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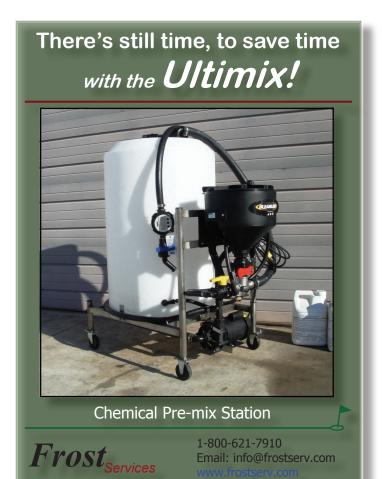


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Upcoming Events

May 13th
Affiliate Appreciation Day
Castlewood Golf Course
Host Jeremy Walker

June 3rd
The Scramble
Medina Golf and Country Club
Host Erin McManus



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Houses for Habitat, The
MGCSA Assistants work on
Habitat for Hen Houses!



Jake Schmitz, Superintendent at Olympic Hills and the Education Chair, welcomes the MEGA participants. Affiliate Members!!!
Affiliate Appreciation Event
on May 13th at Castlewood
Golf Club. Thanks for your
continued support!



Careful!! Assistants at work making hen houses.

...Even More Content...

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Count on it.



Presidential Perspective

by Scottie Hines, CGCS

Welcome to spring? Wow! March 21, 2012 there was exactly NO snow pack in the state. Most, if not all courses were open. We had days in the 70's and 80's! March 21, 2013 is a different beast. The entire

state is in snow pack. No courses are open or thinking about opening. The temperature in the truck was –4 when I pulled into the shop this morning! Punxsutawney Phil was obviously nipping at the bottle as he slumbered in his hole.

To add some perspective: The average date for the first 50-degree day is March 18. The average date for the first 60-degree day is March 27. One of those dates has passed and I am fairly confident that we will not see even 50 on the other. In fact, to date we have only had one day that reached 40 degrees, and that was it, 40 on the nose. Crazy! I have always said that Mother Nature has a funny way of meeting the average. He we go with another example of just that.

As we sit here trying to figure out what to do with ourselves as we are looking out the window at the entirely snow covered landscape it is hard to believe that 67% of the state of Minnesota is still listed as in "extreme to severe" drought conditions. Unfortunately for us the snow will not do much to alleviate this situation. As the snow melts it typically falls into the run-off category since the ground is still frozen. Therefore we may recover in the realm of lake levels, but not ground water. Reports are we need to exceed our typical March – May rainfall to stem the drought tide. I wonder what Punxsutawney Phil's outlook on this is? By the way, a great website to track local weather and environmental conditions is: www.climate.umn.edu. Check it out it is very good and offers up a ton of

information you can use to relay timely messages to members and boards.

Currently the Environmental Stewardship Committee is working on BMP's for water management and conservation. We will be meeting soon and I plan to discuss stepping up our Crisis Management Plan to hopefully guarantee that we all have the well and surface water we need to irrigate and keep our courses viable. This plan will include a scheduled reduction of irrigation waters depending on drought conditions. The plan would be for a reduction of up to 20% of our typical use. It is very important that we as an association get on board with this. It is also vitally important to have the MN DNR on board with us. We have our work cut out for us!

I don't know about anyone else but I am starting to get a little concerned about the ice cover. However, I am glad I didn't remove any snow or ice. With the sun being as intense as it is open greens, then the single digit to sub-zero temperatures? I think this is a recipe for some turf damage. Of course, not doing anything could be disastrous too. I am sticking with less is more in times like this. It is situations like this that remind me of what a great job we have! One of the hardest things we do is manage many people on a day-to-day basis. We do that quite well. If we could just manage the most important person, Mother Nature, we would really have it good!

It has been a tough winter and there is possibly more snow coming this weekend. I truly wish everyone the best as we eventually emerge into spring. It has to break at some point. Please remember that if you have any difficulties due to the weather, communication to key owners, board members and the golfers in general is key.

Good luck!



In Bounds

by Jack MacKenzie, CGCS

His words briefly echoed in my melon, "Head down, fall down", just seconds before I watched the tip of the neon colored board cut cleanly into the back edge of the wake. With a startled shout, muffled by the assault of luke-warm water, my face was submerged quickly and harshly into

Big Marine Lake, my first attempt at wakeboarding ending in a sinus enema of horrific proportions.

It seems that the only good things in life found by keeping one's 'head down' are agates on a country dirt road or the feel of a solidly hit golf shot. Yes, "head down, fall down", are words that sum up many of the challenges we feel in our professional and personal lives. Perhaps the saying should be twisted into a more positive tang, "Head up, stay up"?

As a former Superintendent touring my previous courses, I often found myself focusing upon the smallest of things only to be reminded of the bigger picture when it hit me between my eyes. The blemish on hole two caused by ice damage too slow to recover, cross country ski tracks left across the sixteenth fairway and the tell tail signs of sliders on the hill in front of the eighteenth green seemed to capture and retain my attention.

It always seemed as spring progressed, the poa never greened up quickly enough, the summer staff never began work soon enough and the frost held tight too long in the cool mornings.

Early to work, and often wrapped up in the day, I didn't take enough time to look at the whole picture from the player's perspective as I was too engrossed in the smallest of nuances. Truth be told, the course seemed to always play pretty well for the month of April. Winter scares healed...patience, patience. Those trees, breaking buds and showing pretty blossoms sure did look great...the seasonal staff would be in soon to pick up the litter left from the gales of February. In hind sight the players were happy to be out and about stretching their legs. And wasn't that the end game?

Funny how a new crew can do the strangest things...but even more amazing are the mind farts not uncommon in the returning staff, those who I always thought would know better after returning year upon year! Instead of seeing the challenges, perhaps a broader vision of latent potential should be observed. The idea of achieving the common goal of

going beyond your player's expectations and jointly shared disappointment when Mother Nature gives them a wedgie, brings about camaraderie that should be cherished by one and all. Capture those bigger moments rather than the perennial cart traffic mark near the fourth tee.

