Keeping it “Green” with Engineered Soils

Topdressing Sands
Bunker Sands
Green Colored Sand
Black Dirt
Horticultural Mixes

Choose from one of our quality topdressing sands which meet USGA guidelines, or have us custom blend one using our patented Accublender™. We control the quality from processing and screening through to the final mix, ensuring consistency in every delivery.

Plaisted technical services include soil testing and soil mix recommendations. Visit our website to view the full product offering.

Thank you for making Plaisted the Midwest’s top golf course supplier

Landscape Rock
Retaining Wall Systems
Field Stone Boulders
Construction Sand
Cart Path & Road Base

THE SOIL EXPERTS.

Plaisted Companies
Incorporated
Elk River, MN • plaistedcompanies.com • 763.441.1100
Thank You Annual MGCSA Sponsors

Platinum Podium and Event Sponsor

Syngenta

Cobalt Podium and Event Sponsor

WinField™

Gold Tee Prize and Event Sponsors

Plaisted Companies Incorporated

mti Distributing

Bayer Environmental Science

Silver Tee Sign Event Sponsors

Hartman

Frost Inc.

Healthy Ponds by Bioverse

ORigination, INC.

O2D

Versatile Vehicles, Inc.

Superior Turf Services, Inc.

Gertens Wholesale & VRK Seed

Cycle Works Golf Supply

Club Car

Frontier Ag & Turf

PBI/Gordon Corporation

An Employee-Owned Company
May 19, 2015
SE Outreach Golf Event
The Jewel
Host Doug Mahal CGCS

June 8, 2015
The Scramble
At Medina G&CC
Host Erin McManus

June 23, 2015
SW Outreach Golf Event
Rose Lake Golf Club
Host Bill Brooks

July 23, 2015
Northern MN Outreach Event
Giants Ridge Golf Club
Host David Soltvedt

August 13
Pollinator Summit
Day-long Educational Program
Minnesota Arboretum
CONTENTS

Vol. 49, No. 4 May 2015

Feature Articles; Member Driven Research:

Dude, Put On Your Sunscreen
by Mike Kelly, Bayer Environmental Science
pages 14-20

In The Running: Jori Huges; The Wilderness EM
Provided by the GCSAA
pages 24-31

Affiliate Appreciation Spotlight: Winfield
by John Smith, Winfield Marketing
pages 32-36

Monthly Columns:

Presidential Perspective
pages 6-8
Jake Schmitz

In Bounds
pages 10-12
Jack MacKenzie, CGCS

Within the Leather
pages 52-54
Dave Kazmierczak, CGCS

Not a Wee One Member?
Register Now Page 37

On The Cover
The Scramble at Medina Golf and Country Club
Sign your team up today

Hole Notes (ISSN 108-27994) is digitally published monthly except bimonthly in November/December and January/February by the Minnesota Golf Course Superintendents’ Association, 10050 204th Street North, Forest Lake, MN 55025. Jack MacKenzie CGCS publisher. Please send any address changes, articles for publication, advertising and concerns to jack@mgcsa.org.
In the spring of 2012, Olympic Hills Golf Club set plans in motion for a complete overhaul of the golf course. An architect was retained, irrigation plans were drawn up, applications were made for various permits and a contractor was selected to perform the work. As the planning stages progressed and concepts were applied to paper, all parties involved began to create an idea of how the golf course would look once the construction was complete. As work commenced, it became very apparent that we were all working in a fluid environment. Artistic concepts were addressed in the field, changes to big picture items would get switched on the fly, and numerous additions were included that ultimately enhanced the overall product. Simply put, everyone that worked on the project understood that our ownership would not compromise on quality to save a buck. ‘Do it once, do it right’ became the mantra of the reconstruction.

An interesting sidebar that developed during the work, revolved around the grassing scheme and how the irrigation system could be adapted to support our goals of reducing water and placing moisture in specific locations. For areas of fine cut turf, our goal was to build a system that would allow us to only water the tee tops and fairways with minimal waste going to the surrounding rough. This concept was driven through the grasping plan, as large-scale areas of drought tolerant grasses were introduced to provide texture and differentiation throughout the property. This was achieved through the installation of a hardline system along the fairway edges with part circle heads. Likewise, small spray zones around each teeing location were included.
with the idea of allowing the tee surrounds to become a bit rugged and ratty. Overall, it’s a Cadillac system, and one that we’re very proud of.

So what gives, and how is this at all relevant in a President’s message, you might ask? Prior to the change in ownership at Olympic Hills, the creation and execution of our project was a complete pipe dream. Limited funds and tight budgets would have never allowed for an upgrade to a failing irrigation system, let alone finding a few bucks to purchase second hand equipment. On the same note, introducing drought tolerant grasses to the golf course and tweaking the irrigation system to keep water off of these plants isn’t free either. As much as we would all like to do the right thing environmentally, oftentimes it is the almighty dollar that puts a roadblock in front of projects. Despite the fact that they will save substantial dollars over time, it is the up-front capital that puts the ax to improvements. This is the industry in which we currently work and for many it is very frustrating to say the least. To top it all off, discussions have taken place regarding cost increases for our valuable resource. Surcharges for water usage in the Land of 10,000 Lakes appears to be a common theme to reduce water consumption, and the newly formed legislative commission is seeking tangible outcomes to stem the flow of water coming out of our aquifers. Implementing a bill where dollars are charged per thousands of gallons water consumed would theoretically prompt users to cut back on the spigot. Theoretically.

While my last column discussed taking some steps to self-implement conservation practices and regulations, the thought of the government charging and pocketing additional coin doesn’t sit real well with me. However, there could be a really good opportunity that might arise
through all of this. During the first week of May, a meeting was held with our allied associations to discuss the water issue and figure out a game plan. It was during this meeting that an idea was presented in regards to possible surcharges. What if MGCSA, MGA, MPG, CMAA and MWGCOA all came together as a unified coalition and presented an idea that would allow golf courses to make infrastructure improvements that will help reduce their overall water footprint? Namely, if water surcharges are going to be implemented, maybe the funds generated could be used to truly assist in conservation practices that are out of reach due to limited budgets. Much like local watershed districts that have grants available for improving water quality, a water surcharge could become a source of matching funds where golf courses can apply for irrigation upgrades or for the introduction of drought tolerant grasses. An idea along these lines is definitely more attractive to this guy, rather than sending a check that evaporates into the lines of bureaucracy. If Minnesota is truly looking to protect the resource, hopefully the coalition of our allied associations can work with the legislators to provide a measure that truly results in water conservation.

