JOHNNY TURF NERD

tant to him were the stories and relationships that he built with those not affiliated with golf or turfgrass.

One of those relationships was with the owners and staff at his favorite hotel in St. Andrews – The Russell. In 2007, I had my first introduction to exactly what this meant when he invited me to travel with him to the "Home of Golf." He was a meticulous planner and expert host of trips. Anytime you traveled with Stan he oversaw every detail, which allowed his traveling companions the ability to sit back and just take it all in. Upon our arrival in St. Andrews and The Russell, we were personally greeted by Helen (the manager) and a quick pint at the bar.

The next day, the first order of business was to head to the local florist (Jamie's) and purchase flowers for the "ladies of The Russell." Whether it was bringing flowers to his friends at The Russell or sending random packages of Twizzlers to the staff of BIGGA, Stan always thought of others.

Dr. Kim Erusha sums it up the best: "Stanley often said this was a people business and it was about building relationships."

UNDERSTANDING STAN'S INFLUENCE. Between 2007 and 2010 I made five trips with Stan to the UK. During that time, I was a sponge. I took in as much as I could and often just sat back and watched Stan hold court with numerous people on each trip. I don't really believe I fully understood the impact Stan had on exposing me to St. Andrews until I took my first trip there without him this past July.

Although I wasn't able to get a room at The Russell (there was a national Saxophone Congress in town), numerous Greenkeepers stepped in to find us accommodations. Arrangements for talks were made and even a round of golf at the Old Course. Despite not staying at Stan's favorite hotel, I did stop in to say hello and was greeted by that same warm welcome from Helen and the staff as I had been during my first visit 5 years prior. It was then that I realized all that Stan had actually done for me.

After hearing about Stan's death on that Tuesday morning, one of my first calls was to Andy Campbell, one of his closest friends at St. Andrews. Since then I have shared numerous emails with Andy, Helen and his many friends in that part of the world. It doesn't matter where you live or how you knew Stan, it is clear that he had a large impact on many people's lives.

SAYING GOODBYE. Although Stan will not accompany me when I make the trip back to St. Andrews next spring, you can rest assured that pints will be raised and flowers delivered. I may even have a fudgy donut or two in his honor.

Stan, I can count the number of people who have greatly influenced my life on one hand and you definitely make that list. I cannot thank you enough for all that you've done for me. I will miss you and will do my best to carry on some of the traditions that you started and shared with me over the years. Go Golf! **GCI**



Syngenta Business Institute[™] ALUMNI UPDATE

wo ideas had an immediate impact on me and our facility. The first was from Dan Meersman of the Philadelphia Cricket Club. He incorporated a 'meet-and-greet' into his weekly or daily activities. He would bring members into his maintenance facility and let them express their thoughts on the conditioning of the course. This allowed his team to be able to identify with the members' concerns and the members to get face time with his team. I immediately incorporated that into our regime. The other idea was hearing Steve Drake talk about blogs and how they can be utilized as another avenue of communication. After Steve's discussion, other attendees chimed in on their experience and I was able to see the value of having this tool. After getting back from the SBI, I immediately created a blog and started posting. The response was phenomenal!"



Matt Boyce Golf Course Superintendent The Princess Anne Country Club Virginia Beach, Va.





Exclusively Sponsored by

Learn more about the Syngenta Business Institute at www.greencastonline.com/SBI



@ 2012 Syngenta. Syngenta Business Institute'" and the Syngenta logo are trademarks of a Syngenta Group Company.



What's good for greens has got to be good for fairways, right? Merion GC's Matt Shaffer experiments with fairway rolling to reduce turf stress and improve overall health.

by Bruce Williams, CGCS

The world needs people who make it a habit to think out of the box. Thank God we have them.

Over the years, I have seen a variety of cultural practices come and go and even a few revived that were used half a century ago. One of those cultural practices is turf rolling. Turf rolling was most often utilized in the spring or during construction. I can remember always seeing a small roller and a large roller at every golf course I visited. I would also see three gang rollers used to roll larger areas of turf throughout the 20th century.

In the parts of the country where there was heavy frost we would often see some heaving of the soil and this created uneven putting surfaces almost every spring. Rollers were used to smooth out the putting surface prior to the first mowing in the spring.

