

Schilling Resigns From GCSAA Executive Office

The Golf Course Superintendents Association of America (GCSAA) has announced that John M. Schilling has resigned as chief executive officer, effective January 1994.

Schilling has been with GCSAA for 15 years and has served as executive director and CEO during the past 10 years.

He is leaving the association to start his own business.

"John's leadership of the staff and his successful implementation of the board of directors' policies and programs have had a very positive impact on our association, our profession and our members," said GCSAA President Randy Nichols, CGCS, in announcing the resignation to association membership. "It is with deep regret that I inform you that John has resigned.

"The current board of directors has fully supported John and is extremely disappointed with his decision to resign," Nichols added. "However, we do respect his desires to begin his own business, where his ability and skills will again be demonstrated."

Diana Green, former GCSAA senior director of operations, and Robert D. Ochs, former GCSAA senior director of communications and association general counsel, will join Schilling in his new endeavor.

Schilling has agreed to stay on with GCSAA through January to assist the association in making a smooth transition in leadership. He also will help manage GCSAA's 65th International Golf Course Conference and Show, scheduled for Jan. 31-Feb. 7, 1994, in Dallas.

GCSAA's board of directors currently is conducting a nationwide search to locate a replacement.



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New GCSAA Position Papers Nearing Completion

GCSAA's Government Relations program is developing three new association Position Papers.

Topics of the new Position Papers will be the Americans with Disabilities Act (ADA), water conservation and effluent water use.

The effort is in response to new developments and existing situations in the golf industry that the association's board of directors has decided are worthy of an official association position.

The ADA paper basically will outline the new law as it relates to golf operations and will contain GCSAA's formal position on how the golf industry should respond to the new requirements under the law.

GCSAA has decided that a position paper on the subject would serve as a helpful resource tool for the growing number of members who call association headquarters questioning how the new civil rights bill will affect

them. Additionally, the paper is expected to become a valuable public relations tool in positioning the association and its members as socially responsible professionals responding to the needs of a growing segment of the golfing population.

A position paper dealing with the attributes and methods of water conservation also is in the works. It is being prepared in response to mounting concern for the nation's water supplies.

The water conservation position paper spells out the various ways that water can be conserved on the golf course and states the association's position on the subject—which is, basically, that GCSAA strongly encourages its members and others to employ proven water conservation practices.

A third new position paper will look into the matter of effluent water use on the golf course and also is being

produced in response to growing concern over the country's dwindling water supplies.

GCSAA has long maintained that the use of effluent, or gray, water (partially treated wastewater) is a viable alternative to using potable water for irrigation purposes.

There are many advantages, and a few disadvantages, to using effluent water, all of which will be spelled out in the new position paper.

The position papers should be ready for approval by GCSAA's Board of Directors soon and will be made available for member and public consumption shortly thereafter.

For more information on any of the new position paper topics, contact GCSAA's government relations program at 1421 Research Park Drive, Lawrence, KS 66049-3859, Tel. 913/832-4470, FAX 913/832-4466.

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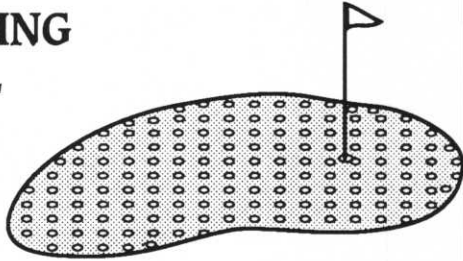
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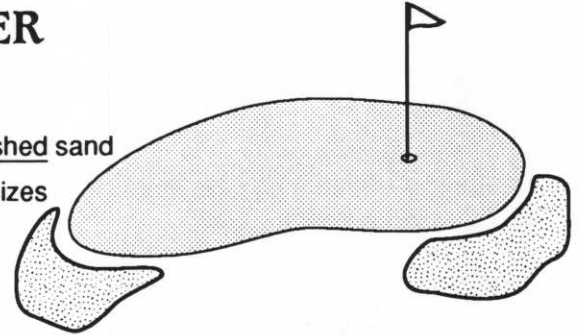
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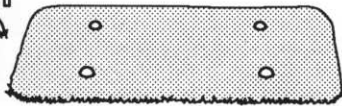
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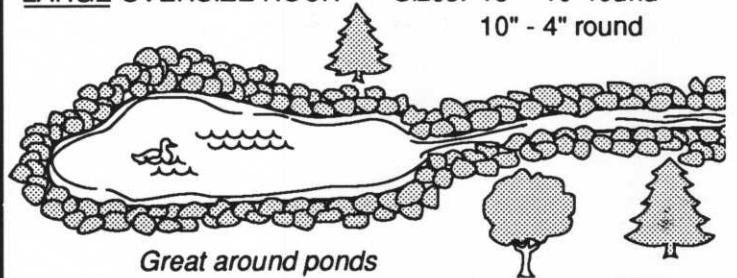