There is a big elephant on the horizon, and golf is firmly in the crosshairs of the public and lawmakers. Rather than fret or complain about it, I believe we have a tremendous opportunity in front of us. Conserving the resource has the chance to make for better golf, reduce financial obligations, and possibly upgrade infrastructure. Without adversity, very little can be accomplished due to lethargy. Thankfully, the MGCSA continues to be a voice of reason. We are represented and respected by legislative groups and our allied associations. With those relationships growing stronger, I am confident that a solution to the water issue will be a win-win for everyone.
Toro Procore Aerators

ProCore® 648

ProCore® 1298

ProCore® 864

MTI Distributing, Inc.
4830 Azelia Avenue N.
Brooklyn Center, MN 55429
800-362-3665
763-592-5600

MTI Distributing, Inc.
2131 16th St. N. Suite C
Fargo, ND 58102
800-782-1031
701-281-0775

Page 9
A popular song in my rebellious youth, Cat’s In The Cradle epitomized my father, as he wasn’t ever home, or so it seemed. A “depression era child;” he never wanted to be lacking of anything. He was raised with the “live to work” attitude and besides, my mom was a stay at home gal and that was her lot in life until my siblings and I grew up. I saw him briefly before he went to work, at exactly 6:00 pm for dinner and occasionally on weekends when he didn’t go back to the office or wasn’t playing golf or tennis. He was the typical father of my generation.

My child arrived just the other day
He came to the world in the usual way
But there were planes to catch and bills to pay
He learned to walk while I was away
And he was talkin’ ‘fore I knew it, and as he grew
He’d say “I’m gonna be like you, Dad
You know I’m gonna be like you”

I swore I wasn’t going to be like him. Unfortunately, I inherited his work ethic and I fulfilled another generation of “live to work-a-holics.” My passion was the golf course, a bitch when unhappy and a love in good times. Torn between wife, children and the greener grass where I was always in charge, I chose the golf course.
My son turned ten just the other day
He said, “Thanks for the ball, Dad, come on let’s play
can you teach me to throw”, I said “Not today
I got a lot to do,” he said, “That’s ok
And he walked away but his smile never dimmed
And said, “I’m gonna be like him, yeah
You know I’m gonna be like him”

My wife divorced me after our seventh anniversary. Gone were my kids, my wife, and my dream of nuclear happiness. Devastated, I did some sole searching and although I couldn’t ever earn my former wife’s faith again, I could and would be the best dad to my children possible. Having lost her shine a little bit, I didn’t mind a day off and away from the golf course each week with just my children and me.

Well, he came from college just the other day
So much like a man I just had to say
“Son, I’m proud of you, can you sit for a while”
He shook his head and said with a smile
“What I’d really like, Dad, is to borrow the car keys
See you later, can I have them please”

Often times embarrassing, I became the consummate sideline father at all evening sports events, whether practices or a real game. A volunteer chaperone at every event offered, I made ginger bread houses, saw two Sesame Street Plays, went to the zoo a few times, did nature walks, police station visits, museum adventures, the Imax and other in-class projects. The teachers finally requested I step back a bit and allow other parents a chance to participate. Nobody got a better seat then I did at school plays.
I’ve long since retired, my son’s moved away
I called him up just the other day
I said, “I’d like to see you if you don’t mind”
He said, “I’d love to, Dad, if I can find the time
You see my new job’s a hassle and kids have the flu
But it’s sure nice talking to you, Dad
It’s been sure nice talking to you”

My children are all grown up and gone now. On occasion I’ll catch a glimpse of them out of the corner of my eye chasing a long deceased dog, carving pumpkins, playing Barbie, planting the garden or boating; such wonderful and enriching memories. Moments I wouldn’t have had if I’d continued my lustful romance seven days a week, eight months of the year, with 18 holes of turf. Funny when I think about it, that old course I used to work at hasn’t texted me any good news in the last three years, called on my birthday, joined me for coffee, gone camping in the BWCA, laughed, cried or even just slouched on the couch doing absolutely nothing with me.

My father and I get along fine. In fact, we have a better relationship today than in my youth. I have forgiven him for never being around because it was simply a sign of the times and not his intent. As the closest of my siblings to him physically, it also falls upon me to be available when necessary; Dr.’s appointments, fixing a leaky faucet, filling up his irrigation system, shoveling his driveway and sidewalks and adjusting his lawn mower. Or just talking about life, his joys and fears, a few remaining dreams and on occasion he will share that he regrets there were not enough opportunities to enjoy his kids. I feel the same way too.

Father’s Day is coming, make it the best one ever.
A TOAST,
IN APPRECIATION OF YOUR BUSINESS.
HERE’S TO YOU.

At Par Aide, we’d like to raise a paper cup to you, our valued customer. Because it’s your unyielding dedication to the course that inspires us to keep building the industry’s most innovative products. So from Par Aide, we salute all you do. Cheers.

PAR AIDE

Wherever golf is played.

PAR AIDE IS A PROUD SPONSOR OF MCCSA, GCSSA, THE FIRST TEE AND THE WEE ONE FOUNDATION.

GCSAA
SILVER PARTNER
Dude, Put On Your Sun Screen
As I write this article the temperatures have fallen and it seems we are once again in a holding pattern in the “Frozen Tundra;” it is April 21, 2015.

The last thing one has on their mind is applying sunscreen when outdoors at this time of year or for that matter any time of year. If you were like me when I got into the golf business 30 years ago, it was work, play golf, go lay by the pool and apply a plethora of baby oil (Insert vision here). I was fortunate to live in Tucson for seven years during my initial golf ventures and that was what you did.

The reason I am sharing all this information is because recently I was diagnosed with Malignant Melanoma Skin Cancer. First, let me assure you all is good as we caught it early, but I feel it is my responsibility to share with you my experience and what I have learned the last two months about the most common cancer that two million people are diagnosed with every year.

When I returned from GIS, San Antonio, this year I noticed a mole on my back had grown and was oddly shaped. Now, being the physical specimen that I am, you ask how I would be able to notice something like that? Well if you have a history of being in the sun or lesions you need to examine your skin often. A little concerned, I had the wife check it out and she definitely could tell a change in shape. Trying to make a Dermatologist appointment within a couple days is almost impossible, I had to get on a waiting list and luckily someone canceled. Make your appointments well in advance, especially if you have a favorite Dermatologist. Sure enough on March 9th, my 49th birthday, I found myself at the Dermatologist. She proceeded to remove the lesion and send it to a pathologist. When you get that phone call and they say “yeah it’s positive for Melanoma you need to contact an Oncologist,”
the wheels start turning. I became a little absent minded and preoccupied, and while I realize some of you think that is norm for me, this was different. Frantically, I started researching Melanoma: what causes it, how to get rid of it, what to expect in the following months. I became concerned that I was going to have to start eating healthy and learn the downward dog. (Insert vision here).

Having been to Mayo in Rochester for a previous appointment I immediately contacted them to get into the system and discuss my situation. If you have not been to Mayo, which I hope you don’t have too, they are outstanding. Every cog in the wheel has a purpose and they all work together. I was immediately contacted and they explained that my biopsy had been sent to their pathologist, that report had been sent to their Dermatologist and he needs to see me “stat,” a medical term I learned.

So off to Mayo I went for all day appointments on April 6th; blood work, blood pressure, all the pre-appointment stuff you can imagine, questionnaires, and so on. Then I was shuffled off to chest x-ray in this building, and electrocardiogram here, then a PET scan there. Now if you have never had to do any of these procedures it can get pretty overwhelming. All I could do was think how all these tests are going to come back negative because someone made a mistake and they have the wrong guy.

