

Hazardous Communication Plans Are Required By Golf Courses

By Michael Semler

The onset of cold weather is coming and this should serve as a reminder to all of us to bring out our compilation of Material Safety Data Sheets (MSDS) and determine whether we need to file the SARA reporting requirements.

It is also a reminder to all of us to formulate our plan to comply with the Hazard Communication Standard established under OSHA (Occupational Safety and Health Administration).

Enforcement of the Hazard Communication Standard expanded in May, 1988 to include any company using or producing hazardous materials in the workplace. This includes golf courses!

However, do not confuse OSHA's interpretation of a hazardous material with that of the EPA under the SARA reporting requirements. OSHA's interpretation of a hazardous material is any element, chemical compound or combination of the two which may pose a health risk. In essence, this is a broad list of materials and may include such items as pesticides, the chemicals in pressure treated lumber, the vapors given off in welding and many other compounds we may not think of as hazardous.

The hazardous Communication Standard has four major elements that relate to the industry, and all must be abided by to remain in compliance with it.

The first element is that employers must keep a list of all hazardous materials present at the workplace. Employers must also have the current MSDS sheets on hand for all of these materials and they must be available to all employees.

Second, the containers for these materials must have the name of the manufacturer, the name of the chemical compound, and the potential adverse affects on the label. This includes, for instance, a 2 gallon container used to fill from a 30 gallon drum. This 2 gallon container must also contain a label with the chemical name and the risks associated with it.

The third requirement is that employers must maintain a written explanation of the means necessary to comply with the safety aspects of the law. Oral explanations to employees will not meet compliance regulations. They must be in writing.

The final requirement is that employees must receive training in the proper use of the chemicals. OSHA lists minimum employee training levels for employers to remain in compliance. This training is essential. Not only must employees have access to the MSDS sheets and have a written explanation on the proper procedures necessary to comply with the elements of the safety standard, but employers must make sure the employees understand it.

This all sounds confusing, but it really is not. The first step any of us should take is to contact the state OSHA office in Madison (telephone 608-266-9383) and ask for their information packet on the Hazardous Communication Standard. This packet will clearly explain what needs to be done by superintendents to set up a good Hazardous Communication plan, as

well as, given an example of a written program which meets their criteria. It will also list many possible hazardous materials that may exist in the workplace.

The second step is to list all hazardous materials you have on hand during the year. Then make sure you have the MSDS sheets for them and have copies available for your employees to review.

Finally, have a written program for the proper safety procedures necessary to follow OSHA's regulation and make sure employees understand it.

In 1988 alone, over \$1 million in fines and penalties were levied against companies who were not in compliance with OSHA's Hazard Communication Standard. Golf course maintenance facilities may not rank high up on the list of offending companies, but we are now in a position to have a leg up on OSHA and remain off that list.

Remember this is not legal advice. For that, see your own or your company's attorney.



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Bentgrass Gets Expected "Thumbs Up" at 1990 Wisconsin Golf Turf Symposium

By Monroe S. Miller

Despite delightful Indian Summer weather the likes of which hasn't been seen in years, nearly 200 people attended the 25th annual Wisconsin Golf Turf Symposium in Milwaukee on October 30 and 31.

Drawn by an interesting subject, a slate of quality speakers and the comfortable surroundings of Milwaukee's Pfister Hotel, few went home disappointed. A written survey that nearly everyone at the Wednesday session completed gave clear and resounding approval to the work of the 1990 Symposium committee.

NOER'S FRIEND

WGCSA president Rod Johnson offered the traditional welcome and was followed by morning session chairman Steve Blendell. Steve's first introduction was easy — veteran turfgrass expert Tom Mascaro.

O.J. Noer first inspired Mascaro's interest in golf turf and he spent a lot of time travelling with Noer. Mascaro associated O.J. with his ever-present camera, good scotch and Milorganite!

