#### (Continued from page 9)

fects of such compaction on water infiltration rates of home lawns and commercial grounds are shown in Table 6. Failure to alleviate this compaction prior to turf establishment leaves sloping areas prone to frequent rainfall runoff. Under these circumstances, it does not take an unusually intense storm to result in substantial runoff. It behooves all landscapers to bear this in mind when establishing turf around homes and commercial buildings.

TABLE 6. VARIABILITY IN WATER INFILTRATION RATES AROUND BUILDINGS	
Type of Site	Infiltration Rate
	Inches/Hour
Home Lawns	0.1 -8.8
Commercial Grounds	0.05-5.0

Where the potential for runoff loss of nitrogen is high, the proper approach is to apply the nitrogen only when the soil is fairly dry, apply a soluble form of nitrogen and make sure that application of the nitrogen is immediately followed by slow application of 1/2-inch water or more. This reduces nitrogen runoff loss during an ensuing 5-inch simulated rainstorm from 10 or 15 percent to less than 2 percent (Table 7).

#### TABLE 7. EFFECTS OF SOIL INFILTRATION RATES AND POST-APPLICATION IRRIGATION ON RUNOFF LOSS OF N FROM A 5-INCH SIMULATED RAIN

Water Infiltration Rate	Post-Application Irrigation	Fertilizer N Loss
Inches/Hour		%
1.73	No	6.1
	Yes	0.3
0.96	No	15.2
	Yes	1.2

#### Summary

Nitrogen BMP's make good sense. In fact, they are basically nothing more than good common sense.

Failure of the turfgrass industry as a whole to conscientiously put forth the effort needed to minimize fertilizer N entry into surface and groundwater will only result in government regulations that inevitably complicate turfgrass management and escalate everyone's costs. If everyone will voluntarily adopt the nitrogen BMP's outlined above, then, and only then, will the industry be in the position of being able to legitimately claim that application of nitrogen to turfgrass is not a significant contributor to surface and groundwater pollution.

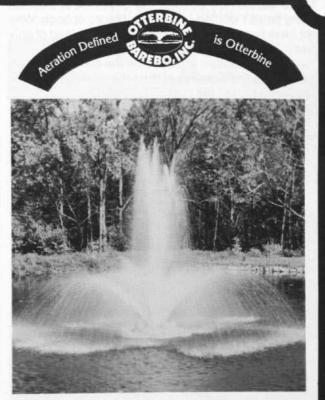
# We Make Your Problems Crystal Clear

Each year, more golf course superintendents realize a simple and energy efficient method of treating problem water quality in their streams and ponds. Otterbine Floating Aerators help prevent algae, aquatic weeds and noxious odors by speeding up the breakdown of wastes.

Through Otterbines' Floating Aerators, up to 3.6 pounds of dissolved oxygen is circulated into 37,500 gallons of water per horsepower hour. With dissolved oxygen, bacteria will break down organic wastes naturally, leaving you clearer and cleaner water.

Otterbine Floating Aerators are self-contained units which range in pumping capacity from 16 to 3,100 gallons per minute. Unit sizes are available in 1/6 to 10 horsepower. Minimum pond size can be as small as 8 feet in diameter and 13 inches deep. These aerators can also beautifully illuminate fountains with low voltage light kits and timing systems.

> For more information on Otterbine Floating Aerators contact:



**Reinders Irrigation Supply** 800 782-3300 Milw. (414) 786-3301 13400 Watertown Plank Road, P.O. Box 825 Elm Grove, Wisconsin 53122-0825



The Orlando Conference: A Report Card

By Monroe S. Miller

Many WGCSA members drove to the 1990 GCSAA Conference and Show hosted by Orlando, Florida. Orlando is a popular destination with lots of tourist attractions, so many families went along this year.

You didn't have to go too far south of the Wisconsin border to get into the mood for warmer weather. We saw our last frozen pond only a few miles south of Rockford. By the time we reached Champaign/Urbana, golfers were very evident on golf courses. And it was downright hot in Nashville.

Few professional groups talk more about the weather than we do, so I won't dwell on the fact that Florida's weather while we were there was superb. They've been extremely dry, so I was happy for my Sunshine State colleagues when two inches of rain fell one of the days of the conference.

This was the 18th consecutive GCSAA conference I've attended; that seems enough experience to offer a "report card" on the 1990 show.

