



# GREEN SECTION RECORD



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## Firm, Resilient Fairways Require a Commitment to Thatch Control

**The USGA Green Section has always been a proponent of firmer, drier turf on golf courses. Controlling thatch is just one aspect of firm fairways, but it is a crucial element.**

by [Adam Moeller](#), agronomist, Northeast Region

Many golf courses are adjusting their turf management philosophies to emphasize firmer surfaces as an integral part of good golf conditions. Achieving these conditions, though, is much easier said than done because there are many variables involved. Sandy soils that drain well allow for firmer conditions much more often than heavy-textured clay soils that tightly retain moisture. Automatic overhead irrigation system efficiency and hand watering capabilities (i.e., labor) also largely influence how firm or soft a golf course can be consistently maintained. Finally, organic matter content, also known as thatch, dramatically impacts golf course firmness, which is the focus of this article.

Thatch is a combination of living and dead plant material and is a natural byproduct of growing healthy turf. A reasonable amount of thatch is needed for traffic tolerance, but too much is a major agronomic and playability concern. Mismanagement of turf contributes to excessive thatch buildup, leading to soft conditions. Excessive use of fertilizer and irrigation are two controllable factors leading to rapid thatch accumulation.



**Excessive thatch is usually the result of insufficient core aeration or vertical mowing. Firm, reliable conditions are rarely attainable if thatch is excessive.**

[Read the rest of this article.](#)

## Things I Wish My Superintendent Understood

**Part 6 of the USGA Green Section Education Conference presentation series**

by the USGA Green Section staff

For the 35th consecutive year, the annual Green Section Education Conference was held in conjunction with the 2012 Golf Industry Show (GIS). This year's program, held on March 2, addressed the theme, "Improving Your Golf Course Management Odds." The Green Section's staff totals 420+ years of experience, and the session highlighted some of the lessons learned and changes witnessed in the turfgrass management field.

Economic challenges have made it more difficult for people to attend the GIS, and, with this in mind, we are sharing the Green Section presentations in this publication. This is the sixth presentation in the series. In this recorded video, [Pat Gross](#), director of the Southwest Region, discusses the results of a survey of golfers regarding what they wish more superintendents understood.

Watch the presentation, [Things I Wish My Superintendent Understood](#)

Links to the previous presentations are found below:

[The Fun Factor](#)  
[Reclaiming Perimeter With Core Aeration Plugs](#)  
[If I Were The Emperor Of Golf For A Day](#)  
[Moisture Meters For Better Golf Turf](#)  
[Showcase Your Value At Your Facility](#)



"Things I Wish My Superintendent Understood" is the sixth presentation of the USGA Green Section Education Conference at the 2012 Golf Industry Show

## USGA Green Section Podcast from the 2012 U.S. Women's Open (July 5-8)

**Hear what is being done to prepare and present Blackwolf Run for the championship**  
*by the USGA Green Section staff*

Listen to Manager of Golf Course Maintenance for Destination Kohler, Mike Lee, and USGA Green Section Senior Agronomist, Bob Vavrek, discuss the agronomic preparations of Blackwolf Run for the 2012 U.S. Women's Open. Green Section Managing Director Kimberly Erusha interviews the two men in this brief but entertaining podcast.

[Listen to the podcast](#)

*The photo to the right is of the 200-yard, par-3 sixth hole at Blackwolf Run. (Steven Gibbons/USGA)*



## Instant Overseeding Coming To A Fairway Near You

**Turf colorants are a capable replacement for winter ryegrass overseeding.**  
*by [Patrick O'Brien](#), director, Southeast Region*

Early adopters of a technology are by nature risk takers, early risers, and people who have a great deal of patience. They are risk takers because they stand out from the crowd, for better or worse. They are early risers because they wake up early enough to be the first in line to purchase the next great thing. Finally, they have the patience to work through glitches inherent with any new technology. For those who are not early adopters, there is opportunity to sit back, evaluate, and see what happens.

In the golf industry, a type of early adopter has appeared. In the Southeast Region, a number of golf course superintendents have been the first to adopt a program that utilizes turf colorants on fairways instead of the traditional practice of winter overseeding with ryegrass. In doing so, these superintendents are conserving natural resources, spending less money, enhancing the quality of their bermudagrass turf base, and delivering a product that meets customer expectations. The colorants, designed for use on turf, are applied with a traditional golf course sprayer.



