New technology documents benefits of tree removal or pruning

Trees are intrinsic to the character of most golf courses, and revered to a fault by most golfers. The conflict between trees and high quality turfgrass, however, is well known among golf course superintendents. From root competition for moisture and nutrients to air stagnation, to excessive shade limiting the photosynthetic capabilities of turfgrasses to survive the stress of intensive management and heavy play, trees and turfgrass are at odds. The conflict between club members and superintendents who suggest tree removal as a means of improving turf condition is even better known.

Newly-enhanced computer technology is available that allows superintendents to document the contribution of specific trees to the shading of golf greens, and then recommend or request removal or pruning on the basis of scientific analysis, rather than conjecture. For those superintendents who have used the service, both the compliance with their recommendations and the improvement of their turf have been gratifying.

Proprietary sun-locating technology was launched two years ago to assist golf course superintendents in quantifying the effect of specific trees or groups of trees on the shading of problematic golf greens. This technology is augmented with new mapping software to graphically demonstrate patterns of sun and shade over time and perform various "what if" scenarios of tree removal and/or pruning.

The process

Without getting too crazy into the underlying science, let's take a quick look at what happens during the process:

- The first step is to "map" the green and surrounding trees using an instrument that is sort of a combined transit, compass and telescope mounted on a tripod. The instrument is set up in the center of the green and oriented toward magnetic north. An assistant walks the perimeter of the green, with measurements taken every 3-15 feet depending upon degree of curvature of the green perimeter. Each measurement includes the differential from true north (expressed in degrees) and the distance (in feet) from the center of the green. This data is entered into a computer, which then uses trigonometry to calculate the area of the green (±3%) and determine its location in three-dimensional space. It's important to note this is not GPS satellite data.

- The same process is performed with the trunk and major limbs of trees (or groups of trees) surrounding the green. A unique ID# is assigned to each tree. Groups of trees with intermingled canopies that can't be separated are treated as one entity.

- Each tree is evaluated as to density of the canopy (% of light passing through), and rated from sparse to dense.

- Each tree is also assigned a crown shape (elliptical, columnar, etc.) so the computer can fill in those spaces not specifically pointed at with the instrument.

- The computer then "crunches the numbers" and determines in which segment of the 360° vista of the green the "blocking horizon" occurs so it can be recorded as well. The blocking horizon is the area behind the already-identified individual or groups of trees that might block some portion of the sun's path and contribute to the shading of the green.

- Once the data for positioning of the green, surrounding trees and the blocking horizon are entered, the computer uses astrometric algorithms to determine the location (and path) of the sun on that specific green at any hour of any day of the year. The sun's position is then compared to the location of the trees (and major branches) relative to the surface of the green to quantify to what extent each tree blocks the sunlight from that green (calculated in square-foot hours).

Historically, the data generated from these complex computer calculations was presented in a tabular spreadsheet format for analysis. With the recent introduction of the mapping software, the data analysis takes on new life as full-color gradient maps showing sunlight duration or shading patterns, and bar charts indicating the number of "square foot hours" of shade contributed by each tree.

The "really cool" part of the software is the ability to run various "what if" scenarios continued on page 6
President's Message

Mike Gilmore

As the summer winds down, rain seems to be a thing of the past and grey leaf spot is back in town! Ah - to be a golf course superintendent in the Mid-Atlantic!

The Annual Picnic held at Mayo Beach was another smashing success. Thanks to Dave Rudinski and his capable Social & Benevolence Committee. After last year's discovery of Mayo Beach and the great responses from those who attended, it was no surprise to see a great turnout at this year's picnic. As I left Mayo Beach, with my two sons, I looked back at the beach and was amazed to see how many of our members, and their families, had set up their chairs at the water's edge as their children enjoyed a twilight swim. The picture re-enforced what the picnic is all about -- spending a day with our family and friends. Thanks to the volunteers and supporters who made it the best picnic to date.

