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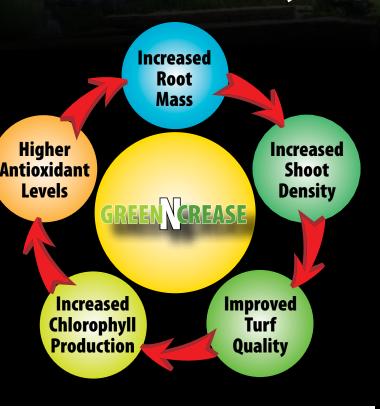
THE COST OF DOING NOTHING

MUSINGS FROM THE USE OPEN

FIRST GREEN COMES TO THE MIDWEST

Woodstock
Country
Club

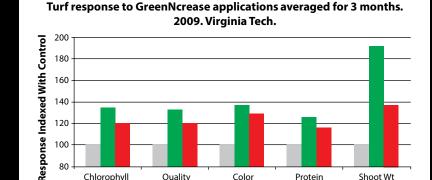
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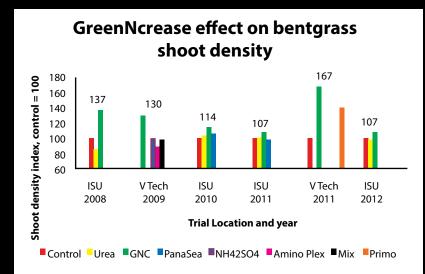
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Shoot Wt

Ouality

Control

Chlorophyll



- Rich in Amino Acid Content
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front cover

The picture of the 7th green at Woodstock Country Club is one of the 3 par 4s on the property, note the sloping fairway in the background.

PHOTO: Luke Cella



The fourth hole at Woodstock CC has a very narrow fairway with out of bounds all down the left side and one of the largest shagbark hickory trees behind the green that will help you line up your approach shot.

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2014 MIDWEST EVENTS

Midwest Nine Hole Event - Woodstock CC

Midwest Golf Championship, Harborside International 8/26

10/06 Midwest October Meeting, Briarwood CC

11/12 Midwest Turf Clinic & Annual Meeting, Medinah CC

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enhancement opportunities to all members who facilitate the growth and enjoyment of golf.

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Chuck Barber St. Charles Country Club

How Hard Can it Be?

"A league of Their Own" is a 1992 film starring Geena Davis and Tom Hanks. The film tells the story of a World War II era women's baseball league that was formed to keep public interest alive in baseball during the war. This is not my favorite film of all time. Indeed it might not crack the top 100.

However, near the end of the film Tom Hanks' character provides a brief, astonishing moment of clarity that provided the inspiration for this column.

Geena Davis' character's husband (Bill Pullman aka "Lone Star") has returned, injured, from the war. The road, the competition and the game have become frustrating for Davis. She longs for a return to her native Oregon and the simpler life that awaits her there. In despair, fighting back tears, she explains to Hanks, "It just got too hard."

Hanks is dissatisfied with this and explains in no uncertain terms, "It's supposed to be hard. If it wasn't hard, everyone would do it. The hard is what makes it great." I am reminded of these words when things just aren't going my way at work, at home or elsewhere in my life.

As Golf Course Superintendents we are presented, almost daily, with a wide variety of challenges. We work in an ever changing, living, breathing, dynamic

environment. Some of these hurdles include the weather, our customers, stakeholders, owners, members, co-workers, industry support, equipment, and infrastructure. There is quite literally a

FOR.

IF I CAN'T FIGURE IT OUT

ON MY OWN, I ASK THE

PEOPLE I WORK WITH. IF

THEY CAN'T FIGURE IT OUT,

I ASK THE PEOPLE I WORK

whole world out there that has the ability to screw up your day. That's what I love about my job. I like to figure it out. If I can't figure it out on my own, I ask the people I work with. If they can't figure it out I ask the people I work for. I am the first to admit that I don't know everything. I don't

have all the answers. The answers are out there.

I have always felt that control is an illusion. All things being equal the world will behave as it damn well pleases. I can't control any of the challenges that are beyond the scope of my influence. I can influence our response to those challenges. I can figure it out. take the idea 'the hard is what makes it great' and apply it to my job. Finding those answers, solving problems, making improvements and preventing mistakes is what I enjoy most about my job.

The challenges that we face at work are not hardships, only challenges. Talk to any family that has lost a loved one, or has family serving



The best known line from the movie "There's no crying in baseball" is followed by the funniest line of the whole movie - check it out on YouTube.

in the military, or who has lost their home in a tornado and they can speak about hardship. In the end, golf is a game. The people we work for are supposed to enjoy themselves. I feel strongly that we can enjoy ourselves at work, too. We are only afforded so many years in the sun. Why not make the most of 'the hard' part of it? After all, the hard is what makes it great. (II)



Gregory E Martin, Martin Design, ASGCA

As golf courses grow older, they mature and the nuance and charm of a design becomes more evident. But as a living and breathing entity, golf courses age and infrastructure fails, ultimately requiring attention.

Trees planted for scale are now overgrown, impacting play and turf health deteriorates; the irrigation system is leaking and programming options are woefully out-of-date; bunkers are not draining and sand is contaminated; tee surface is insufficient; youth golf is waning; paths and circulation are crumbling and maintenance costs are swelling. Sound familiar?