After these tests were done and loaded into my file, which is an amazing feat to have all this orchestrated in a day, I was scheduled to come back the following day for more tests and a final consultation with my doctors. The first person I met with was the Dermatologist. He was a young German guy that was pleasant, and I am sure he was saying something about fair-skinned Irishman under his breath, but a great doctor. After he examined my mole, he immediately said “Achtung!, you shall be here every six months, das sun ist verboten,” meaning; “Hey dummy, you got some lesions on your upper body and you need to have those all checked.” He immediately called in a nurse and had her set up my
“photo shoot.” Wait, what? I don’t know about you, but the last time I did a “photo shoot” was when I was three, except for that other time, but we won’t go there. I asked the Dermatologist if this would be necessary and he reminded me that in order for him to have a base point for future visits he needs photos. Off to the photo lab I went.

When I got there, I explained to the photographer, John, that I needed a full body shoot. He asked me “what do you got on?” Huh?

Do you mean boxers or briefs? Oh man! I inform him boxers and he proceeds to throw me a bag that contains a paper thong (Insert vision here). So I proceeded to do the poses that poor, poor John had to take photos of. When it was over I informed John that I would not tell anyone what happened here today if he didn’t’, He agreed and I am off to my next appointment.

There is a reason why I am sharing so much detail; all humility goes out the window when you are
in the hospital. Your privacy and reluctance to have people poke and prod you is gone. If you have issues with this, wear your sunscreen and have biannual check-ups.

Tests are done, photos taken and now it is time to meet with my Doctor. Keep in mind that I have been at Mayo for two days and not once have I had to wait for an appointment. If they say your appointment is at 7:45 am, your appointment is 7:45 am. Lots of things are going through your mind when you have spent the last two days doing what I had been through. So the doctor walks in with her entourage, all women, four of them. Lucky you say? Well, not quite as women doctors have seen it all and as she orders me to lay on the table and drop trousers, I say to her ”What Doc no dinner first?” She looks at my wife and says “You can have him.” She then informs me about the procedure. Pre-operation procedure consist of injecting dye at the cancer site to see which Lymph nodes the fluid travels too, once that is determined, the lymph nodes will be removed.

What? This was the first I had heard of this and then reality sets in; operations, cut out Melanoma on back, remove four lymph nodes under my right arm and have them tested for cancer while I am under anesthesia during the operation. Whoa doc, you’re not making sense. Long story short, this was the procedure that happened on

Squamous Cell Carcinoma

Squamous cell carcinomas can also develop in scars or skin sores on any part of the body. Squamous cell cancers are more likely to grow into deeper layers of skin and spread to other parts of the body than basal cell cancers, although this is still uncommon.
April 16th.

So on the morning of April 16th I was admitted for my operation at 6:00 am, was at the prep station at 7:00 am, surrounded by people that kept asking my name, what I’m having done today, date of birth and all I could think was do you people not really know the answer to these questions? They do this so they know your clear on what is happening to you and they always have the correct patient.

But as I laid there waiting for the nurses to take me into the operating room I noticed old, young, men, women, all around me also getting prepped and I thought; is this what it is all about? You work hard, you play hard, but you live life. The choices you make in life also dictates the type of road traveled: bumpy or smooth, curvy, or straight. I consider mine a straight curve with some speed bumps.

Off we go to the operating room at 8:00 am on the dot. As I pass my doctor and her entourage

Basal Cell Carcinoma

*Basal cell carcinomas can also develop on the scalp, so it’s important to check your scalp when you check the rest of your body for any new marks or growths. Many doctors recommend doing this once a month.*
of doctors in the hallway she makes sure I’m good to go, and I give her the pep talk of: make me pretty, scars are cool, maybe take some from the mid-section. Then I commence to say to the entourage: Dr., Dr., Dr., Dr., finally the last Dr. got it and laughs then says “From the movie ”spy’s like us?” (and am like: “nice.”) Two minutes after that, I was in a wonderful place with unicorns, kaleidoscopes and where the Snozberries taste like Snozberries. Recovery had to be the hardest part, because your head feels like a 20 lb. bowling ball and you still have attachments connected all over your body and you have too pee. A little hint, after your body has been injected with blue dye, your pee comes out blue dye, kinda like Papa Smurf.

Recovery went well with more questions, walking, peeing, and the normal stuff in a hospital. After ten hours I get the thumbs up to go home, and wait for the final verdict from the pathologist on the dissection of the lymph nodes.

Well today is the 21st of April and I received word that all four lymph nodes were negative and the area around my lesion was free of Melanoma! God is good!

I am not writing this for sympathy, I am writing this because I am concerned about friends, colleagues and our youth who partake in outdoor activities every day. I have learned that I do not like hospitals and that I am a lucky individual some are not so fortunate. Just remember that early detection and treatment has a high cure rate. Don’t wait to see your dermatologist and perform skin self-examinations. If you notice anything changing, growing, or bleeding on your skin, immediately make an appointment to see your dermatologist. You even have to protect your skin around snow, water, and sand. Wear protective clothing, hat, and sunglasses when possible. But most important: **dude, put on your sunscreen!**

I hope this has helped some of you understand what you potentially can go through if you don’t take care of your skin. If you have any questions give me a shout and good luck!
Now you can outsmart dollar spot.

**Xzemplar fungicide**

Dollar spot is relentless. But when you’re prepared, you can cross that worry right off your list.

**New Xzemplar™ fungicide** with the active ingredient fluxapyroxad gives you consistent, longer-lasting protection against this tough disease. It’s fast-acting, with preventative and curative properties that keep dollar spot at bay. Trust **Xzemplar fungicide** to put you in control of the game.

*Find out more by contacting Randy Lusher, Sales Specialist, randy.lusher@basf.com, (630)235-0104, or visit betterturf.basf.us*

Always read and follow label directions.

Xzemplar is a trademark of BASF. © 2014 BASF Corporation. All rights reserved.
Thank You Larry DiVito, Target Field Groundskeeper and Sponsors JRK Seed, ArborJet, Frost Inc and Winfield.
2015 InReach Education and Target Field Tour
Target Field Groundskeeper and sponsors JRK Seed, ArborJet, Frost Inc and Winfield.
Help select the 2015 Most Valuable Technician
It’s time for you to choose GCM’s Most Valuable Technician, presented in partnership with Foley United. Please review the information below on each of the finalists and vote for the one you feel most deserves the title of Most Valuable Technician.

Voting closes May 25. Look for the winner to be announced this summer.

**Finalist No. 1**

**Jori Hughes**

**The Wilderness at Fortune Bay, Tower, Minn.**

Outstanding fabrication skills, a dedication to a clean and safe work environment and a developing role as a facility leader at this resort golf course in northern Minnesota were all driving factors in Vincent Dodge, CGCS, nominating his equipment technician, Jori Hughes, for the 2015 Most Valuable Technician Award. Technically trained at a local community college, Hughes has mastered his craft during his time at The Wilderness, focusing all the while on golf course equipment maintenance and establishing himself as a crucial employee at the resort. Hughes has spun his love of building and racing stock cars into a plus for his employer, too, with exceptional fabrication skills that.
allow him to easily solve problems big and small for Dodge and his team. Also notable to Dodge has been the development of Hughes’ interpersonal skills as a leader at the facility. “Jori works with staff members not just to make his own duties more manageable,” Dodge says, “but to help others accomplish their work more efficiently, as well.”