Rollers had taken on many forms, and most rollers were about 3 feet wide and filled with water to have greater impact. Even after rolling I remember using a Toro Series IV walking greens mower – with a masonry block in the basket – that was used prior to the official first mowing of all of the greens. This prevented scalping and gave a very smooth surface when topdressing since topdressing frequency was much less.

Rollers took on many forms and I have seen vibratory rollers, small construction rollers and everything in between.

As greater demands for high-level conditioning arose, there was a tendency to take practices like rolling and expand them to other areas of the golf course like tees and approaches. Some of these practices have evolved into use on fairways as well and fairway rolling has followed suit in that evolution.

CONCEPT. Over the years, I have had the pleasure to know Matt Shaffer, director of golf courses at Merion Golf Club in Havertown, Pa., very well. Matt is one of those cutting-edge guys who does not always wait for the newest pieces of equipment and latest trends to develop. Matt is at the forefront and works with

quite a few equipment manufacturers, universities and plant-protectant companies to develop his conceptual plans into realities at Merion GC.

Through following former and current research on disease development, Matt realized there were a variety of benefits to greens rolling. One of those benefits was the reduction of disease pressure even in an area like Philadelphia that is known for turf damage through disease.

As the demand for excellence at Merion increased there were several cultural programs that expanded beyond the greens and out onto the approaches leading to the greens. One of those cultural practices was the rolling of turf. Matt noticed a reduction in disease pressure on the approaches, which started to make him think that there was potential for doing the same on fairways. All of this fit nicely into an integrated pest management program that utilized rolling to aid in reducing fungicide applications to Merion's many acres of fairways.

DEVELOPMENT. The amount of equip-

As demands rose for high level conditioning, practices have evolved to include fairway rolling.





Sal Rizzo: "We built a small model and worked on the steering for what seemed to be forever. We were positive that when turning on the green there should be no damage. It took four months alone just to perfect the steering."

ment and labor required to roll fairways would surely be cost prohibitive. Only greens rollers were commercially available a year ago. So a concept had to be taken to the right people to develop a prototype of a roller that could be wide enough to make the process feasible. It also had to be mobile enough to move from fairway to fairway with little or no reason for an operator to get off the machine.

Matt says he contacted every manufacturer he could think of to build this machine and nobody wanted to take on the project of designing this machine. Matt and Sal Rizzo from Salsco had done business for many years. When Matt asked Sal if he had any interest Sal agreed to take a look at the project. They set a time to meet and discuss the project.

Present at that first meeting were Paul Brandon, sales manager for Finch (the local John Deere dealer) and Dick Owen, a Salsco golf equipment salesperson. Combined there was well over 100 years of experience in golf and turf equipment and maintenance at this gathering. They made a wish list of the things they wanted the machine to do. Nobody knew what it should look like – only the things they expected from it.

As Sal drove home the next day and thought about this new machine he began to get excited about the project. As he drove the machine started to come together in his mind.

Sal told me: "I have no choice once I start the process... the whole machine must be done in my mind. I install every nut and bolt, every link and bracket, investigate all the stress points, the whole unit. Then I drive it and use it in my mind to work out any weak points.

"Once I'm happy with the unit in my mind, I begin to lay the concept out to the R&D people at Salsco," he adds. After they picked apart the base design they called in the AutoCAD guys. At this point the yellow pads come out and the base unit begins to take form.

"We built a small model and worked on the steering for what seemed to be forever," he says. "We were positive that when turning on the green there should be no damage. It took four months alone just to perfect the steering. Sal estimated that the first machine had at least \$350,000 in design and production time. We used components and technology from other machines we build and the unit began to take shape."

When they introduced the Tranz-Former at Merion GC to the same group who attended the initial meeting the feedback was extremely positive. This machine performed better than expected. "When we brought the prototype to Matt you would have thought it was his first child," Sal says. "He loved everything about it."





