quested this type of help in the past as most chapters cannot afford their own staffing. I would like to see a regional staff setup in one part of the country before we cover the whole country. Contrary to the previous month's author these individuals that would serve as field staff would not "come to tell him how to run his golf course". The author commented that "he could call on Randy Kane, Tom Fermaninan, Dave Wehner, Hank Wilkinson, and many more at no cost and know that they are doing research locally." Unless I am mistaken, these gentlemen do not work for free and are supported by all of the taxpayers and in some cases subsidized by research grants made by groups like CDGA, GCSAA, USGA, MAGCS, etc. They all do a great job but how can one assume that they perform their jobs at no cost.

The author of the aforementioned article also stated that "I am sure the GCSAA Standards Committee was very heavily influenced by the staff of GCSAA in presenting the By-Law changes to give more control to the Board and Staff." How can you make such a statement without talking to those on the Standards Committee? It is a shame to see such attacks published with reckless abandon by those who don't research their facts.

The previously published comments about the voting procedures were unfounded as well. It was correct that there were approximately 5000 to 6000 votes cast at the New Orleans annual meeting. With the concept of one person one vote, we don't know how many votes **would** be cast but we do know that there is a potential that 8300 votes **could** be cast. I think that the author has little faith in his peers to cast their votes. The proposed system would involve more people in the decision making process. Realistically, we are providing an alternative to the current voting procedures. Some members find the current voting process less than desirable. Let's let each of the MAGCS members decide their destiny.

The author also asked why we need more membership classifications and other questions that were previously covered. Some people don't read the information in our publications or don't listen to the organized presentations arranged by the MAGCS. And then there are those who are so set in their thinking that they are not willing to listen to any views other than their own. The author asked the readers to "give it some thought". I only wish he had given the issues some thought based on the facts. It saddens me to see such an impulsive negative reaction. I only wish the author could find something good about GCSAA. I guess criticizing doers is more fun than proposing possible solutions.

I would hope that each member of GCSAA would evaluate the by-law proposals thoroughly and take the time to make up their own minds without being intimidated by the ones who whine and complain the loudest. This is what the democratic process is all about. I invite any GCSAA member to contact me personally to discuss the issues. Ultimately, it is you, the GCSAA member, that will set the tone for the future of our association and profession.

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Joel Purpur sent this photo in on a quick way to mount a 16 h.p. Billygoat Blower to a golf cart. Take off the wheels and handle—clamp it on and away you go. Greens, tees, and fairways are able to be blown without getting tired.

Clinic & NCTE Update

by Dave Blomquist, Education Chairman

The annual Midwest Clinic was held on November 18 at Medinah C.C. For those not in attendance, you missed a great program. First time, long time, and in time superintendents shared their experiences about everything from Cockatoos to Superintendent/Assistant relations. A panel of some of the finer mechanics in the area presented a report on the state of their profession and the individuals that comprise the association. It was very enlightening.

The highlight of the day was not the slide that showed Mike Baviers' bare bottom (sorry Mike), rather, it was Captain Al Haynes. Capt. Haynes is the pilot who flew the ill-fated DC-10 that crashed in Souix City, Iowa. His talk included a video presentation along with slides that supported his 5 reasons that 188 people survived the tragedy.

At the NCTE Bruce Williams conducted a workshop on Teamwork Concept of Golf Course Maintenance. 75 people attended and gained some insight into developing a more cohesive unit at their clubs. Thanks to Bruce for taking his time to share this program with us!

On the second day of the conference the MAGCS sponsored a roundtable pesticide discussion. Well over 300 people were in attendance! We were able to gain an insight to the pros and cons of pesticides and our general welfare. Highlights of that session:

- "Everything is dangerous, the question is what are the benefits vs. the risks" Dr. Tom Lang, IL Dept. of Health
 "There aren't many birds on golf courses" Barbara Mullarky, Mother Earth Network
- Look for extended coverage of this discussion in the next issue. Special thanks go out to Marlin McMannis, Assistant Superintendent River Forest Golf Club, for videotaping Capt. Al Haynes at the Clinic and the Pesticide Roundtable. These tapes will become available in the MAGCS video library.