The Most Valuable Technician Nomination Application filed by Vince Dodge CGCS

Why should your equipment technician be considered for the Most Valuable Technician Award? The working relationship between the superintendent and technician is the most important one in golf course grounds management. What makes this relationship a challenge at times to master is the scarcity of qualified individuals to perform a technician’s tasks. Golf course technicians have a very specific and challenging skill set that takes time to learn. At the Wilderness at Fortune Bay, we chose to go the route of train-
ing an inherently skilled young man named Jori Hughes to become our equipment technician. Jori received his formal technical training at the local community college and then came to work with us on golf course equipment. Training Jori on the specifics of golf course equipment was, honestly, very easy. There were no practices that needed to be “deprogrammed” from Jori’s ways of doing things as is often the case with other mechanics from different fields. Jori has developed not only the technical skills to perform his work but also has continued to develop his social skills to become better at his job. His ability to make others around him better is Jori’s best attribute. This ability is what separates good technicians from exceptional ones, and we feel fortunate to have someone like Jori Hughes as our equipment technician. For these reasons, I believe that Jori Hughes should receive serious consideration for the Most Valuable Technician Award.

Does the nominee have any formal equipment technician education/training and/or industry certifications? Please list. Diploma of Occupational Proficiency from Superior Tech Products
Leading Edge Turfgrass Solutions
Golf Courses | Sport Fields | Parks

952-546-3678
www.stproots.com
stp@stproots.com

* Liquid & Granular Fertilizers
* Organic Fertilizers
* Post Patent Pesticides
* Aerification Tines & Bedknifes
* Natural & Artificial Turf grooming equipment.

smooth healthy consistent greens
Vibratory Greens Roller & Greens Care Collection

True-Surface
Hibbing Community College, Diesel Mechanics and Heavy Equipment Maintenance, Toro Commercial Products Service Training Certificate 2009

Is the nominee involved with any professional organizations? Please list. Jori is a member of: GCSAA, IGCEMA

Explain how the nominee emphasizes shop management (organization, cleanliness, etc.) at your facility. The shop condition has improved annually under the guidance of Jori. Cleanliness with an eye towards more environmental conscious practices, such as the proper disposal of waste products, has become second nature to Jori’s shop operation. In addition, Jori has systematically been adding useful tools to the maintenance shop such as a sand-blasting unit for cleaning and painting small parts. This has been particularly useful on bedknife bars. The most recent addition is an automatic grinder for rotary blades, which increases the safety of our shop. The organizational improvements that Jori makes each and every year to the shop do not go unnoticed.
Explain how the nominee exhibits exceptional resourcefulness, innovation or creativity in problem solving at your facility. Jori’s hobby is both making and then racing stock cars. These skills transfer over to the golf course very well in that Jori has fantastic fabrication skills. Given the material to work with and a welder, Jori can make just about any kind of custom piece needed both in the shop and on the golf course. Just this past year I asked Jori to make a custom steel piece that would allow us to level a large drainage grate on the golf course. Jori promptly built the piece according to specifications and the problem was solved. Jori looks upon these kinds of special projects as a challenge – not something that keeps him away from other types of work.

We now carry only the items we really need to minimize downtime in equipment. That being said, Jori is astute enough to take advantage of the numerous early order programs offered by our vendors. By taking full of advantage of these programs with their discounts and free shipping, we have been able to save substantial sums of money – all the while remaining within our budget and not carrying unnecessary parts.

Explain how the nominee embodies and promotes safety in the workplace. Safety in the workplace for Jori involves both safety in the shop and safety in the field. Safety in the shop is accomplished by the acquisition of the proper tools to do the job and then the training to use them properly. Jori makes all the right recommendations to make the shop a safer place. Where Jori truly excels, however, is in the way he assists others in operating equipment in a safe manner. He does this by ensuring that all of the safety features of equipment are working properly and by assisting in the training of other employees to operate their equipment in a safe fashion.

Explain how the nominee manages costs/budgets/inventory while maintaining high-quality, dependable resources. Part of having an effective inventory program is knowing exactly what you have in stock already and then being able to find it. This is something that Jori has created over the past few years.
7500A E-Cut™ Hybrid Fairway Mower

- TechControl display locks in performance and uptime
- Set mowing turn speed to reduce scuffing
- AutoPedal™ lowers fuel consumption and noise
- Proven hybrid design eliminates hydraulics from reel circuit

2.9% for 60 Months*

*Offer ends 5/30/15. Subject to approved installment credit from John Deere Financial. 2.9% is for 60 months only. Other special rates and terms may be available. Prices and models may vary by dealer. See dealer for complete details.

frontieragturf.com

Cannon Falls, MN  (507) 263-4238  
Rosemount, MN  (651) 423-2274  
Hastings, MN  (651) 437-7747  
New Richmond, WI  (715) 246-6565  
Osceola, WI  (715) 294-2191  
Turtle Lake, WI  (715) 986-4403

Melding Playability With Natural Landscapes

MN Native Plants ● Pond buffers ● Wetlands ● Prairies ● Woodlands

NaturalShore.com  612.703.7581
Assistant’s Spring Seminar and Golf Outing
Hosted by Frost Services Inc. and St. Croix Valley Golf Club
Explain how the nominee demonstrates a commitment to environmentally conscious practices. Environmentally sound practices are not just for the golf course but also for the operations inside the shop. All fluids changed out of equipment are saved into spill-contained containers before recycling companies processes them. Oil filters are also recycled through the same company that handles the fluids. In addition, we have made a steady transition over to electric and hybrid maintenance vehicles to save on fuel costs. Jori has been instrumental in our acquisition to these types of units and has embraced the challenge of working with newer forms of technology that are better for the environment.

Explain how the nominee exemplifies excellence and integrity in workplace relationships, interactions, decision-making and mentoring. The most exciting part of Jori’s development as a technician has been his ability to interact with other members of the staff. This is a skill that many technicians struggle with in that sometimes an adversarial relationship develops between a technician and the crew. Jori works with staff members not just to make his own duties more manageable but to help others accomplish their work more efficiently as well. This is a skill that takes time to develop in that Jori was a little shy at first – his confidence was not nearly as developed as it is now. With a growing confidence in the ability to do your job comes the ability to assist others in achieving the same goal.
Since establishing our professional products business nearly four years ago, our valued customers have come to know WinField as more than just a distributor. With our national headquarters in Shoreview, WinField provides area courses a unique blend of local expert service, proprietary insight tools and access to a vast supplier network you won’t find anywhere else.

