2015 Great Lakes School of Turfgrass Science Online (For Professionals)

Online Program (Jan. 7th – Mar. 25th 2015)
- Live Wednesday night online sessions from 6-8pm (CST)
- 12 internationally renowned turfgrass science faculty from across the Great Lakes Region
- 24 hrs of in-depth training in turfgrass science and management

Questions about the class?
Contact: Sam Bauer (jrbauer@umn.edu, 763-767-3518)

Class fee: $495.00/person
Registration deadline: Wed. Dec. 31st, 2014

Register at: http://z.umn.edu/2015greatlakesturfschool

Thank You Sponsors
Roger Stewart, certified golf course superintendent (CGCS) at TPC Twin Cities in St. Paul, Minn., received the 2014 President’s Award for Environmental Stewardship by the board of directors of the Golf Course Superintendents Association of America (GCSAA) on Wednesday, Feb. 5, during the Opening Session at the 2014 Golf Industry Show in Orlando (Feb. 1-6).

A 38-year member of GCSAA, Stewart has accumulated an impressive array of environmental accomplishments at each stop along a nearly four-decade career as a golf course superintendent. Since joining the TPC network of courses in 1996, he has served as a leader and a resource on environmental matters across all 33 TPC courses, and has been equally involved in issues on the local level through leadership in numerous superintendent chapters.

“GCSAA members such as Roger Stewart set a shining example for all superintendents through the positive environmental stewardship he has displayed during his career,” says GCSAA President Patrick R. Finlen, CGCS. “His openness and willingness to share what he has learned with others has been a benefit to our entire industry, and we’re pleased to honor him for his many accomplishments.”

Stewart’s first stop in the TPC system was as the grow-in superintendent at TPC Jasna Polana in Princeton, N.J. He worked diligently throughout the construction process to protect the water sources and native wildlife habitat that surround the environmentally sensitive site. Under his direction, Jasna Polana was certified as both an Audubon Cooperative Sanctuary by Audubon International and a River Friendly Golf Course through the Stony Brook Millstone Watershed Association.

After moving to TPC Twin Cities in 2008, Stewart continued his stewardship efforts. He recertified the property as an Audubon Cooper-
Stewart Receives 2014 President’s Award for Environmental Stewardship
Provided by the GCSAA

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The GCSAA President’s Award for Environmental Stewardship was established in 1991 to recognize “an exceptional environmental contribution to the game of golf; a contribution that further exemplifies the golf course superintendent’s image as a steward of the land.” For a full list of past winners, visit www.gcsaa.org/community/awards.

Right: Roger Stewart CGCS and winner of the GCSAA President’s Award for Environmental Stewardship.

We know there are many choices on who you buy your supplies from so it is at this time we turn to you & say Thank You because sometimes during the busy season we forget to thank the very people that have made our progress happen. We cannot say it enough!

Thank you  Thank you  Thank you

Have a Safe and Happy Holiday Season

MGCSA Beer and Pretzel Social
At the Northern Green Expo
January 14, 2014
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Rick Gabler  ·  Dan Gabler  ·  Steve Hamelau  ·  Nick Larson  ·  Rick McCarthy

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 сезон's Greetings
Anoka Technical College Horticulture has had an exciting year with several highlights...

January saw the Northern Green Expo. Students helped install our Anoka Tech booth. They laid a 10 X 20 foot paver patio, Straussen wall column (thanks, Borgert!) with a granite column cap/ fire rock, and a fire on water fountain that wowed the crowds! Many of the students donated their time for experience of practicing the innovative techniques.

Early spring found the Horticulture Club teaching Horticulture to 5th grade students at Franklin Elementary in Anoka. The weather was cold outside but the students were thrilled to plant herbs to take home! The Horticulture Club also followed up with Twin Rivers Nursing Home in Anoka and planted some annuals into the raised beds they had donated in December.

Internships sent everyone out for the spring and summer. Once again, the turf students were coast to coast (Vermont to California). For the first time in many years, the Horticulture department sold plants that the student’s raised. Although it was small, nearly $500 was raised. Shortly after the plant sale we graduation. The department had 6 AAS in Golf Course Grounds Management and 4 AAS in Landscape Technology graduate in May.

This summer brought the news that the 60/120 waiver was approved. Our program was one of the last to be reviewed. The approval means that we do not have to decrease any content delivered to our students. Other good news over the summer was the approval of the articulation agreement with University of Wisconsin– River Falls. The articulation gives transferring students about a years worth of credit plus electives.