September's Membership Meeting at Greystone was a success for everyone who had a chance to attend. Superintendent Drew Scully and the staff Greystone gave us a wonderful day. Greystone lived up to its reputation as a tough test for any golfer and the scores showed that to be true. This meeting was the Superintendent/Club Official Tournament and featured an excellent presentation by MAAGCS members and supporters, Brian Ault and Tom Clark, from Ault, Clark & Associates. Their topic was "Renovating Your Golf Course" which offered strategies and tips for formulating renovations on the golf course. While the turnout could have been better, the Superintendent/Club Official Tournament will continue to grow and give us a chance to help enlighten our employers.

Be sure to make the October meeting at Mount Vernon Country Club. This will be the site of the Annual Championship and our host Jeff Michel, CGCS and his staff will have the course ready for action.

On a down note, we were forced to cancel Ladies' Night due to a poor response. The decision to cancel was not an easy one, but with six responses a week out, we did not feel comfortable taking such a risk and losing a few thousand dollars. It seems to me that Ladies' Night might be an event whose time has come and gone, at least on a yearly basis. Maybe more support can be directed toward the picnic or the scholarship and educational programs. I can remember only a couple of Ladies' Nights that were successful. For whatever reason(s) this has been a problem event to make successful. We are open to suggestions.

On a final topic, Turf Valley is again the only golf course in the world going through aeration! Less than three weeks ago, my staff and I received standing ovations at the Member/Guest closing dinner. People could not say enough good things about the course. Now after aerating all three golf courses, I need a bulletproof skin just to go by the Pro Shop. Every year the response to aeration is the same, utter disdain for the course and the Superintendent. Am I alone in seeing this? Even after thirteen years as a Golf Course Superintendent, my skin has not gotten thick enough (at least figuratively!) to ward off these annual slams. How do you handle it? I'd like to know how MAAGCS members handle this added stress. Drop me a line and maybe we can publish some of the cures for everyone's benefit. Thanks in advance and in the meantime I'll keep my head low until the holes heal over!

See you at Mount Vernon!
Recently I was in Lawrence, Kansas to attend my sixth voting delegates meeting. It seems each year we have learned more and become more in tune with what is going on at GCSAA headquarters, but I don’t think I have ever seen as many representatives leave the meeting with such a strong feeling of pride in their association. That pride came in the realization that our association and it’s leaders are not only striving to take us to the top in the quest to be the best environmentalists possible, but they are making sure that the rest of the world knows it.

Over the last couple of years there has been a lot of speculation about member standards. I am happy to say the plans to set standards are in motion. The Board of Directors of GCSAA is not going to rush the process. They are looking for the best possible plan to put in motion to improve our image and our professional worth.

Another reason to feel pride is the fact that we have so many very qualified people running for office this year. During my visit we were permitted to visit with all the candidates for a couple of hours. I spent that time walking from room to room. Talking to all the candidates and listening to all the questions asked of them by all the delegates. At the end of that evening I was convinced we have a very good slate. Every candidate has something to offer and they all seem very anxious to be part of the process.

I would like all of you to read the information that will be coming out to you in the next couple of months and if you have any questions about the candidates please call me. I believe that the incumbents have done a good job during their terms and should be given the chance to move up, but at this time I am not convinced who should be elected to the open position.

As part of the opening message from the president there were a few statements made that I thought might be of interest:

- We now have 17 standing committees and 4 resource groups with 216 members serving those committees.
- You are not “agronomic advisors” but you are the agronomic expert.
- One major point to come out of the Stanford Research Institute Study is that many of our employers THINK they understand our profession and our role, but REALLY do not. We need to help them understand. It’s up to us to sell ourselves to our employers.

- Our relationships in golf-as an association-are the best they’ve ever been, especially with our allied associations. Our first major responsibility is to prove ourselves WORTHY of the image we want to portray. We want “brand” recognition. That must be our goal. To say you are a member MUST mean something, but for it to be meaningful, it must be supported by merit. It must say, you as a member adhere to a set of criteria established by your professional peers. It must say that you have been judged by your peers and found worthy. This goal of “brand” recognition cannot be achieved without members standards and chapter affiliations that have substance. We need criteria that will provide our employers a measured, tested standard against which we can be judged.