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 - Red rock
 - Grey
 - Gravel



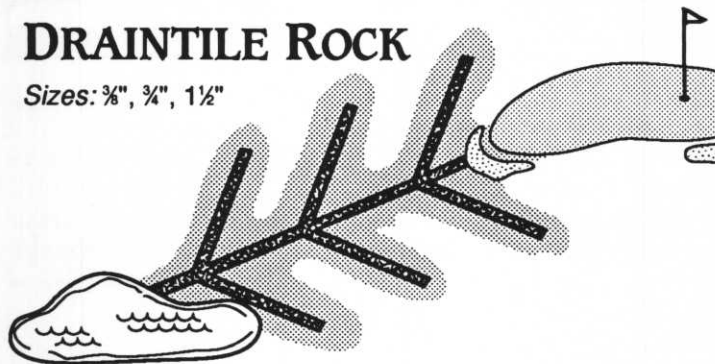
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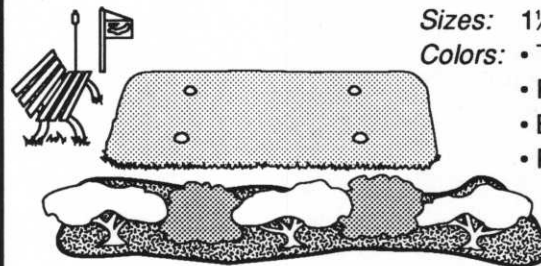
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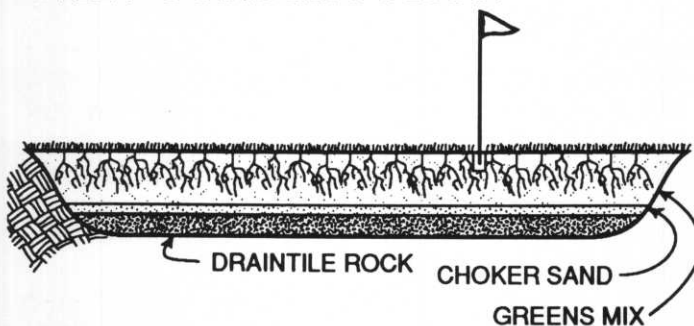


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Additional Nine Holes Plus New Clubhouse Being Built at The Pines

* * * *

*For Tom Kientzle,
It Was A
Very Busy
Summer*

PAUSING on the future tee of the eighth hole on the new nine being built at The Pines is Head Superintendent Tom Kientzle, CGCS.

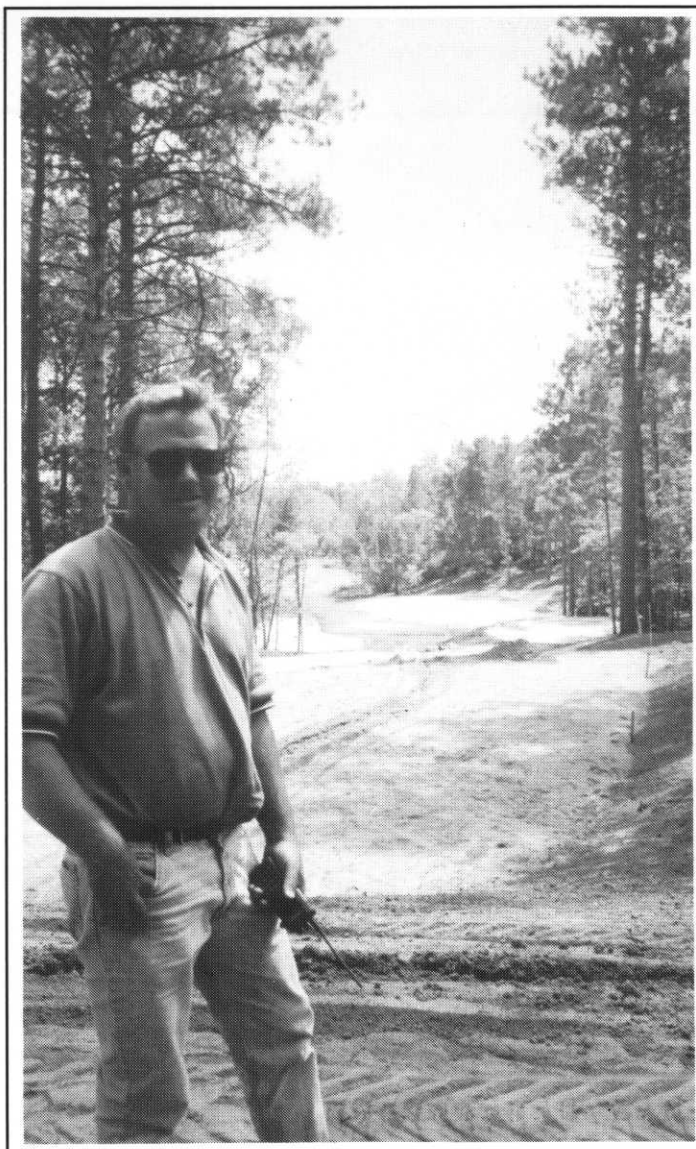
For Tom Kientzle, golf operations manager and head golf course superintendent at Grand View Lodge in Nisswa, the summer of '93 will be one he'll long remember.