A new season allows for fresh opportunities between you and the clubhouse and golf shop staff. With a solid 'head up' take time to notice the changes that will have an impact upon your season ahead. Perhaps a little admiration of the soft goods will win a future favor. Complementing the menu could elicit a special snack and mentioning the professionalism of your locker room attendant may very well earn a shoeshine. Why scurry through the building with your mind on auto focus? 'Head up', look for the obvious and share a kind word of acknowledgement.

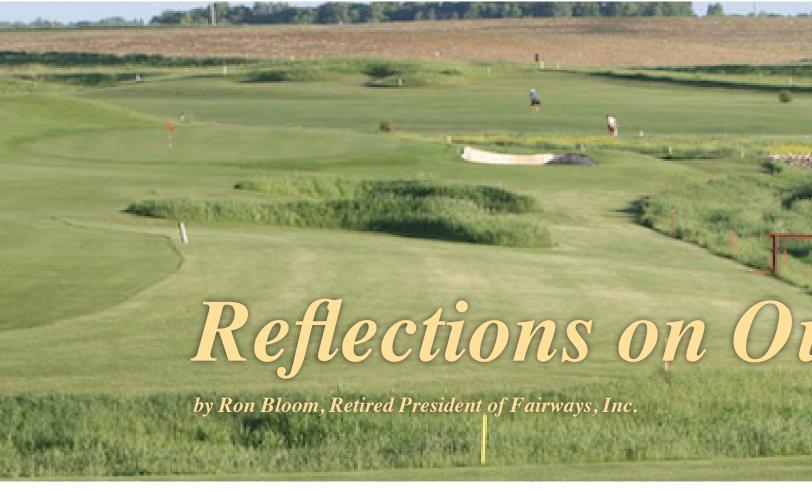
Is it an equilibrium thing or the fact that with your 'head up' you won't fall down as much on the lake, the ski slope or in life?

How about a 'head up' at home? While the course will take a large percent of your time and attention, it cannot become your focal point or there is a potential to fall down at your most important job, that of maintaining your family relationships. Indeed there will be times your turf requires great thought and angst. But look at the bigger picture and appreciate that turfgrass never made you laugh like you did at your kid's last birthday party. That pure bunker didn't bring the joy you felt when your wife announced she was pregnant. And in your heart, the attainment of a 13 on the stimpmeter during Men's Guest Day didn't provide the gratification of one more day fishing with your father especially after the close call last winter.

In my first marriage too often I spent my days 'head down' and after seven years, two kids and what I thought were good times, I fell down. That crash did give me pause for a change in posture. My 'head up' position has afforded me the clear vision of what is important...the totality of life and not the seemingly important teeniest of details which grew to distracting proportions.

Following my power sinus flush, complete with honking cough and the stinging, eye-weeping, sensation only experienced following the ingestion of water blasted up your nose and into your lungs, I replaced my feet into the awkward harness of the wakeboard. "HIT IT", I shouted. With renewed enthusiasm I was dragged around the lake in prime fashion.

Maybe not perfect, but with a 'head up' I was able to maintain my perspective and only went down comfortably on my own terms when my body was ready to take a break. Tired, yet extremely satisfied, my refined attitude allowed for an open-minded perspective and wholeness for I was living the complete experience with my head held high.



Prairie View Golf Links, Su

Reflections; 45 Years of Golf Course Design and Construction

My name is Ron Bloom. I am now retired as the working president of Fairways, Inc. The company was organized in 1970 with the intention of designing and building golf courses. During the past 45 years, over 86 golf course projects were designed and developed by Fairways, Inc., resulting in over one million rounds of golf played yearly on courses in Minnesota and the surrounding four states.

A short while ago I was asked to write a brief article about what I thought was the biggest change in golf courses since I first began this career. The obvious big change was the growth of golf itself. Perhaps the smallest change was the disappearance of the night watering man. Notwithstanding the above, I think the aesthetics of golf courses, because of turf research and the many varieties of grasses currently available now, along with the improved equipment and changes in mowing patterns are the biggest noticeable things.

I do remember the way rural courses were mowed. It was with an old Worthington fairway mower and a farm tractor with smooth tires or something very similar. It was usually straight lines and same heights; fairways and



perintendent Kevin Black CGCS

roughs. Changes didn't occur very fast or very often. Budgets were the reason. This was a challenge as I got into the golf course architecture and construction. At the time almost all of our work was in rural towns in Minnesota with very limited budgets. As we progressed into the golf course work, Bill Johnson, the superintendent at Edina Country Club, who was a friend of mine, became my partner and mentor on the grasses and greens.

In 1970, Joel Goldstrand, a touring pro, joined our team. He had been playing on the best-groomed grass in the world and so his input was insurmountable. The challenge was to convert that knowledge to rural Minnesota courses

with little or no cost. His suggestions put into practice changes in mowing patterns, which resulted in better contours to give the courses a better look.

As the years went by, construction began to flourish. As research and development of many elite grasses became available, we were able to create more ideas of our own in regard to the use of grasses, mowing patterns and lower costs of maintenance. It became an inexpensive goal of ours in the design and construction of golf courses.

In 1982, Joel designed a Reversible Golf Course. It was a unique design that the golf course can literally be reversed and



played in the other direction, thereby obtaining the variety of two courses for the construction costs of building only one. There was one fairway for two holes and thus they were uniquely mowed. The site was 80% wooded, so many trees were selected to stay or clear in designing tee locations for 18 holes and mowing to that specific fairway. It was the first one built in the world and named the Double Eagle Golf Club, Eagle Bend, Minnesota.

The creation of Target Fairways was an

original design idea of Joel Goldstrand He came up with the idea of bent grass targets within the bluegrass fairways. Maintaining fairway grasses at a low height of cut necessary for superior playing conditions is a fragile and expensive procedure. Using his design plan, we originated the principle of preparing, seeding and maintaining to these extensive requirements only the landing area, so when the hole is properly played, the approach shot will be from ideal turf conditions.