- Achieving such “brand” recognition cannot be done without funds. One of the most asked questions this year has been “why is GCSAA selling itself out to sponsorship.” It would be nice to provide our members with the current level of support, AND do it solely on dues and association revenues, but the money just isn’t there to even continue the current level of member support. GCSAA leaders, both past and present, have coldly weighed the pros and cons of this argument. Weighed it from the viewpoint of our mission statement: “Dedicated to serving its members, advancing their profession and enriching the quality of golf and its environment.” To even HOPE to achieve that goal we have to be a player in the game. You can only play if the other players see you as a worthy participant. This is BRAND recognition. The greater the degree of recognition the greater the role played. To reach that level requires public relations and education initiatives. This in turn requires funding, funding that despite our best efforts cannot be derived from in-house efforts. Therefore, the decision was made to seek sponsorship. These sponsors have partnered with us to aid us in our growth as a profession. In return for their generosity, these Partners/Sponsors take a chance that in supporting our association, our members will in turn support them. Simply put, they receive advertising (their ability to link their corporate name to ours) in return for their funding. “Brand” recognition is not just a national mindset. It needs to be local and regional as well.
Editor's Letter

Tim R. Norris, CGCS, Director of Communications

I was extremely honored when Mike Gilmore called and asked me to fill the vacated position of Communications Director. As many of you know I have been a member of MAAGCS for nearly six years, however several construction projects at Army Navy CC have kept me from being as involved in the association as I would have liked. I was very active with both the local and state superintendents’ associations in Texas and it will be good to be involved once again.

It is a great responsibility to produce a quality newsletter such as Turfgrass Matters, one that I will not take lightly. Chris Ayres, CGCS and Bruce Zickafoose have established a standard that should make all MAAGCS members proud. With their help and the guidance of Executive Secretary, Charlotte Norris, I will strive to continue the excellent publication that we now have.

The lead article in this issue submitted by John Tribbett of Renosapes, Inc. discusses new technology that can help all superintendents document shade patterns on greens. This technology could be invaluable when trying to convince managers, owners, and green committees of the need to remove or prune specific trees on the golf course.

President Mike Gilmore revisits the need of our membership to become more involved with all aspects and activities. In Golf Notes, Mike Evans reviews the tournament results from the July Meeting at Caroline Country Club and the Superintendent/Club Official Tournament held at Greystone Golf Course. Nick Vance, CGCS updates board decisions from MAAGCS and GCSAA. News & Notes will keep you informed of any changes in members positions or personal interests.

It is an obvious statement to say that Turfgrass Matters is a newsletter for the membership of MAAGCS, however we need input from the membership to make it truly news from our association. If you have any information of interest or wish to submit an article, contact either myself or Charlotte at the MAAGCS office.
September/October 1998

Maryland Student Chapter of the GCSAA
by Andrea C. Bakalyar, President

Congratulations to the Maryland Student Chapter for selling all 100 University of Maryland shirts and 50 caps. Thank you to all of those who helped support the Chapter by making a purchase. For those of you who were not able to buy a shirt or cap the last time, don't worry, we anticipate a new shipment shortly of new colors and caps of different design.

The past few months have been eventful for the MD Student Chapter. In May, John Gabbeitt and Lee Carroll sponsored the IAA Open at Little Bennett Golf Course. Approximately 35 students met to play a great game of golf, enjoying a picnic afterward. The first State Farm Senior Classic was held at Hobbitt's Glen Golf Course, June 28-July 5, 1998 and several students (Mark Menusan, Andrea Bakalyar, Brad Siptroth, Tom Graul) and advisor, Kevin Mathias, volunteered on the maintenance crew during the tournament.

Many Scholarships were awarded over the summer and the Student Chapter would like to recognize some winning members: Shield Memorial Fund- Scott Furlong, Joyce Hennessey, Guy McDonald, Mark Menusan, John Shannahan, Jr., Bill Stowers; Bernice Howell Scholarship - Thomas Calpin, Erin Stevens. Turfgrass students, Art Grace, Joyce Hennessey, Guy McDonald, Mark Menusan made the Honor Roll with GPA's of 3.5 or better.