Forget blue or red; the vote goes to **Emerald® fungicide** for the best dollar spot control on turf in every region of the U.S. With a single application, **Emerald fungicide** delivers unsurpassed dollar spot control for 14-28 days. And use **Curalan® fungicide** for that second application for economical control of dollar spot. For best results, include **Emerald fungicide** in your first application in spring followed by **Curalan fungicide**. Then use **Curalan fungicide** for your last two fungicide applications in fall.

betterturf.basf.us

The Chemical Company

IMPLEMENTATION. Through prior experimentation the team at Merion GC had ascertained that a significant reduction in an aggressive dollar spot infestation had occurred when rolling approaches.

Early versions of a fairway roller were created with a five-plex, but eventually the Salsco prototypes were put into action on a regular schedule. With the new fairway rollers it was decided to operate the new machines on a regular schedule. Fairways are rolled at the rate of 4.5 acres per hour and the turf team has the system down pat.

Fairways at Merion GC are mown on Monday, Tuesday, Thursday and Friday each week. Fairways are rolled on Wednesday, Saturday and Sunday. Additional cultural practices impacting fairway conditions are the use of topdressing sand at the rate of 15 tons of sand in two applications per year.

RESULTS. As they say "the proof is in the

pudding." All of the development of this new machinery would have been for naught had there been no measurable results. During the summer of 2011, Shaffer told me that "I have not applied any fairway fungicides in 280 days and that alone will allow us to develop an effective calculation

for a realistic time for return on our investment in the machinery." In 2012 fairway fungicide applications were utilized on a 21-28 day schedule but at a much lesser cost than previous years. Any

visible dollar spot was less aggressive and smaller in size with the rolling.

Shaffer

Side benefits have included a noticeable thatch reduction. The sand topdressing may be adding to that effect, but it is all good. Matt says when he looks at the actual height of cut for the fairway turf, through a prism, it is .010 inches less than before fairway rolling. This has resulted in greater member satisfaction with a tighter lie while not sacrificing the health of the plant with a lower bench height of cut. Utilizing the newer cultural practices on fairways it is hoped that fairway aeration can be minimized in the future.

THE SCIENCE. Some of the genesis of the fairway rolling concept not only came from the trial-and-error concept and practical trial and error, but also from the science and research behind the concept.

Dr. Thom A. Nikolai, turfgrass academic specialist at Michigan State University, has been performing lightweight roller research since 1993. His observations about the numerous benefits that regular rolling provides were the impetus for the resurgence of the mechanical practice. Those benefits include decreases in dollar spot, brown patch, and



• Elastrony Vinc Heile a Antipinite of Dys2004 (CEA Grant Rectain Resent The CED GL SAL DUL John Markey OSA Avenus, and in the only separatedeet in the dest Duc John Markey OSA Avenus, and in the construction on the second second difference for the second difference on the second second difference for the second difference on the second second difference for the second difference on the second s

THE MONIZOF CUTTING

localized dry spot while increasing green speed. Many of his findings have been summarized in a recent article published in the summer issue of the Michigan Turfgrass Foundation publication of NewsNotes.

Masters student Paul Giordano reported that increasing the frequency of rolling significantly decreases the incidence of dollar spot. Beyond the research at MSU that proves rolling decreases dollar spot, Rutgers University research has also shown that anthracnose can be decreased with regular use of lightweight rolling. These are surely the two largest challenges for maintaining disease-free turf in the cool-season regions of the US.

While reduction of morning dew and a healthier sward of fairway grasses may be a key component of disease reduction, Giordano's research indicates that changes in the microbial population caused by rolling are most likely the key. Michigan State is performing rolling research on fairways and athletic fields. We can expect to see more research results from Michigan State in the upcoming years.

SUMMARY. Could it be that we are seeing another case of history repeating or reinventing itself? Practices like rolling of fairways, that were once utilized, are coming back into modern turfgrass maintenance. Science and rationale are behind the new direction to improve fairway conditions.

While it took an investment of \$350,000 to roll out the first machines Sal Rizzo indicated that he is selling his units in the range of \$35,000, which makes them affordable for a variety of golf courses.

Each facility must do its own homework as to what cost savings might be evident. It is hard to place an exact value on overall improved fairway conditions, but if you could calculate items like reduced fungicide applications and less hand watering it is easy to see how long this may be a prudent investment.

