

(Continued from page 39)

Why the results of this study were contrary to expectations cannot be explained without more detailed observations. It is also possible that had the study been conducted at different times during the season with more intense or a different type of wear, the results may have been quite different. Further study is clearly needed before firm conclusions can be drawn about what proportions of Kentucky bluegrass and tall fescue are needed in a blend to create a turf for high traffic areas.

Literature Cited

1. Adams, W.A. 1994. Turfgrasses for sport and amenity use. p. 43-45. In Natural turf for sport and amenity: Science and practice.
2. Anonymous. 1988. Match your turf with your sport. Land Mgmt. 27(8):50.
3. Beard, J.R. 1990. Turfgrass wear tolerance. Grounds Maintain. 25(7):32, 72, 74.
4. Carroll, M.J., and M.A. Petrovic. 1991. Wear tolerance of Kentucky bluegrass and creeping bentgrass following nitrogen and potassium application. HortScience 26(7):851- 853.
5. Carrow, R.N., and M.A. Petrovic. 1992. Effects of traffic on turfgrass. Turfgrass 32:285-324.
6. Duncan, D.N. 1974. Measurement techniques and wear tolerance as related to turfgrass thatch and mat. p. 98. In Agronomy abstracts. ASA, Madison, WI.
7. Hawes, D.T., and A.M. Decker. 1977. Healing potential of creeping bentgrass as affected by nitrogen and soil temperature. Agron. J. 69:189-193.
8. Shearman, R.C., and J.B. Beard. 1975. Turfgrass wear tolerance mechanisms: I. Wear tolerance of seven turf-

grass species and quantitative methods for determining turfgrass wear injury. Agron. J. 67:208-211.

9. Shearman, R.C., and J.B. Beard. 1975. Turfgrass wear tolerance mechanisms: II. Effects of cell wall constituents on turfgrass wear tolerance. Agron. J. 67:211-215.
10. Shearman, R.C., and J.B. Beard. 1975. Turfgrass wear tolerance mechanisms: III. Physiological, morphological, and anatomical characteristics associated with turfgrass wear tolerance. Agron. J. 67:215-218.
11. U.S. Department of Agriculture. 1990. Wear tolerance ratings of Kentucky bluegrass cultivars. p. 27 (Table 9). In National Kentucky bluegrass test: Natl. Evaluation Program. USDA, Gov. Print. Office, Washington, DC.
12. U.S. Department of Agriculture. 1990. Wear tolerance ratings of Kentucky bluegrass cultivars. p. 22 (Table 14). In National Kentucky bluegrass test: Natl. Evaluation Program. USDA, Gov. Print. Office, Washington, DC.
13. U.S. Department of Agriculture. 1990. Wear tolerance ratings of Kentucky bluegrass cultivars. p. 26 (Table 7). In National Kentucky bluegrass test: Natl. Evaluation Program. USDA, Gov. Print. Office, Washington, DC.
14. Ventola, M., and J.N. Rogers III. 1992. Crumb rubber from used tires as a soil amendment for high traffic turfs. p. 177. In Agronomy abstracts. ASA, Madison, WI.

Douglas Schoch will be graduating from the UW-Madison Turf and Grounds Management Program in December 1996. His career goal is that of sports turf manager. In preparation, he has worked the past 6 summers on the Milwaukee County Stadium grounds crew. His genuine interest in sports turf management and an outstanding academic record recently earned him a scholarship from the Sports Turf Managers Association. 🏆



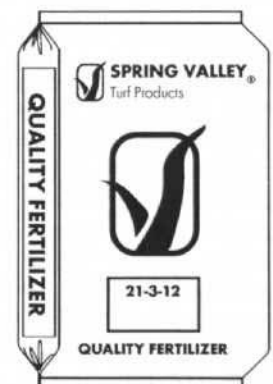
SPRING VALLEY®

Turf Products

ALL YOUR TURF PRODUCT NEEDS UNDER ONE ROOF



1-800-635-2123



Spring Valley fertilizers are made from quality products like Poly coated urea, Nutralene®, GSL® sulfate of potash and Milorganite®.

Fertilizers are screened and sized for uniform spreading.



Jump-Starting Microbe Activity in Sand-Peat Root Zone Mixes

By Dr. Wayne R. Kussow
Department of Soil Science, University of Wisconsin-Madison

A trend that seems to have invaded the golf turf world in recent times is the application of large amounts of nitrogen to speed bentgrass establishment on sand putting greens. From discussions I've had, application of 30 lb N/M in the grow-in year, which is about double that recommended by USGA Green Section agronomists, is fairly common. Considering that in subsequent years the annual N rate generally settles in at about 3 to 5 lb/M/season, application of 30 lb N in the establishment year raises some interesting questions. Why do superintendents see the need for so much N? What do these N rates do for root development? Can these N rates set the stage for putting green failure? What are the environmental implications?