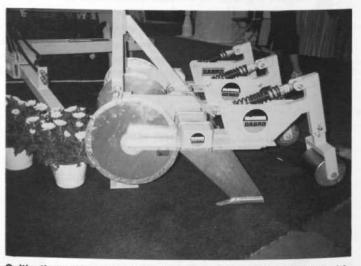
- EDUCATIONAL PROGRAM. The roster of speakers offered was outstanding. Some of the best minds and most experienced people in our industry accepted invitations to participate and share. The focus on our involvement with environmental issues was very good. The format, however, needs changes, I think. Here's why:
  - A. Three concurrent educational sessions is absurd. Many times I wanted to be three places at once. Why not have lectures offered over two days instead of only one?
  - B. Too much emphasis is placed on the seminar format. It comes at the expense of the educational sessions. I suppose part of the reason for 38 (count 'em) seminars is the need to generate "credits" for the certification program. I object on that count and these as well:
    - 1.) They are too costly.
    - My experience is that there is a 50/50 chance of enrolling in a poor one — poor content, poor

instruction and/or poor presentation. Those are poor odds for the money.

- 3.) The combination of dues, which have gotten quite high, and steep registration fees are sufficient to expand what is available as an open component of the conference.
- C. There isn't enough time given to some speakers. It is impossible to reasonably develop a topic in 20 minutes. More time, please.
- D. I spent the afternoon of the 24th (February) at the topdressing and cultivation symposia presented by Paul Rieke and Bob Carrow. It was excellent, but far too few knew about it. More PR was needed.
- E. I'd be interested in responses to the major speakers on the 25th. My view is to give that day and its programs over to the concurrent session. ORLANDO EDUCATIONAL PROGRAM GRADE: B
- EQUIPMENT SHOW. The show gets better every year. Or at least it gets bigger every year. I cannot imagine making really shrewd buying decisions without attending this show. Here are some specific observations:
  - A. The show has gotten so big that it is an exhausting job to see it in its entirety. Once in awhile it would be nice to sit and relax for a few minutes. In Orlando, that meant pulling up the floor and sitting. The simple accommodation of a group of chairs would be nice in the future.
  - B. Lots of room this year; wide aisles are comfortable and make the show experience much better.
  - C. If the Gestapo are going to guard the doors of the show next year, then give advance notice of rules, apply them evenly and enforce them fairly. As *The Grass Roots'* chief photographer, I bopped in with my camera (your camera, actually) swinging from my neck, ready to take pictures you'll see here. I was accosted by a Nazi who was ready to confiscate that camera



Toro's new Hydrojet aerifier — a blockbuster introduction.



Cultivation equipment was everywhere. You'd want to be careful with this on irrigated fairways!

("over my dead body, you are"). Negotiations led to agreement that I'd find Clay Loyd or Chris Caldwell and get an official "photag" ribbon for my name badge. Although it made me feel like an official nerd, it was a satisfactory compromise.

Inquiry as to why this new "no camera" rule was in effect led to this explanation: it was requested by the exhibitors. They are sick and tired of far east visitors (who commonly ignore U.S. patents) coming to our show and taking endless photos of pieces they will probably ultimately copy. Apparently these people are too cheap to simply purchase one of what they want to copy.

The reason for the rule irritates me. You can guess my reaction when the first of three violators of the rule (no green ribbon) I ran into was — you guessed it — Japanese. The other two violators were...Japanese.

Next year I expect to either see the rule enforced for all (not just Americans) or abandoned. ORLANDO EQUIPMENT SHOW GRADE: A

- FACILITIES. Orlando is headed toward the top, or at least near it, of convention cities in the U.S., I believe. Part of the reason has to be the offerings of the convention center itself.
  - A. I was assigned the Peabody Hotel and enjoyed the luxury of walking to the convention center.
  - B. The convention center itself was plenty large for our group. That hasn't always been the case.
  - C. I also liked the meeting rooms, the public address system in each room and the comfortable chairs.
  - D. The convention center was clean, something not to be taken for granted.
  - E. I didn't hear even one complaint about the shuttle system; couldn't have been too bad.
  - F. We were cautioned by several to be careful after dark. However, I saw little riffraff in the area around the convention center, and I felt perfectly safe. You cannot say that in New Orleans, Atlanta, Houston, Phoenix and some other cities we've visited.

Safety should be one of the primary considerations in site selection.

ORLANDO FACILITIES GRADE: A



Headquarters hotel - The Peabody.

- 4. USGA GREEN SECTION CONFERENCE. Another great program by Bengeyfield and Company. Latham and Kienert each did a great job. I was proud of them. ORLANDO USGA GREEN SECTION CONFERENCE GRADE: A
- 5. THE CITY OF ORLANDO. You cannot call Orlando an up and coming city — its convention center and tourist business already put it in the big leagues. There are reasons for its popularity — DisneyWorld, EPCOT, MGM, NASA, sandy beaches, warm weather. It is a good conference choice in that regard. The PGA and the CMAA held their conventions in Orlando, too. Many families were there, and vacations were held both before and after the conference.