As decision makers contemplate the need for golf course renovation, it is necessary to understand the simple arithmetic of improvement: there is a substantial cost to renovation. Maybe more important and less understood is "the price of inaction". The cost of renovation may be considerably more tolerable when the substantial cost of waiting is understood.

Simply, the cost of a renovation is the price of the project, less the cost of inaction.

What is the cost of inaction? Plainly, if renovation is inevitable. maintenance costs will continue to escalate while revenues and golfer satisfaction will decline. For instance, a bunker improvement project can be a significant cost, but it may likely reduce ongoing maintenance and restoration costs while improving golfer satisfaction and use.



Those should be factored as part of the renovation cost. In some cases this can be significant.

Case Study – Arrowhead Golf Club

At Arrowhead Golf Club in Wheaton, Illinois, the yearly cost to maintain bunkers was increasing. Labor and material costs for the 135.000 sf. of bunkers were increasing, particularly after rain events. The cost to maintain these bunkers after a rainfall [pump, restore sand and re-establish eroded edges] was a minimum of \$35,000 per year and each year those costs were increasing. It was estimated that over a 10-year period, the cost to maintain the bunkers, if left untouched – because of failed or ineffective drainage in the bunkers - would exceed \$400,000. If left untouched, those costs would continue to escalate.



Ultimately, this project was approved based upon our analysis. We illustrated that the cost of the renovation PLUS future cost savings [Renovation] would be acceptable against the cost of current maintenance PLUS future maintenance and loss of revenue [Inaction].

The results were telling. After a fairly extensive bunker reduction/renovation the maintenance costs for bunkers were reduced substantially. Over a 10-15 year period – or the life span of a bunker - it is projected that the net savings will result in more than \$500,000 of maintenance cost savings. These future savings/benefits can now be applied to the cost of the project. A \$1,200,000 project now has a net cost of \$700,000 or less. This is substantial.

Certainly, every project is different; The specifics of design, the improvement program, the site, the soils, golfer expectations and ownership interest are relevant and will have impacts to current and estimated future costs. However, the golfers at Arrowhead now enjoy better conditions, better strategy, and better aesthetics while maintenance costs have been stabilized. Satisfied golfers are the best marketing.

This analysis can be constructed to measure any kind of project. At Wilmette Golf Club in Wilmette, Illinois, we used this analysis to determine the viability for more significant improvements.

A highly utilized club [35-40,000 rounds], this facility suffered from shutdowns after rain events [flat site and impacts from nearby North Branch of the Chicago River]. Turf conditions deteriorated because of inadequate drainage, sluggish recovery and over-planting. Further, Wilmette is a 90-year old golf course with design features from every one of the past decades, possessing a variety of push-up, USGA and modified sand-greens, multiple bunker types, tees of every kind and shape, as well as the described under-performing drainage system.

Recent rain events and springtime flooding caused serious damage and each year those rain events became more and more destructive. While rounds remained stable, maintenance costs associated to recovery continued to escalate.

Our Master Plan was comprehensive. It called for a substantial underground drainage system to work in concert with improved overland drainage and a new network of ponds, wetlands and swales. We proposed raising fairways [in primary landing areas] and raising greens where necessary while expanding water features to accomplish more effective stormwater management. This in conjunction with improved bunkers, tees, modifying greens to USGA standard, will produce a more resilient golf course and more efficient use of maintenance resources.

To fully understand the long-term benefits of this project we developed a matrix that compared near-term and long-term costs from No-Action to Full Course Renovation, and a variety of intermediate investment strategies. This review allowed the club, the membership and ownership to fully understand the most effective, long-term investments.

Some of the plan options included:

- 1. No-action;
- 2. Minimal in-house improvements;
- 3. Hybrid plan [small renovation and in-house over time
- 4. Master plan "light"; and
- 5. Full renovation

The analysis compared implementation costs from nothing to the full "comprehensive renovation" version and then and calculated golfer satisfaction and future maintenance costs. The following were just some aspects of the review and analysis:

- Turfgrass condition, turf type, tree cover
- Golf course impacts after rain events
- Stormwater management capabilities
- Access & circulation [paths]
- Design Features [bunkers, greens, tees recovery & consistency]

- Customer Expectation & Satisfaction
- Phase costs [Loss of income and staff costs]
- Fee impacts
- Residual income
- Aesthetics and design consistency

This analysis showed that there were substantial costs to inaction including: declining customer satisfaction, reduced golfer use, loss of cart revenue due to limited access after rain events, and increasing recovery, restoration and maintenance costs.