Not only did he have his normal responsibilities of making certain that Grand View's 18-hole Pines and 9-hole Garden courses were in meticulous condition for resort guests, daily players, special golf tours and several tournaments, but he also was involved with:

- Construction of nine more holes at The Pines;
- Preparations for construction of a new clubhouse;
- Installation of a new, computerized irrigation system;
- Construction of a new maintenance building;
- Special preparations for various tournaments;

including the Minnesota Golf Association's statewide low net foursome competition September 7-8 at The Pines.

Fortunately, the Rains of '93, which hampered operations of virtually all golf course superintendents throughout Minnesota, proved to be more of a series of minor but frustrating delays than overly serious problems in the Gull Lake area of Central Minnesota. As a result, construction of the new Pines' nine moved ahead much as planned. In



fact by the end of August, construction was two weeks ahead of schedule.

Building of these nine additional holes had been part of a 5-year plan by the owners of Grand View Lodge, but the construction schedule was advanced two years because of the heavy demand for tee times.

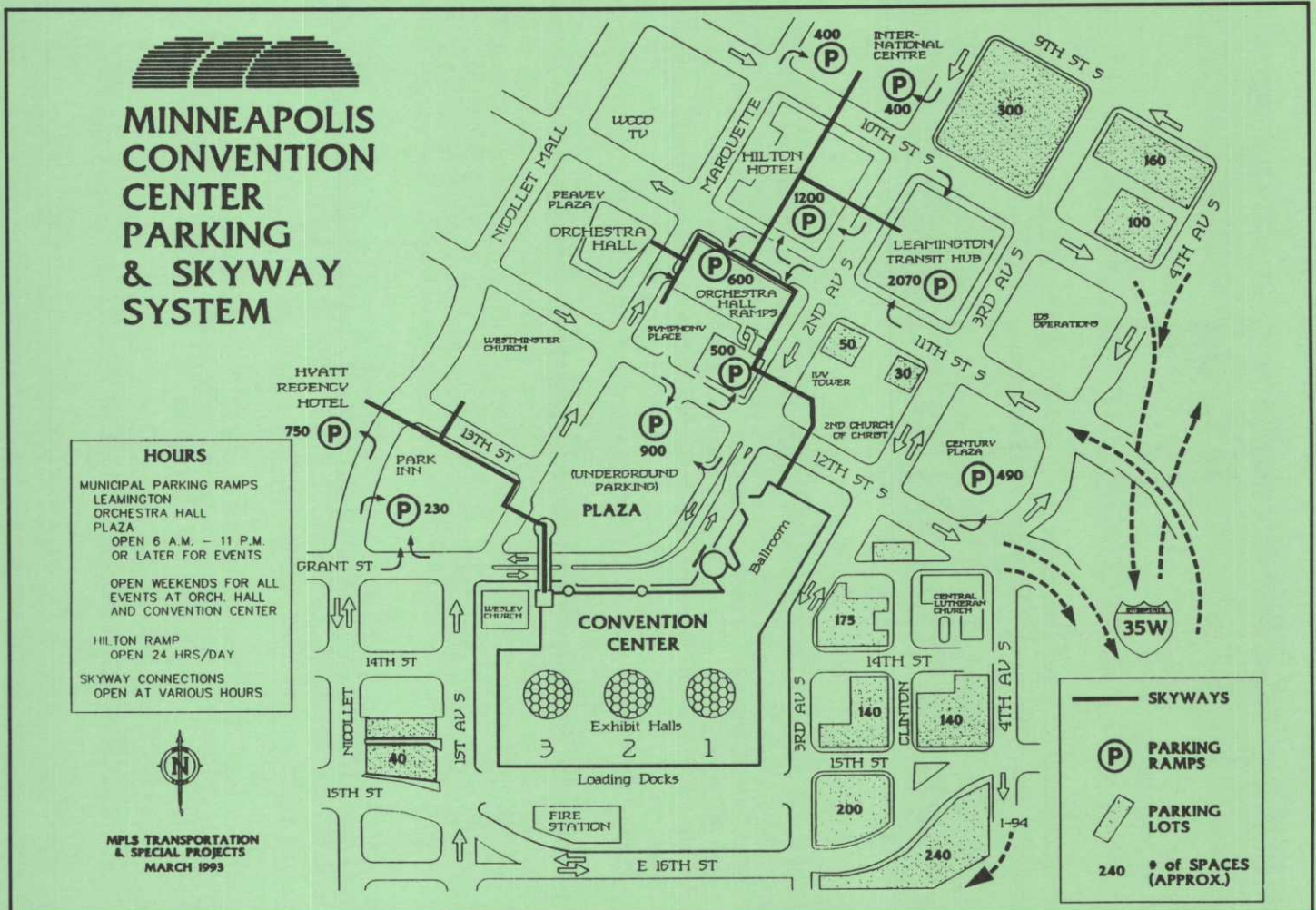
Kientzle's experience with construction of the original Pines course proved most beneficial when the new nine was started.