These areas were surrounded by regular bluegrass fairways. This concept greatly reduces the cost of construction and maintenance, enhances the aesthetics of the course and gives players from all four sets of tees the optimum playing conditions if they hit their shots in the proper area. Willow Run Golf Club, located in Sioux Falls, South Dakota was the first course designed and built in the world with target fairways in 1986 by Fairways, Inc. The total target fairways area was approximately 4.5 acres. We have constructed several other golf courses in this unique fashion. Fox Hollow Golf Club in Rogers, Minnesota, Grand National in Hinkley, and Lake Geneva in Alexandria are three more of them.

Some other unique notes of interest we have practiced throughout the years, are the restoration of native prairie grasses for course aesthetics, shot definition, and decreased maintenance costs. We began this program in 1980 with the construction of Prairie View Golf Course in Worthington, Minnesota. The Wildflower Golf Club in Detroit Lakes is a hallmark of this design. We designed and built it in 1992 with many acres of tall fescues and wildflowers sown in strategic areas.

Over the past 45 years, the varieties of grass seed have become so specialized and numerous with the strains and colors

available, that today an architect could be considered an artist with a brand new handful of paint brushes and imagination his only guide. The mowing patterns will follow. Renovations will be unique.

The fast growing technology of computer science continues to complement the superintendent's work, with more applications to solve problems regarding sun and shade, water and wind, etc. It seems the only vision remaining is robotic mowing by GPS. There will be less tennis shoes in the lunch room. That will be a shame.

Opposite: Grand National in Hinkley. Superintendent Steven Benson

Below: Ron Bloom



The Seven Deadly Defects

Gary Johnson, Professor, Urban and Community Forestry University of Minnesota Extension, Department of Forest Resources March, 2013

No, not wrath, greed, sloth, pride, lust, envy or gluttony. Those may be deadly but have nothing to do with hazardous trees. Think decay, cracks, root problems, weak branch unions, trunk cankers, poor tree architecture and dead wood. THOSE are the seven deadly defects that every conscientious land manager holds to heart!

Tree *defects* are structural problems resulting from injury, disease, or poor architecture that makes it more likely the tree or branch will fail. Simply put, they are predictable, pre-existing weaknesses that when they fail usually cause significant damage or injury to targets. Knowing what these deadly defects look like will



This hackberry has extensive decay even though the cavity opening to the outside is small. The fungal fruiting structures indicate that decay is in the tree trunk and buttress roots. Photo: Gary Johnson

help property managers avoid or minimize that damage or injury.

Deadly Defect #1...Decay. If you tend to be paranoid, this is something that warrants paranoia. Decay is the most common preexisting condition that leads to tree failures during loading events. Whether the loading event is wind,



This basswood only had about 1.5 inches of solid wood in the trunk with the decay extending from the ground line up 20' into the tree trunk.

Photo: Gary Johnson

fine. But cracks present two potential problems: 1. Weaknesses ("a chain is only as strong as its weakest link"), and 2. Internal decay. Cracks are outside indicators of damaged wood and the loss of the strength of a cylinder, in this case the tree trunk or major branch. Cracks can form when trees are twisted in severe winds and the wood fibers fail. They can also be the result of "frost cracks." Either way, internally the wood has been wounded and most often decay is beginning...out of sight and out of mind.

Deadly Defect #3...Root Problems. The problems you don't even know you have.

ice or snow, tree branches, trunks or roots with decay are the first places that trees fail. If you see decay, get nervous.

Deadly Defect #2...Cracks. Cracks in branches or tree trunks seem so minor and there are trees all over with cracks in them that seem just



Note the crack in the trunk between the two leaders of this American elm. The crack extended almost to the ground line.

Photo: Gary Johnson



A close-up view of the crack and the internal damage that resulted from it. Soon, the wounded wood would begin decaying.

Photo: Gary Johnson

Root problems generally fall into two categories: roots that are dying because of root rots or structural roots that have been cut. Either way, tree stability is compromised and the entire tree can collapse during a wind loading event. Onesided root damage is bad but most trees eventually recover from that. Two to four-sided root damage leaves trees so unstable that they often fail long before the root systems can recover and stabilize the tree again.

Another root problem is called Stem Girdling Roots, or SGRs. SGRs grow around or against tree trunks, usually below ground on trees that have their stems buried. As the roots enlarge and the tree trunks enlarge, the trunk is "girdled," or compressed. This is the most common, pre-existing condition that leads to complete tree failure in Minnesota, based on research at the University of Minnesota from 1995-2000.

Deadly Defect #4...Weak Branch Unions. The old adage is that narrow-angled branch attachments are weak, while wide attachments are strong. This is only a partial truth. A more accurate assessment of a strong vs. weak branch attachment is the presence of a

branch bark ridge (strong) or included bark in the branch attachment (weak). Branch attachments with included bark do not have complete branch wood to trunk wood unions and as the trees get larger and heavier, the weak attachments become more of a hazard.

Deadly Defect #5...Trunk
Cankers. Cankers are areas



A close-up view of the buried tree trunk and the compressed, weakened portion below ground.

Photo: Dave Hanson



This little leaf linden failed suddenly in a wind storm, breaking off at the weak point of the tree trunk. The weakness was caused by stem compression from stem girdling roots. This tree was planted with the stem buried by more than 12" of soil.

Photo: Dave Hanson

of trunk and/or branch tissues that have been killed by either diseases, insects or non-living agents such as fire. A canker is a larger, diffused dead area in the (previously) living bark that poses the same danger as a bark or wood crack. The canker weakens the tree trunk or branch because the solid cylinder of sapwood strength has been broken and quite often, decay is associated with cankers. As opposed to the previous defects, cankers cause failures more commonly with younger tree trunks. Younger tree trunks are more supple and flexible

which allows them to bend and flex in wind storms. If there is a weak spot due to a canker, the tree trunk or branch is most likely to break at that point.

Deadly Defect #6...

Poor Tree Architecture.

There can be a lot of architectural problems with unmaintained or



A good example of a branch union with included bark, literally, bark included in the attachment. This is weak.