Chapter President, Andrea Bakalyar was chosen as one of nineteen students nationally, to participate in the very first Student Resource Group held by the GCSAA in Lawrence, Kansas. The two day forum was held August 21-22, 1998. The Student Resource Group discussed ways to improve communication with the Student Chapters and the GCSAA, Student Activities at the National Conference and Show, how to increase student involvement, and ways the GCSAA can better provide Internship opportunities at the show. GCSAA scholarships were reviewed as well as ways students can get the most out of their chapters and the GCSAA. The Maryland Student Chapter was the only chapter present who is fortunate enough to have support from their local association. The relationship the MAAGCS and the Student Chapter has is not a luxury other student chapters enjoy nationally, making the Maryland Student Chapter one of the most successful chapters in the nation. The Student Chapter is very lucky to have the interest and support the Mid-Atlantic has provided over the years, thank you.

Chapter Vice-President, William Stowers and first year Golf Course Management student Mike Speiler, both employees at Congressional Country Club, joined their Superintendent, Mr. Paul Latshaw at the Riviera Club in California, working at the Senior U.S. Open. Bill Stowers is not new to the rigor of hosting a major PGA Tournament, he was a huge part of preparing and working for the 1997 U.S. Open held at Congressional last year.

The Maryland Student Chapter looks forward to an eventful fall with the sale of newly designed shirts, caps, and wind jackets. Students will be holding a Nine-Hole Fall Open golf outing for new and current students and the Chapter will be attending the November Mid-Atlantic Meeting at Lakewood.... Look for your new shirt there!
Shade

to anticipate the effect of pruning or removal of a tree or combination of trees. “Before and after” maps can be generated to graphically show the benefit of tree removal in terms of additional hours of sunlight (or reduced square foot-hours of shade). Shade patterns after pruning or tree removal can also be predicted.

The new software also allows the consultant to “grow the course” to project what the tree and shading situation will be any number of years into the future. Again, this is done on a factual, scientific basis by measuring the lateral and vertical growth rate of each tree in question. This information is again entered into the computer, the numbers crunched, and an entirely new “what if” scenario generated to reflect the future shade situation - whether full, partial, or no pruning or removal is performed.

As an indication of how sophisticated these calculations can be, generating just one graphical map of the sunlight exposure of a green (taking into consideration surrounding trees and sun location on a specific date and time of day) involves about 45,000 calculations - which can take today’s fastest personal computer up to 15 minutes to perform.

Success Stories

John Gasper, CGCS, has used this new technology three times in the past two years at Oak Hill Country Club in Rochester, NY, and has met with “100% compliance and approval” of his requests for tree removal to date. “You must be judicious in balancing the recommendations for removal with the aesthetics, history and playability of the course,” said Gasper. “We may not follow all of the recommendations indicated by the sunlight survey, but the documentation has been convincing enough to get approval for everything we have asked for so far.” “We have taken quite a few trees down here,” Gasper continued, “and selectively pruned many more. This data really lets you work intelligently. If you get five hours of sunlight now, you’ll know you will get eight if you remove that tree, for example. Once the trees are down, we have seen an absolute, immediate improvement in the turf. There is an unbelievable response of roots to additional sunlight.”

Larry Pakkala, CGCS, has been struggling with two heavily shaded greens since he started at Woodway Country Club in Darien, CT, sixteen seasons ago. The 4th and 13th greens at Woodway are positioned atop a heavily wooded knoll populated with stately 80+ year old oak trees, each in the range of 24-36” caliper. A sunlight analysis was performed this spring on the most problematic green, the 4th, focusing on maximizing morning sunlight. Ultimately 17 trees were recommended for removal along the east and south side of the green. Pakkala and his green committee met for an hour and a half on the green site itself. The committee approved a 2-step implementation of the recommendations, starting with the removal of eight trees this coming winter. “We expect at least a 50% increase in sunlight from removing those 8 trees.”
Shade

continued from page 6

commented Pakkala. "The committee wants to see what the green complex will look like with those trees removed, and also evaluate the degree of turf improvement before proceeding with the removal of the rest."