WinField, a Land O’ Lakes, Inc. company, began serving the professional products category in 2010 with the acquisition of ProSource One Midwest. Continuing this growth trend, WinField added Precision Turf (Minn.) to its portfolio in 2012 along with other recent strategic acquisitions aimed at expanding the business’ bandwidth and providing customers with exceptional service. By bringing these businesses under the WinField brand, we have been able to make heavy investments in research and product development that provide our customers with unique, value-added product formulations.

Today, our team of more than 80 sales representatives nationwide provides customized solutions for each course. Many of the state’s premier courses are supported by the local expertise of Brad Smith, Chris Hoff and Kevin Leeper.

- “I have been working with WinField since they took over Precision Turf and Chemical in 2012. My experience has been nothing but positive in both their product offerings but more importantly in their customer service at all levels. Top to bottom, WinField is a great partner for myself and the Edina Country Club when it comes to providing agronomic solutions.” - Brandon Schindele, Golf Course Superintendent, Edina Country Club
While the game of golf often requires a degree of guesswork, superintendents must make precise, science-based decisions. Our comprehensive product line-up includes research-based solutions from WinField and our industry-leading partners. When you team up with WinField, you can be confident you’re maximizing your course’s potential.

• “The sales team at WinField provide great products with great service and are a very professional group. They provide helpful information that I need to be successful at my job.” - Jamie Bezanson, Golf Course Superintendent, Oneka Ridge (White Bear Lake)

SOLUTIONS
With unmatched insights as a core company value, WinField understands the importance of research and is committed to delivering innovative solutions to you and your course. Over the past three years, WinField has conducted more than 50 internal research trials leading to not only improved and innovative products, but also data-driven tools that help make complex decisions easier.

• “When it comes to my purchasing needs, I have two basic requirements: variety of goods and excellent service. Winfield has consistently delivered in both of these areas and that is why they are one of my top suppliers. Whether it’s chemicals, fertilizers or ancillary products, Winfield has the selection of proven products that I need.” - Dave Kazmierczak, Golf Course Superintendent, Prestwick Golf Club (Woodbury)

Our R&D department has developed more than 25 proprietary products including:

Droplex® Adjuvant
Improves spray deposition on intended targets and reduces spray drift through eliminating small droplets and not mak-
ing large droplets. This leads to improved pesticide and fertilizer performance.

- Maximizes deposition and minimizes drift potential
- Helps keep droplet particles within preferred size range
- Does not encapsulate product

Gulfstream™ Adjuvant
Contains a non-ionic surfactant that reduces surface tension so droplets can spread over a larger area of the leaf surface. This leads to improved pesticide uptake and performance.

- Reduces surface tension so droplets spread out over a larger area of the leaf surface
- Promotes increased absorption of products on the leaf surface
- Has the potential to improve spray coverage and penetration in dense canopies
- Lowers spray solution pH to reduce alkaline hydrolysis and increase solubility of certain pesticides

Aquicare™ Wetting Agent
Helps reduce watering requirements to maintain turf quality. This formulation reduces the surface tension of water droplets, which provides preventive and curative relief of localized dry spots. All of which means less evaporation and runoff, and improved infiltration of water.

- Nonphytotoxic
- Promotes more efficient use of irrigation water or rainfall
- Can be used preventively or curatively
- Resists excessive water retention at the soil surface
Gravity® Liquid Fertilizers
Available in five macro and micronutrient blends. They include CornSorb® technology that aids the absorption and movement of nutrients in the plant.

- Include CornSorb® technology to help absorption and movement of nutrients
- Proven via university studies to drive more nutrients into plants
- Available in five macro and micronutrient blends.

INSIGHTS
In addition to product developments, our investment in proprietary insight tools allows us to provide customers with valuable data and knowledge that help simplify complex decisions and achieve smarter business outcomes.

GeoTech™ Tool
See your grounds like never before with our innovative approach to uncovering soil and plant health variability. This mapping tool uses satellite imagery to reveal what the eye can’t see, identify opportunities to adjust management plans and bring out the best in your site.

TurfTech Tool
The seed selection process just got easier. Our patented tool features university evaluations of six species and more than 1,000 turf varieties. Select from nearly 150 performance features and the tool quickly identifies the best turf varieties to suit your needs. Evaluate varieties on a national, regional or state level to determine the best turf seed for your area.

NutriTech Tool
WinField can help you track and monitor the condition of your grounds with our proprietary nutrient-testing offering. This comprehensive tool provides accurate, customized analyses of soil, water and plant tissue. Expert WinField agronomists analyze the findings and provide
The golf course industry is constantly changing, and now more than ever, the burden falls on superintendents to keep up with the latest products and technologies, review application best practices and discover new business strategies. Our WinField Academies help you make sense of this complex landscape. State-required continuing education units are also offered at most sessions and all deliver practical insights you can use to refine and grow your business.

I’m proud to say that at WinField, we are as driven as the customers we serve. To learn more about what WinField can do for your business, contact your local sales representative or visit winfieldpro.com.

WinField™

The membership and Board of Directors greatly appreciates the support the MGCSA receives through its affiliate base. Thank you for your support.

Is your company interested in promotion through the Affiliate Appreciation Spotlight? Contact Dave Kazmierczak CGCS or Jamie Bezanson for more information and a simple template to use.
One Cause. One Goal. One Percent.

**One Cause:** Help golf course management professionals and their dependents that are having trouble paying medical bills due to the lack of comprehensive insurance or adequate financial resources.

**One Goal:** Raise $10 million in 10 years to support these families.

**One Percent:** Donate 1% of your 2014 revenue, maintenance budget, or salary over the next 10 years in 10 payments.

Example Contribution:

2014 Salary = $70,000

\[
1\% = \frac{70,000}{100} = 700
\]

Donation = $70 per year for 10 years

To learn more about One for the Wee One, visit weeone.org/onepercent or call (630) 457-7276.
MINNESOTA GOLF COURSE SUPERINTENDENTS’ ASSOCIATION

Presents “The SCRAMBLE”
AT MEDINA Golf and Country Club

MONDAY, June 8, 2015
Medina, Minnesota
HOST SUPERINTENDENT: Erin McManus

This is a combined scholarship/research fundraising event. Proper golf attire required. $120 entry fee (per person) includes lunch, research donation, range balls, cart fee, and heavy appetizers. The format is a scramble and open to all members with emphasis placed upon inviting your club officials to join in the fun. Prizes from the Pro Shop will be based upon participation.
A 50/50 skins game for $50 per team. 50 percent of which goes to the Research and Scholarship funding.
Join the fun, it won't be the same without you!!!

FORMAT: FOUR-PERSON SCRAMBLE
11:30 - 12:45 p.m.  Registration – Driving Range available, lunch
1:00 p.m.  GOLF - Shotgun
5:30-7:00 p.m.  Reception and heavy appetizers
(Dinner tickets available for $60 ea. -- includes donation.)

-----------------------------------------------
REGISTRATION FORM
-----------------------------------------------

PLEASE FILL OUT COMPLETELY. THE DINNER COUNTS ARE IMPORTANT.