Photo: Gary Johnson



These branch attachments are strong. Note the prominent branch bark ridges, indicating strong branch unions. Photo: Gary Johnson

poorly-maintained trees, but multiple leaders is the most dangerous, especially if the tree is large or will become large. Medium to large trees (30 feet and taller) that have multiple leaders (the vertical branches a.k.a. leaders) bear too much weight as the tree matures, especially if the leaders begin close to the ground (less than 10 feet from the ground). The tremendous amount of weight in each leader combined with the movement of the tree in a



This young tree failed at a canker in the stem. The cause of the canker could have been a mechanical wound when it was younger. Regardless of the cause, the ending is usually the same with young trees. Photo: Gary Johnson

wind storm is frequently the cause of failures in wind and ice storms. Combine the multiple leaders (codominant leaders) with included bark in the unions and maybe a little decay and you have the number one pre-existing condition for failures in the canopy of trees.

Deadly Defect #7...Deadwood.

Oddly, for many trees deadwood remains safely attached for many years before finally failing.

Deadwood has less wind-resistance and therefore can sometimes be more stable than living branches with a lot of foliage and a poor branch attachment and/or decay.

However, when it does fail and especially if the deadwood is high up in the tree canopy, the damage or injury can be severe or fatal. Some trees can hold securely on to deadwood for many years, such as red elms. Others, such as green ash, begin dropping dead branches within a year of death. It's not worth the risk of leaving large branches (branch diameter of 2 inches or more) 50 feet off the ground of a large tree hanging over a trail, parking lot or building.

The poster child for a tree with poor architecture: multiple leaders, all with included bark in their attachments and all occurring far too close to the ground for a tree that will grow to 50+ feet tall. Photo: Gary Johnson



Thank you Dr. Johnson for your continuing series on tree management and risks associated with maintaining these beautiful plants while limiting liabilities. In the third and last installment of managing tree risks in public spaces, the focus will be on managing risks at an acceptable level through regular monitoring, predicting, preventing and planning ahead.

The MEGA 2013, Thanks John Spaulding and Syngenta for your continued support of the MGCSA!



How To Hire the Right Employee the First Time

By Patrick McGuiness, Attorney at Law Zlimen & McGuiness, PLLC

So you are in need of some new employees. You need them to start soon, as in now. There is work to be done and the hiring process takes too much time. Ok, STOP. Hiring the wrong employees quickly will cause you to spend tenfold the time dealing with them later. You know the employees I am talking about because you have them on staff currently. You spend more time dealing with the mistakes from one bad employee than you do dealing with all of your good employees.

Put a stop to this merry go round of bad hiring by putting a process in place. It is simple and can prevent headaches in the future by helping you hire competent, responsible workers. Follow these steps and you will be on your way to solving many of your future employee related problems.

Take the time to set up the process. I know you are in a hurry, but if you need employees immediately, use a labor agency. To truly hire the right people, force yourself to take the time to set up a hiring process.

Write a good job description. Draft a job description that tells a little about

what the job entails. Nobody wants to work in an unfriendly, not fun work environment, so don't make your job description sound that way. Set a deadline for applications and list what materials the applicant should submit.

Have an interview process. Work with an attorney or HR consultant to develop a set of questions to ask each candidate you are interviewing. Set a time limit for each of the interviews and stick closely to it. The idea is to create a level playing field for the candidates so they can be evaluated objectively.

For the interview, come up with questions that will give you clues to the candidate's abilities to perform well on the job you are hiring for.

Consider a simulation. It can be a good idea to include a simulation as a part of the job interview. Have the candidate perform a simple task that would be a part of what they would be doing for the job. It could be as simple as changing the spark plug on one of the small mowers, or having them show you how they would load mulch around a tree. Just make sure it isn't something that is going to injure them



during the interview. Also, make sure you have everyone you interview do the same simulation so that you can accurately compare their abilities.

What not to do. Do not hire someone that is very similar to you, unless of course the job you are hiring for is the same as yours. Look for skills and traits that will work well in the job being hired for.

Do not assume that you will have an epiphany when interviewing people. The process should be put in place so that you can objectively evaluate and

rank all of the candidates. Assuming you will 'know it when you see it' can leave you asking who was the best candidate after all the interviews have been completed and you haven't had that 'a-ha' moment.

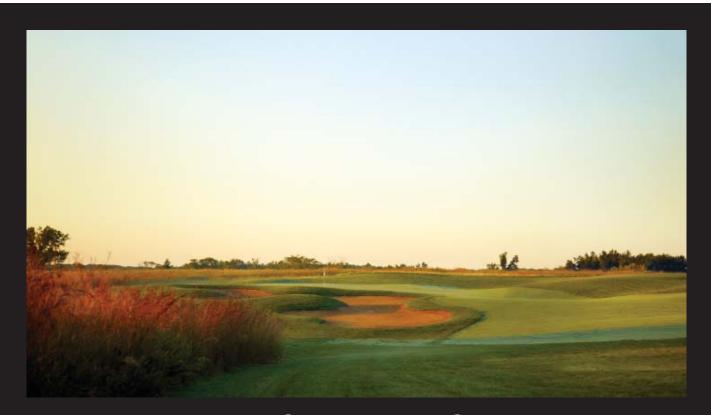
Do not hire friends of current employees. Sure it is fine if you do this after the friend has gone through the same application process as all the other candidates and then ends up being the best suited for the job. However, do not simply rely on your current employee's recommendation that their friend is a great worker.

Chances are your employee is looking out for their friend's interest more than they are looking out for your bottom line.

Follow these steps and you will be on your way to setting up a great hiring process. It will eliminate headaches further down the road, and yield quality workers to improve your bottom line. If you would like more information on how to hire the best, stay tuned for future columns. As always, don't hesitate to email me with your questions and article ideas!

This article provides general information on employment law matters and should not be relied upon as legal advice. A qualified attorney must analyze all relevant facts and apply the applicable law to any matter before legal advice can be given.

Patrick McGuiness is a partner at Zlimen & McGuiness, PLLC. His law practice focuses on assisting small business owners on a wide range of legal issues. He can be reached at pmcguiness@zmattorneys.com. If you would like more information regarding employment law or other legal matters, please contact Zlimen & McGuiness, PLLC at 651-206-3203 or www.zmattorneys.com.