United States Golf Association



Green Section Great Lakes Region



Highlights of Recent Changes to the USGA's Green Construction Recommendations

by Robert Vavrek USGA, Green Section

The USGA's recommended method for putting green construction has been revised three times during the last 30 years. Each revision was an effort to integrate the current level of scientific knowledge with the sound practical experience of the Green Section staff. The underlying intent of the USGA has always been to provide a method for greens construction with the highest potential for success under a wide range of environmental conditions.

During 1991, Dr. Norm Hummell, associate professor at Cornell University, spent his year on sabbatical leave working with the USGA to update and standardize the laboratory procedures used by various labs that test the construction materials used to build putting greens. After an extensive review of the scientific literature pertaining to the use of high-sand content root zone mixtures for turf, a number of revisions to the USGA specs were recommended.

An Advisory Committee of soil scientists and Green Section staff was assembled to review the recommendations. After review, the proposed revisions were submitted to an international group of approximately 30 soil scientists, lab personnel, architects, and industry personnel for comment and further suggestions. The USGA has utilized a broad base of scientific knowledge and practical experience to achieve several goals regarding the current revisions:

- To increase confidence in the specs by standardizing lab procedures.
- To reduce the cost of building greens to USGA specs by removing unnecessary steps during constructions and to provide more flexibility in choosing construction materials.
- To utilize the most current level of scientific knowledge to develop a comprehensive set of recommendations.
- 4) To identify areas in our knowledge of greens construction methods that are poorly understood and will require further research efforts in the future.

The following is a summary of the major changes: SUBGRADE — The subgrade can be shaped to facilitate drainage and need not conform exactly to the proposed surface contours. However, the contours of the gravel layer must closely conform to the finished grade.

A geotextile fabric may be used between the gravel layer and an unstable subgrade soil, i.e. muck, expanding clay, etc. **DRAINAGE** — Drainage trenches shall be a minimum of 8 inches (20 cm) deep.

Drain lines shall be installed no more than 15 feet (5 m) apart. The main line shall be extended for a short distance from the back/high side of the green to facilitate the installation of a clean-out port.

A perimeter (smile) drain shall be installed along the low edge of the green/surrounding-soil interface and shall extend to the first set of laterals.

GRAVEL — Angular particles are preferred for stability — to facilitate shaping: pea gravel is, of course, acceptable.

Gravel of questionable weathering/mechanical stability must pass the LA Abrasion test and/or the sulfate soundness test — ASTM tests C-131 and C-88, respectively.

The need for an intermediate sand layer can only be determined by a soil laboratory and depends upon the relationship between the particle size distributions of the gravel and the root zone mix.

Where an intermediate sand layer is required — no more than 10% of the gravel can be retained on a ½ inch sieve, at least 65% must pass through a 3/8 inch and be retained on a ¼ inch sieve, and no more than 10% can pass through a 22 mm sieve. INTERMEDIATE SAND LAYER — The acceptable particle size has been expanded from 90% of the particles between 2 mm and 1mm, to 90% between 4 mm and 1mm.

ROOT ZONE MIXTURE — The acceptable particle size distribution of the USGA root zone mix is summarized in the accompanying table (top of page 13).

Allowance has been made for more fine sand (0.25 mm - 0.15 mm) but less very fine sand (0.15 mm - 0.05 mm).

The peat source must be a minimum of 85% organic matter by weight. Other organic composts should be aged for at least one year and must be proven to be non-phytotoxic to the turf by the supplier. The final organic matter content of the mix must be between 1-5% by weight (ideally 2-4%).

If soil is used in the mix it must have a minimum sand content of 60% and a clay content between 5% and 20%. The final mix must still conform to the revised guidelines for particle size distribution.

Several root zone physical properties have been modified: Total porosity: 35-55% (previously 35-50%)

Air-filled porosity: 20-30% (previously 15-25%)

Saturated Conductivity (percolation rate)

Normal range: 6-12 in/hr (15/30 cm/hr)
Accelerated range: 12-24 in/hr (30-60 cm/hr)

SOIL FUMIGATION — Sterilization required prior to

establishment of turf only 1) in areas prone to severe nematode problems, 2) in areas prone to grassy weed or nutsedge problems, or 3) when the root zone contains unsterilized soil—otherwise optional.