NAME     CLASS GOLF COURSE / COMPANY             GOLF - $120 ea.      DINNER ONLY - $60

_____________________________   _____ _____________________________   ________  ________
_____________________________   _____ _____________________________     ________  ________
_____________________________  _____ _____________________________   ________  ________
_____________________________  _____ _____________________________   ________  ________

REGISTER: ___ GOLFERS @ $120 ea (Golf, dinner, donation, range balls, cart) ___ NON-GOLFERS @ $60 ea. (Dinner, donation)

TOTAL ENCLOSED: $___________________________

PAYMENT METHOD:   ____ Check      ____ Credit Card:   __ VISA   __ MASTERCARD   __ DISCOVER

Name as it appears on credit card: _______________________________________________________________

Credit Card Number: _______________________________ Security Code: _____________ Expiration Date: _________

Authorized Signature: _______________________________________________________________________

Make check payable to MGCSA and mail to:   MGCSA, 10050 204th Street North, Forest Lake, MN 55025

REGISTRATION DEADLINE: June 1, 2015
The MGCSA wishes to extend their appreciation to the MGA, USGA, UMN and Reinder’s Inc for hosting this annual event.
New federal and state legislation on conserving bees

In March 2014 the EPA released new bee protection guidelines on neonicotinoid insecticide labels (imidacloprid, dinotefuran, thiamethoxam, and clothianidin) to protect bees and other insect pollinators. The bee icon signals that the pesticide has the potential to harm bees. The language in the new bee advisory and directions for use sections of the label explains application restrictions to protect bees.

In addition, as of July 1 2014, Minnesota has a new plant labeling law in effect to protect pollinators. The new law requires plants that are sold as bee friendly cannot have certain insecticides used during their cultivation. Currently, in the 2015 legislative session, there are some amendment to the labeling laws, but no decision has been made as whether the changes will be in-
cluded in the final bills. Why is conserving pollinators and other beneficial insects important to Integrated Pest Management (IPM)?
The conservation of beneficial insects, that includes bees, insect predators, parasitic wasps, and butterflies, is an essential part of Integrated Pest Management (IPM) programs. IPM promotes multiple tactics to manage pests and to suppress the population size below levels that will damage the plant. IPM tactics include cultural control, sanitation, biological control, and finally the use of insecticides. IPM recognizes that the few remaining pest insects will support beneficial predators and parasitic wasps. Use spot treatments of contact insecticides, not systemic insecticides, which will help conserve pollen and nectar feeding beneficial insects.

Flowers that open after spraying with contact insecticides do not contain insecticide residue. Use contact insecticides, such as bifenthrin, cyfluthrin, flonicamid, and spinosad (less toxicity 3 hrs post spray when dried). Toxicity lasts 1-3 weeks. Do not spray flowers and foraging bees as most insecticides are harmful to insects. However, flowers that open after systemic insecticides are sprayed can contain the insecticide residue in pollen and nectar for months.

There are few systemic insecticides, while there are many systemic herbicides and fungicides. Systemic, neonicotinoid insecticides are the most widely used insecticides in the world, due to their low mammalian toxicity and the ability of the insecticide to move systemically from soil into the entire plant, including pollen and nectar. Treatment methods include
seed treatments, foliar sprays, soil (granular and liquid) applications, trunk drenches, and trunk-injections. Flowers that open after systemic insecticides are sprayed can contain the insecticide residue for many months in both the leaves and pollen and nectar.

There are six neonicotinoid active ingredients, imidacloprid, dinotefuran, thiamethoxam, and clothianidin, of which acetamiprid and thiacloprid are the least toxic to bees. There is another systemic insecticide, fipronil, that is used around structures, and it is also toxic to bees. You will find these active ingredients listed on the insecticide label in small print. Neonicotinoid systemic insecticides have been implicated in the decline of bees, butterflies, and other beneficial insects. The European Union suspended the use of neonicotinoid insecticides from 2014-2016 on crops and
plants that bees’ visit. The concern was the residue in pollen and nectar and their negative effects on survival and foraging behavior of bees. The neonicotinoid class of insecticides is highly toxic to bees and kills bees at around 180 ppb in flower nectar or pollen. However, sublethal doses of neonicotinoid insecticide starting around 5 ppb, cause bees to lose navigation and foraging skills. The longevity and amount of the neonicotinoid in the pollen and nectar will depend on application method, concentration applied, and binding capacity of the soil.

The use of neonicotinoid insecticides as trunk injections and soil drenches for ash trees is important to slow the spread of the exotic, invasive Emerald Ash Borer and other invasive pests. As bees do not collect ash pollen in quantities, the risk to bee pollinators is low. In contrast, the use of neonicotinoid insecticides on flowering garden plants, shrubs and trees, including linden and basswood trees can potentially kill bees and beneficial insects that utilize the flowers for pollen and nectar. It is wise to avoid using systemic neonicotinoid insecticides on flowering plants that bees visit regularly. Instead use spot treatments of contact insecticides.

Creating a federal strategy to promote the health of honey bees and other pollinators

As of October 2014 a federal task force suggests that systemic insecti-
cides should not be used on bee friendly plants according to the 51 page document entitled “Supporting the health of honey bees and others pollinators” developed by the council on environmental quality and GSA to address the requirement of the presidential memorandum of June 20 2014. The wording on page 15 states “5. Acquire seeds and plants from nurseries that do not treat their plants with systemic insecticides”. You can find the document at the url: http://www.whitehouse.gov/sites/default/files/docs/supporting_the_health_of_honey_bees_and_other_pollinators.pdf

The presidential memorandum of June 20, 2014 states that: “Given the breadth, severity, and persistence of pollinator losses, it is critical to expand Federal efforts and take new steps to reverse pollinator losses and help restore populations to healthy levels. ...Therefore, by the authority vested in me as President by the Constitution and the laws of the United States of America, I hereby direct the following: .... hereby established the Pollinator Health Task Force, to be co-chaired by the Secretary of Agriculture and the Administrator of the Environmental Protection Agency. In addition to the Co-Chairs, the Task Force shall also include”.... members from the various federal departments. ...The mission is to develop a pollinator research action plan, public education plan, increase pollinator habitat, and
collect and share data on pollinator issues.

You can find the document at the url: http://www.whitehouse.gov/the-press-office/2014/06/20/presidential-memorandum-creating-federal-strategy-promote-health-honey-b

The new EPA bee icon and bee advisory box on labels

As of March 2014 the EPA has added the new “Bee Advisory Box” to neonicotinoid insecticide clopid, dinofuran, and clothianidin) to other insect pollinator icon above signals pesticide has potential to language in the new box explains application restrictions to protect bees. Also, bee cautions can be found in the “Directions for Use” section of the insecticide label. You can find the document at the url: http://www2.epa.gov/sites/production/files/2013-11/documents/bee-label-info-graphic.pdf

The bee advisory box states” Protection of pollinators “Application restrictions exist for this product because of risk to bees and other insect pollinators….. This product can kill bees and other insect pollinators. Bees and other insect pollinators will forage on plants when they flower, shed pollen, or produce nectar. Bees and other insect pollinators can be exposed to this pesticide from:

1. Direct contact during foliar application or contact with residues on plant surfaces after foliar application.
2. Ingestion of residues in nectar and pollen when the pesticide is applied as a seed treatment, soil, tree injection, as well as foliar application.
When using this product take steps to:

1. Minimize exposure of this product to bees and other insect pollinators when they are foraging on pollinator attractive plants around the application site.