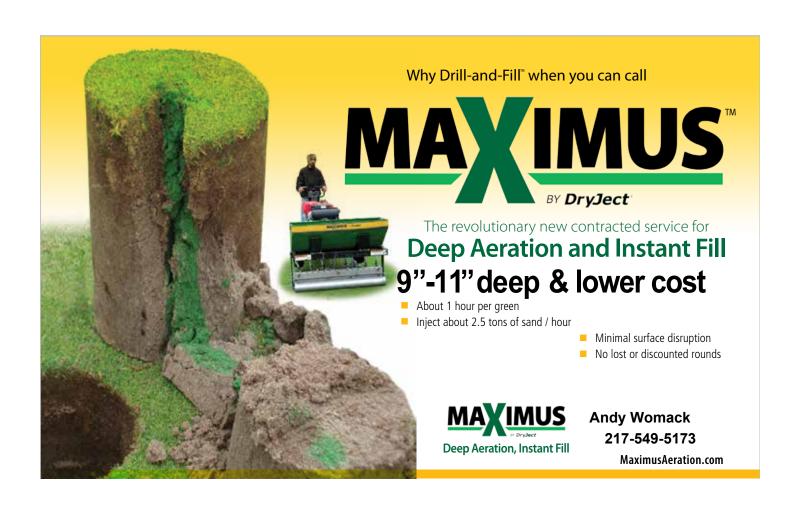
Ultimately, the renovation strategy selected was a mid-range plan termed "Master Plan 'Light". It targeted all of the drainage concerns, necessary tree removals and improved stormwater capacity while upgrading much of the strategic, playability and aesthetic aspects of the golf course. Most of the work was contracted, with a small share of the work to be completed 'inhouse'.

Wilmette Golf Club will open in late spring, but already, the project sees benefits. Golfers are enthused and the golf course superintendent, Mike Matchen, is satisfied knowing that many of past maintenance struggles have been addressed. A significant side benefit is the expansion of wetlands and the new buffer swale system on the golf course improving water quality and reducing maintenance.



Regardless of the project there will likely be dissent. Improvement project costs are likely significant, but, longterm cost savings from those improvements may be equally noteworthy. This analysis begins to shed light on the enduring benefits of project completion while exposing the menacing cost of doing nothing. Conditions will improve, golfer enjoyment is be amplified, customer satisfaction increases and maintenance costs are, at minimum, stabilized.

Only time will tell if our financial projections are correct, but even if maintenance cost savings are nominal, conditions are improved, resources are focused and golfer satisfaction will saturate the community. There is a cost to inaction and project costs can result in savings. The cost of inaction needs to be factored and fully understood during the planning stages of a project. (7)













To hear what superintendents are saying, visit **GreenCastOnline.com/DaconilAction**

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Sheet



Dates to Remember

July 10 – MAGCS 9 Holer at Woodstock Country Club, Bob Kronn Sr., host.

July 10 - Toro Company's 100th birthday. And Bob Kronn's.

July 11 - The Mark Olson Benefit Golf Outing at Old Oak Country Club in Homer Glen, IL, Chad Walk and Peter Lieponis hosts.

July 15 - Purdue Turf and Landscape Field Day at the W. H. Daniel Turf Center in West LaFayette, IN.

July 21 – The 14th Annual John Buck Golf Outing at the Highlands of Elgin, IL, Brad Legnaioli, CGCS host.

July 24 – Iowa Turfgrass Field Day at the Horticultural Research Station in Ames, IA.

July 28-30 – 20th Illinois Women's Open at Mistwood Golf Club in Romeoville, IL, Ben Kelnhofer host.

August 1 – Deadline for nominations for the 2015 GCSAA Col. John Morley Distinguished Service Award.

August 19 – 8th Annual Sunshine Through Golf Foundation White Sox Fundraiser at U.S. Cellular Field in Chicago, IL.

August 26 - MAGCS monthly meeting at Harborside International in Chicago, IL, Ryan Tully host.

Tyler Enterprises recently announced that **Dennis Hamilton** has been named a Sales Executive for the company. Dennis was a superintendent for 11 years, most recently at Macktown Golf Club in Rockton, IL, and served on the board of directors for the Northwest Illinois Golf Course Superintendents Association (NWIGCSA). Congratulations Dennis!

Aaron Hill, formerly at Fresh Meadow GC is the new superintendent at White Pines Golf Course in Bensenville, IL. Congrats Aaron, and good luck in the new position.

August 1st is the deadline to nominate someone you know for the 2015 GCSAA Col. John Morley Distinguished Service Award. The DSA is presented annually to individuals who have made an outstanding contribution to the advancement of the golf course superintendent's profession which is significant in both substance and duration. Individuals must be nominated by a GCSAA member, an affiliated chapter, or a qualified golf association. The nominee must not have been a recipient of the award in the past 10 years. This award was first presented in 1932 and has been presented annually since 1975. Past MAGCS recipients are John MacGregor (1935), Ted Woehrle (1964), Ray Gerber (1975), Bob Williams (1977), Ben Warren (1982), Warren Bidwell (1984), Mike Bavier (2002), Bruce Williams (2002), Danny Quast (2004), Tommy Witt (2005), and Oscar Miles (2008). Let's get another one huh?

Patrick McDonagh, (r) the superintendent of Redtail Golf Club and a longtime MAGCS member passed away on June 12th in his home after a several-year-long battle with cancer. I had the pleasure of being acquainted with Pat, and all I can say is he was a truly good guy. He was taken from his family and friends much too soon, and he will be sorely missed. Rest in peace, Pat.



On Tuesday, August 19th the Sunshine Through Golf Foundation

will hold its 8th Annual White Sox Fundraiser at U.S. Cellular Field. The cool part about it is that you can send a Sunshine Through Golf athlete to the game by selecting the "Sponsor a Camper" box on the registration form. If you'd like to help, call or email Alex Nolly at 630-685-2351 or at anolly@cdga.org.