Mascaro used his time on the program to discuss the familiar golf course topic of dew. Despite its recognized significance, little research has been completed on the subject.

Even the word is a misnomer, according to Mascaro. What most call dew is really exudated water — fluid that is actually pumped out of the plant.

There are a couple of fundamental differences between dew and guttated water. Dew is water of condensation;



A familiar marquee at The Pfister.

guttated water contains salts. Guttated water has a precise arrangement on plant leaves; dew does not. Disease (fungi spores) grows profusely on exudated water, poorly in water.

Tom strongly recommended removing "dew", through syringing, poling or some mechanical means.

OLD BENTGRASS

Bentgrass fairway turf at Bloomfield Hills Country Club was the subject of Kevin Dushane's lecture. Dushane, speaking at the Symposium for the second time, presented a slide program of his maintenance of BHCC's original bentgrass fairways.

He knows his predominantly bentgrass fairways contain Penncross and Penneagle — he's overseeded with those varieties — and suspects Seaside, South German, Arlington, Congressional and Washington bents.

The course was built in 1909 and remodelled by the great Donald Ross in 1920. Dushane's management suggests deep respect for the golf course. He bases his plans on maintaining the bentgrass population and on presenting the best playing surface possible.

Less water, less fertilizer and less fungicide are keys. One to 2 pounds N/M, 4 pounds K/M, 9 fungicide applications and lightweight mowing have proven successful for him.

Other routine features of the Bloomfield Hills fairway management program are a daily, physical removal of dew, seeding of fairway divots, clipping removal and a ½" height of cut.

The most important thing done all year, according to Kevin, is aerification. He uses small area aerifiers in the fall months.

Verticutting is a procedure dictated by his high bentgrass populations. The BHCC fairways are verticut 5 or 6 times each season with greensmower verticuts. He removes every other tine because of the limited horsepower of these machines. This lowers the risk of hydraulic leaks.

THE NOON LUNCHEON

MMSD's Jim Spindler served as host of the noon luncheon. Introductions included the Milorganite staff, the Symposium committee and head table quests.

After a moment of silence for the late Harry Gill, Jim Latham led a reminis-



The session chairmen — Blendell, Waddington and Norton.



The audience in a grand room at The Pfister.

cence of the past 25 years of the Symposium. Names from the past like Crewe, Stamfl, Shiley and Verhaalen were mentioned as important in starting the Symposium. And as nearly everyone knows, Charlie Wilson was absolutely critical in getting the whole program off the ground.

The format of registration charges supplemented by MMSD's payment of speaker expenses has been very successful. Latham also attributed 25 years of success to the single topic format, a program that gives speakers adequate time to develop a subject, and a more relaxed atmosphere that exists in a hotel and sometimes doesn't on a college campus.

The format also included a luncheon and afternoon social hour without an evening banquet. This set the Symposium even further apart from other more traditional educational meetings.

Finally, any proceeds from the meeting were funnelled into the O.J. NOER RESEARCH FOUNDATION. That has enriched the foundation by \$26,000 over the years.

THE WISCONSIN DISTINGUISHED SERVICE AWARD

The entire history of the Symposium has seen Jim Latham either in the audience or at the podium. More often than not he has been involved in the planning as a member of the planning committee. That is why the members of the Wisconsin Golf Course Superintendents Association chose the luncheon of the anniversary meeting to present Jim with the WGCSA's Distinguished Service Award. The significance of the award is that it is given so seldom; it has been awarded only eight times in the Association's history.



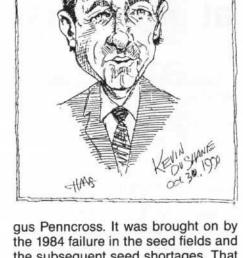
FINALLY, DR. DUICH!

It seems significant that the silver anniversary of the Symposium had a giant in our industry on the program. Dr. Joseph Duich, professor of turfgrass science at Penn State University, filled that role perfectly. He was introduced by session chairman Gordy Waddington.