One of the Woodway green committee members wanted Pakkala to estimate the degree of turf improvement to be expected from the tree removal. "That's very difficult to do," he explained. "Those greens look very good right now (in June), so they may not improve very much from their current condition at this time of the year. However, I expect them to decline less and be much less subject to late season disease problems than they otherwise would be, all with a much more reasonable maintenance program. You might say 'the peaks might not get much higher, but the valleys will definitely be less deep'."

This new technology is being licensed to arborist in various regions and locales.

This article was submitted by John Tribbett of Renoscapes, Inc. Portions of the article were reprinted with permission of Peter McCormick at TurfNet.  

1999 MAAGCS Calendar

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<th>Month</th>
<th>Event</th>
<th>Location</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>March</td>
<td>Educational Seminar</td>
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<td>April 12</td>
<td>Fountain Head CC</td>
<td>Ken Keller</td>
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<td>May 11</td>
<td>Turf Valley Resort Supt/Pro Tournament</td>
<td>Mike Gilmore</td>
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<td>June 15</td>
<td>Chevy Chase Club Supt/Club Official</td>
<td>Sean Remington</td>
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<td>July</td>
<td>Westwood CC</td>
<td>Walter Montross</td>
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<td>August 10</td>
<td>Mayo Beach/South River Annual Family Picnic</td>
<td>John Newcomb</td>
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<td>September 14</td>
<td>Woodmont C C</td>
<td>Mike Larsen</td>
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<td>October 12</td>
<td>Lowes Island GC Annual Championship</td>
<td>Byron Lash</td>
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<td>November 9</td>
<td>Southview GC</td>
<td>Steve Cohoon</td>
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<tr>
<td>December</td>
<td>Turf Valley Resort Annual Meeting &amp; GCSAA Seminar</td>
<td>Mike Gilmore</td>
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All dates and locations are subject to change.

Quality Turfgrass Seed

Lofts Maryland
Dave Thomas
MD, DE, N. VA, DC
Jeff Everhart
VA, WVA
John Brader
MANAGER
Mary Collins
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A Glimpse of the Past...

by Lee C. Dieter, CGCS

The Founding Members of Our Association

The first contact with the Department of Agriculture relating to golf turf was made by Walter S. Harben of Washington Golf and Country Club and Columbia Country Club in 1906. Interest in turf and requests for help came from C. B. MacDonald of the Chicago Golf Club and others.

The first of many articles on golf turf was published by Dr. Piper in January, 1913 and his book, "Turf For Golf Courses", was published in January, 1917. He and his co-author, Dr. Oakley, had established the Arlington Turf Gardens in the spring of 1916 on the site of the Pentagon south parking. They had been working with local green chairmen and greenkeepers. Dr. C. V. Piper and Dr. Russel Oakley were both members of Washington Golf & C. C. in those early years.

The green section staff were among the first to encourage the formation of the early associations of greenkeepers. The Mid-Atlantic was among the first to organize. O. B. Fitts was one of the first to write articles and speak at the annual meetings of the Green Section. He was in charge of the turf gardens from March, 1923 to February, 1928. O. B. Fitts and Robert Scott from Baltimore C. C. organized the first meeting of the Mid-Atlantic Greenkeepers.