2. Minimize drift of this product onto beehives or to off-site pollinator attractive habitat. Drift of this product onto beehives can result in bee kills.

Also, there is new language in the “Directions for use” section of the label, that states: “Do not apply this product while bees are foraging. Do not apply this product to blooming, pollen shedding or nectar producing parts of plants, if bees may forage on the plant during this time period…”

Information on protecting bees and other pollinators can be found at the Pesticide Environmental Stewardship website at: http://pesticidestewardship.org/pollinatorprotection/Pages/default.aspx

Minnesota’s new plant labeling law is in effect to protect pollinators

As of July 1 2014 a new plant labeling law is in effect in Minnesota to protect pollinators from exposure to systemic insecticides. The new law requires that plants advertised as “beneficial to pollinators” must be free of
detectable levels of certain systemic insecticides. The Minnesota Department of Agriculture (MDA) Plant Protection Division (PPD) will enforce the law. The law is meant to protect plant pollinators from exposure to detectable levels of insecticide residues that may persist in flowering plants sold in Minnesota nurseries. The new law does not allow labeling or advertising of plants as “beneficial to pollinators” if the plants have been treated with certain systemic insecticides. Systemic insecticides are compounds that move within the tissues of a plant which means they can potentially reach the plant flowers where pollinators may be feeding or collecting pollen. The MDA has developed a fact sheet about the new law that is posted on the agency’s website at www.mda.state.mn.us/labelfactsheet and http://www.mda.state.mn.us/en/news/releases/2014.nr20140715-bees.aspx

1. MDA Agricultural Landscapes http://www.mda.state.mn.us/protecting/bmps/~media/Files/protecting/bmps/pollinators/pollinatorsagland.pdf
2. MDA Yards and Gardens http://www.mda.state.mn.us/protecting/bmps/~media/Files/protecting/bmps/pollinators/pollinatoryardbmps.pdf
2. Roadsides and rights of ways Roadsides and Rights-of-ways (PDF: 3.57 MB / 4 pages)

Here is the list of systemic insecticides affected by the law and not approved on bee-friendly-labeled plants. These insecticides are registered for
use on nursery, greenhouse, and landscape by the EPA (18 insecticides): abamectin, acephate, acetamiprid, avermectin, bifenazate, carbaryl, chlorfenapyr, clothianidin, cyantraniliprole, dinotefuran, emamectin benzoate, imidacloprid, milbemectin, oxamyl, pymetrozine, spinosad, thiacloprid, thiamethoxam. Of these 18 insecticides, four are neonicotinoid insecticides and of the remaining 14 only 7 (abamectin, acephate, bifenazate, carbaryl, chlorfenapyr, pymetrozine, spinosad) are comm. See Table 1.

Which flowers do not attract bees?
There are not any plant lists that identify plants not attractive to bees. Bees do not use double flowers, as male parts are bred to make additional petals, and the flower does not produce pollen and nectar. Most double flowers that show no pollen will not be fed on by bees. However, older varieties of zinnia, marigold, and dahlia, especially those that have visible yellow pollen, will be fed on by bees. Most annual bedding plants do not contain pollen and nectar and consequently are not attractive to bees. Bees will probe and visit flowers of plants that do not provide food. A feeding bee has a pulsating abdomen.

Many annual bedding plants, such as recent Tea roses with closed buds, Begonia, Impatiens, New Guinea Impatiens, Geranium, Callbrachoa, petunia, pansy, Fuchsia, Gerbera, Coleus, marigold, Dusty Miller, and many other seasonal table top plants, such as chrysanthemum, Poinsettia, and Cyclamen are not attractive to bees. You could use systemic insecticides on these plants, as long as they are not advertised as bee-friendly.

Which flowers attract bees?

Avoid treating flowering plants that bees utilize with systemic, neonicotinoids. Bees prefer to feed on native plants and heirloom “garden” varieties of plants.

Some perennials very attractive to bees are: Potentilla, pussy willows, all flowering crabapple, apple, pear, hawthorn, and serviceberry, Delphinium, Campanula, Liatris blazing star, Echinacea cone flower, Se-

Some annual bedding plants very attractive to bees are fennel, basal, dill, rosemary, thyme, lavender, heather, Salvia, Tithonia Mexican sunflower, Asclepias Mexican milkweed, Buddleia, Gaillardia, Ganzania, Verbena, Portulaca, Lantana, Lobelia, Ageratum, Alyssum, and snapdragons

There are numerous lists identifying plants attractive to bees. Some lists only contain native plants, while other lists contain heirloom “garden” varieties of plants:

1. The University of MN bee lab bulletin, Plants for Minnesota bees
   http://www.beelab.umn.edu/prod/groups/cfans/@pub/@cfans/@bees/documents/article/cfans_article_451478.pdf

2. Pollinator plants Midwest region

3. CUES: Pollinator Conservation, plants for bees and other pollinators
   www.entomology.umn.edu/cues/pollinators/plants.html

4. CUES: Poster, Save the bees plant flowers and trees
   http://www.entomology.umn.edu/cues/pollinators/plantsposter.pdf

5. CUES: Bulletin, Plants for butterfly gardening
   www.extension.umn.edu/garden/yard-garden/landscaping/butterfly-gardening/

6. CUES: bulletin, Plants that provide pollen and nectar for beneficial insects www.entomology.umn.edu/cues/gervais/keytable.htm
Information on insecticide toxicity to bees. In gray are insecticides not permitted by the MDA on bee-friendly-labeled plants. Systemic neonicotinoid insecticides (imidacloprid, clothianidin, dinofuran, and thiamethoxam) are translocated to pollen and nectar of flowers for some time after application. Contact insecticides should not be translocated to pollen and nectar and should not be present in new flowers. Many contact insecticides are toxic to bees and should not be sprayed directly on foraging bees or flowers. In structures use contact insecticides during cultivation; when plants are sold, they will not contain residues of systemic insecticides in flowers. Modified from “Protecting honeybees from pesticides”, Purdue Extension, E-53W, Krupke, C., G. Hunt, and R. Foster, June 2014 and “How to reduce bee poisoning from pesticides”, A Pacific Northwest Extension Publication, OSU, UI, WSU, PNW 591, Hooven, L., Sagili, and E. Johansen. The information given here is supplied with the understanding that no discrimination is intended and no endorsement by the University of Minnesota Extension. Remember, the label is the law.

