesday, July 26, 2017: Departure Day

For additional information contact Lane Tredway at [lane.tredway@syngenta.com](mailto:lane.tredway@syngenta.com).

## Dr. James Watson Celebration: Monday, July 17, 2017

by Gwen Stahnke

Walla Walla Community College, Walla Walla, WA

Dr. James Watson was one of the early leaders of the International Turfgrass Society (ITS) and an integral part of turfgrass research throughout his entire life. In recognition of his many contributions to turfgrass research, the ITS will host an evening program on Monday, 17 July 2017 from 17:30 - 18:45 in the conference hotel (Hyatt Regency). This program was designed to highlight who Dr. Watson was and his many contributions to the industry today, future research, and his promotion of student educational opportunities.

We are honored to have Dr. James B. Beard, President and Chief Scientist of the International Sports Turf Institute, Inc. and Professor Emeritus of Turfgrass Science, Texas A & M University give a brief overview of how the ITS was founded and the history of Dr. Watson's involvement in the ITS over the years. Dr. Paul Rieke, Professor Emeritus of Michigan State University and Dr. Kimberly Erusha,



Managing Director of the USGA Green Section also will speak about Dr. Watson and his involvement in the USGA Turfgrass and Environmental Research Committee.

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Mr. Dana Lonn, Director of the Center for Advanced Turf Technology with the Toro Company will speak about the Watson Fellowship Award, and a member of Dr. Watson's family will give a brief tribute to Dr. Watson. The celebration will end with some comments from Dr. James Murphy of Rutgers University, who as a student benefited greatly from

Dr. Watson's guidance and commitment to turfgrass research.

Please join us to honor the legacy of Dr. James Watson. There will be light hors d'oeuvres and refreshments available for the attendees to mingle and visit with each other after this event.

## **Student Competition and Student Travel Awards for the 2017 ITRC by Paul Koch University of Wisconsin, Madison, WI**

(Application Deadline for Travel Awards: January 31st, 2017)

A new Student Competition will take place at the 2017 ITRC. Competitions will be held for both oral and poster presentations and entrants will be divided into four broad categories: Pest Management Strategies, Turfgrass Physiology and Soil Health, Genetics and Breeding, and Environmental Aspects of Turfgrass Management. The top 3 contestants in each category will receive a complimentary ITS student membership and a modest cash prize.

In addition the Student Oral and Poster Competition, there will be multiple awards available to support student travel to the 2017 ITRC. Applicants will be divided into those from the United States and those from the international community, and the top award from each applicant pool will equal the approximate full cost of attending the meeting (airfare, lodging, registration, modest meal allowances). Additional awards will provide partial travel support and the amount and number of awards given will depend on the number of qualified applicants.

To apply for a student travel award, download and completely fill out the 2017 ITRC Student Travel Award Application available from the ITRC website (<http://turfgrassociety.com/itrc2017/#student-travel->

[awards](#)). The application must include any abstracts to be presented at the 2017 ITRC, a 1-page personal statement stating how attendance at the meeting will help the applicant achieve their career goals, and a signed statement from their major advisor verifying that they study turfgrass science and that they are currently in good academic standing at their respective institution.

To be eligible for a travel award applicants must be a current student studying turfgrass science at the time of the 2017 ITRC and must be planning to present (oral or poster) at the 2017 ITRC. Applicants will be judged based primarily on their personal statement, the quality of their abstracts, and their involvement and leadership at their respective universities. Applicants who have entered the Student Competition will receive priority for an award over those who have not.

The completed application should be saved as a single PDF file and emailed to Paul Koch ([plkoch@wisc.edu](mailto:plkoch@wisc.edu)) by January 31st, 2017 at 11:59 PM. Award recipients will be notified on approximately March 1st, 2017. Questions regarding the application process or the Student Oral and Poster Competition should be directed to Paul Koch at [plkoch@wisc.edu](mailto:plkoch@wisc.edu) or 608-262-6531.

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Please send comments, feedback, and turfgrass news articles for future issues to the editor.

If you know any non-members, new faculty, staff, and new personnel involved in turfgrass research who might be interested in joining ITS please forward their e-mail address to me and I will send a complimentary copy of the next Triannual issue of International Turfgrass.

The deadline for submissions for the next newsletter is April 15, 2017