Cheryl's folks have lived in the Orlando area for years and we have been to every tourist trap within a hundred miles. I felt lucky that I wasn't distracted by all the temptations and outside forces on my time; I didn't wait in line even once for anything because I didn't go anywhere. Not everything in Orlando is peachy, though:

- A. Traffic. I-4 was running full at midnight! I've never seen poorer traffic planning; I was in it at one point and it was like the worst of Chicago, New York City or Boston. Absolutely terrible.
- B. Coffee. It cost \$2.25 a cup at the Peabody. I thought the waiter was kidding and I told him so. Too bad he didn't speak English. Many of the meals I ate were very overpriced. But because the traffic was so bad, I was forced to eat near the convention center and pay the high prices.
- C. There wasn't anything for kids and spouses to do in the immediate convention center area, which is a disadvantage.





Everybody was trying their key in hopes of winning a Ransomes Fairway 5000.



Hi-tech equipment has moved onto the golf course.



Cushman's fifth wheel aerifier.

#### RANKING ORLANDO WITH OTHER CITIES WHICH HAVE HOSTED THE GCSAA ANNUAL CONFERENCE AND SHOW IN THE PAST 18 YEARS:

I tend to group the cities we've visited with our conference. The first group is my favorite; the middle group consists of those that are okay but which don't really spin any magic for me. The final group has those I would just as soon avoid.

Remember, this is only my opinion and is not intended to denigrate anyone or any place. It is about preference. It's also only about the conferences I have attended.

FIRST GROUP. Boston, San Francisco, Washington, D.C., Las Vegas and Anaheim.

MIDDLE GROUP. Orlando, Minneapolis, Portland and San Antonio.

LAST GROUP. Houston, Atlanta, New Orleans, St. Louis and Phoenix.

## **Orlando Conference Awards**

Best new piece of equipment. Toro's Hydrojet aerifier. Its introduction caught most of us by surprise.'It was a pleasant surprise.

Best new line of equipment. Cushman's 5th wheel pieces. Innovative and progressive.

Best lecture: Tie among Dr. Lois Stack, Mark Kinert, Jim Latham and Dr. Milt Engelke.

**Biggest surprise.** This year's keynote speaker was really good. Ken Blanchard was both informative and entertaining. We're plowing new ground here! They are too often boring.

Best restaurant. The B Line Diner. It was a trip back to the 50s and 60s, my favorite time. A bit pricey, perhaps, but the chow was good and the portions generous.

Best freebie. Those GCSAA members who were able to purchase an LF-100 in 1989 received a beautiful golf shirt from Jacobsen. The rest of us got our Jacobsen cap. It was my 18th (I have them all in my collection) and the most colorful yet.

Funniest moment. For me, it was running into Tom Harrison one evening around the dinner hour at the Mercado shopping mall. He was looking for a Norwegian restaurant! He didn't find one.

Biggest turnaround. Dow/Elanco is starting to sell

Rubigan as a fungicide. Imagine that. After ten years of pushing it as a plant growth regulator/*Poa annua* control product, they are now touting its value as a fungicide.

What gives? Which is it? What if you use it on a predominantly *Poa annua* fairway, which includes a lot of those in Wisconsin and other northern states?

Best show gimmick. Ransomes' "try our key" program. They had more people around their booth than nearly anyone else. Amazing how many people are willing to look foolish! Jim Hofmeister tried my key. I didn't win the Fairway 500.

Most disappointing news. Arnold Palmer sold the Bay Hill Club to the Japanese. Is nothing sacred? This is like losing the Firestone Tire Company and Rockefeller Center to them. What's next — Pine Valley? Merion? Pebble Beach?

Best Orlando area golf course. The Isleworth Golf Club course. Wayne Otto and Rod Johnson managed to muscle their way onto it for a round of golf and thought they were in either paradise or Sheboygan.

Arnie owns this course; maybe that is why he sold Bay Hill. That and a ton of money.

Funny thing — Rod and Wayne were unable to get onto Bay Hill. Hmmmmm.



Toro's entry in the fairway fiveplex market.



Another piece of cultivation equipment.



## Antracnose, Summer Patch and Poa annua Decline: A 1990 Perspective

By Dr. Gayle L. Worf Department of Plant Pathology University of Wisconsin-Madison

In spite of efforts over the past several years to eliminate it, *Poa annua* remains the primary fairway turf on most of our more intensely managed golf courses in Wisconsin. It's not the subject of this article to discuss whether that is good or bad. But because it's there, most superintendents have to face the job of keeping *Poa* alive during critical summer months.

That is the subject for today.

Research from a number of locations has demonstrated that *Poa* on northern golf courses can be kept alive and functional during the summer by careful attention to compaction problems, irrigation and nutritional management practices — if these are also combined with protective fungicide treatments. Diseases are important, and their control is critical.

In addition to the diseases that attack most grasses, e.g., dollar spot, brown patch and Pythium, we have to deal with some that are peculiar to *Poa*. Anthracnose is one of those, and summer patch it another.