An untested response to the first question is that the problem is one of an initially low level of microbe activity in sand-peat mixes. The presumption behind this response is that when microbe activity is very low, the level of biocycling of N is equally low. Hence, fertilizer N needs are correspondingly high. Unfortunately, there is very little research that supports this presumption.

Research has demonstrated that by the time sand-peat greens are into their second year after establishment, microbe populations are very similar to those found in turf several years after establishment on native soil. In this circumstance, soluble fertilizer N virtually disappears within 48 hours after introduction into the root zone. Up to 75% of the soluble N is absorbed by the turfgrass. The remaining 25 to 40% is consumed by soil microorganisms. Much of this "immobilized" fertilizer N is thought to eventually become available to the turfgrass as a result of constant turnover of the microbe population. Thus, some 25 to 40% of the soluble fertilizer N applied takes on the character of slow-release nitrogen.

The scenario that has evolved from these types of observations is that new putting greens require so much N

for grow-in because of severely restricted biocycling of fertilizer N. An added factor may be a consequence of the fact that root zone mixes initially contain only organic material with a high carbon:nitrogen ratio. Such material cannot sustain, let alone allow for the buildup of a high microbe population. A substantial amount of fertilizer N applied during turfgrass establishment may actually be used by microbes to offset the lack of N in the root zone organic fraction. At present, both explanations for the abnormally high N requirements of putting greens during grow-in are highly speculative. I'm anticipating the the new round of research recently funded by the USGA Green Section will include careful examination of the microbe dynamics of new putting greens and the consequences as far as N requirements are concerned. Meanwhile, there is great interest in the notion that considerable benefit can be derived from incorporat-

ing into root zone mixes organic materials that have the potential for greatly accelerating the buildup of microbe populations. Organic materials with low C:N ratios and substantial amounts of sugars, carbohydrates, amino acids and proteins are logical choices. Additional benefit may be realized if the materials themselves contain microorganisms commonly found in soil.

Thanks to the interest and financial support from the Milorganite Division of the MMSD, I have underway a greenhouse experiment that should provide some insights into the virtues of amending sand-peat root zone mix with different kinds and amounts of organic materials. My purpose here is to share with you some of my general observations and the lessons learned so far. I feel it is important to do so before any of you get involved in putting green construction.

One of the things being observed in simulated putting greens is the overall

You Want it Done Right, Right?

Doin' Bentgrass right for 16 years & Bluegrass right for 30 years

- Washed Big Roll or Standard Cut Bentgrass or Bluegrass Sod
 - Penncross or Pennlinks Bentgrass Sod
 - "Executive Blend" Bluegrass Sod

Pictured below: The state-of-the-art StrathAyr Big Roll Turf Washer



HUBER RANCH SOD NURSERY, INC.

Route 41, P.O. BOX 188, SCHNEIDER, IN 46376

1-800-553-0552 • (219)552-0752 FAX

level of microbe activity at two depths in the root zones. I do have evidence that sand-peat mixes initially have very low levels of microbe activity and that this activity can be jump-started with high energy, low C:N ratio organic materials. BUT, in the three treatments exhibiting the highest level of microbial activity two weeks after seeding, disaster struck. Two weeks into the study these greens had dense, uniform, dark green stands of bentgrass approaching 1/2-inch in height. Over a 3 day period the grass suddenly turned brown and died. This observation leads to lesson #1: Being overly zealous in our efforts to stimulate microbe activity in root zone mixes can lead to unemployment!

In another series of treatments, greens with unamended root zone mix are being fertilized with feed-grade urea at rates of 0.2, 0.4, or 0.8 lb N/M/week. Over a 24-week season, these N rates lead to annual totals of 4.8, 9.6, and 19.2 lb N/M. The greens are now into their third month of establishment. Stand density, uniformity, growth rate and color are near ideal in the greens receiving 0.2 or 0.4 lb N/M/week and there is no visual differ-

ence between them. At the 0.8 lb N rate, several problems were encountered. The first was what appeared to be potassium deficiency. This was surprising in view of the fact that K was incorporated into the top 3 inches of the root zone mix expressedly to ensure an adequate K supply. Application of K restored some color to the bentgrass, but recovery was not complete. Adding a micronutrient mix gave some further improvement, but in the meantime the greens had thinned out and still have not filled in. Within the past week a new problem has cropped up at the 0.8 lb N rate. This time it appears to be an as yet unidentified disease. These observations lead to lessons #2 and #3. Lesson #2 is that for the environmental conditions under which the experiment is being conducted, application of more than 0.4 lb N/week is not advisable. Lesson #3 is that if you do choose to push the grow-in process by applying in excess of more than about 10 lb N/M/season, be prepared to deal with secondary problems such as multiple nutrient deficiencies and heavy disease pressures. In one treatment I'm attempting grow-in with 0.5 lb SRN/month. I've

found it necessary to supplement the SRN with periodic applications of soluble N. Thus, lesson #4 seems to be that rapid grow-in cannot be accomplished with SRN alone.