"A meeting was held at the New Howard Hotel in Baltimore for the purpose of forming the Mid-Atlantic Association of Greenkeepers. A draft of the by-laws was presented by a committee composed of Robert Scott, W. E. Dunt and Reg Giddings and with a few revisions was accepted by the members unanimously. The members present were: O. B. Fitts (Columbia C. C.), Robert Scott (Baltimore C. C.), J. H. Links (Columbia C. C.), Richard Watson (Indian Springs C. C.), C. Maurey (Woodholm C. C.), T. Fisher (Burning Tree C. C.), R. Ward (C. C. Inc.), W. E. Dunt (Sherwood Forest Golf Club), R. Caltrider (Suburban C. C.), Richard Scott (Rolling Road C. C.), R. T. Granger (Belle Haven C. C.), R. D. Giddings (Gibson Island Golf Club), C. Victor (East Potomac Golf Club), and K. Welton (U.S.G.A. Green Section). All of the above members paid dues of $6.00. It was decided to hold the next meeting on January 7, 1929 at the Hamilton Hotel In Washington, D. C. The meeting was adjourned at 11 p.m." (Taken from the first minutes of the Association).

By the end of 1929 others who joined were Geo LeBrun, R. V. King, R. P. Hines, Mr. Gerlie, Harry Diffenbaugh (Clifton Park) David Edgar (Hillendale C. C.), Carrol Hitchcock (Green Spring Valley), W. Collins (Green Section), Dr. Montieh (Green Section), Dr. Brown (Green Chairman, Bannockburn), D. Thompson (Washington Golf & C. C.), Prof. Hillman, H. Haviland, J. G. Tilghman (Edgewood Golf Club), Rudy G. Wills (Harper C. C.), Mr. Armiger, Nathan Mather (Maryland C. C.), Major Davidson and Lt. Myers (Bolling Field). By January, 1930 the minutes state that there were 33 members. These were our charter members. When I joined the association in May of 1960, Mr. Gustin (Baltimore Toro), Dick Watson (Chevy Chase), O. B. Fitts (Burning Tree), R. D. Giddings (Gibson Island); Ruben Hines (Hines Turf Nursery) and Carrol Hitchcock (Woodholm C. C.) were still active members.
The golf tournament for the July 14, meeting at Caroline Country Club was our Two-Man Team Championship. Thirty-eight teams enjoyed a relaxing day of golf in the “Land of Pleasant Living”, courtesy of Jim McHenry and all the fine folks at Caroline Country Club. Thanks, Jim, to you and your staff for a great job! The day’s winners were:

**Net**

1st Jim Weaver/Mike King
2nd John Anderes/Andy Rosewag
3rd Steve Cohoon/George Renault
4th Lance Ernst/Gary Luchs
5th Paul Masimore/Michael Evans

**Gross**

1st Glenn Smickley/Paul Brandon
2nd Tim Norris/Corey Haney
3rd Jim McHenry/Scott Wagner
4th Jeff Michel/Phil Davidson
5th Jeff Facto/Tom Mynaugh

**Closest to the Hole**

#3 Archie Hall (#9 Gary Luchs
#12 Tom Tokarski
#15 Gordy Caldwell

**Long Drive**

#5 Steve Melton (357 yards!)

While we more than doubled last year’s inaugural field, participation in this event is nowhere close to what we would like it to be. Undoubtedly, many of you were in the process of aerification and fall renovation and could not get away for the day. However, there seems to be a reluctance on the part of many superintendents to play golf with their club officials. This tournament is a wonderful opportunity to showcase our association to our club officials in a relaxed, enjoyable environment. It also allows our club officials to network with one another and with superintendents. Next year’s tournament will be held in conjunction with our June meeting at Chevy Chase Club. If we can double participation again next year we will begin to approach the goal we have set for this event. I hope that in the next few years the Superintendent/Club Official Tournament will take on the same stature as our Superintendent/Professional.

The following companies have sponsored our past two golf tournaments: Ault, Clark & Associates, Finch Services, G. L. Cornell, Newsom Seed, Scotts Pro Turf, Summit Hall, and Zeneca. Please be sure to thank these companies for their continuing support of the MAAGCS.

Our Annual Championship will be held October 13, at Mount Vernon Country Club, with Jeff Michel, CGCS, as our host. Due to an unfortunate scheduling conflict the MET Tournament, being played this year at the Country Club of Connecticut, is also the same day. If you would like to play in this year’s MET Tournament which features teams from Superintendents Associations throughout the northeast please contact me so that we can try to field a team. My telephone number is (301) 249-6116. We need eight players, four for a gross team and four for a net team.