If you are not really sure of what's attacking your Poa, you may have good reason to be confused. Their symptoms can overlap, but these two diseases are usually easy to tell apart. Anthracnose is usually recognized as a leaf blight problem that causes some general yellowing and thinning of the turf and, in its extreme, some serious kill in erratic patterns. Summer patch causes a sudden appearance of dead and dying Poa in distinct circular patches that range from 4 to perhaps 14 inches in diameter. Anthracnose often appears in early July, while patch rarely occurs in Wisconsin before August. Anthracnose is more subtle. Patch is very distinct, unless there's enough unaffected bentgrass in the mix to mask its effect.

#### Controlling anthracnose and summer patch Best treatments for anthracnose include two sterol inhibitors — Banner

and Rubigan — and also Daconil. (The benzimidazoles also perform well against anthracnose, but there's too much dollar spot disease resistance on most courses to consider this alternative.) These need to be applied before the 'anthracnose season', e.g., **about the first of June** during a warm year. Two bi-weekly applications of the sterol inhibitors, followed by Daconil treatments seem to work well in controlling anthracnose, dollar spot, and suppressing brown patch.

Banner, Bayleton and Rubigan appear to perform well against summer patch. However, the timing is different. There's a consensus emerging among turf pathologists that says the fungus starts invading the crowns and roots of the turf in the patches, beginning when the soil temperatures are reaching 65°F. Several pathologists from other states have reported success with early applications, when applied at the highest label rates. Probably, the earlier in the season that a consistently warm soil temperature occurs, the greater will be the damage from summer patch (and anthracnose, too).

Our results in 1988, at Nakoma, and 1989, at Pine Hills, would support those observations. Control was good with our better treatments at Nakoma — we applied in late April and May. We didn't take soil temperatures in 1988, but we all remember what a warm year it was. But last year the soil temperatures at Pine Hills stayed cool way into June, according to our thermometer readings, and we didn't encounter any disease. This is in spite of a bad summer patch history there for several previous seasons.

Most believe that irrigating right after treatment improves chances for controlling summer patch.

#### Problems with dovetailing anthracnose and summer patch control

You no doubt noted that summer patch treatments are earlier than what

we've been suggesting for anthracnose control needs. And making four applications before any disease shows up is way too much — for lots of reasons — too much chemical, too expensive, potential fungicide resistance, potential phytotoxicity are some of them.

For some of you this shouldn't be a problem. My impression is that both problems don't occur on every course or every fairway. Disease history should serve as a starting point in deciding what you need to protect. Anthracnose appears to be much more common than summer patch in Wisconsin. If I were losing *Poa* in the summer without knowing why (and I had eliminated traditional diseases, Atenius, drouth, hungry turf and excessive compaction!), I'd be suspicious of anthracnose.

Do we get useful anthracnose control from the early spring (summer patch) treatments? Maybe. Perhaps a single early application, followed by a mid-June treatment and subsequent summer contact-type fungicide applications would be a satisfactory compromise where both diseases are a problem. We haven't had opportunity to evaluate this in our trials to date nor have I seen such information from research reports elsewhere. But we hope to gain some insight on that from this year's work.

#### Additional comments on anthracnose

There appears to be a considerable variation among Wisconsin isolates. We've been working this winter in the growth chambers with six Wisconsin isolates. Several have not shown any inclination to cause turf damage, regardless of different temperature and inoculation approaches we've tried.

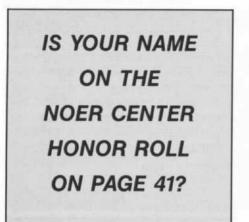
But a couple are quite pathogenic. At about 75° to 82°F, there is severe yellowing and killing of the foliage, and after two or three recycles, the inoculated turf begins to die. If we had any doubt about *Colletotrichum*'s ability to cause serious Poa damage, working with this isolate would erase any doubt.

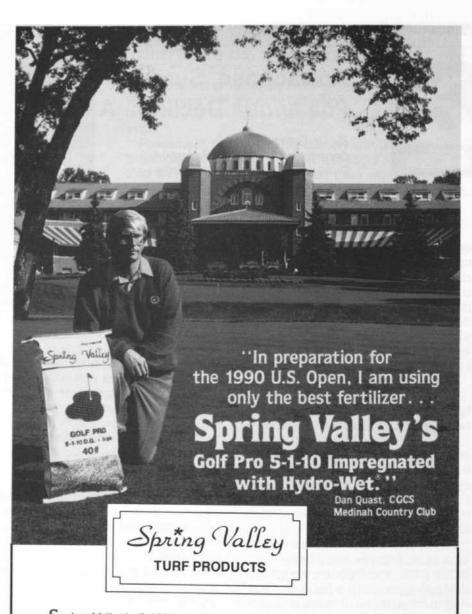
The variability is probably real, and may account for differences from one golf course to another in their experiences with anthracnose.