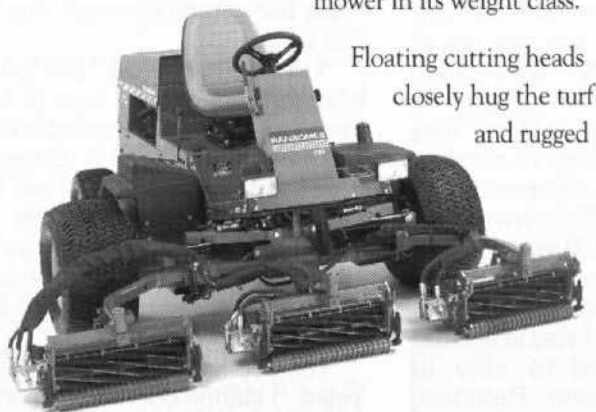
In certain treatments where the root zone mix has been amended with organic materials, it has been possible to achieve satisfactory bentgrass establishment without application of soluble N. One such treatment has, however, begun to show the same symptoms as experienced when the root zone mix was not amended and the soluble N rate was 0.8 lb/M/week. This leads to lesson #5: Pushing the bentgrass along too fast with some organic materials selected to promote microbe activity can, like the 0.8 lb N/week, create secondary problems that will have to be dealt with.

Summing these five lessons, I think it is obvious that extreme caution must be exercised when taking actions designed to jump-start the microorganism population in sand-peat root zone mixes. This is a case where solid research needs to precede action. Acting on the basis of theory, speculation or hype could prove detrimental to your health! 🍷

The New Lightweight Champion

Introducing the Ransomes® 250 Fairway Mower

No lightweight contender stands a chance against the 250's winning combination of features. All you have to do is demo the 250 to appreciate its drive to outperform, outpower, outproduce and outmaneuver any mower in its weight class.



Floating cutting heads closely hug the turf and rugged

hydrostatic drive grips the terrain for an unsurpassed cut. Even weight distribution eliminates "bouncing" for a smooth, clean finish. The 23-, 28- or 33-horsepower engine muscles the 250 up inclines or around any obstacle, but not at the expense of agility. The 250 is extremely quick on its feet.

Before you put your money behind any other lightweight, give the Ransomes® 250 a workout. It's the only mower to have in your corner for a winning performance on the fairway. Ransomes...the reel thing.

Call today for your free demonstration.



RANSOMES
Driven to be the best.

HANLEY COMPANY, INC.

641 W. Main St., Sun Prairie, WI 53590 (608) 837-5111, Ext. 355 Toll Free 1-800-279-1422



Destined to Design Irrigation Systems

By Lori Ward Bocher

Beginning at age 16 when he dug his first trenches and laid irrigation pipe, it seemed that Tom Emmerich was destined to work in the irrigation business. Oh, he strayed during those first few years after college. But he jumped back into irrigation the same year he turned 30. And today, at the age of 40, he's a private irrigation consultant with his own firm, T.J. Emmerich Associates, Inc., out of Hartland, Wis.

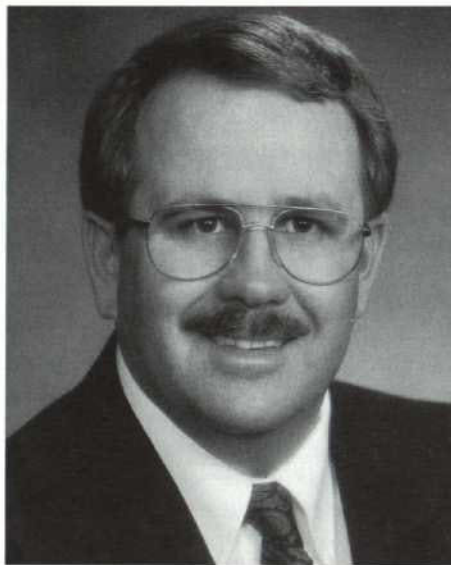
Tom, who was born in Milwaukee, grew up in a typical middle class family with three older brothers and an older sister. He paid attention to his older brothers, especially Bob, who was eight years his senior.

"While he was in high school, Bob got a job with the Acme Lawn Sprinkler Company," Tom explains. "At that time, residential systems were all Goodyear rubber pipe and everything was glued together." When Tom turned 16, he, too, went to work for the Acme Lawn Sprinkler Company, digging holes and putting in sprinklers.

When that job wasn't available the next summer, Tom again looked to his older brother, Bob. "When Bob graduated from college he went to work as the assistant manager at R&S Parts which was the Toro Irrigation distributor at the time," Tom explains.