Get your game in shape and join us on October 13!
## News & Notes

### New Members

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<th>Class</th>
<th>Name</th>
<th>Club</th>
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<tr>
<td>A</td>
<td>Mark MacDonald</td>
<td>Regents Glen Golf Club</td>
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<td>B</td>
<td>Scott Reeside</td>
<td>Worthington Manor Golf Club</td>
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<td>Scott Johnson</td>
<td>Virginia Oaks Golf Club</td>
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<td>C</td>
<td>Scott Frederick</td>
<td>Regents Glen Golf Club</td>
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<td>Dan Hofmeister</td>
<td>Regents Glen Golf Club</td>
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<td>Todd Travers</td>
<td>Towson Golf &amp; C C</td>
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### Congratulations

To Paul McMahon and his wife Elisa upon the birth of their son, Brady Patrick.

To Jim Black and his wife Marnie upon the birth of their daughter, Gillian Janette.

To Jack Roxbrough and his wife Jane upon the birth of their son, Stephen John.

### Get Well Wishes

To John Stern recovering from surgery.

To Sharon Verchick recovering from a recent fall.

### Reroutings

Eric Linde is now the superintendent at Bear Trap Dunes

David Horton is now at Raspberry Falls Hunt & Golf Club

### Calendar of Upcoming Events

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<thead>
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<th>Date</th>
<th>Event</th>
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<td>Annual Championship</td>
<td>Mount Vernon Country Club</td>
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<td>November 10th</td>
<td>Lakewood Country Club</td>
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<td>December 8th</td>
<td>Annual Meeting &amp; Elections</td>
<td>Turf Valley Resort &amp; Conference Center</td>
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<td>December 8th-9th</td>
<td>GCSAA Seminars - Turf Valley Resort</td>
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<td></td>
<td>&quot;Employee Safety Training&quot; (8th)</td>
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<td></td>
<td>&quot;Maximizing Job Satisfaction (9th)&quot;</td>
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Product Guide

- **ISOLITE®**
- **EcoSoil Systems, Inc.**
  - Bioject®
- **Liquids**
  - Eco K+ 1-0-23
  - Eco Calex 1-0-0 w/7 Ca
  - Lex - Liquid Energy Xtract
  - Eco Mag
  - Eco Mix
  - Eco N+ 24-0-0
  - Eco Phos 2-20-0
  - Eco Iron
  - Eco Gro 4-0-4
  - Eco Sil
- **Unimin/Morie Co.**
  - Topdressing Materials
  - Divot/Tee Mixes
  - Root Zone Mixes
  - Bunker/Topsoil/Mat Sand
- **Environmental Systems**
  - CleanRack®
  - HazMat Buildings
  - Fuel Vaults

- **ZeoPro™**
- **Menefee Humate™**
  - granular, wsp
- **Stormy Acres, Inc**
  - Bentgrass Sod
- **North Atlantic Kelp Meal**
- **Calcium Nitrate**
- **O’Malley’s Mulch**
- **Orgro**
- **Growth Products**
  - Professional Liquid Fertilizers and Micronutrients
- **Quill-Tuft™**
  - Range Mats
  - Logo Mats
  - Bridge Matting
- **Allen-Air Cushion Mowers**
- **Kirby Yardage Markers**
- **Coverttech**
  - Turf Covers
- **ISTRC**
  - Core Testing
- **Optima – Wetting Agent**
Governor's Pesticide Council
by Tom Walsh

The purpose of the Maryland Governor's Pesticide Council is to advise the governor on pesticide related issues. The council discusses upcoming bills in the legislature regarding pesticides. They then recommended passing the bill or suggest changes to accommodate all parties involved. The council consists of twenty-three members from a cross section of the community, such as representatives from public schools, local governments, public health, labor organizations, environmental groups, the agricultural community and the general public. The discussions can be both lively and entertaining to say the least.