The literature on turf anthracnose damage is argumentative. Some says it is not important, and is only a secondary problem. At worst, according to this thesis, it causes older, senescing leaves to turn yellow and to guit prematurely. But loss of Poa has been attributed to anthracnose for many years, beginning with work done by Drew Smith in Canada, and supported by Vargas' work in Michigan. Publishing in 1954, Smith described anthracnose as starting as small patches of yellowish dying grass which increase in size up to 6 inches or so in diameter, assuming an irregular outline. Smith emphasized root and collar effects - he scarcely mentions direct damage to foliage. He described a deterioration of the base of the individual shoots, root systems that were poor, and with brown or black discoloration. Indeed, his description of Poa loss is very close to what we usually encounter in our most severe situations.

Smith didn't close the loop entirely in confirming these symptoms to be caused by *Colletotrichum* (anthracnose). He only worked with seedlings through the seminole root phase. Nor have we done so, through the inoculations described above, or via root inoculation trials which we've also tried.

We lean more closely today to the idea that "Wisconsin *Poa* decline" is in fact caused primarily by a root and crown-rotting phase of anthracnose. But the proof is still lacking. There are some other possibilities. We'll continue to struggle with it, maybe add another chapter this summer. We need more isolations and samples from diseased *Poa* this summer — maybe from your course!





Spring Valley's Golf Pro 5-1-10 + Hydro-Wet is an organic based, non-burning fertilizer, and each granule is impregnated with Hydro-Wet.\* Fertilizer and wetting agent are applied in one easy application.

Spring Valley Turf Products has developed a special line of natural, organic based fertilizers that will make your job easier and your course look and play its best.

### SPRING VALLEY'S ORGANIC BASED GOLF PRO LINE

- 21-3-12 Golf Pro
- 12-4-8 Golf Pro
  6-1-12 Golf Pro
- 13-2-4 + Hydro-Wet 6-1-12 • 5-1-10 + Hydro-Wet

### FREE NEWSLETTER

Call 800-635-2123 for a FREE Spring Valley newsletter and information on a distributor near you.

\*Hydro-Wet is a registered trademark of Kalo, Inc.

SPRING VALLEY TURF PRODUCTS

1891 Spring Valley Road • Jackson, WI 53037

#### Legal Matters



## FUEL TANKS: Changes on the Horizon

By Michael Semler

Editor's Note: In an effort to help members of the Wisconsin Golf Course Superintendents Association sort through the mountain of new legislation and regulations affecting our golf course operations, "The Grass Roots" is offering a new feature — LEGAL MATTERS. "This is not legal advice. Lawyers are not writing this column. If you want an opinion(s) about your own operation, contact your club or course legal counsel."

Mike Semler has done a lot of research on fuel tank requirements. The first article in LEGAL MATTERS deals with what he has learned.

Remember, if you have questions involving your own situation, contact your organization's lawyer.

This year will see a dramatic change in the regulations involved with Underground Storage Tanks (USTs). The laws that came into effect in October 1988 have required the EPA to develop regulations to protect human health and the environment from leaking USTs. It specifically mandates requirements for financial and technical responsibility on the owners of them.

For golf courses with USTs, this means compliance with the set of guidelines set up by the EPA. With these new laws, two possibilities exist for the storage of fuels: keeping the tanks underground or closing the existing UST and installing above ground tanks.

If you desire to keep your tank underground, by October 26, 1990, owners must be able to prove sufficient financial responsibility to provide \$1 million to cover all leaks in a given year and \$500,000 per occurrence.

There are a number of ways to demonstrate this financial responsibility, including insurance programs, state funds, trust funds from parent corporations, or any other method approved by the state. The state can give more details on the types of funding applicable and available.

By December 1993, all USTs must also have operable leak detection de-

vices in place. Leak detection devices include monthly monitoring of the surrounding soil and groundwater with wells and vapor detectors, monthly inventory controls, and annual tank tightness testing. Here, depending on the age of the tank and the type of tank, all or a combination of these may be necessary.

In addition to leak detection and financial proof, by December 1998 all USTs must have corrosion protection and devices that prevent spills and overfills. Corrosion protection includes coated or cathodically protected steel, fiberglass tanks, interior lining of tanks or a combination of all of these.

In any case, keeping your tanks underground will become an expensive and time consuming ordeal and, in some cases, this may be the best solution. For others, the solution may be installing above ground storage tanks. The paperwork, planning and hassles may be no less in the short run. However, in the long run, your liabilities and environmental risks may be less than with USTs.

In order to install fuel tanks above ground, you need to apply for a permit with the State Safety Petroleum Inspection board (telephone: 608-266-8076). At the same time, notify your local Fire Chief to get approval for the above ground tank site.