Condolences to the friends and family of Robert Graunke, who passed away last month. Bob was a longtime MAGCS member who retired after a long stint as superintendent at Eagle Ridge Resort in Galena, IL.

Congrats to Curtis Tyrrell, CGCS, MG and his staff on the reopening of

Medinah Country Club's Course One on June 13th. You may recall the course was closed just 13 hours after the end of the Ryder Cup matches at Medinah in September of 2012. After a 21-month Tom Doak renovation, the new course—originally built in 1924—was ceremoniously opened with a ribbon-cutting followed by a cannon blast and Mr. Doak's first tee shot off the new #1 tee.

Jake Koch is the assistant superintendent at White Eagle Golf Club. Strangely, he seems to go missing whenever the Blackhawks are playing; and the minute their playoff run ends, he's back at work. Hmmm... Is that Jake between the pipes for the Hawks, going under the assumed name of Corey Crawford?

MIDWEST Doppelgänger



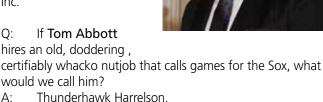


Jake Koch, Asst. Super or Hawk goalie Crawford?

The USGA has announced a new way for you to enjoy the game you love (or at least the game that employs you). USGA members can now experience the new Member Clubhouse, which is an online thingy that has a whole bunch of features and benefits that connect you to their tradition of excellence

in golf. Go to www.usga. org to see just what those features and benefits are.

Congratulations to Brian Placzkowski, (r) former assistant superintendent at Royal Melbourne Country Club on his new job as Equipment Sales Representative for Reinders, Inc.



BIG kudos to **Dan Dinelli, CGCS** and **JD Dinelli** their staff, along with the volunteers who pitched in to stage another fantastic Encompass Championship at North Shore Country Club from June 20-22. Although Mother Nature was totally uncooperative, with conditions dramatically changing every

single day, yet the tournament went off seemingly without a hitch—and it ended in as equally dramatic fashion as last year, with a birdie putt on the 18th green on Sunday determining the winner. This year it was Tom Lehman who provided the fireworks; however the biggest winners were the people who made the tournament happen—congratulations Dan and JD and everyone who played a part in it!



The crew in green and the volunteers in orange. The orange made it easier to keep track of them and himself.



Each day of the tournament brought a new set of conditions that the staff deatlt with successfully.



It was a senior event, even the older members of the PGA staff jumped in to help. Paul Vermeulen still knows the best way to get the job done.

There were a few young people around, Alan Davidson (I) of Northmoor CC and Brian Chasensky from Chicago Golf Club lent a hand doing course set up tournament week.





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Here's news you can use: The Environmental Protection Agency (EPA) is extending the 90-day public comment period for an additional 91 days—until October 20—for the proposed rule expanding the definition of "waters of the U.S." under the Clean Water Act. This rule would significantly impact how we treat property near any water by subjecting all waters to regulation, including man-made bodies, rights-of-way, golf course ponds, ditches, and flood plains. The public comment period originally ended July 21. Under the proposed rule, any pesticide or fertilizer applications adjacent to these waters may be jeopardized by costly permits. So there's that. [GCSAA has launched an action alert through their webiste. Keep an eye out for the link so you may send your senator a comment.]

MAGCS members have been all over the trade publications recently. TurfNet's Blog Aggregator had a ditty by Erwin McKone (Briar Ridge CC) on lightning strikes and the devastation they can cause, along with links to some sites that have all kindsa info on lightning safety. In the same media outlet, Bill Meyer of Park Ridge CC updated his membership on the crazy growth rate they were experiencing in the rough, along with updates on winter-killed area repair; and Steve Cook, CGCS, MG of Oakland Hills CC chimed in on re-prioritization of maintenance practices based on winter damage recovery. In the June issue of GCM, in its Front Nine Photo Quiz section, BOTH photos were submitted by MAGCS member clubs. The first was some funky goose damage at Aldeen Golf Club in Rockford, and the second was a lightning strike on Rich Harvest Farms that **Jeff Vercautren** photographed and Ed Nangle submitted.

You are cordially invited

to join the club.

Did You Know?

Your membership with MAGCS includes a handicap with the CDGA.

In fact, if you are planning to compete in the MAGCS Championship at Harborside on August 26, you'll need one.

RSVP: Luke Cella luke@magcs.org

And finally, a big thanks to John Gurke, CGCS and Aaron **Reinhart** for hosting the MAGCS June Meeting at Aurora Country Club. On more than one occasion I heard that this used to be how Midwest events were, minus the mad scramble after golf to shower and get seated for dinner in time for the salad. The reminiscence came from the abundant food and beverages provided at the event, including chicken on a stick at the turn, bourbon tasting and duck served in martini glasses on a bed of risotto. The treatment the Midwest received was a testament to John and his dedication to the club – the GM. Bob White, Chef George Upton, golf Pro Aaron Sabers and all the staff made sure nothing was overlooked. Shane Conroy provided the education, (check out the education wrap up) talking about technology and the tools superintendents have at their disposal these days. Jeff Sievert was crowned the Class C Champion shooting a 82 and John Gurke and Aaron Reinhart get to put their names on the Dom Grotti trophy (and a few other from the past couple of years, thanks for updating the trophy John) using their course knowledge and mostly Aaron's skill to win (net 136). Jason Lemanski and Greg Van Weelde tied for second with last year's champs from Ruth Lake CC. Thank you to all those who participated and sponsored our June meeting. – L. Cella

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John Gurke and Aaron Reinhart get photobombed by Paul Yerkes while trying to accept the Dom Grotti trophy at the closing ceremonies at Aurora Country Club.