Time will tell if this becomes a trend. Salsco is taking orders and units used at a major earlier this year have created buzz and became the impetus for Brigham Young University to order one for their sports turf.

Shaffer continues to be on top of his game and always striving for improvement on his golf courses. With fellows like Shaffer taking a need and developing the concept it opens the doors for creative people like Sal Rizzo to invest his time and money into new technology that will only improve over time. **GCI**

Bruce R. Williams, CGCS, is principal for both Bruce Williams Golf Consulting and Executive Golf Search. He is a frequent GCI contributor.





Monroe Miller retired after 36 years as superintendent at Blackhawk CC in Madison, Wis. He is a recipient of the 2004 USGA Green Section Award, the 2009 GCSAA Col. John Morley DSA Award, and is the only superintendent in the Wisconsin Golf Hall of Fame. Reach him at groots@charter.net.

ABOUT STAN

"An event has happened, upon which it is difficult to speak, and impossible to be silent." — Edmund Burke

was mowing the lawn when Cheryl told me Stan Zontek had died. I was so surprised and stunned I had to stop and sit down. The profound sadness that swept over me was an emotion usually only felt when a close relative dies. Today, I'm still thinking about Stanley. He was an exceptional influence on my career and my indebtedness remains with me even though I've been retired for years.

Many people have noted they never heard anyone say anything negative about Stan. The reason is there are likely thousands of superintendents, like me, who benefited from his experience and intelligence. His advice ranged from how to grow Poa annua to preparations necessary for a major tournament. I knew a colleague who was sound and capable in his ability to manage a golf course but had gotten into some trouble with course conditions. The green committee met with Stan on a Saturday morning; his advice was unequivocal and blunt for all involved. They took it, almost to the letter, and the results were positive and obvious, a job was saved, and a course returned to normal.

In my case, I talked for a year about a new irrigation system and a new shop, but it fell on deaf ears. I asked Stan for some suggestions. During the next TAS visit, he merely noted, "This club really needs to replace this inadequate shop facility." It happened the next year. A couple of years passed, and he repeated the same admonition about our irrigation system, with the same results. Stanley brought credibility and trust to these TAS visits with club officials, and used them to move the club to make important investments. And in the instance of our green committee members, they really liked him.

Stanley possessed great quantities of common sense. His course visits were practical and down-to-earth. He didn't make recommendations that were obviously not within the financial reality of our club. This came from the fact that his father was a superintendent. That also endeared him to us. He knew the life we lived and the profession we worked. time when cell phones were new. We struggled with dropped calls, wrong turns and some marginal directions, but Stan talked us there. We called when we left to thank him, and he talked us into quickly driving to Washington, D.C. to see the brand new WWII Memorial. His directions were great, but he didn't mention anything about parking. When we saw him at the conference and told him our tale of a towed car in D.C. at night, he couldn't quit laughing. He referred to us as "Cheesehead Hicks!"

And there was no one more adept at telling jokes on himself, especially

More than a few times I had told Stanley how grateful I was for his **positive influence**. I feel relieved, also, putting these reflections into words for others to read.

Many of us who met "Stan the Man" through the USGA Green Section developed a personal relationship with him as well. Back in the 1980s the Wisconsin Turfgrass Association was raising money to build a turfgrass research station for our land grant university. Stan came to our Wisconsin Hospitality Room held during the GCSAA Conference and, like the good sport he was, bought a raffle ticket for a drawing we were having. He won! He immediately stood on a chair and auctioned his winning prize. Then he auctioned his necktie and went on to anything else he could lay his hands on. People went crazy and he left with that famous impish smile on his face. He fattened our building fund considerably that night.

Not too many years ago we drove to the GCSAA Conference and hen we got within 10 miles of Merion we called Stan's office. This was a those making reference to his ethnicity. His sense of humor was as big as he was. I've also heard tales of his trips to Scotland for golf and fun.

Stan was in demand as a speaker, and although I probably had heard him 100 times I always wanted to hear him again. The articles he wrote throughout his career make me wish he had written a turf book. It would have been a best-seller. The respect he earned over his long career with the Green Section led to his selection as a GCSAA DSA recipient. I sat in the front row when it was presented, clapping loudly and grinning ear to ear.