Above ground tanks require the construction of holding ponds equal to or greater than the size of the total gallons in the tank or tanks. This is to prevent any leaked fuel from entering the ground. It also allows for a less expensive clean-up if a leak does occur.

If you have an existing UST, this will also be the time to apply for a site assessment for its closure and abandonment. Here again, your local Fire Chief should be notified of the site assessment.

This assessment for tank closure involves having a third party take soil tests of the area around the tank and having them analyzed for any leakage.

Assuming there is no problem with the soil samples, tank closure can proceed with the removal of remaining fluids and vapors. After excavating to the top of the tank, it may be abandoned in place by filling it with an inert material, or it may be removed from the ground and disposed of in an approved manner.

In either case, as environmental concerns increase, above and below ground storage of fuel will require more careful monitoring and reporting on the user's part.

For more information concerning fuel storage, contact: State Safety Petroleum Inspection Board at (608) 266-8076.

They will give you all the information you need to comply with the new storage tank laws.

For specific legal advice on this issue, contact your company attorney.



#### Editorial



## "The Golfer's Right to Know"

By Tom Harrison Maple Bluff Country Club

Several states around the country have been grappling with the issue of posting home lawns after lawncare companies have applied materials to them. The issues of private property, government intrusion, and the relative safety of the materials applied all have entered into the debate over posting.

The issue of posting on the golf course, after pesticide applications have been made, is a subject that was briefly discussed when "AG 29" was being run through various committees here in Wisconsin. The amount of materials applied to high maintenance turf, such as a golf course, coupled with the number of people who traverse a golf course during the day, would seem to indicate that the subject deserves some discussion.

The mere mention of posting by someone in the industry will cause many people to wring their hands and say, "Oh no, don't bring that subject up, let a sleeping dog lie." You can take the tact of not discussing something for fear that simple discussion will bring unwanted legislation and more regulations.

However, pesticides usage is something that has changed around us rapidly over the last 10 years, and outside forces are going to further change their use and understanding in our society.

The dooms day, "environmentalist" types will lobby against any or all pesticides, while the chemical lobby will proclaim the total safety of their products. As is guite often the case, the truth lies somewhere in between. In recent studies at the University of Wisconsin Center for Integrated Agricultural Systems it was found that crops produced with the most chemicals netted \$120 per acre. Crops produced with no pesticides, to the delight of the environmentalist, had a net profit of \$136 per acre; while crops produced with only a few chemicals, on an as needed basis, netted the best profit at \$153 per acre. As can be seen, the most profitable use of pesticides in agriculture is somewhere between the maximum and none.

The problem with discussing pesticides and posting is the emotional side of the issue and the uneven portrayal of pesticides by the media. The word pesticide is used in the same breath by the media as poison, illness, birth defects and all kinds of other very negative terms. The media has played up the negative side of pesticides, for the sake of selling newspapers and keeping our dials tuned, with little regard for factual reporting. Pesticides and the home yard, or golf course, can exist in harmony if used properly, according to the label, and with an integrated pest management approach.

But what about the golf course? Are we using materials properly, by the label, and with an integrated pest management approach? Where should we stand on posting? In most cases we are using these materials properly. But all too often the golf course superintendent is pressed to have the look and play of a PGA tour event course all season long. Golf's boom period, which we are all experiencing now, fuels this desire of the golfer to play on a course that looks like the tour courses on TV.

Besides that yard stick to measure by, we start competing against one another to be greener, faster and more impeccably manicured than our neighbor. This all leads to a greater dependence on pesticides to help insure we have that totally manicured look.

Everyone has been caught by a disease or insect attack that damages or destroys a turf area. No one likes to alibi or make excuses as to why that turf is dead or thin. We all know the way to cover ourselves on that front is to always apply enough pesticide so that no disease or insect can cause turf damage.

This is fine as long as we apply the materials by the label rate and follow all the label instructions. "The label is the law," as it is said.

But the question has to be asked: "Was that pesticide application really necessary, was it timed right, and did we spray mainly to cover ourselves so we did not have to face someone and make excuses about a turf problem?"

I maintain that too often we are all guilty of falling into that trap. We apply pesticides to cover ourselves against what "might" happen to the turf. A leading entomologist speaking at a recent turf conference indicated that the majority of insecticide applications were ineffective due to improper timing of application.

I like my job and I don't need any grief from players. People who pay a lot of money to belong to a golf club don't like excuses. So why make excuses — when in doubt, spray it. As long as we do it by the label, the label is the law, we are doing things legal we say. But it's environmentally questionable. We should perhaps look a little closer at why we apply a pesticide. Agriculture has found that less pesticide is indeed more profitable.

If you could do a comparison of how much material was applied to a golf course in 1967, 1977, and 1987 we would all be astounded. I had to do that in 1989, and I was amazed. The standards of course maintenance have been elevated to such a level that the use of one of our strongest tools, pesticides, has increased tenfold or greater. A 20-year comparison such as I had to do can make you step back and seriously study what you are doing and why.