Musings from the



US Open

Dr. Ed Nangle, CDGA

I encountered a week of dust, heat, and dry conditions while volunteering at the US Open at Pinehurst Country Club in North Carolina. The tournament is one of the four majors in men's professional golf and was hotly anticipated for two reasons.

Restoration architects Ben Crenshaw and Bill Coore put the course back as close to its original layout and condition as designed by Donald Ross in 1907. They accomplished this using archival images from neighboring Fort Bragg taken in 1930s onward. They were able to peel back the layers of changes and to return the course to its original style. The style encompassed very little rough and bunkering, simple, like nature. The other intriguing aspect was visible intent of the USGA to dry the course down and really firm the conditions up. Now that the tournament is over, the unintended impact has become the discussion about the how brown the course looked. Its playability was unaffected by these changes as Martin Kaymer proved and overall scoring was similar to other



It was tough to tell from the front of the house what the backyard looked like: the USGA liked to think brown is better and at least tougher.



Changing the mindset of golf, one brown blade at a time.

Opens. Was the USGA trying to change the mindset of their audience about the color of golf? Perhaps. One fact remains, Pinehurst conserved 40 million gallons of water, only irrigating via a single row system.

The water reduction happened because of two factors; the lack of fear of brown turf and not irrigating any rough. We must remember that it's a lot easier to cut water with bermudagrass than with our cool season grasses. There is little fear losing a bermudagrass fairway in extreme heat. The bentgrass greens will be converted to an ultra dwarf cultivar of bermudagrass after both Opens (Men's and Women's) so expect to hear of even greater water savings at Pinehurst. One can hope the benefits that may land on our lap will include greater tolerance of brown fairways and some reductions in mowing all rough areas. From an environmental and budget management standpoint, these changes are welcome. From a playability standpoint I don't remember any complaints of plugged balls in wet fairways. I've recapped my experience by days:

Day One (Sunday)

After meetings and introductions, credentials were handed out and directions to the parking lots were explained. The "Barn" was an impressive site. It had ping-pong and pool tables and hammocks were strung throughout. Knowing that the first three days were a test run, people were excited but somewhat relaxed about what lie ahead. The course was in excellent condition; most felt we would just be cleaning it up to prepare it for the following days to come.

Day Two (Monday)

Temperatures were a balmy 67°F at our 4:30 a.m. start and it didn't get much cooler all week. Those mowing greens were assigned partners to move turning boards and whip areas that needed it. Greens were mowed twice that morning followed by a roll to really firm them up and add speed. Every area on the course received some form of attention; bunkers were checked and cleaned, crews blew fairways and surrounds to clear pine needles and other debris that happened to be out of place. Moisture and green speeds were measured to ensure the turtle back greens were not too fast. The evening shift consisted of a single mow and only some greens were rolled to bring them all to consistent speeds. The one issue that no one could escape was the amount of dust in the air. They drying down of the course and the fact there was very little rainfall in the previous six weeks made the dust conspicuous.

Day Three (Tuesday)

The issue that arose had to do with the delineation of the bunkers from the now famous 'rough'. Rules officials were cognizant of what had occurred with Dustin Johnson at Whistling Straights during the PGA Championship and didn't want the same problems to arise. To remediate this problem, a crew went out to re-edge the back part of the bunkers (in particular where the native areas blended into the bunkers). A little finesse with a shovel and rake created a cleaner border between the two areas. Irrigation by hand watering occurred and a discussion about overhead irrigation was started. Temperatures rose into the mid 90s and those entrusted with turf health became more wary. Greens were single mowed and rolled both morning and evening. Final touches were put on some of the external fences and stands. As players made their way through practice rounds many of them were happy about the course and indicated that the greens were the best/ truest they had played on all year. The dust was really starting to rise as patrons began to gather and move around the course.

Day Four (Wednesday)

A concerted effort to sharpen any loose edges that were required went on and final preparations of stadia were completed. A forecast of 350,000 spectators for both events necessitated a lot extra work and planning for safety and flexibility on and off the course. Shuttles were running from 10 miles away so traffic close to the course was light. There was heavy security presence at all times. The dust was really rising but a rain forecast for the night created hope that a light shower would knock it down. As the storm came through, the famous Pinehurst dome put up its shield and avoided any rainfall.



Lights, camera, mowing....in order to have the course ready for 6:45 a.m. tee times, lights were used to get mowers out and working on Thursday and Friday.