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Thanks Mike Kelly and Bayer Environmental Science for lunch















































The Program: The Minnesota Golf Course Superintendents' Association offers a scholarship program designed to assist children and grandchildren of Class AA, A, SM, C, D, Associate and Affiliate members. The MGCSA provides scholarships to students attending college or vocational programs at any accredited post-secondary institution. The program is independently managed by Scholarship America, a national non-profit student aid service organization. Awards will be granted without regard to race, color, creed, religion, sex, disability, national origin or financial need.

Selection of Recipients: Scholarship recipients are selected on the basis of academic record, potential to succeed, leadership and participation in school and community activities, honors, work experience, a statement of education and career goals and an outside appraisal. Selection of recipients is made by Scholarship Management Services. In no instance does any member of the MGCSA play a part in the selection. Applicants will be notified by the end of July whether they have been awarded or denied a scholarship.

Eligibility: Applicants for the MGCSA Legacy Scholarships must be: children/grandchildren of Class AA, A, SM, C, D, Associate or Affiliate members who have been members of the MGCSA at least five years; High school seniors or graduates who plan to enroll or students who are already enrolled in a full-time undergraduate course of study at an accredited two- or four-year college, university or vocational-technical school, and under 23 years of age.

Awards: Three awards will be given to children and grandchildren of Class AA, A, SM and C members. One award of \$1,500 in the name of Joseph S. Garske will be given to the highest evaluated applicant. That award will be renewable for one year contingent upon full-time enrollment and satisfactory academic performance. One other \$1,000 award will be given to other qualified applicants from this group. One \$1,000 award will be available to children and grandchildren of Class D, Associate and Affiliate members. These awards are not renewable. However, students may reapply to the program each year they meet eligibility requirements. Awards are for undergraduate study only.

Obligations: Recipients have no obligation to the MGCSA or its members. They are, however, required to supply Scholarship Management Services with current transcripts and to notify Scholarship Management Services of any changes of address, school enrollment or other relevant information. Except as described in this brochure, no obligation is assumed by the MGCSA.

Application Deadline: June 1, 2013. For more information go to mgcsa.org

Applied Science

Springtime Broadleaf Weed Control

Dave Gardner, The Ohio State University

As spring approaches it becomes important to begin thinking about your turf weed control programs. Remember that the first step to controlling weeds is to identify which weeds are present on a site. Proper identification of the weed will assist with two things: 1) selecting the correct herbicide and 2) applying that herbicide at the right time in the weed's life cycle in order to maximize control.

If you are primarily dealing with annual broadleaf weeds (Tables 1a or 1b) then you can control these possibly with a preemergence herbicide (check the label of your crabgrass control product) or post emergence. The issue with using a preemergence herbicide is usually one of timing. For example, knotweed germinates in late March, before we recommend application of preemergence herbicides. Late germinating weeds, such as oxalis, germinate very late, after most preemergence products have lost effectiveness.

However, the preemergence herbicide will provide some defense. Always check the label and remember to target the application for crabgrass control, making the application sometime in April when Forsythia are in bloom. If you have some breakthrough then post emergence products are very effective. However, you will want to target the weeds early in their life cycle, before they have the chance to set

seeds that will become next year's infestation.

Use tables 1c and 1d to determine if you have perennial broadleaf weeds and when the most appropriate time to control them is. Usually fall time applications are recommended for perennial broadleaf control. If you make a springtime application (and most do for obvious reasons) then know that this is going to be effective probably for 60-90 days depending on the product used and the rate applied. Broadleaf weeds, whether new or regrowth from below ground structures on the surviving original weeds, will reappear.

Fall applications tend to result in longer term control due to more complete translocation into below ground weed parts. If you see weeds this fall, consider making an application with an ester formulation of an herbicide recommended in Table 2.

After determining your target weeds then use table 2 to select the best herbicide for the application. Table 3 includes a list of combination herbicides which are commonly applied in order to broaden the spectrum of control on sites with multiple weeds species. Always read the label prior to use of a herbicide. Be particularly mindful of the reseeding interval if any renovation work is planned, susceptible weed species and the site and or use restrictions

Table 1a. Annual Broadleaf Weeds



Black medic - Medicago Iupulina (Stem on end leaf distinguishes from white clover)



Mallow - Malva rotundifolia (Has a central taproot and does not root at the nodes)



Corn Speedwell - Veronica arvensis



Knotweed - Polygonum aviculare (Sometimes confused with crabgrass when first emerging)



Lambsquarters – Chenopodium album



Virginia Pepperweed -

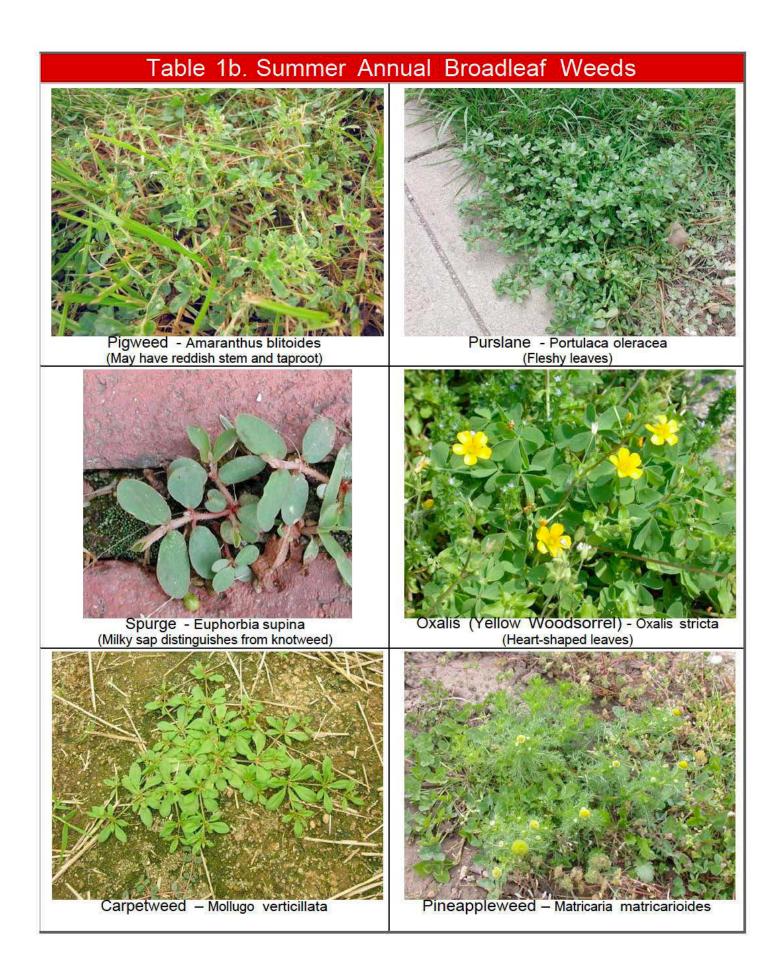


Table 1c. Perennial Broadleaf Weeds

Figure includes recommended timing of herbicide application for best control.