"I was involved right from the start of the first 18 back in 1988," said Kientzle, who has been head golf course superintendent since 1981. "That experience with practically every facet of construction was most helpful. I don't want to minimize the various problems that arise with any new construction, but this time around I had a good idea of what to expect and how to handle various problems when they arose."

By mid-May virtually all clearing and grubbing was completed.

By the end of July the fairways, tees and greens were
(Continued on Next Page)

MGCSA GUIDE TO MINNEAPOLIS CONVENTION CENTER PARKING & SKYWAY SYSTEM



DIRECTIONS TO THE MINNEAPOLIS CONVENTION CENTER 1301 SECOND AVENUE SOUTH — MINNEAPOLIS, MN 55403

94 FROM THE EAST (ST. PAUL)

Take the 11th Street Exit: Follow 11th Street S. until you reach 2nd Avenue South, turn left onto 2nd Avenue S. and cross 12th Street S. The Convention Center will be on your left. The Underground Plaza Parking Ramp is on your right.

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35W FROM THE SOUTH (BLOOMINGTON)

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35W FROM THE NORTH

Take 35W to the Washington Ave. Exit: Take a right on Washington Ave. S., follow Washington Ave. S. to 2nd Avenue S., turn left onto 2nd Avenue S. and cross 12th Street S. The Convention Center will be on your left. The Underground Plaza Parking Ramp will be on your right.

394 (HIGHWAY 12) FROM THE WEST

Take Downtown Exit (12th Street): Follow 12th Street S. to 2nd Avenue S. and turn right. The Convention Center will be on your left. The Underground Plaza Parking Ramp will be on your right.

TRUCK DOCK ENTRANCE

Take 3rd Avenue South to 16th Street S., take a right turn onto 16th Street S. to 1st Avenue South. Take a right onto 1st Avenue S. — take first right into dock area. Dock is behind Fire Station #6.

PUBLIC ENTRANCE

There are 4 public entrance rotundas located on Second Ave. S. & Grant St., labeled Ballroom Entrance, Plaza 1, Plaza 2 & Plaza 3. **Across from the Plaza** Designated entrance for *handicapped* is adjacent to Plaza 3 (entrance closest to Wesley Church).

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Enter either on Second Avenue S. or on 12th St. S. Exits on either Marquette Ave. S. or on 12th St. S. *The Plaza Ramp has *handicapped* parking — elevators and a skyway connect the Ramp to the Convention Center, allowing easy access for wheelchairs.

MGCSA 66th ANNUAL TURF CONFERENCE

November 17, 18 & 19, 1993

Minneapolis Convention Center • Minneapolis, Minnesota

Wednesday, November 17, 1993

7:30 a.m. - 10:00 a.m.	Registration	
9:00 a.m. - 11:00 a.m.	MGCSA Annual Business Meeting - Rm. 208	Thinking Staff - Rm. 211 Session Moderator - Dale Parske
	GCSAA Representative - Issues Update Dave Ferris	1) Monty Montague — Equipment and Topdresser Maintenance 2) John Betchwars — Course Set-Up & Presentation 3) Steve Garske — Course Accessory Maintenance 4) Paul Diegnau — A Pre-Germinating System for Seed 5) Leif Erickson — Common Sense on the Golf Course 6) Todd Severud — Tee Box Maintenance, 7) Scott Bjorge — A Brand New Approach to Aerification 8) Rich Meyer — Constructing a Greenhouse For Your Greens 9) Martin Terveer — Innovations for your Spray Systems 10) Michael Ward — Building a Green Roller
11:00 a.m. - 1:00 p.m.	Lunch and Awards Presentation	* Watson Award * Distinguished Service Award * Scholarships * Service Awards 25, 30, 35 etc. * New Board Introductions
	Lunch Address by: Jack McCloskey, G.M., Minnesota Timberwolves Participation Optional (Pre Registration Required) David McNally — Keynote Speaker - Rm. 205 I.P.M. Strategies — Concurrent Workshop - Rm. 208	Golf Course Construction & Design - Rm. 211 Concurrent Workshop Tom Doak - Practice Facilities Jim Latham - Tee Construction Mike Morley - Construction Budgeting Leon Howard - Physical Soil Analyses
1:00 p.m. - 2:00 p.m.		
2:00 p.m. - 5:00 p.m.	Instructor: Gerald Ferrantino Professor, Cornell University	