**The environmental impact of turf colorants is noteworthy because green fairways are produced using less water and fewer pesticides and fertilizers versus overseeding.**

As mentioned earlier, any new trend is going to have glitches and bumps along the way. Every superintendent mentioned in this article agrees. For this reason, they continue to modify and improve the process each season. Those who are not early adopters have the opportunity to wait and learn. This article examines this trend and is designed to be a resource for those interested in testing this concept at their golf facility.

[Read the rest of this article.](#)

## Gumption In Grand Junction

**Renovation and new irrigation installation was a long time planning, but worth the wait!**

by [Dorf Soller](#), agronomist, Southwest Region

Tiara Rado Golf Course is located in Grand Junction, Colorado, in the Grand Valley of western Colorado. This municipal 18-hole golf course showed sound, practical judgment with a recently completed and long-awaited renovation, along with an entirely new irrigation system. With proper planning and prudent purchasing, they completed the project under budget and on time, and are now realizing energy savings, water savings with improved irrigation efficiency, improved turf conditions, and increasing golfer satisfaction. And, as a bonus, they are more efficient in their use of labor for daily course maintenance.

Originally designed by Tom Kolacny, Tiara Rado was opened in 1971. The golf course sits at the foot of the Colorado National Monument. The breathtaking vertical red cliffs of the monument and views of the Bookcliff Mountains to the north and the Grand Mesa (the largest flat top mountain in the world) provide spectacular vistas in all directions for residents and visitors to the Grand Junction area.

[Read the rest of this article.](#)





A new pump station, pad, and irrigation lake was part of the renovation.

## Thirsty But Green *USGA Research Update*

**A Kansas State University study explores the minimum amount of water needed for Kentucky bluegrasses to survive while remaining green between irrigation cycles.**

*by the USGA Green Section*



Well-watered Kentucky bluegrass cultivar plots at the beginning of a dry-down study on June 4, 2007, (left) and at two months later (right), where drought stress is evident (photos courtesy of Dr. Dale Bremer).

In most of the United States, watering the golf course is an important responsibility of the superintendent. It is equally important for golfers and course officials to understand that water availability, usage, and cost are major issues facing the golf course industry. Water impacts nearly every aspect of managing golf course turf, such as color, mowing operations, traffic control, disease development, and playability. In addition, a significant amount of the golf course maintenance budget is directly related to water - maintaining the irrigation system, energy costs to pump water, costs for using and storing water, and on and on.

For nearly three decades, the USGA Turfgrass and Environmental Research Program has addressed these issues by funding the development of turfgrasses that use less water, studies to determine how much water turfgrasses use, and just how far they can be "pushed" to use less.

One such project at Kansas State University demonstrated a potential 30 percent savings in water when selecting a Kentucky bluegrass cultivar for golf course roughs. The researchers compared water use requirements among 28 Kentucky bluegrass cultivars and two hybrid bluegrasses (Kentucky bluegrass X Texas bluegrass) that were maintained under wilt-based irrigation. Water was applied when an individual cultivar plot started to wilt. In that way, each cultivar was maintained under far less than ideal moisture conditions in an effort to find the minimum amount of water needed to have acceptable turf. The cultivar received one inch of water when visual symptoms of wilt appeared, rather than applying daily amounts of water to replace moisture lost

[Read the rest of this article.](#)

## Regional Updates

The USGA Green Section agronomists see an amazing variety of issues and challenges as they visit golf courses across the country. Be sure to read the highlights of each region since many of the topics covered apply to courses everywhere.



### Mid-Atlantic Region

#### This update includes:

Tips on managing turf in the heat

[View the rest of this update](#)



### Southeast Region

#### This update includes:

Notes from the 2012 Memphis Field Trip  
The Bear Trace at Harrison Bay make headlines - again

[View the rest of this update.](#)



### North-Central Region

#### This update includes:

Seed, sod, or plug?

[View the rest of this update.](#)



### Northeast Region

## This update includes:

Observations on:

- Summer heat
- *Pythium*
- Bluegrass weevils
- Parasitic nematodes
- False green kyllinga
- Fertilizer recommendations during the heat
- Cultivation practices

[View the rest of this update](#)



### Northwest Region

## This update includes:

Wildfires have the region on edge  
Upcoming USGA championships in the region

[View the rest of this update.](#)



### Florida Region

## This update includes:

Early summer storms might require a significant change in mowing practices

[View the rest of this update.](#)



### Southwest Region

## This update includes:

Leveling collars to improve playability and turfgrass health

[View the rest of this update](#)

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### A Valuable, Free Resource

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