Day Five (Thursday)

Tournament day arrived and golf began at 6:45 a.m. All available lighting was used to get a jump on the mowing as greens, tees, fairways and surrounds were clipped. Bunkers were touched up. Crews were on hand for any "just in case moments" as all operations worked as planned. Players were delighted with the course conditions and certainly Martin Kaymer shocked everyone with his opening round. A majority of the staff even thought at that point Kaymer would be tough to catch. That evening work concentrated on clean up; pine needles had blown around throughout the day. We completed our work at 9:30 p.m. and most of us didn't know that 15 minutes after we left the grounds an inch of rain fell in the next 20 minutes.

Day Six (Friday)

Upon morning arrival at the Barn it became apparent that there was going to be some cleanup required from the rain. The crews all went out rapidly on their initial jobs; fairways and approaches did not get mowed. The pressure was on for clean up crews to stay ahead of play. The bunkers became

a source of much attention. Some were contaminated from the chaff and debris from the rough; others held water that required pumping and some needed sand to be pushed back into place (Picture 4). However, the dust had abated. The Pinehurst Resort

The Pinehurst Resort has nine golf courses (they just bought another). The benefit of being able to sum-



One of the bunkers that needed some sand pushed back into place after the rainfall event on Thursday night.

mon crews from the other courses became quickly apparent as over 100 staff members made their way up the 17th and 18th holes to put things back together. It was an impressive

continued on next page

sight, to say the least. The clean up was a huge success. Kaymer's second round of five under, proved the course not in an unfair state. It was apparent he was a very strong favorite to win the whole thing, which deflated the spectacle a bit. During the evening shift fairways and approaches were mowed. It was amazing how much the bermudagrass had grown, even despite its brown look. Clean up continued as a welcome drop in temperature ensued.

Day Seven (Saturday)

Friday's afternoon winds helped some of firmness in greens to recover. Speeds were at target so only a single mow and roll was needed on Saturday morning. Water and hoses were non-existent, but Superintendent Kevin Robinson, CGCS and Assistants John Jeffreys and Alan Owen were surely thinking about the Women's US Open the following week. Preserving the course for another week of championship golf was extremely important, a feat no course had ever accomplished. By Saturday's end an act of God was the only thing that would prevent Kaymer from winning. The course had returned to its consistent drier conditions by the end of the day and hoses were on show to syringe surfaces. Conditions had firmed up completely and greens were extremely smooth.

Day Eight (Sunday)

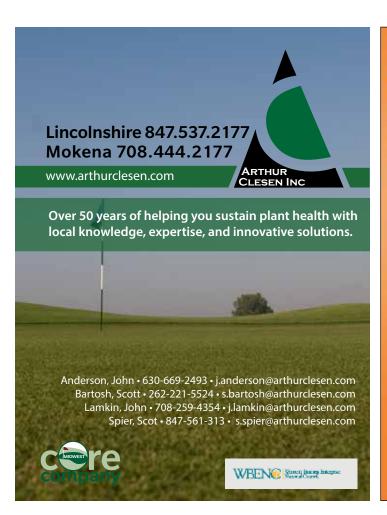
Like Saturday, Greens received a single mow and roll. Everything was tidied up and prepared for the big final day, although most knew the event was over due to the control that Kaymer had displayed the previous days. It would take an epic Greg Normanesque collapse for anyone to catch Kaymer. It didn't happen and he took his second major. In truth, it was as dazzling for his domination of the golf course versus the inability of the field to catch him. The course displayed beautifully, though a dramatic contrast from its previous spotlights - this however is in the eye of the beholder



It wasn't that long ago the colors we saw at Pinehurst were the norm each weekend broadcast, this however was the first in high definition.

Overall, it was an incredible experience and on Friday morning when the massive clean up was going on I realized what it meant to Pinehurst to have the event run off without a hitch. To see over 100 people working as a small army was really impressive and reminded me why guys do the job – for the love of it. Looking forward to Chambers Bay and Erin Hills, it seems the USGA is is on the path of using "low input" natural looking courses. It was accomplished at Pinehurst and we all know it is possible to manage turf when there is a consistent breeze that moderates both humidity and temperature. However, there has to be some cognizance that just like the British Isles, these courses make up a very small portion of the golfing world in the U.S. The USGA set the table and the debate will continue on the color of turf and the impact on playability, but more importantly the long-term impact on water savings. (1)













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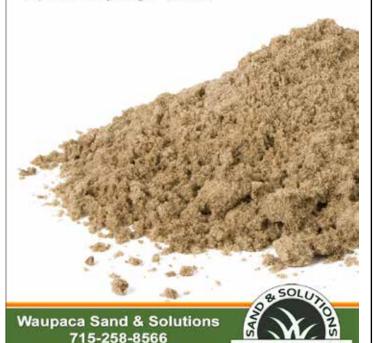
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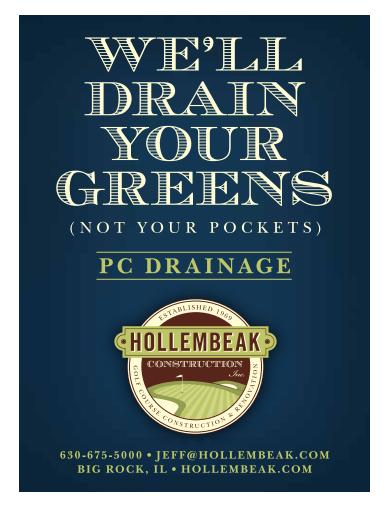
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MIDWEST Pic of the Month

Submitted by Andy Perry, #13 at Blackstone Golf Club. Got a pic? Email to luke@magcs.org









First Green Comes to the Midwest





Larry Gilhuly, Director of Northwest Region, USGA Green Section, is surrounded by students during a field trip.