<table>
<thead>
<tr>
<th>Chemical class</th>
<th>Examples of common names</th>
<th>Bee Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbamates</td>
<td>carbaryl, methomyl</td>
<td>All x</td>
</tr>
<tr>
<td>Neonicotinoids</td>
<td>imidacloprid (I)</td>
<td>All x</td>
</tr>
<tr>
<td></td>
<td>thiamethoxam (T)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>clothianidin (C)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>dinofuran (D)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>imid+bifenthrin (LB)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Less toxic: acetamiprid (A)</td>
<td>All x</td>
</tr>
<tr>
<td></td>
<td>thiacloprid (T)</td>
<td></td>
</tr>
<tr>
<td>Organophosphates</td>
<td>acephate, chlorpyrifos, dimethoate, malathion, phosmet</td>
<td>All x</td>
</tr>
<tr>
<td>Pyrethroids</td>
<td>bifenthrin, cyfluthrin, fenpropathrin, lambda-cyhalothrin, permethrin</td>
<td>All x</td>
</tr>
<tr>
<td>Botanical</td>
<td>pyrethrum/pyrethrins</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>azadirachtin</td>
<td></td>
</tr>
<tr>
<td>Insect growth regulators</td>
<td>diflubenzuron, tebufenozide</td>
<td>All x</td>
</tr>
<tr>
<td></td>
<td>azadirachtin</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>buprofezin</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>pyriproxyfen</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>novaluron</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>cyromazine</td>
<td>x</td>
</tr>
<tr>
<td>Juvenile hormone</td>
<td>s-kinoprene</td>
<td>x</td>
</tr>
<tr>
<td>Diamides</td>
<td>chlorantraniliprole</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>cyantraniliprole</td>
<td></td>
</tr>
<tr>
<td>Macroyclic lactones</td>
<td>abamectin/avermectin</td>
<td>x</td>
</tr>
<tr>
<td>Miticides</td>
<td>acequinocyl, exotaxole, fenpyroximate, fenbutatin-oxide</td>
<td>All x</td>
</tr>
<tr>
<td></td>
<td>clofentezine, hexythiazox</td>
<td>x, x</td>
</tr>
<tr>
<td></td>
<td>bifenazate</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>pyridaben</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>chlorfenapyr</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>spiromesifen</td>
<td>x</td>
</tr>
<tr>
<td>Spinosyns</td>
<td>spinosad, less toxic when dry</td>
<td>x</td>
</tr>
<tr>
<td>Tetronic acids</td>
<td>spirotetramat</td>
<td>x</td>
</tr>
<tr>
<td>GABA-channel</td>
<td>fipronil</td>
<td>x</td>
</tr>
<tr>
<td>Pyridine carboxamide</td>
<td>fonicamid</td>
<td>x</td>
</tr>
<tr>
<td>Pyridine azomethines</td>
<td>pymetrozine</td>
<td>x</td>
</tr>
<tr>
<td>Avermectin</td>
<td>@emamectin, benzoate</td>
<td>x</td>
</tr>
<tr>
<td>Other insecticides</td>
<td><em>Bacillus thuringiensis</em>, potassium salts fatty acids soaps</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>horticultural mineral oils, neem oil</td>
<td>x</td>
</tr>
</tbody>
</table>
“Of Magazines and Men”

I signed on to be editor of this magazine when I was elected to the MGCSA Board of Directors three and half years ago. Well, I didn’t really sign on, I was placed on the communications committee and after advertising my background in journalism I was kind of anointed the position which I gladly accepted. Who else was going to do it?

The former editor, Jack MacKenzie, had been handed the job of MGCSA Director which meant that he was now the publisher of the magazine as part of his job. It was also the time the magazine switched from hard copy to digital only. It was quite a transition all at once for a publication, looking back. Jack had really no idea about composing a magazine in digital form but jumped into the fire with both feet and turned out a solid product. I also had to remember some things from 20 years ago and try to figure out what I could get done as a side job that was now thrown into an already busy schedule. I had big, grand plans about articles this, and reporting that. I forgot how much time it takes to do even the simplest of things.

Three and a half years later, there is plenty more I would like to do with this publication. In the real world of magazine production, the publisher is the guy generally running the business operations of the magazine. The editor is the guy who decides content, directs efforts of reporters on stories he or she wants in the publication and makes all the critical decisions as far as placement of stories, headlines, etc. Copy editors edit the stories for factual errors, flow, etc. Separate teams put the magazine together, set design along with the editor, etc. This magazine? Well......
There is Jack, and me. Jack’s paid to do what he can. He has a set design that hasn’t wavered much since we started the digital magazine, and he is primarily responsible for content, most of which comes to him or he solicits as he makes contacts both outside and within the MGCSA. I am pretty much a copy editor (and a questionable one at that) that writes a column each month. It is the nature of a small trade magazine I guess, but I am proud, and I am sure Jack is as well, of what we are able to put out there each month for your perusal and hopefully enjoyment.

I bring this up because I looked back recently and skimmed the past issues just to review what we have done and try to see if there needs to be some changes, which is not unlike what is done by a superintendent at their job from year to year. I noticed something very important.

The content of our articles, and most certainly our columns, seem to center around three very important issues: water use/regulations and the environmental stewardship committee’s attempt to help with that issue, insects- both detrimental and beneficial - and the fate and interaction of insecticides on both, and the delicate balance of doing the jobs we do while preserving family life. I did not find one issue that didn’t have some sort of content that dealt with one of those three issues.

That tells me a couple things. First, it means we need to have some more diversity in content for you in the magazine. That can be difficult because as I stated above, we don’t have a fleet of reporters to go find unique stories about what we as superintendents are doing and how we are doing it. We rely mostly on content that comes to us or is relevant in dealings with others which tends to be on the front burner. It would certainly help to get a few stories from the masses to help with the diversity of the magazine. I promise I will try to guilt you all into writing more as time marches on. If
you want a perfect example of this read Mike Kelly’s story a few pages back about his health scare. It is informational, thought provoking, unique and damn funny all in one. Thank you, Mike for contributing in your own special way. We need more of that, just not what precipitated it.

But the most glaring observation to me is that the three aforementioned issues are constantly being harped upon for a reason- they are all very, very important. I realize they can be redundant. You might open up the magazine and say to yourself “God, not another story about using water wisely,” or “Another article about pollinators?” or even “If I’m told I need to go play catch with little Johnny or Sally again I’m going to puke!” That’s just fine. Just remember that they are there for a reason. If you are the type that gets the message the first time good for you, not everybody does. Constant reminders and differing stories that deliver a similar message have been proven effective. These issues are important, and that is why we are hammering away at them. You can’t get solid content or reasoning from a two sentence tweet. Not now, not ever.

The best thing about the digital magazine is that we can track how many people open it up and actually use it. Our numbers indicate that there are a bunch of you who do. On behalf of the entire editorial staff of both of us: Thank You! Please keep reading. Or glancing at the pictures. Or whatever you are doing. If you have a suggestion or complaint or an “atta boy” feel free to fire away. We get so little feedback that any comment would be welcome. Occasionally I will get a response or two, but usually from a close friend. I would welcome more feedback and remember, this magazine is only as good as the contributions from its users for this publication is solely about us, for us and done by us.

I’m not sure John Steinbeck would be impressed, but I think we do alright.