I know why I apply pesticides as often as I do, and I wish I didn't have to. I wish I could take the tact of agriculture and back off on these materials. But as long as the golfer is adamant in his desire for this fine manicured look on a course, our hands are tied.

But I now begin to wonder if the player is aware that for us to achieve these increasingly rigid course conditions, we are applying tremendous amounts of pesticides. If the players knew, would they feel comfortable playing on a course under these conditions?

This brings us back to the issue of posting or perhaps more directly "the player's right to know what we are doing." Should anyone be aware of how dramatically pesticide use has increased on the golf course? Should the players be told anything that we are doing or will they overreact and panic because of all the media hype about the evils of pesticides? Someone other than the superintendent should know.

Our employees by Federal law have a "right to know". I think committees entrusted with the decision-making authority over the greens operation should at least be aware of how we manicure the course. If a committee or board desires to have the fine manicuring, using the optimum amount of pesticides, then it is their decision and no one can complain later that they had no idea what we were doing. Whether the course is posted or not, people at least have a right to know.



# Is the GMO's future at Tuckaway?

By Rob Schultz

Officials of the Greater Milwaukee Open and the Milwaukee County Parks District met last month to discuss the feasibility of building a new, high-profile golf course at an existing park in Oak Creek, this reporter has learned.

Although the meeting was just a factfinding mission, GMO president Gordon Kress admitted that tournament officials have explored potential options for moving the PGA Tour event to a different site within the Milwaukee area if its contract with Tuckaway Country Club is not renewed when it runs out in 1992.

"We're probably going to be (at Tuckaway) for a couple of years after ('92), hopefully. But maybe not," said Kress, during a phone interview from Ponte Vedra, Fla., when he was attending the Tournament Players Championship this past winter. "After all, we still have to get the OK from Tuckaway for beyond '92. That's why we have to look at our options as well."

Kress said Tuckaway is a good PGA Tour site and cited tour players' reactions and the fact that it was rated as one of the best conditioned courses on tour last year as strong reasons to keep the tournament there.

He added, however, that he felt Tuckaway could use a few changes such as a new 18th hole that would include an amphitheater that could house more spectators — to strengthen the course for its members, the tournament players and the spectators.

Kress, who is an active member and former president at Tuckaway, also expressed some confidence that Tuckaway will want the GMO to renew its contract with the club, located in the suburb of Franklin and the site of the GMO since 1973. He supported his feeling with a 1989 survey of Tuckaway members that showed overwhelming support to keep the GMO there.

But a source close to both Tuckaway and the GMO had a different feeling. "I'd be surprised if it was renewed."

said the source, who wished to remain anonymous. "It's just a feeling I have from the people who are involved in both places. That's why I think the GMO has to look at other options."

The source said one option that the GMO is seriously considering is moving the tournament to newly renovated Brown Deer Park after the Tuckaway lease expires. The tournament would stay there until a new, Tournament Players Course, or a reasonable facsimile, is built by either the county or a private developer at Bender Park, located on the Lake Michigan shoreline in Oak Creek. The source also said that Madison pro Andy North and architect partner Roger Packard were contacted about designing the course.

Kress denied that such a scenario exists. He said the GMO was simply asked by Milwaukee County if they'd be interested in moving the tournament if a course was built at the Bender Park site. He admitted, however, that North, who is one of the GMO's directors, was contacted for his input.

In attendance at the meeting with the GMO and Milwaukee County officials in February were Kress, GMO executive director Tom Strong, Milwaukee County supervisor Tom Mohs, Milwaukee County deputy parks director Bill Teitgen and Milwaukee County director of finance Tom Ritato. They discussed the political ramifications and other difficulties of building a course there by either the county or a private developer. Both sides said the other side called for the meeting.

"It was a question of potential, future golf course development, it was a farreaching question," said Teitgen, who said he told Kress and Strong that it would take at least two years before any land there could be developed because five governmental agencies would have to be involved.

"The land is spectacular," Teitgen added. "It's not the first time a golf course has been discussed there and it may not be the last and it may come to fruition. But it's not a quick process."

Kress said he was not impressed with what he learned at the meeting.

"There are too many federal, state, county and local ramifications," he said. "We didn't even discuss the local ones. Hell, I don't even think the mayor of Oak Creek knows about it."

Kress also said cost figures never were discussed. "If I were a county official who is a golf nut and said, 'Boy, I would like to see them build a golf course at Brown Deer,' well, maybe there were some inquiries made about something here or there. But an inquiry is not a story. It's a dream or a thought."