Cathy Relyea from the First Green Foundation will introduce First Green, an innovative environmental education outreach program using golf courses as environmental learning labs, at the August 26 MAGCS monthly meeting at Harborside International.

She'll be joined by representatives from the Illinois and Indiana Sea Grant Program (IISG). First Green and IISG are seeking to bring First Green to the Chicago area, with help from the MAGCS. IISG will be applying for a second round of funding this fall to provide superintendent resources kits, training for superintendents, and identify classroom teachers.

What is First Green?

First Green is an innovative environmental education outreach program using golf courses as environmental learning labs. First Green coordinates outdoor STEM "learning labs" at golf courses that allow students to perform hands-on experiments and tests, all within the focus of their schools' environmental science and/ or environmental horticulture curricula. In these outdoor "labs" students test water quality, collect soil samples, identify plants, do math activities and work with local issues such as stream-bed or owl-nest restoration. Many of the field trips involve community organizations. In Bellevue, Wash., the city's Stream Team often has a learning station at Glendale Country Club's field trips and engages students in identifying macro-invertebrates (bugs) from the Glendale pond.

Hosting a Field Trip

Golf course superintendents are key players in a First Green field trip, working with the teacher to select a lesson or lessons from the First Green website (www.thefirstgreen.org) that fit what the students are learning in class. Superintendents are the subject matter experts and have plenty of knowledge to share. With the help of the planning checklists and lesson plans on the First Green website, superintendents can host their own field trips. While sometimes a little apprehensive at hosting their first field trips, superintendents love the interaction with inquisitive students and are quickly sold on the benefits of reaching out to

the community. Frank Tichenor, Golf Course Superintendent at Forest Hill Field Club in Bloomfield, New Jersey says after his first field trip, "I have to say ... yesterday was one of the best days I have ever spent on a golf course!"

Growing the Game

Over 15,000 students have been on First Green field trips. Each field trip reaches an estimated 230 people with environmental and golf messages (due to students sharing with friends and families and teachers sharing with colleagues). For many students, a First Green field trip is their first foray onto a golf course.

The United States Golf Association (USGA) awarded First Green STEM (Science, Technology, Engineering and Mathematics) grants in 2013 and 2014 to help in expanding from Washington into Oregon, California, Utah, Colorado, New Jersey and British Columbia.





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Bob Kronn, Jr., Boone Creek Country Club

PHOTOS: LUKE CELLA

This day and age, many traditional golf clubs built in the early 1900's have gone through expansive renovation to remain relevant or to keep up with technology. On the contrary, Woodstock Country Club has done everything to preserve their 9 hole Thomas Bendelow design.

The design approach was simple. Following the flow of the natural terrain. Bendelow staked the location of the green and tees on foot and on the fly. "It was farm fields and meadow, and the founders would come out on weekends with a horse and wagon and clear away rocks and brush and basically built it by hand" said long time member Kent Cooney. "It was done frugally by a bunch of townspeople" Through the years there were multiple opportunities to expand the club to 18 holes, or to move the club to a different location. Fortunately those options



Bob Jr. (Supt. at Boone Creek) and father Bob Kronn, Sr. are excited for Midwest members to enjoy Woodstock CC.

never came to fruition. and the membership now is able to enjoy a golf course that has seen very few changes over the



The club is on Country Club Rd, in the town of Bull Valley. It hold's the 19th spot on Golf Digest's best Nine Hole golf courses in the US.

years, as the golf course today looks and plays much like it did nearly a century ago, a testament to both Bendelow's ingenuity and the natural beauty of the land it was shaped from.

Woodstock Country Club was established in 1916 but went by the name of Glen Crest until the mid 1920's, The 65 acre property is nestled in the rolling hills of Bull Valley, right in the heart of McHenry County. The par 70, 5968 yard golf course uses 2 unique sets of tees to create a terrific 18 hole golf course. Don't let the yardage fool you, this golf course provides a unique challenge to players of all abilities, and will



require every shot in the bag. This is a great place to work on your game considering there are very few level lies after you leave the tee box. Local knowledge also helps as the flowing changes in elevation naturally conceal several flagsticks.

Golf course superintendent Bob Kronn describes the 65 acre property as "one of the nicest pieces of property for golf in Northern Illinois. The layout is fantastic. We haven't done any big changes since it was constructed in 1916. What we do now is like turning the clock back to keep it close to the original design". Kronn has spent the last thirteen years at the club, time which he has utilized to improve the playability and aesthetics of the golf course.

Bob began his career under the tutelage of his father Ben Kronn, who diligently served as the superintendent at Twin Orchard Country Club for over thirty years. In 1970, after attending Penn State University, Bob accepted his first Superintendent position at Ridgemoor Country Club in Harwood Heights. After three seasons he moved on to Rolling Green Country Club for 12 years and then on to La Grange Country Club for 16 years.