The complete recommendations will be available during January 1993. For a copy, contact the USGA Green Section, Great Lakes Region, 11431 N. Port Washington Rd., Suite 203, Mequon, Wisconsin 53092, or call 414-241-8742.

PARTICLE SIZE DISTRIBUTION OF A USGA ROOT ZONE MIX

FINE GRAVEL	VERY COARSE SAND	COARSE SAND	MEDIUM SAND	FINE	VERY FINE SAND	SILT	CLAY
3.4 mm	2.0 mm	1.0 mm	0.50 mm	0.25 mm	0.15 mm	0.05 mm	LESS
to	to	to	to	to	to	to	THAN
2.0 mm	1.0 mm	0.5 mm	0.25 mm	0.15 mm	0.05 mm	0.002 mm	0.002 mm
MAX		AT LEAST 60%		MAX	MAX	MAX	MAX
3%		OF THE		20%	5%	5%	3%
10% MAXIMUM GREATER THAN 1.0 mm		PARTICLES MUST BE WITHIN THIS RANGE			10% MAXIMUM LESS THAN 0.15 mm		10.07 10.0 14.0

"Who ... What ...?"

by Fred D. Opperman, Editor

Just a short quiz to see how well you know your fellow members and association.

- 1. Who's the weekend cowboy who ropes?
- 2. Who puts about as many miles on his bike as his car?
- 3. Who are the two MAGCS Presidents who were neighbors?
- 4. How many father-son, brother, superintendent combinations would you guess are in the MAGCS?
- 5. Who's the rookie artist who already has been commissioned to do a painting?
- 6. Who are the 2 father-sons who have been MAGCS Presidents and the fathers were Presidents of the GCSAA?
- 7. Who's the retired superintendent who has 3 sons with PhD's?
- 8. Who has won the "Ray Gerber Editorial Award" twice?
- 9. Who was the 50th President of the MAGCS?
- 10. Who was the 1st?
- 11. What year did the MAGCS start?
- 12. Who's the superintendent who raises and flies falcons?
- 13. Who was the first Penn State graduate to become a superintendent in the Chicago area?
- 14. Who started the Prayer Breakfast at the GCSAA Conferences?
- 15. Who has won the MAGCS Golf Championship the 2nd most number of times?

Answers to Quiz on Page 24

Deer Beer Stew

by Dan Albaugh

- 2-4 lbs. of venison cut into bit size chunks
- 8 large onions peeled and quartered
- 10 carrots cut in 1" pieces
- 5-10 cloves garlic finely chopped, the more the merrier
- 3-5 beers (maybe the more the merrier refers to the beer?)
- 1 tablespoon dried mint
- 1 tablespoon crushed red pepper to taste
- 3 tablespoons olive oil
- 8 medium/large potatoes peeled and cut into chunks

Remove all talo and membrance from the meat — this is a must for it imparts the gamey taste. In a large 8-10 quart pot add olive oil, medium heat, add onions and the chopped garlic. Cook till they pearl, add meat and brown it. Add 3 cans of beer, potatoes, and the rest of the ingredients. Cover, cook for 3-4 hours, add additional beer as needed. Stir occasionally. Salt to taste.

(Editor's note: Thanks Dan, I can try this recipe now that you provided the main ingredient).

Adolph Bertucci's Christmas Party



Chef & Host Adolph Bertucci













Bill Aiston, Supt. & Tim Scott, Assistant











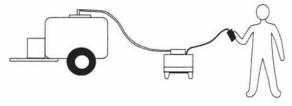








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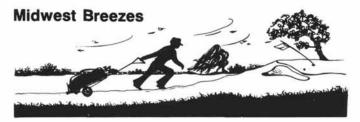
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Upcoming Events—Mark Your Calendar

January 11 - MAGCS meeting at Arrowhead G.C.

January 11-15 — OSU Short Course

January 23-30 — GCSAA Conference & Show, Anaheim, CA

February - No MAGCS meeting

March 4 — Spray Technician Course, Stonebridge C.C.

March 15 — MAGCS meeting at Nordic Hills C.C.

April 26 — MAGCS meeting at Geneva G.C.

May? - Combined Joint Association meeting

June 21 — MAGCS meeting at River Forest G.C.

July 19 — MAGCS meeting at Poplar Creek G.C.