When he was 17, Tom was hired as the "counter guy" at R&S Parts. "I stocked shelves, filled orders and did some field service, and I worked there through high school," he recalls, adding that he graduated from Messmer High School in 1973. "When I went to UW-LaCrosse to study business administration, I continued to work for R&S Parts."

Tom's older brothers greatly influenced his choice of majors at college. "One of them studied history, one studied sociology and one studied political science, and they all ended up in the business field," he explains. "It just seemed kind of obvious to me that



Tom Emmerich

some where along the line I'd end up in business, so I decided I'd might as well major in it."

During his junior year at UW-LaCrosse, Tom had a business internship with Tri-State Turf in Davenport, Iowa. "They were a complete line Toro distributor," Tom points out. "I helped them set up their irrigation division."

The summer of 1977 he worked for Milwaukee Lawn Sprinkler Company as a crew foreman and serviceman. "That's when I did my first golf job at Westmoor Country Club," Tom recalls.

Tom graduated from college in December 1977. "Up until my last semester, I had intentions of sending my resume to irrigation distributors and golf course contractors — anywhere in the country where I could work on golf course irrigation," he recalls. "But that summer I met the young lady who was to become my wife. So I was in a situation where I wanted to stay in Wisconsin." At that time, Reinders Brothers had just bought R&S Parts, so there was no job for him there. So he took a job with a Waukesha company, Portec, Inc., selling the structures

and equipment for concrete batch plants. His territory included Washington D.C., Maryland, the Virginias, the Carolinas, Florida, Georgia, Mississippi and Alabama. He was gone all week and home on the weekends only. "I didn't like the traveling much," Tom recalls.

About one year later he took a job with AKO Manufacturing in Butler, Wis. "They made induction heat treating equipment," Tom explains. "If you were a company like Black & Decker that made drill bits, you might buy a machine from us that would automatically harden, or heat treat, those bits as part of the production line."

About three years later a better job opportunity came along with Metal Treating in downtown Milwaukee. "We would do batch heat treating work for manufacturers who didn't have enough volume to own their own equipment," Tom points out. "I ran the induction department and did some sales." He worked there about three years.

"All the time I was working these other jobs, I was keeping up on what was happening in the turf irrigation industry," Tom recalls. So when a sales job opened up at Reinders, he took it. "Dick (Reinders) hired me in May of 1985. And I finally realized that I was back in the business that I loved, that I enjoyed.

"I like being outside. I like the people who are involved," he says of the business. "Growing and maintaining high quality turf is more of a technical field than most people realize. I like to listen to the superintendents. I'm not an agronomist. But in 11 years I've learned a lot about the agronomy side of the business from talking to superintendents."

Tom worked for Reinders for seven years. "I started out as a territory salesman. And then I was a sales manager while still covering nine counties in golf sales," he recalls. "And I was doing irrigation design."

While working at Reinders, Tom completed the certification process with the National Irrigation Association. He's a "Certified Irrigation Designer" for residential, commercial and golf.

"What I know about irrigation design I learned through self education, reading whatever books I could get my hands on, the certification program, and from looking over the shoulder of Dick Reinders," Tom continues. "I learned a lot from Dick Reinders."

In January of 1992, Tom left Reinders to start an irrigation consulting business. In explaining why he became a consultant, Tom discussed the history of golf course irrigation. "In the early years, golf courses just had a hose bib system — a network of underground piping that had a hose bib at every green and tee," he says. "You put a sprinkler on a stand, hooked a hose to it, and moved it around the green. And that's how the greens were irrigated.

"Then quick coupler systems became popular in the late 50's and the 60's," he continues. "The hoseless watering system."

"When golf courses began to install automatic irrigation systems, the equipment manufacturers did the design," he points out. "That service then evolved to the distribution level and finally to professional design consultants.

"Today you have an irrigation system — especially a double-row golf course irrigation system — that is a major investment," Tom continues. "You can easily spend \$500,000 to \$600,000. You wouldn't put up a \$600,000 building without hiring an architect. I'm basically an architect for the irrigation system. I'm also kind of like an insurance policy.

"The other thing is that the demands on the golf course superintendent are much higher than they used to be," Tom adds. "He does not have the time to sort through all the elements involved with the design, budgeting, bidding and construction of a new irrigation system. This is a project that he may do once or twice in his career. I do it every day."

Tom says that irrigation systems have become so sophisticated over the years because the demands of the golfer are greater. "Years ago the only thing that was watered were the greens and tees," he relates. "Now golfers want to play on lush turf from tee to green and beyond. Center row fairway systems used to be good

enough. But now double and triple row systems are becoming the rule rather than the exception."

"Irrigation consultants have always been present on the east coast, west coast, in the sunbelt and in the south," he says. "I could see that consultants would become acceptable in the mid-west. So I decided I'd give it a shot."