As a 45-year member of the GCSAA Kronns' success comes from his hands-on management style. Being a second generation Superintendent has allowed him to learn the trade from the ground up. Of course being a single digit handicap has helped. "My playing ability goes along with my knowledge of growing turf." Bob has played in numerous tournaments throughout his career. He has won the MAGCS Championship a record twelve times, and has competed in several IPGA events. Using the players' perspective has been a crucial quality in his time as a Superintendent.

"We don't want green grass; we want grass that is ex-

tremely playable," is one of Bob's mantra's. Firm conditions along with consistency from tee to green are two of the more important things he has passed on to over a dozen MAGCS members that are now superintendents in the Chicago area. "I have always felt you should give something back to our profession. My thought was to pass on my knowledge and my Dad's to a select group on individuals who would become very successful in our profession. I take great pride in that," Kronn said.

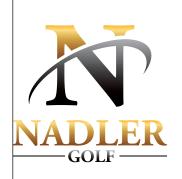


Blind shots abound at Woodstock, not only off the tee, but into several greens as well. And good luck finding a flat lie if you are fortunate enough to hit a fairway.

The current staff at WCC includes Assistant Superintendent Jeremy Woods, who has been at the club for over ten years. Woods fills the role of the mechanic, spray tech, and

Continued on next page.





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Chuck Anfield, CGCS Heritage Bluffs Golf Course



Shane Conroy of Spectrum Technologies addresses the audiences on some of the more popular tech-tools used for turf.

Shane Conroy of Spectrum Technologies made his presentation at the monthly MAGCS Meeting held at Aurora Country Club. "If you don't measure it, you can't manage it" was Shane's advice to Golf Course Superintendents in attendance.

Monitoring Water Usage

The average golf course uses 312,000 gallons per day for irrigation use. Is your course using too much water or not enough?

Shane listed out and explained the reasons to conserve water:

- 1. Save natural water resources
- 2. Conserve energy used to pump water
- 3. Improve turf quality
- 4. Develop optimum irrigation programs
- 5. Reduce labor costs

How do we know when we have put down enough water? Historically, the turf was visually observed for wilting and hot spots. Often a probe or soil profile sampler was used to observe how wet the soil looked or felt. These techniques often lead to inconsistencies.



Soil Water Measurements Now

Permanent soil sensors can be installed in the soil profile. The challenge with this type of sensor is it is limited to one spot and many sensors need to be installed to get a complete soil moisture profile measurement.

A portable soil sensor will give the operator more flexibility and can monitor many areas quickly and efficiently. Data can be downloaded and mapped. This information can be used to create or adjust irrigation programs. Soil water is measured by quantifying (VWC) or volumetric water content. This is the actual amount of water in the soil structure and it is measured as a percentage of the overall volume of the soil. Different soil types have different pore space and consequently different wilt points and different field capacities.

The Spectrum TDR 3000 is a portable soil sensor that measures time domain reflectometry. It creates an electric wave pulse that shoots between two probes in the soil. The speed of the pulse will measure the VWC. Common measuring techniques include creating a grid of the area to be irrigated or just random probing. The goal is to have consistent moisture values. One attendee commented to make certain the length of the probes used (variable) on the meter are suited for your putting surfaces, especially if there is a significant layer of topdressing sand that most of the roots are growing into — this is where you would need to measure—not below it.

Adjustments that irrigation managers can make after taking measurements is to change nozzles, hand water specific drier areas and increase or decrease run times in the irrigation program.

The overall benefits that can be gained via more efficient irrigation use include: improved plant health, decreased disease incidence, improved esthetics, better playing conditions promoting a firmer faster playing surface.

Shane commented that thresholds will be different for each course. Knowledge and experience will still be very important for water management.

Measuring Salinity

Soluble salts can have negative effects on turf growth. In highly saline soils it is harder for the plant roots to extract water from the soil. Soluble salts can accumulate in irrigation water sources. from frequent fertilizer applications and effluent water use.

(EC) electro conductivity is the unit of measurement for salinity. After measuring salinity in irrigation water, it can be specifically treated.

Measuring Light and Shade

Light is of major importance for photosynthesis. Plants grown in decreased light will have much less vigor and perform poorly. Light intensity is measured by (DLI) daily light integrals.

By measuring light intensity pruning documentation can be establish to promote pruning decisions, create landscape designs, select specific turf species for establishment and compare light from green to green.

The light meter can be a hand held device that gives instant feedback or a unit that will record long term exposure.

Measuring pH

pH meters are used to measure alkalinity or acidity. Acidic or alkaline soils can reduce microorganism populations and reduce plant tolerances. Alkalinity can also be very important when mixing plant protectant products in spray tanks. Effectiveness of pesticides can be reduced from alkaline hydrolysis. A small inexpensive meter can save thousands of dollars to ensure product effectiveness.

Measuring Firmness

A tool can be used to measure green firmness. This tool sometimes goes by the name of a "thump meter." It measures turf penetration by mimicking ball impact with a hammer dropping type motion.

This tool helps establish baseline data that can then be used to measure overall green conditions and help adjust cultural practices for a more consistent playing surface or to provide better tournament conditions.

All these tools help us to quantify many of the circumstances we already manage. Placing a number to these conditions helps us to create a benchmark and track changes. We still have to correlate the fluctuations as we manage our inputs and tune our turfgrass from there. (C)

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