Members include Council Chairperson Amy Brown, Ph.D., Pesticide Education Coordinator, University of Maryland; Raymond Fritz, retired Chief of the Chesapeake Bay Estuary Water Quality, U.S. Fish & Wildlife Service; James Slater, Chief of the Bureau of Environmental Services, Carroll County, MD; Mark Fuchs, Senior Agronomist, Southern States Cooperative; Max Eisenberg, Ph.D., Executive Director, Center for Indoor Air Research; Garry Schnappinger, Ph.D., Research Scientist, Novartis; Michael Pelczar, Ph.D., Professor of Microbiology, University of Maryland; Craig Storbel, Executive Vice President, York Distributors; Senator Lowell Stoltzfus, R-Wicomico.

The September 23rd meeting provided additional discussion surrounding the pest applications in and around public schools. An IPM training manual of Grounds Maintenance was distributed and discussed by Dr. Michael Raupp of the University of Maryland, Entomology Department. Meetings are open to the public and public comments are welcome at each meeting. From time to time throughout the meeting, the public is invited to ask questions. A sign-up sheet is provided for those who wish to address the council at the end of the meeting on a particular issue.

My observations are that the environmental community has the biggest voice. The audience seems to consist of more people who are against our industry. From time to time, issues regarding the Golf Course Industry will be discussed. So please take the time to attend these important meetings. Your voice could help persuade the many panelists who are undecided.
Mid-Atlantic Region Leads All Areas for Superintendent Salary Increases

In August the Career Development Department of GCSAA released *Trends in Compensation and Benefits for Golf Course Superintendents*. This is an analysis between the 1995 and 1998 Compensation and Benefits Reports. The Mid-Atlantic Region posted the most significant increase in average salaries, up 27.9% from $55,223 in 1995 to $70,621 in 1998. The national average base salary for golf course superintendents rose to $53,205 in 1998. This represents a 19.5% increase since 1993 and a 7% increase since 1995.

Experience and education continue to be significant factors driving salary increases. Certified superintendents with more than twenty years experience received an average of 17.9% increase from 1995 to 1998, and certified superintendents with 15 - 19 years experience received an average 17.3% salary increase. These increases were significantly more than the national average of 10.4% for all certified golf course superintendents during the same period and a 7% increase for all superintendents.

Assistant superintendents salaries have also increased to $27,981 in 1998, from $25,053 in 1995. This 12% increase is consistent with the average increase for superintendents during the same time frame.

Reprints of the GCSAA analysis or copies of the complete 1995 & 1998 *Trends in Compensation and Benefits for Golf Course Superintendents* are available from GCSAA Career Development Department by calling (800) 472-7878 ext. 655.

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All superintendents fighting Grey Leaf Spot should note that Dr. Peter Dernoeden, University of Maryland, says Grey Leaf Spot will be active in this area until the first hard frost. *Heritage* seems to be the best preventative. Dr. Dernoeden suggests tank mixing *Heritage* and Chlorothalonil at high rates for treating active disease.

Dr. Dernoeden can be reached at (301) 405-1337 for further information.

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GCSAA Announces New "Associate" Membership Classification

As of July 1, 1998, GCSAA has opened an Associate membership classification that is open to golf course employees who are working toward a career as a golf course superintendent. Any golf course employee who meets the requirements may be classified as an Associate member instead of an Affiliate member. Annual membership dues for an Associate member are $125.00.

Requirements:
1. Applicant must be on a career track within the golf course superintendent profession.
2. Applicant must hold a degree from an accredited university/college that may include one of the following types of degrees:
   - 4 year turf or “other” bachelor’s degree
   - 2 year associate turf/plant science degree
   - 2 year turf certificate
3. Applicant must be a former GCSAA student member. This requirement will take effect July 1, 1999. Individuals not members before this date are grandfathered with regards to this requirement.
4. Associate class member applicants will be required to provide an application attested by a Class A or B superintendent member of GCSAA.

Associate Membership Benefits:
- Green membership card
- All of the privileges of membership except that of voting and holding office.
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If you have any questions regarding the Associate membership classification or your eligibility, please call the GCSAA Service Center at (800) 472-7878.
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