August 9 — MAGCS meeting at Lakewood G.C.

September 21 — MAGCS meeting at Shoreacres G.C.

October 4 — MAGCS meeting at Bartlett Hills G.C.

November ? - Midwest Clinic and Annual Meeting





Outgoing president Ray Schmitz (on the left) introducing the new MAGCS president, Timothy Kelly

The deepest sympathy of the members of the Midwest Association of Golf Course Superintendents is extended to Jerry Dilday (Parts Manager at Chicago Turf & Irrigation) and his family on the death of his wife, Libby, on December 2, 1992.

Bob Lohmann, President of both Lohmann Golf Designs, Inc. and Midwest Golf Development, Inc., Marengo, Illinois, is pleased to announce the addition of Dan Murray to his staff. As Construction Manager, Dan will be responsible for project management, including cost estimating, scheduling and grow-in management for Lohmann Golf Designs and Midwest Golf Development projects. As a golf course superintendent, Dan has extensive knowledge of golf course construction and grow-in procedures and will be a valued member of the Lohmann Golf Designs team. With Dan on board, Lohmann Golf Designs now offers grow-in management services to aid their clients in the demanding task of establishing turf on newly seeded golf courses.



John Gurke receiving the "Ray Gerber Editorial Award Plaque" for the best article written for The Bull Sheet from Editor, Fred Opperman.

John won this award for his article "Inform Your Golfers" which was in the July 1991 issue of The Bull Sheet. I would like to add that it was very close in who would win this year. Joel Purpur with his article, "Our 18th Hole Norman Rockwall" and Brian Green with his article, "Noise/Nuisance Ordinance" were all within .6 of a point of winning this year. Congratulations to John Gurke and all others who took the time to write. — Thank You.

Lois & Jim Latham spent Christmas "down under" touring Australia and took a four day cruise around the Fiji islands. They toured Sidney, went on to Adelaide where they took a train to Alice Springs. At Cairns they were able to get to the Great Barrier Reef and a tour of the rain forest.

In late November and early December there has been a series of break-ins at some golf course maintenance buildings. The people doing it are pretty good for they have not triggered some alarms that were in buildings. They have been taking hand tools, chain saws, mechanic tools, string trimmers, all items very easy to sell and not too traceable. You better check to see how to improve your security and have an inventory with serial numbers and cost of various tools, etc. If you have a video camera, it is an excellent way to inventory what you have. Be sure to make copies and keep them in separate places. This also is something you need to do for your home.

Congratulations are in order ... James and Valarie Roberts wish to announce the arrival of Alexander Rayvan Roberts on November 18, 1992. Alex was 8 lbs. 9 oz. and 20" long at birth. Both mother and son are doing fine.

For Sale: Toro 350D Reelmaster — good condition. Call Scott at Itasca C.C., 708/773-1800, ext. 141.

Superintendent's Position — Klein Creek G.C., public 18 hole course under construction in Winfield, IL. Class A or B supt. Send resume to: J. Douglas Lytle, P.E., 3750 Hobson Rd., Woodridge, IL 60517.

Position Available: Asst. Golf Course Supt., Orchard Valley Golf Course, Aurora, IL. Position available — March 1, 1993. Resume deadline — February 1, 1993. Send resume to: Jim McNair, c/o Fox Valley Park District, 712 S. River St., Aurora, IL 60506.

Ridgemoor C.C. is looking for an assistant superintendent. Send resumes to: Peter J. Hahn, Ridgemoor C.C., 6601 W. Gunnison, Chicago, IL 60656.

Some interesting figures from the 1992 GCSAA Conference in New Orleans concerning just who attended.

3,381 Class A, B, C & other class members

549 Non members

107 Students

806 Spouses

33 Children

10,124 Exhibitors & Distributors!

15,000 TOTAL

Why You Should Delegate Well

If you're having trouble delegating to your employees, remember that the best definition of a good leader is the same as the chemical definition of a catalyst. A catalyst causes things to happen without itself being used up. If you don't delegate, you'll soon be "used up."

Source: Joe Mann, Spokane, WA



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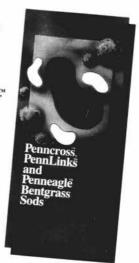
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