This fall saw a small change in the structure of the program. We started all Golf Course students October 6 (not including the fall internship). Landscape students started the week before Labor Day but did have a late start in both Plant Pest I and Woody Plants I. It was very quiet until the return of the Golf Course students! Currently we have 18/3/1 Golf Course students (AAS/Diploma/Certificate) and 11/12/7 Landscape students plus 2 full time PSEO students.

This fall has generated a crazy amount of energy and excitement.

Parade: Horticulture faculty and students participated in producing the ATC float displaying 2 1376 pound pumpkins (squash).

Horticulture Club participated in the Stillwater Harvest Fest by assisting the St. Croix Growers Association with the weighing of the big pumpkins.

Coursework at ATC:

Marlin and his students have scalped the green outside, top dressed it and cut a cup. Equipment that has not been run in 5 years is working and getting used along with the new greens mower that Toro donated last year. The indoor green is re-planted and the new lights are showing promise for sustaining growth.

The second phase to the courtyard is underway. Students have installed two more patios and some seating within the walls. Edging, mulch and plant material will also be installed.

Irrigation class has installed irrigation just outside the department so plants can finally grow through the summer without dying.

All of the students have commented on how beneficial the hands on learning has been!

Horticulture Club installed a landscape for the Conexus Energy Solar Garden in Ramsey as a way to promote good will because they are strong supporters of ATC through the Foundation.

The day after Advisory Board, ATC Hort will host an Industry Day in the Department with seminars, job fair, and lunch by the Hort Club. We are looking forward to this new launch of internship/ SOE.

We are also looking forward to many students volunteering at the Northern Green Expo in paid positions from MNLA.

And that wraps up a year in the life of ATC Hort...
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Member Driven Research: Using growing degree days to schedule paclobutrazol applications on Kentucky bluegrass fairways

Sam Bauer, Matt Cavanaugh, Mario Gagliardi, and Dr. Brian Horgan
University of Minnesota

Plant growth regulator (PGR) use on golf courses has increased dramatically over the last two decades. In that time, turfgrass managers and researchers have constantly been striving to increase both the efficiency of PGR uptake and consistency of turfgrass response. Previously, calendar-based PGR applications have been the standard in the industry due to convenience and ease of scheduling. As we begin to learn more about PGR uptake and metabolism, it has become apparent that calendar-based application scheduling results in inconsistent turfgrass responses because air temperatures impact metabolism of PGRs. Superintendents noticing a lack of PGR effectiveness in the summer months can attribute this to a more rapid breakdown of PGR compounds within the plant.

Research at the University of Illinois demonstrated the increase in PGR metabolism under high temperatures by analyzing trinexapac-ethyl (TE) and paclobutrazol (PAC) residues in both creeping bentgrass and Kentucky bluegrass at different times of the year. Metabolism of TE increased almost two-fold in both species when comparing temperatures of 64 degrees F to 86 degrees Fahrenheit. Applications of PAC resulted in a similar PGR breakdown response under high temperatures, although PAC had a longer half-life in both species, and Kentucky bluegrass was regulated for a longer period than creeping bentgrass (Branham and Beasley 2007). Researchers at the University of Wisconsin-Madison built on this work by establishing growing-degree-day (GDD) application interval timings for TE and PAC applications to creeping bentgrass putting greens (Soldat 2011; Kreuser and Soldat 2012). This work helped to improve the consistency of suppression without over-applying PGRs, while avoiding the rebound phase following PGR breakdown. Plant growth regulator GDD models are calculated by determining the mean daily air temperature in degrees Celsius and adding this number to consecutive days until the threshold is reached. The base temperature used is 0 degrees Celsius. Current models developed for TE and PAC regulation of bentgrass putting greens require applications at 200 and 300 GDD, respectively.

The goal of this research was to establish a GDD application model for consistent season-long suppression of Kentucky bluegrass fairways with PAC. Knowing that Kentucky bluegrass is regulated for a longer duration than creeping bentgrass and fairway height turf can tolerate higher rates, the models used in this research have longer GDD application intervals and rates relevant for fairways. Note that our application rates in some instances exceed the label rate and was done so for experimental purposes.

Study Design

This study was carried out on a 75/25 mixed stand of Kentucky bluegrass and annual bluegrass maintained as a fairway at Tartan Park...