As a consultant, he offers a full service from the initial planning to the actual construction. "I look at and evaluate the system that's there and see if any of it can be used again," he explains. "And then I design the new system in terms of the placement and number of sprinklers, the pipe sizing, the control system, the wire sizing, etc."

Then he helps his clients go through the budgeting process. If they decide to go ahead with a project, he'll help them through the bidding process — writing bid specifications and providing the contractors with plans, bid specifications and bid forms.

"That way the client is going to get three or four bids from different contractors for the same set of plans and under the same installation method and materials specifications. So they're comparing apples to apples," Tom emphasizes.

"Part of the potential problem of having contractors do a design/build bid is that you get three different plans from three different contractors at three

different prices. Well, which one is the best? It's hard for someone unacquainted with the industry to decide what's best," Tom says.

Once a bid has been accepted, Tom helps his clients get the contract documents squared away. "And then I actually stake the sprinkler locations, inspect the materials, and make sure the contractor is doing the work according to specification," he explains. "And then I'm usually involved in doing the programming of the system. That's all part of the service."

Tom sells no equipment with his services. And he remains neutral on the brand of irrigation equipment his clients want to use. Clients may choose one brand over another because they're more familiar with it or because they know they'll get good service from the distributor. And Tom sees these as legitimate reasons.

He thinks too much emphasis is sometimes put on the brand. "There's a lot more to a golf course irrigation system than the sprinklers and controls," he points out. "You've got pipe, wire, fittings, a pump station, the right water source. But everyone labels the irrigation system based on the brand name product."

In the past four years, about 85 percent of Tom's work has been with golf courses. He's worked in Wisconsin, Illinois, Indiana and Iowa. And most of
(Continued on page 47)

Annual SUPER/PRO Event

Wednesday, May 29, 1996
Green Bay Country Club

*This event benefits one
of our favorite causes —
The O.J. Noer Research Foundation*

Watertronics Pumping Systems Meeting Your Irrigation Management Needs

Effective golf course irrigation is one of your major concerns, as a superintendent. Maintaining your system can be time-consuming and expensive.

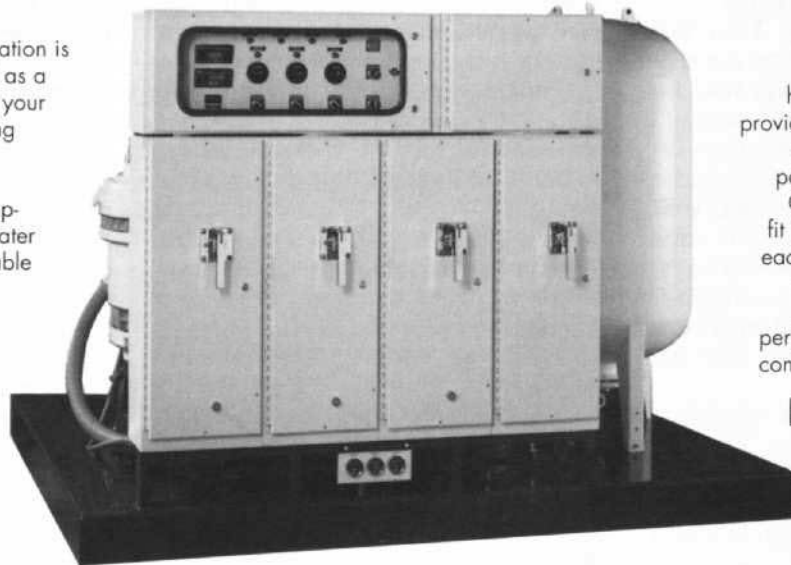
Now Watertronics™ electronically controlled pumping systems make efficient water management simple, affordable and automatic. Advanced microprocessor technology monitors and controls flow, pressure, pump sequence and water usage. Precisely and reliably. To save you time and money, year after year.

Watertronics systems offer electronic pressure regulating valves, VFD adjustable motor speed drives, and remote monitoring packages for optimum wire to water efficiency. Plus each station is dynamically flow tested at the factory.