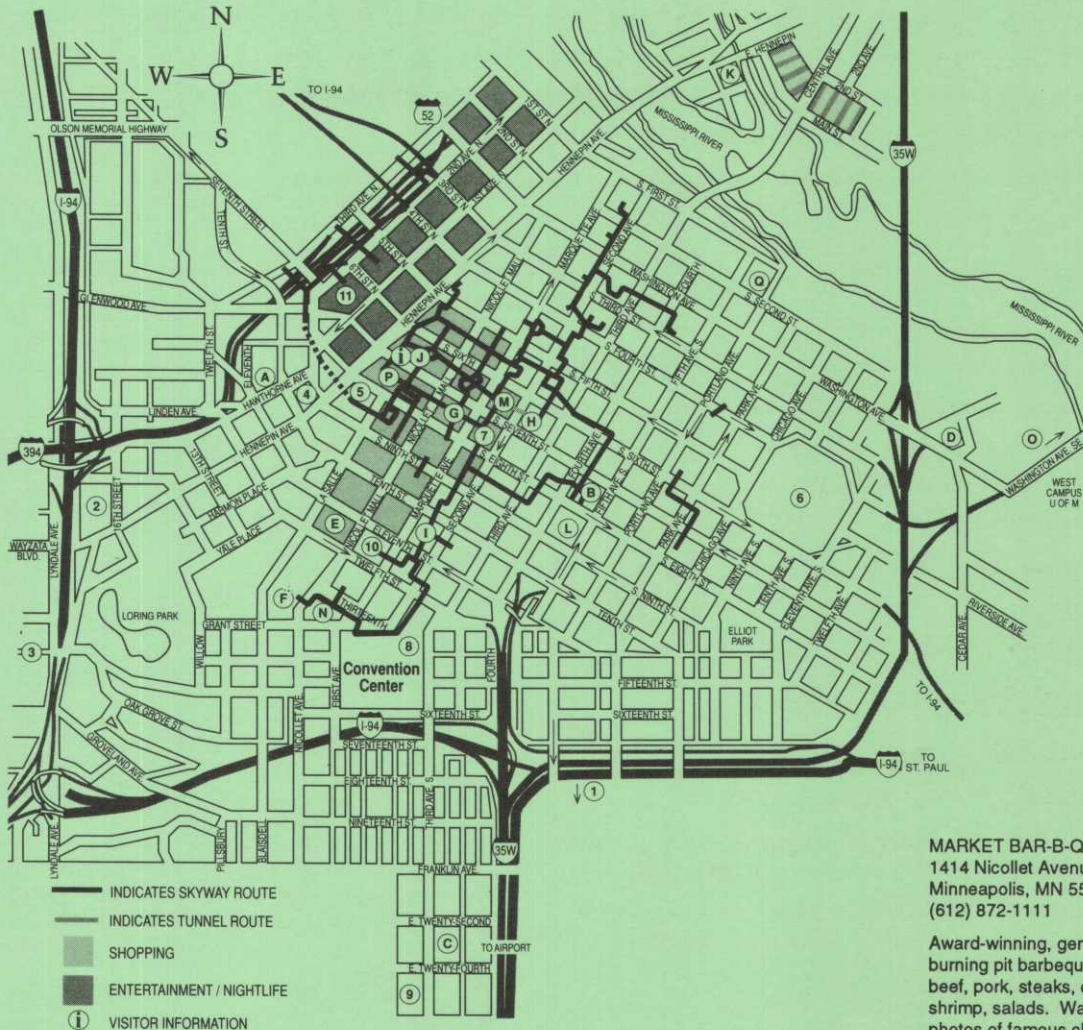
Thursday, November 18, 1993

7:30 a.m. - 8:30 a.m.	Fellowship Meeting - Rm. 101	
8:00 a.m. - 9:00 a.m.	Registration	
8:00 a.m. - 11:00 a.m.	Professional Relations- Rm. 208 Concurrent Workshop George Carrol - Team Building Jim Snow - Selling Your Ideas Reed MacKenzie - Effective Committees Craig Waryan - Pro Functions	Landscaping the Golf Course - Rm. 211 Concurrent Workshop Instructor: Brad Pedersen, U of M Turf Specialist/Assoc. Professor
11:00 a.m. - 12:00 noon	Community Relations and Pesticide Risk Management - Rm. 205 — Dr. Frank Rossi, University of Wisconsin	1) Maintenance Considerations 2) Plant Material Selection 3) Project Estimating
12:00 p.m. - 1:00 p.m.	Lunch Choose from numerous area restaurants, all within walking distance by skyway or on-site cafeteria.	Board/Committee Speaker Luncheon
1:00 p.m. - 4:00 p.m.	Trade Show - Rm. 101	
4:00 p.m. - 5:00 p.m.	GCSAA Caucus — Jim Nicol	
5:00 p.m. - 9:00 p.m.	Hospitality Night Convention Center Ballroom	