Table 1d. Perennial Broadleaf Weeds

Figure includes recommended timing of herbicide application for best control.



Table 2. Recomm	en	de	d H	ler	bic	ide	es	for	Bı	roa	dle	af	W	'ee	d (Col	ntr	ol		
	Preemergence								Postemergence											
Weed Species	Bensulide	Ethofumesate	Benefin	Pendimethalin	Prodiamine	Dithiopyr	Siduron	Oxadiazon	Isoxaben	2,4-D	2,4-DP	MCPA	MCPP	Dicamba	Clopyralid	Fluroxypyr	Triclopyr	Quinclorac	Carfentrazone	Sulfentrazone
Summer Annual Broadleaf Weeds																				
Black Medic						\checkmark							✓	\checkmark	\checkmark	\checkmark		\checkmark		\neg
Carpetweed					\checkmark	\checkmark				\checkmark			✓	\checkmark						\neg
Common Mallow													✓	\checkmark	✓					\neg
Corn Speedwell			✓	\checkmark		\checkmark		✓							✓					\neg
Knotweed				✓	✓	✓			✓				✓	\checkmark						\neg
Lambsquarters	\checkmark				✓				✓											\neg
Oxalis (Yellow Woodsorrel)				✓	✓	✓		✓	✓	а	а				b		b			\neg
Pigweed					✓	✓		✓	✓	✓			✓							\neg
Pineappleweed						✓									✓					\neg
Prostrate Spurge				✓	✓	✓		✓	✓	√	✓		✓	\checkmark						\neg
Purslane		✓		✓	✓	✓		✓	✓					✓						\neg
Virginia Pepperweed	П																			\neg
Winter Annual Broadleaf Weeds																				
Common Chickweed		√	✓	\checkmark		✓			✓				✓	✓					\Box	\neg
Common Groundsel																				\neg
Henbit	✓		✓	✓	✓	\checkmark			√					✓			✓			\neg
Prickly Lettuce																				\neg
Shepard's Purse	✓				✓	√			√											\neg
Sowthistle (Annual)																				\neg
Biennial	aı	nd	Pe	rer	nnia	al	Bro	nac	llea	af	We	999	ls							
Birdsfoot trefoil																Π				
Blackseed Plantain										√			✓		✓					\neg
Buckhorn Plantain										√			√		✓					\neg
Bull Thistle														\checkmark	✓					\neg
Canada Thistle										√				$\overline{}$	✓					\neg
Chicory																				\neg
Creeping Speedwell (Veronica)										√			✓							\neg
Curly Dock										✓				√	✓					\neg
Dandelion										√		√		√			\checkmark	✓	✓	\neg
Field Bindweed																		✓		\neg
Ground Ivy (Creeping Charlie)														√			✓			\neg
Indian Mock Strawberry										\dashv										\dashv
Mouse-ear Chickweed										\Box			✓	\checkmark	✓					\dashv
Red Clover						\Box		\Box		\neg										\dashv
White Clover						П				\Box			\checkmark	✓	\checkmark	\checkmark		\checkmark		\neg
Wild Carrot										\Box										\dashv
Wild Violet										\dashv				√	√		✓			\dashv
Yarrow						\Box		\Box		\neg				✓						\dashv
Where the recommendation is denoted by	<u> </u>	44	41				- 6 1				Ale e		- 1-4	4 :				11	\perp	_

Where the recommendation is denoted by a letter, the combination of herbicides with the same letter is recommended.

Best Choice

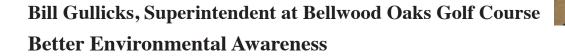
Effective

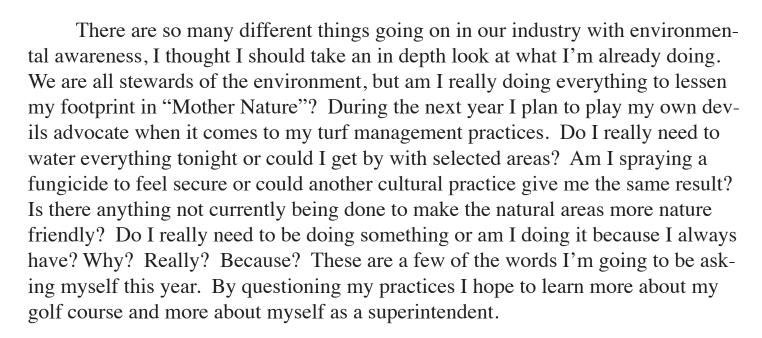
Table 3. Broadleaf Herbicides and Combination Products												
Products	2,4-D	4-DP	CPA	MCPP	icamba	lopyralid	luroxypyr	uinclorac	riclopyr	Carfentrazone	Sulfentrazone	Pyrfaflufen
	2,	2,	Σ	Σ	Δ	O	ш	Ø	-	O	တ	<u>a</u>
Formula 40, Dymec, Weedone LV4, Weedar 64, LESCO A-4D, Weeddestroy AM-40, Opti-Amine, Harball, Barrage HF												
MCPP 4-Amine, Lescopex, Turfgro MCPP 4K, Mecomec 2.5,												
Mecomec 4 2 Plus 2									_			\dashv
Banvel, Diablo, Vanquish						\dashv	\neg		_			\neg
Four-Power Plus, Super D Weedone											一	
Trimec Classic, Trimec 899, Trimec 992, Trimec LAF-637, Strike 3,												
Three Way Selective, Trimec Bent, Bent Selective, Triplet, 3-D,												
Trexsan, Mec-Amine-D, Mec Amine-BG, Trimec 1000												
MCPA 4-Amine												
Tri-Power, Trimec Encore												_
Weedone DPC, Turf D-DP												
Trimec Turf Ester, Super Trimec, Brushmaster				_			_		_			_
Three Way Ester, Tri-ester, Tri-amine, Dissolve, Spoiler												-
Tri-ester II, Tri-amine II					_	\dashv			_		\dashv	-
Turflon												
Chaser, Chaser 2, Turflon II amine												
Cool Power, Horsepower				_		_	_	-				_
Lontrel				_	_		_	-				-
Chaser Ultra					_				_			
Confront, 2-D Momentum					-		-	-				-
Battleship				-	-		\dashv	-		-	\dashv	-
Millenium Ultra 2, Millenium Ultra Plus							-+	-			\dashv	-
Spotlight												-
Chaser Ultra 2				-	-	\dashv		-	-	-	\dashv	\dashv
Battleship III					_	\dashv						-
Momentum FX, Momentum FX2						\dashv					-	\neg
Escalade, Escalade 2, Escalade Low Odor												
Strike Three Ultra 2						\neg					一	\neg
Drive												
Onetime												
Quincept												
Quicksilver						\neg						
Shutout												\neg
SquareOne												
Speedzone												
Powerzone												
Dismiss												
Surge												_
Q4												
Octane				_			_					
Solitare												
4 Speed								_				
4 Speed XT T-Zone				-		\dashv	-	-				
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On Board