Excellence in system design and construction

Watertronics systems include a selection of high quality pump configurations:

- Vertical Turbines
- Centrifugals
- Submersibles
- Wet Pit Systems
- Variable Speed
- Booster Stations



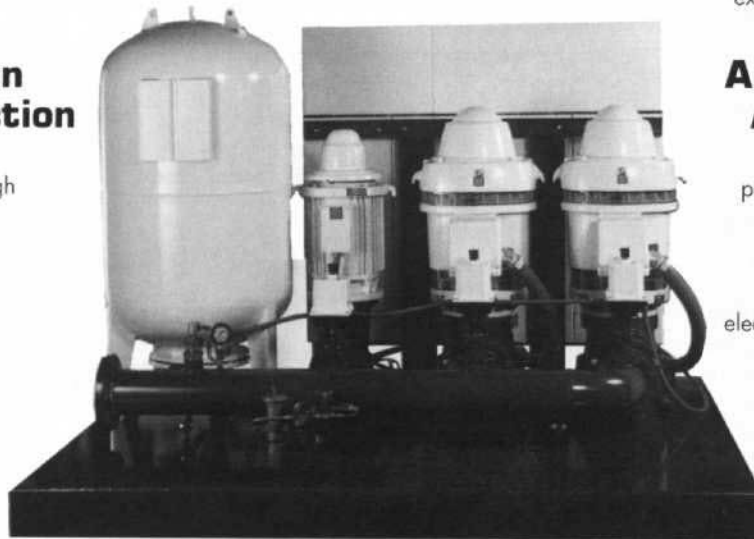
Custom fabricated modular controls to meet your local electrical code requirements.

Custom designed VT 1200 model delivers up to 1200 GPM at 125psi discharge pressure on only a 96" x 108" base.

High engineering and design standards plus heavy-duty construction provide the rugged dependability you expect in a packaged pump station. Custom-design services fit Watertronic systems to each application. No "off the shelf" models, that may not give you the performance capability or configuration you require.

Retro-Fit Controls Packages

Watertronics microprocessor based technology, electronically actuated regulating valves and VFD adjustable motor speed drives can easily be added, increasing performance and efficiency. This means you can retrofit your existing pumps without extensive renovation.



Amazingly Affordable

High-tech doesn't mean high price. Watertronics systems are surprisingly affordable. But don't just take our word for it. Call us today to find out how easy and cost-effective electronically controlled pumping systems can be.

Toll Free: 800-356-6686
or (414) 367-5000

 **WATERTRONICS**
ELECTRONICALLY CONTROLLED PUMPING SYSTEMS

525 Industrial Drive, Hartland, Wisconsin 53029-0530

(Continued from page 45)

his work has been renovation. But he has designed the irrigation system for some new courses—Thornberry Creek near Green Bay, the Green Bay Country Club, the 9-hole addition to Ives Grove Golf Links in Racine County, and The Highlands at Grand Geneva Resort.

Since he's a self-employed businessman, Tom has to think of things besides designing irrigation systems. Competition is one. "There are other irrigation consultants," he points out. "I don't think there's anybody in Wisconsin at this time who's actively doing designing, other than the distributors. But there are a number of consultants in the Chicago marketplace. And there are guys in Indiana and Michigan. One in Iowa. A couple in Minnesota. One out in the Dakotas."

"I'm very fortunate in Wisconsin," he continues. "The members of the WGCSA have been very supportive of my efforts and I'm very appreciative of that. I'm working on getting better known in other markets so things can grow."

To date, Tom hasn't done much active marketing. "Right now I'm doing the business that comes through the door," he explains, adding that he gets clients through word of mouth.

Since he still has a one-man operation, Tom is as busy as he can be. "I need some help," he points out. "Somewhere along the line I've got to find somebody to do the design work so I can be in the field marketing. Or I need somebody to do the marketing so that I can do the design work and the construction observation work."

Before he can do that, he needs to move his office out of his home. "It's difficult to hire somebody and chain them to my CAD system when it's in my basement, against a cement block wall, with the laundry on the other side of the room," he says. "The working conditions aren't the greatest."

While he's watching his business grow, Tom is also watching for changes in the irrigation industry. "I think we'll see radio controlled sprinkler heads so you won't have any wire," he says. "You'll just have a radio

transmitter at the computer in the office and that will send a signal to tell what sprinkler to turn on and turn off. The technology exists now. It's just not cost effective and reliable."

To keep up with his profession, Tom is a member of the National Irrigation Association. And he's an associate member of the WGCSA, the Northern Great Lakes GCSA, and the Wisconsin Turfgrass Association.

"I play golf when time allows," he points out. "It's an interesting hobby, but it sure doesn't get me away from work all that much. I walk around the course looking at the irrigation system."

Tom also spends his free time with model railroading, taking care of the home and serving as a "soccer chauffeur" for his three sons, ages 10, 8 and 5. He and his wife, Barb, also are active in a local community theater group, the Lake Country Players. But he's no actor. "Barb is a producer, choreographer and past president of the group. I design the sets on my CAD system and then help build them," he explains. ♣

We Don't Just Offer Attachments



WE HAVE THEM!



LINCOLN CONTRACTORS SUPPLY, INC.