Friday, November 19, 1993

7:00 a.m. - 8:30 a.m.	Industrial Relations Meeting	
8:00 a.m. - 9:00 a.m.	Registration	
8:30 a.m. - 11:00 a.m.	USGA Program Jim Snow - USGA Research Bob Vavrick — Cutting Edge Technology Jim Latham - Turf Tips	
11:00 a.m.-11:30 a.m.	Physically Limited Golfers — Jim Listerud	
11:30 a.m.-12:30 p.m.	Lunch Choose from numerous area restaurants, all within walking distance by skyway or on-site cafeteria.	
12:00 p.m.	Past President's Luncheon	
12:30 p.m. - 1:30 p.m.	Facility Evaluation — Janet Altmann, OSHA	
1:30 p.m. - 2:30 p.m.	The Anatomy of a Golf Course — Tom Doak, Author	
2:30 p.m. - 3:00 p.m.	Thinking Superintendents: Management Skills gained through hosting a tournament: • Tom Fischer • Jim Gardner • John Katterheinrich	

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1993 MGCSA Annual Conference Registration

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Please complete the registration form below including which workshops you will be attending.
Thank You.

Name _____ Class _____
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	Member	Non-Member	Student	Total
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Individual Day Registration
Wednesday November 17th

Full day—lunch included	\$ <u>55</u>	\$ <u>65</u>	\$ <u>55</u>	\$ _____
Full day—no lunch included	\$ <u>35</u>	\$ <u>45</u>	\$ <u>35</u>	\$ _____

Workshops Concurrent—Please Choose One
 A.M. and one P.M.

- | | |
|---|---|
| <input type="checkbox"/> A.M. Thinking Staff | <input type="checkbox"/> P.M. Workshop—IPM |
| <input type="checkbox"/> A.M. MGCSA Annual Business Meeting | <input type="checkbox"/> P.M. Workshop—Construction |

Thursday November 18th

Full day—includes Trade Show —Lunch on your own	\$ <u>35</u>	\$ <u>45</u>	\$ <u>35</u>	\$ _____
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Workshops Concurrent—Please Choose One
 A.M. Workshop—Professional Relations
 A.M. Workshop—Landscaping

Friday November 19th

Full Day—Lunch on your own	\$ <u>20</u>	\$ <u>25</u>	\$ <u>20</u>	\$ _____
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Daily Parking Passes \$5.00/day Number of days _____ × \$5.00 \$ _____

TOTAL \$ _____

* = Discount for Class C members (Provided by Scholarship Fund)
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Deadline: November 1, 1993

The Pines—

shaped.

By early August seeding of the bluegrass fairways and tees and the bent grass greens had begun.

By September 8, six greens already had been mowed.

"Next spring fine-tuning of the course will get it in shape for partial play around Memorial Day, and we should be fully operational by July 1," Kientzle said.

Architect for the new nine is Joel Goldstrand, St. Louis Park, Minn., who designed the original Pines which, in 1991, was named one of the top five new resort courses built that year in the United States. "Working with Joel also was beneficial," Kientzle said. "We both knew the way each of us approached our goals and our work."

Like the original 18, the new Pines' nine will have four sets of tees. Yardages range from 3,400 from the championship tees to 2,600 from the shortest.

"It may be hard to believe, but the manner in which the fairways weave through several attractive stands of Norway Pines, the rolling terrain, 11.9 acres of wetlands and two man-made ponds should make the new nine equally as attractive as the first 18, possibly even more," Kientzle said. "The fifth and eighth holes are particularly nice."

Construction is being done by Rardin Construction, Brainerd, and Par Four Shaping, Spicer, Minn.

Meantime, construction of an unusual, two-winged clubhouse—which features considerable use of glass to provide excellent views of a spectacular waterfall and special landscaping treatment—has been proceeding on schedule.

The 5,000 square-foot building will house a new pro shop, a bar and grill with dining space for 100 persons, a deck that will seat 40, lockers and showers for members and daily golfers, bag and cart storage and a variety of other amenities. An additional putting green also will be built.

"Considering the heavy demand for play and our con-



REVIEWING A MODEL of the new clubhouse under construction at The Pines are, from left, Kevin Cashman, head professional; Fred Boos, a part-owner of Grand View Lodge, and Tom Kientzle, golf operations manager and head superintendent.

struction of nine more holes to meet this demand at The Pines, we needed the larger pro shop and pleasant dining facilities to accommodate our clientele comfortably," said Mark Ronnei, Grand View's general manager. "Construction should be completed next April."

Initially the clubhouse will be open for breakfast, lunch and after-golf dining in the wing pointed toward the 18th green. That's where a spectacular waterfall will be the focal point of landscaping around the clubhouse.