Kress added, however, that the GMO probably would be in favor of a TPC course, or a stadium golf course made famous by the TPC at Sawgrass, being built somewhere in Milwaukee County, including the Bender Park site, if donations could be found. All TPCs, the brainchild of the PGA Tour, are built to house PGA Tour or PGA Senior Tour events. As of 1989, there were 13 TPC courses operating across the nation.

"If an offer were made on something like that, we'd weigh (moving there) very seriously," Kress said. Kress said the GMO, which lacks the sugar-daddy influence of a big-time corporate sponsor and survives on generous donations by the Lloyd Pettit family and other sponsorships by Midwest Express and Miller Brewing Co., could get free rent on a TPC site and also get the first \$100,000 in gate receipts.

"I don't think a TPC course is impossible (in Milwaukee)," said Kress. "And I'm not going to lie to you, if they build a TPC course here, no matter where it is, you get that free rent and the first \$100,000 in receipts. You have almost a \$300,000 swing (from the Tuckaway contract)."

Kress also said a TPC course in Milwaukee would be good for the community because it would be the perfect complement to the wide array of other public courses in the area.

"I'd like to someday see a championship-type course and I'd like it to be public in Milwaukee and the county. After all," he added, "I think Blackwolf Run (in Kohler) is a great asset for people to see a Pete Dye course. We need more of that. And we need one in Milwaukee county."

But who would build it? The county? Maybe. A private developer? Kress said a private developer is the better possibility. He added both are farfetched dreams. "We're a ways away as far as getting ourselves involved in it unless somebody came around and donated \$5 million to get this thing rolling," he said.

One possible financier, Kress said, could be the state of Wisconsin. "Maybe something with their development fund could be worked out," he said.

Although Teitgen said Milwaukee County hasn't offered, or been asked, to officially do anything related with such a course, he didn't rule out the possibility of the county building such a course with either county property tax supported capital or through a private donor.

"I've learned never to say never, that possibility exists..." said Teitgen, who added that most county officials are still unaware of the meeting with the GMO. "But given the strain on capital dollars, that's why the discussion has turned to the possibility of turning the land over to an entrepreneur on one of those 99-year leases for development purposes."

Kress said the county could never build the course. "I don't think the county could afford to build a golf course, a clubhouse and a media room and all that would facilitate a PGA Tour event," he added.

Getting back to Tuckaway, Kress said keeping the tournament there is the safest move. "The players like it at Tuckaway. They like the big greens, those fairways. They like the manager of Tuckaway. It scares me to think that someday down the road you move and they don't like the course," he said.

Kress said Tuckaway's biggest problems are an inadequate practice putting green and the 18th green, which is built on a site that is inadequate for large crowds. "If that hole were cut in half and the pond was brought into play, you could build an amphitheater around there, it wouldn't distract from the members and it would be easier to maintain."

But Kress didn't want that to sound like an ultimatum. Asked if Tuckaway has to do something down the road to keep the GMO, he answered, "My personal opinion? I would say that's a question mark. We would like to have them do that. Maybe there's a way for it to be funded. I don't know. Right now we don't have the money."

If Tuckaway would not renew the contract and the GMO was left out in the cold, Kress said there are other options besides building a new course such as moving the tournament around to different courses in the area or moving the tournament to an existing county course such as Brown Deer Park.

"I'm not the sole decision maker on this, but I'm not the one who would say it shouldn't be moved around to two or three different places," he said. "But I don't see any private clubs outside of Tuckaway that could house it."

But, Kress said, at this time, he foresees the GMO and Tuckaway continuing their strong relationship.

"But down the road, just speaking as a GMO official, I'd like to see something more economical set up for the GMO and its fans," he said. "But you have to be so careful. Sure everybody's looking for a dream golf course. There are a lot of them out there now. But a lot of those TPC courses, the pros don't like them."

Kress equated the process to house shopping. "I might find the house that I knew I would be happy in. Then I go down the road and find the same exact house for \$50,000 less. Would I be a fool not to take the house that would save me money? I wouldn't do it for 200 bucks. But when you're talking about big bucks, certainly our eyes will be open."



### The Wilbur Ellis Co. is proud to share our IDEAS TO GROW WITH!

- · Fast FREE Delivery within 24 hours of your call
- · Computer generated price information & product information
- Contracted distributor for all MAJOR Turf Products
- Professional Turf Sales Representatives committed to SERVICING YOUR NEEDS
- EPA regulatory assistance MSDS, EMERGENCY RESPONSE PLANS
- Electronic Partnership computer software linking us to our customers
- Soil & Water Testing Harris Labs
- · Member of local and national Golf Course Superintendents Association

Combining experience and modern techniques in equipment & facilities we have built our business by giving our customers IDEAS TO GROW WITH and the service to meet their needs.

For more information, contact ...

Joe Wollner • Wisconsin & Northern Illinois • 800-747-7400 John C. Meyer • Central Illinois • 800-892-4033 Larry Thornton • Minnesota • 800-642-2736