11111 West Hayes Avenue, Milwaukee, WI 53227
(414) 541-1327 • 1-800-242-1255 • FAX (414) 541-3603

7233 N. 51st Blvd.
Milwaukee, WI 53223
(414) 357-7111
1-800-533-7113

5826 48th Street
Kenosha, WI 53142
(414) 652-8890
1-800-638-3448

901 Walsh Road
Madison, WI 53714
(608) 249-6476
1-800-521-2331

220 E. Fernau Ave.
Oshkosh, WI 54901
(414) 231-3501
1-800-451-4551

5207 Westfair Ave.
Schofield, WI 54476
(715) 359-8111
1-800-537-3778



A Trip To Cobble Valley

By Monroe S. Miller

We were fired up. The golf courses in town were open and healed up from the winter dormancy, and our players were a happy group. Regardless of the club, members were feeling good this spring, and so were we.

That's why Tom Morris, Bogey Calhoun, Steady Eddie Middleton and I were going to the first golf meeting of the year for the Wisconsin Golf Course Superintendents Association. Morris had a new Badger red and white Ford Explorer to show off, so we all met at Stinky's Bar and Grill, parked our trucks (with Stinky's permission, of course) and climbed into Tom's brand spanking new vehicle.

"Nice wheels, Tom," I said, unable to disguise the little bit of envy I felt.

"Kids are out of college, so it is my turn for a share of family resources," Tom said with a smile. "Did you guys notice the boat hitch on the back bumper? Standard equipment from here on out. We will be going for a boat ride on Lake Mendota before you know it!"

Early in the first few days of any new golf season, Wisconsin golf course superintendents say this is their favorite season. So we all meant it as, one by one, we declared spring as our favorite of all. "I was in the UW arboretum," Steady Eddie announced, "and noticed the buds on the lilacs and the flowering crabapples are getting fat. There'll be an explosion of color before long."

Nobody in town let a spring go by without a few hours in the arboretum. It is one of the many things that makes our town a great one to live and work in. Who couldn't feel that, especially knowing how much Aldo Leopold loved the place and invested himself in it?

We were in great spirits for another reason. Our meeting was being hosted by Mac MacPherson, course superintendent at the Cobble Valley Country Club, near Homesburg, Wisconsin. Cobble Valley is the only golf course designed by A.W. Tillinghast in Wisconsin, although the great designer did some remodeling at another state course. This was his single start-to-finish creation. The small, three generation membership has left it unchanged from the master's original design. It has held up very well.

Or, so we think. The Cobble Valley members are a quiet lot, stay close to home and keep to themselves. They've chosen not to participate in the bigger world of golf in the state, preferring to have a few events with Cold Stream CC and Fair View CC members each year. Mac has tried to get meetings there, but he has been unsuccessful until now. J.C. Marsh, the green committee chair, helped him get this meeting. The board was reluctant, but Mac and Mr. Marsh prevailed.

So we were off to the Scotch Bluff area of Wisconsin, northwest of our town.

It is a pretty ride to Homesburg. We left Middleton, headed north/northwest on Highway 12. For me, each time I take the drive, it has a historic feel to it. The connection was easy—the road roughly follows the path Blackhawk and his band took in 1832 as they retreated from the Madison area, maybe even from a location on Lake Mendota's shore where our course is. Each time I think of that retreat and the ensuing battle of Wisconsin Heights, it tugs at my emotions. It was a sad event in history.



We weren't the only happy people on this spring day in Wisconsin. The words were few since we each had a window and we were "busy" watching farmers chisel plow and disk acres and acres in preparation for their corn crop. The freshly worked, dark brown soil contrasted sharply with the soft pale green of the newly emerged oat crop and the deep green of the alfalfa. Strip cropping and contour farming accentuated the landscape features so distinct to this part of Dane county. We were driving through some of the most productive farms in Wisconsin.

"Look at that Farmall 1066 belch diesel smoke," Tom commented, looking over the top of his ever present state trouser sunglasses. "I'd like to be on the seat of that machine today."

"Forget it, Morris," Calhoun said. "You're a superintendent, not a farmer."

"On days like this, I sort of wish it was the other way around," Tom sighed.

The highway followed a corridor that is rich in natural history and glacial topography. As soon as we'd left Middleton, the road had risen up and out of the flat lakebed of old glacial Lake Middleton. It was a prominent

feature that was easy to see, if you were aware of it and looked for it. It was left as the glaciers melted and retreated to the northeast around 12,000 years ago.

Modern day commuters gripe and complain about Highway 12—"it's crooked, it dips up and down too much, and it takes too long to get from Sauk City to Madison," they complain.

"It is too bad they didn't have Jim Love as an instructor," Bogey said. "He loved geology, understood its natural connection to the soil, and made sure we understood it, too. Because of him I can really enjoy this trip."

"I suppose you will want to stop and look for agates, too!" Ed said with a big smile on his face.

Morris wasn't ever in much of a hurry, and at times that was aggravating. Not today. There was too much natural beauty to soak up. We had all afternoon to get there and look around the Cobble Valley course. There was no need to rush.