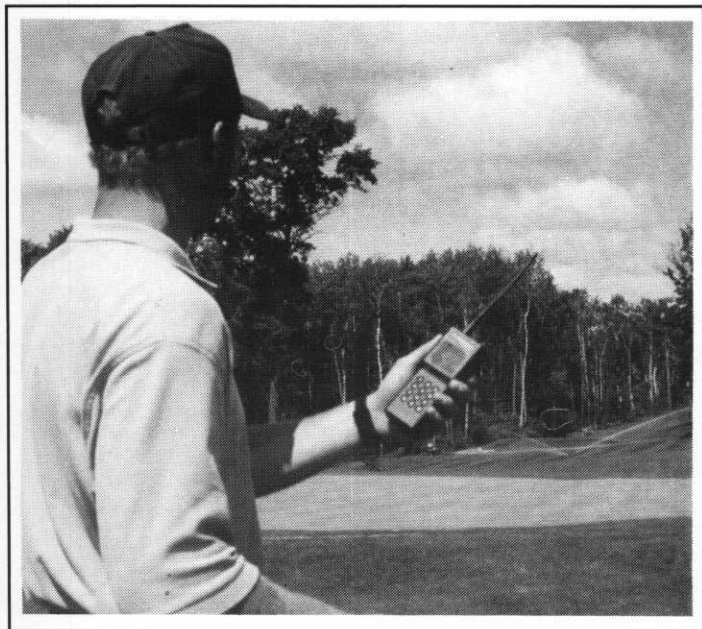
"**The waterfall, which will be lit at night**, will be surrounded by an incredibly special treatment of flowers, trees and shrubs," Kientzle said.

A circular driveway to the entrance of the clubhouse will provide easy access to both the pro shop and the dining areas as well as a bituminous parking lot.

The pro shop, located in the wing facing the current first and 10th tees, will have space for attractive displays of golf merchandise, two offices and a registration counter. Lockers, club storage and cart storage will be located on a lower level.

Meantime a new, computerized Osmac irrigation system, which works in conjunction with Motorola radios, has been installed on all 27 holes of the Pines. A new maintenance building also has been completed to house vehicles for daily operations.

Yes, indeed, it has been a busy summer for Kientzle, who is quick to point out that his 35-person crew "has performed remarkably well. One man can't do it all. It's really been a major team effort."



DEMONSTRATING how a new Osmac irrigation system works at The Pines, is Kevin Rue, assistant superintendent. Above he starts the sprinkling of water on the ninth fairway.

Fertilization - Fall and Late Fall Style

By Paul E. Rieke
Crop and Soil Sciences
Michigan State University

One of the very important turf management practices during the fall is fertilization. This time of year there are many other activities which require time and attention, but fertilization must also be given priority. For many reasons, turf management practices done in the fall will have a major effect on the quality of turf the following spring. Fertilization is one of the most important.

Phosphorus and potassium in the fall

The key nutrient in fall fertilization is nitrogen. Some have suggested phosphorus and potassium are the key nutrients in fall fertilization. Certainly, these nutrients should be available to turf in adequate quantities. For example, when potassium is limiting, there is a reduction in stress tolerance. Considering the potential for low temperature injury to turf during winter, if potassium could have an impact on reducing low temperature injury, turf managers should be sure adequate potassium is available to the turf. There is also some evidence to suggest there is an increase in susceptibility to snowmold when potassium is limiting.

To be sure there is adequate potash in the soil, use a soil test for medium and fine-textured soils. If tests suggest potash is needed, appropriate rates should be applied based on recommendation and common sense. For turfs on sands, soil tests for potassium are usually low in spite of a potash fertilization program. Regular, light applications of potash at frequent intervals (spoon feeding) should be made on sandy soils, particularly on sand greens.

When late fall fertilization is practiced, some potash should also be applied along with the nitrogen. On finer-textured soils, apply potash at about half the rate of nitrogen. On sands, use equal quantities of nitrogen and potash.

If needed based on soil test recommendations, phosphorus can be applied in the fall fertility program as well, normally in a complete fertilizer. Seldom is phosphorus limiting on turf. An exception is when no phosphorus has been applied and clippings are routinely removed. Another potential exception is on sand greens. Sands have little capacity to hold phosphate. We have seen several cases of phosphorus deficiency on sand greens, more commonly on new greens, but also on older greens where no phosphorus has been applied for some time. Soil tests must be used to determine need for phosphorus.

Fall Nitrogen

For cool season grasses, both fall and late fall fertilization should be considered. Fall fertilization is best done during September, preferably early in the month. With the weather changes in late summer, the shorter days, cooler nights and more regular rainfall cause the turf plant to

grow less rapid vertically than occurs in the spring. More lateral growth results in improvement in turf density after the rigors of the summer. So fertilization in the fall deserves top priority. Carbohydrates manufactured at this time of year will be more likely to be stored, building up the plant for next year.