Q&A with Members of the Board of Directors

Spring, a fresh start. What goals have you set for yourself in the season ahead?







Roger Stewart CGCS, Superintendent at TPC Twin Cities

One of the goals I have for 2013 is to keep the momentum going on the MGCSA Research Committee. Now that we have identified the member driven research projects for 2013 we need to develop topics for 2014 and beyond. We have an energetic and engaged committee and my goal is to make sure we remain focused and on track as well as engaged in exploring new projects and fund raising ideas.

The Scramble, June 3rd 2013...Medina Golf and Country Club...you, your club pro, your GM and club president? Or will it be a team of your staff? Your Dad, Brother and 'special in-law? Regardless...it won't be the same without you!



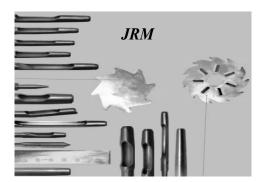
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Kerry Glader, Sales Manager Plaisted Companies

As I ponder on this question, I can't help but think about the profession that has gotten me to where I am today. The year 2012 was my 18th year in sales following 18 years as a golf course superintendent. As the current sales manager for Plaisted Companies, I have been extremely lucky to meet and come to know so many great people. They include golf course superintendents, assistants, equipment managers, me-

chanics, crew members, architects and the list goes on.

After starting in the business in 1970 pushing a Jacobsen rotary mower at the Cloquet Country Club, I have always had the drive to be better and improve myself and others by example. From the smell of freshly cut grass in the morning to checking the sprinklers running at night, the goal was always to keep and grow healthy turf. After a personal epiphany taught to me by my growing young sons, I moved into the sales side of the Turf Industry. My original goal became #2

On Board

(Continued

Q&A with Members of the Board of Directors

Spring, a fresh start. What goals have you set for yourself in the season ahead?

replaced by my new #1 most important goal "Don't forget your family"! It is the easiest to overlook and be forgotten because we are so dedicated to our profession that our families suffer. I missed so many activities when my children were growing up and I urge you to take the time to enjoy them when they are young because they grow up too fast! It is possible to be successful with both!

My goal for 2013 is to continue to serve this great profession and lead by example. Family first and enlightenment of the "newbies" and "seasoned veterans" to not forget the basics of turf grass management. You have so many advanced tools in your tool boxes that I think the basics get overlooked. Back in the dark ages we spiked to allow better water movement, verti-cut to reduce thatch build-up, aerated twice a year for improved air movement, used soluble fertilizers from May to September to control feeding, applied root growth enhancers and wetting agents to help the root systems thrive and of course last but not least, we top-dressed on a weekly or bi-weekly basis. Don't forget that you are growing next year's grass today! Everything you do today is to help your turf survive into next year.

So my professional goal is what it always has been. Be helpful, be thoughtful, be a friend first, oh and then remember to sell, but also always give free advice! Is it age that makes us wiser or the experiences in both family and work that define who we are? I am defined by family, faith, friends, and of course my better half and wife of 37 years, Barb! I would imagine it is your better half too, that helps to guide, support and lift you up to reach your goals.

Barb now says, "Kerry is maturing rather well and now plays in the sand box at work"! So now I get to play with my two new Grandsons in the sand box and watch them grow up! Life is good!! Don't miss out on it!

Affiliates Mark Your Calendars!!! Affiliate
Appreciation Day May 13th at Castlewood Golf Club



Who is in your Network? Recently the Southern Superintendents got together to discuss current Association issues with Jack MacKenzie, ED of the MGCSA, at The Jewel in Lake City. The event, one of several planned by Tom Prosheck, was hosted by Doug Mahal, CGCS.

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Benefits of Membership in the MGCSA

MGCSA.org: The MGCSA provides its membership an electronic destination. The site offers a broad range of services including latest news, meeting information, important links, local association contacts and meeting schedules, as well as a market place for used equipment or student internships. Links are provided to the Affiliate Members who advertise on the web site.

Education: The MGCSA provides a range of high quality discounted professional education with more than 100 hours of relevant classes at the Northern Green Expo in January each year, supplemented by an extensive program at the Mega Seminar, as well as the annual MGA Spring Turf Forum.

Research: The MGCSA coordinates with researchers at the University of Minnesota's TROE Center to make sure you get the information you need. The association also directs Turfgrass Research Benefit Week, the annual sale of donated tee-times, to raise money for golf turfgrass research. And the association also contributes to The Turf Endowment fund to ensure a continuing program at the University of Minnesota.