The reason the road rose and dipped and curved is that it follows the contours of the landforms left by the glacier—drumlins and kettles and recessional moraines. That is also why it is so pretty.

The drumlin hills are still mostly wooded—too steep for any farming or even decent pastures for the herds of Brown Swiss and Guernsey and Holsteins we saw along the way. Rather, such hilly countryside is ideal for wildlife—rabbits and fox and deer and other small mammals. And songbirds. Bogey pointed out the passenger side window—"look at the hawk circling up there." Nobody said anything, satisfied with just enjoying a small wonder of nature so close to our home.

A few miles north we descended into a large valley that marked the edge of the Johnston Moraine, a ridge of soil and rock that marks the western terminus of the Wisconsin glacier. One time, centuries ago, it was filled with water melting from the face of the glacier. The highway followed the valley to where it joined the Wisconsin River Valley at Sauk City and Prairie du Sac.

Early settlers, almost immediately after their arrival, built great and beautiful rural churches. We all loved the sight of the spires of the churches in Ashton and in Roxbury reaching for the sky. Those old Germans were craftsmen like we seldom see anymore.

(Continued on page 51)

**Grow
With
Us™!**



New construction or course renovation, contact LESCO for premium performance turf seed varieties and 18-24-12 starter fertilizer with PolyPlus® SCU. To obtain more information on LESCO turf products contact your LESCO Professional Golf Representative or call (800) 321-5325.

LESCO™

LESCO and Grow With Us are trademarks of LESCO, Inc. PolyPlus is a registered trademark of LESCO, Inc.



**LESCO... a team of
professionals serving
your turfgrass needs.**

**•Fertilizer •Repair Parts
•Seed •Equipment
•Golf Course Accessories**

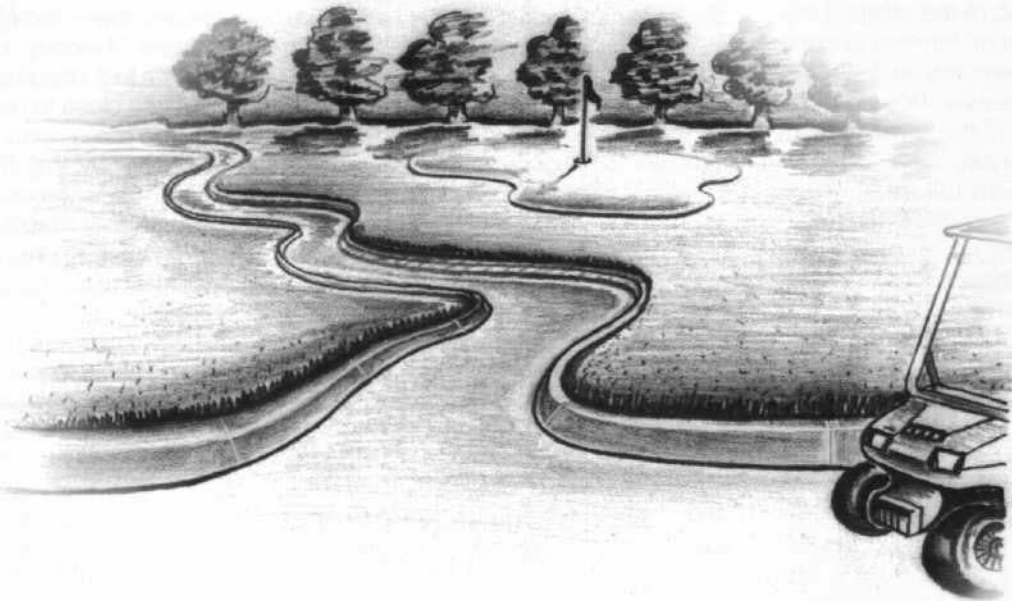
LESCO and Grow With Us are trademarks of LESCO, Inc.

(800) 321-5325

LESCO™

NEW

Curb Those Golf Carts



with Extruded Concrete Curbing

At last! A practical and appealing solution to cart path traffic control. Our innovative new curbing politely but firmly deters cart drivers from venturing off the path and into sensitive areas such as greens, tees and unsafe terrain.

Extruded on-site from high strength reinforced concrete, our powerful new equipment can lay hundreds of linear feet of curbing per day along new or existing cart paths. Extruded curbs also form attractive islands and boundaries for clubhouse parking lots.

EXTRUDED CONCRETE CURBING:

- **Costs less than timber or pre-cast concrete barriers**
- **Seamlessly conforms to curves and slopes**
- **Smooth, exposed aggregate or color finishes**
- **Is virtually maintenance free**

Call now for more information and a free estimate!

(608) 249-6262 FAX (608) 635-7590

Droster and Daughters

3259 Tipperary Point Road, Poynette, Wisconsin 53955