It is not fair that he died so young, but it never is. He didn't have enough time on earth to enjoy the retirement he had certainly earned and was close to taking. But it is fair to say his was a life well lived.

Stan will be sorely missed, but never forgotten. GCI

GOLF COURSE

TATES OF AMERICA 20

THE

SUPPLEMENT

Calcium can help in many ways!

Alcium, the forgotten nutrient! Yes, calcium is getting more and more respect now than in years past. It used to be that NPK were the only fertility things on the minds of turf managers, but in recent years, calcium has become the "fourth" nutrient and is beginning to be seen nearly as important as NPK. Especially at key times of the year, such as spring, mid-summer and fall.

Why so much calcium?

On our soil tests, we see calcium taking up most of the room on the soil colloid. This is the natural cycle in the soil. Calcium is dominant and the soil colloid will want to bond with it. This calcium is rarely available as a feeding/amending nutrient to the plant or soil structure. To properly amend the soil and feed the plant, more calcium must be applied.

The key to amending the soil properly, which basically means conditioning salts in the soil, you must apply the proper volume of available calcium in the proper form for the type of soil and conditions that exist at your facility.

VERDE-CAL Products can provide the proper calcium source.

pH can fluctuate due to many reasons in the soil structure. Low pH (low calcium) due to the excess of hydrogen and aluminum in the soil will need to be amended very carefully. This excess hydrogen and aluminum need to be released from the soil colloid and must be done so with a calcium carbonate source (typically High Cal Lime).

A product like VERDE-CAL, enhanced Calcium Carbonate, will provide immediately available calcium in a carbonate form to properly amend and condition high hydrogen and aluminum levels in the soil. The result is a quick and long lasting pH adjustment. The beauty of a product like VERDE-CAL is that it will penetrate the soil profile due to its soluble calcium characteristics and product design. VERDE-CAL does not need any mechanical incorporation at all. It is designed to break down quickly with irrigation and move into the root zone. All while utilizing less product and less labor to achieve great results.

Effluent water, high sodium, high magnesium, high pH and tight soils require proper amending as well and require a calcium sulfate source. Typically gypsum (calcium sulfate) will be recommended for these issues in the soil.

A product like VERDE-CAL G, enhanced Calcium Sulfate, allows the proper volume of soluble calcium sulfate to penetrate the soil profile. This will condition the soil and flush/balance salts that may have become harmful to your turf growth and plant health.

VERDE-CAL G breaks down with irrigation and moves into the soil profile with no mechanical incorporation required. This results in a long lasting effect of thoroughly conditioning soil of harmful salts such as sodium and bicarbonate. Tight soils also begin to loosen and oxygen and water start to balance. VERDE-CAL G allows for less product, less labor and quick longer lasting results vs. traditional forms of calcium sulfate.

It's all about volume!

Volume of available nutrient is the key to properly amending and conditioning any soil.

Traditional forms of calcium,

such as lime or gypsum require high rates, excess labor, and incorporation into the root zone. These old time sources also are very messy to your golfers and to your equipment. They work great on the farm, but not on the golf course with existing finely manicured turf.

Products like VERDE-CAL's line provide the proper volume of essential calcium in sulfate or carbonate form. VERDE-CAL products are very cost effective, budget friendly and user friendly. No mess, no incorporation and great soil tests are the result of using VERDE-CAL products. If particle size is important, you will find that the VERDE-CAL products homogenous particle sizes work great with the lowest height of cut up to fairway height as well.

Products like VERDE-CAL's line will allow any turf manager to successfully accomplish all three of these needs to the turf and root zone. Do this successfully and the end result is better, stronger, healthier turf!

Many products today simply do not contain enough soluble calcium to provide adequate conditioning of the soil. The end result is that these inferior products become expensive to use and simply "maintain a problem in the soil." They cannot be expected to release enough calcium in its proper form to overcome a soil problem!

Understand your soil tests. Compare the last several tests and look at your product choices. Are they working?

Finding a great product like VERDE-CAL's line up of calcium products allows you to utilize budget dollars better and provide outstanding results in your soil and turf.