Government Relations: The MGCSA provides access to the State Capitol through a continued relationship with the Minnesota Golf Association and other Green Industry Allies. This service keeps your association aware of issues likely to affect golf as they emerge rather than after the fact. This proactive presence also helps us educate legislators and regulators by providing solid information and research findings as they strive to make sound decisions for the good of the whole community. The MGCSA has representation at the Minnesota Nursery and Landscape's 'Day on the Hill' event.

Hole Notes Magazine: The MGCSA provides an award winning professional golf course superintendent association journal. Published ten times each year in a digital format, Hole Notes strives to provide relevant, interesting information that reflects the personality and professionalism of the membership. Links are provided to the Affiliate members who advertise in the magazine.

Membership Directory: At the Member's Only section the MGCSA provides an annually updated listing of names and contact details for every member of the association. This electronic directory puts each within fingertip reach of around 700 allied professionals across the region.

Employment Referral Service: The MGCSA provides a link between the people with jobs and those who want them. The employment referral service is available on-line at MGCSA.org as well as electronically delivered weekly through 'e-updates'.

Email Alerts: The MGCSA uses the internet to provide updates and alerts on urgent matters as they arise so we remain current with issues that may effect you, the industry and the Association.

Scholarships: The MGCSA extends its support to the next generation through an annual scholarship program to assist children and grandchildren of superintendents who have achieved academic excellence.

Wee One Support: The MGCSA annually hosts a Wee One fund raising golf outing with the proceeds going to support this outstanding program that serves those in the goof course turf management industry.











2013 TURFGRASS FORUM

A Free Informational Discussion & Round Table for MGA Member Clubs and Members

- Speakers:
 - Dr. Brian Horgan, University of Minnesota Turf Extension Specialist
 - Mr. Robert Vavrek, USGA Senior Agronomist, North Central Region
 - Mr. John Spitzer, USGA Managing Director of Equipment Standards
- Topics will include:

THE LATEST ISSUES FACING GOLF COURSE **TURFGRASS**

CURRENT EQUIPMENT STANDARDS AND HOW THEY CAN AFFECT YOUR GOLF COURSE

• Tuesday, April 30

8:00 a.m.....Registration (coffee & rolls) 8:30 a.m.-12:00 p.m.Presentations & Discussion

at Mendakota Country Club

2075 Mendakota Dr, Mendota Heights, MN 55120

- This meeting is for: Course Owners, General Managers, Golf Professionals, Golf Course Superintendents, Club Presidents, Greens Chairs and any other MGA Members.
- There will be no fee for this forum.
- PGA MSR credits available.
- For Reservations:

Joel Comstock, Regional Affairs Director of the MGA 952-345-3968 or joel@mngolf.org Please provide your name and golf course affiliation.

REGISTER BY WEDNESDAY, APRIL 24



Within the Leather

by David Kazmierczak, CGCS

A calendar year can be divided up into many different

seasons. There are the four seasons, of course: winter, spring, summer and fall, that divide the calendar into equal quarters and generally usher in a change in weather patterns depending on your location.

Then there are weather related seasons. In some places, rain is so prevalent or sparse that certain times of the year are referred to as "the rainy" season or "the dry" season. Man-made seasons are also a way of providing benchmarks throughout the calendar. Christmas, Hannukka, et al are referred to as the Holiday Season. There's the Easter season. If you are into sports, there are all kinds of seasons for you, the most important of which is football season. To me, there are really only two seasons- football season, and not football season. All the other sports seasons are distractions until and during football season.

The golf season is, of course, of paramount interest to almost all who are reading this column.

It is a catch-all season that sums up our livelihood. Within the golf season is the busy season, which parallels the growing season. These two seasons of heavy play and heavy growth are the backbone of golf season. There's the off-season, when the snow shuts down the course and a deep sigh of relief is drawn into the lungs, followed by the seminar season, which is getting started just after the holiday season. The seminar season lasts until the golf season starts, which is great unless the spring season decides the winter season has not had its due. That is precisely where we are at right now, and I have a new name for it. I am going to call it the pothole season.

I was reminded that the pothole season was fully underway when my vehicle almost disappeared from the road the other day on my drive to work. A giant pothole, formed from weeks of melting and re-freezing precipitation, engulfed my mini-van and spit it out the other side with tires wobbling and wipers blazing. For a moment, I thought the Chinese language classes I was taking were really going to pay off. Where did this demon hole come from? It was not there the other day. Pothole season is officially in full bloom.

And what a pothole season it has turned out to be. It is payback, really, for the potholes of the state. Last season saw the sparsest crop of potholes Minnesota has ever seen. We skipped right past pothole season and went from seminar season, heck, two-thirds into seminar season right into golf season. Pothole season was eliminated before it even began.

Pothole season makes people grumpy. The winter is supposed to be coming to an end but it is not. The snow and cold keep coming like an unwanted fungus. The blade on our plow is just about worn down to the nub. Salt supplies are running very low. Even the cat and dog are going nuts from being trapped in the house for so long.

I suppose superintendents should embrace pothole season in a strange way. If they are behind in their winter work, it is a chance to catch up and be super ready for the growing season. No need for those extra hires in the early spring, which makes the budget look better. Plenty of extra time to plan, make sure all the T's are crossed and all the I's dotted. But if pothole season lasts too long, busy season turns into the entire golf season, and that opens up a whole new can of worms.

So why do I bring all this up?

Surely pothole season is not news to anybody living in Minnesota or Western Wisconsin. It is a normal progression in normal weather years. I guess the point is that this is natural. That this is normal for this time of year around these parts and last year was the abnormal year. I remember hearing last year that this was going to be the new normal. That weather patterns have shifted so that Minnesota was going to become Omaha. Real Minnesota winter was a thing of the past. Right. Step outside and tell me another one.

Now don't get me wrong, I do think climate change is real, and some steps need to be taken so we do not use up this planet for future generations. But if I hear one more thing about how Minnesota is the new Omaha I am going to get unreasonable. Clearly, that is just not the case. If we have a cool summer I bet you will even hear a story about global cooling.

So make the most out of pothole season as best you can, and hopefully avoid the gaping chasms anxious to do your vehicle malice. May all your grass emerge from the white abyss healthy, happy, and ready to grow. Enjoy the season, whatever it may be.

mgcsa.org