Appropriate rates of nitrogen applied during the fall period depend on a number of variables, ranging from ½ to 1 lb. N per 1000 sq. ft. On occasion a higher rate may be justified; examples include newly established turf which needs pushing for rapid establishment or a turf which has suffered serious thinning over the summer due to injury from disease, insects, traffic or moisture stress or where an extensive weed population has been controlled, leaving open areas. On general turfs (lawns, grounds, etc.) all the nitrogen can be applied in one application. For greens and other high maintenance turfs, one can split this into two applications if the higher rate of nitrogen is needed. An alternative is to use a fertilizer which contains more slow release nitrogen. Or a spoon feeding program with weekly applications of soluble sources can be used, particularly on greens.

Normally, it is best to withhold nitrogen applications during October to permit the turf to "harden off." This permits the turf to accumulate carbohydrates and reduces the potential for frost-injury should the turf become very succulent before a major freeze. Avoiding nitrogen during October may reduce susceptibility to snow mold as well.

Late Fall Nitrogen

There are a number of opinions as to how and when to use late fall nitrogen applications. In part, this occurs because of differences in climatic zones and variations from one season to the next. Perhaps the more important reason for variation in late fall fertilization is the objective for this practice.

From my perspective, the objective is to *supply nitrogen to the turf after growth has ceased*. The root system is still active since the soil is warmer than the air. Nitrate nitrogen can still be taken up and utilized by the plant. If proper nitrogen fertilization has been practiced during the fall (September) period, the turf should still be green and physiologically active. This permits the plant to continue photosynthesis whenever modest temperatures and some sunlight conditions occur. Carbohydrates manufactured during this time are not "burned off" with growth and clippings, but are stored. This builds up the plant for next spring.

Rate of application of nitrogen will again vary with turf conditions and philosophy of the turf manager. For greens,

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Fall Fertilization —

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½ lb. N per 1000 sq. ft. may be sufficient. If tees are still thin from traffic, especially on par 3 tees, ¾ to 1 lb. may be needed. Fairways, could receive ½ to ¾ lb. Lawns and general grounds can receive ¾ to 1 lb. N.

Some turfs may perform better without the late fall nitrogen. Some lawn care companies cannot justify the cost of late fall nitrogen for customers who may not continue with their services the next year. However, the quality of the turf the next spring should be excellent about the time spring sales begin.

Snowmold was severe on many turfs over the winter of 1992-93. Late fall nitrogen applications contributed to greater snowmold in some cases. If turfs are hard hit by snowmold nearly every year and no snowmold preventative program is followed, it may be best to avoid late fall nitrogen.

However, based on plot research done by Dr. Joe Vargas and on observations in the field, it is clear that while in most years the late fall nitrogen may increase the amount of snowmold, there is much quicker recovery from any injury caused. The snowmold damage may be more superficial with the late fall nitrogen and/or the recovery is quicker. Either way the next spring the turf returns to a better quality condition sooner with late fall nitrogen.

For the Great Lakes region, we suggest applying the nitrogen after growth has ceased for all practical purposes. This does not mean there will be no need to further mowing, but regular mowing will not be needed. An additional mowing or two may be required before growth ceased entirely. This occurs anywhere from the last week of October to the second week of November.

Potential problems with late fall nitrogen fertilization include the potential for leaching of applied nitrogen, late fall growth which would require more mowing, affecting snowmold and other winter injury, increase to thatch and earlier spring growth. In a study here at Michigan State being conducted by Eric Miltner and Bruce Branham, which compares late fall nitrogen treatments with those emphasizing spring applications, there is no significant leaching of nitrates from either treatment thus far. If the nitrogen is applied while the plant is still physiologically active, most of the nitrogen should be used and will not be available for leaching over the winter. There is evidence from Ohio State that late fall nitrogen may increase susceptibility to thatch formation to some degree.

While there may be a small increase in growth during the fall or spring, most turf managers are satisfied the benefits are far greater than the potential negative effects. There is no evidence for increased susceptibility to low temperatures or crown hydration injury which is caused by late fall nitrogen.

Benefits of late fall nitrogen include good carbohydrate levels in the turf the next spring, good early spring root growth, good fall and spring color and good turf density so there is less potential for establishment of spring weeds. Since root growth of cool season grasses begins before top

growth, it is essential that a high level of carbohydrates exist in the plant to initiate that root growth.

The next spring the turf will have a good color. There will likely be a small increase in mowing needed in the spring compared to a turf which receives no nitrogen either in late fall or spring. But the growth will be very limited compared to a turf which receives an early spring fertilization. Avoiding early spring nitrogen has the advantages of reduced carbohydrate loss caused by the excessive growth, less mowing, potential reduction in several diseases and greater moisture stress tolerance during the summer. If we can provide a turf which has good density and fewer weeds, requiring less herbicide as well as greater stress tolerance, why should we not adopt the practice?

With many advantages apparent for late fall nitrogen and few disadvantages, it is clear why so many turf managers have adopted this practice. I have not talked to anyone who has tried late fall nitrogen fertilization who has not continued to utilize the practice for agronomic reasons. This is the best testimonial for late fall fertilization.

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