Dr. Duich remarked that he probably held the record for turning down invitations to the Wisconsin Golf Turf Symposium more than anyone else! This year was the first year in his career that he wasn't teaching two courses during the fall term, allowing him to travel to Milwaukee. He commented that fellowship is important to him, and he sure felt it at this meeting.

Duich's lecture focused on two subjects: 1.) fraud involving the Penncross variety name, and 2.) current creeping bentgrass research programs.

Few were aware of the depth and seriousness of the problem involving bo-



gus Penncross. It was brought on by the 1984 failure in the seed fields and the subsequent seed shortages. That shortage, coupled with an increasing demand, tempted dishonest seed brokers and sellers to sell low quality seed as Penncross.

This fraud led to fake bags and counterfeit certification tags. The trusting customer, in every case, was the loser.

Sometimes the losses were enormous. An \$87 million overseas project was seeded with bogus Penncross and the results were disastrous.

The problems associated with tracking down and prosecuting the guilty are formidable. Duich spent significant time explaining how evidence is developed; a good bit of that is high technology work. Much of the frustration felt by Duich and others affected by this problem is the legal system itself — lawyers, inadequate punishment and excessive costs.

He offered some advice for any of us







Sketches by THE GRASS ROOTS illustrator Gene Haas.



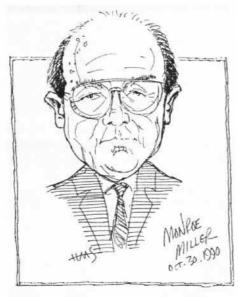
involved with Penncross (or any other) seeding projects:

- 1. Save all certification labels.
- Keep accurate records of what seed is used on which features or areas.
- Record the lot numbers and make them part of item 2.
- Pull representative samples for your own independent seed test.
- Save a representative sample of seed used in a project.

The most interesting thing about the current bentgrass breeding projects at PSU was the close cut study. Included is a plot of bentgrass which will tolerate a 1/16" height of cut!

ON THE EDGE

The "Living on the Edge" award belongs to Joel Jackson. He left the Disney World golf courses in Orlando, Florida (1974-1988) for the challenge of one of Arnold Palmer's new golf courses.



Isleworth Country Club is Arnie's new home (or winter home) golf course. He's charged Joel Jackson with the task of maintaining Penncross greens in Florida.

The greens were seeded to Penncross in 1986, and a dedicated effort at keeping a cool season grass growing in warm season conditions has paid off. Jackson's work shows that you can have bentgrass greens in Florida.

A PLAYER'S PERSPECTIVE

Gene Haas, executive director of the Wisconsin State Golf Association, left the Symposium with two titles: 1.) best lecture title with "Spinners and Flyers — A Golfer's A-grass-ive Approach to the Game"; and 2.) lecture with the best combination of wit and humor. It was, in a word, classic Gene Haas.

Gene presented a player's perspective on the improving fairway conditions in Wisconsin, and applauded those improvements. He encouraged golf course superintendents to continue this upgrade, offering assurance the golfers are willing to pay for them.

Haas said the full parking lots at Blackwolf, SentryWorld, et. al. are evidence that competitive players are actually searching for improved conditions. His advice — "go for bentgrass, if possible."

NEW TRADITION

It may be that a new Symposium tradition was born this year — the Wisconsin panel. The group of Wisconsin golf course superintendents — Ozaukee's Wayne Otto, Milwaukee County's Greg Youngs and Blackhawk's Monroe Miller — gave brief summaries of "why they maintain the turf they do."

Otto talked about striving toward increasing his existing bentgrass. Youngs explained the county's plan to improve their fairway conditions, and Miller discussed management of fairways consisting almost entirely of *Poa annua*. The panel also fielded questions from the audience.

Cedar Creek C.C.'s Pat Norton opened the Wednesday morning session with an introduction of Bob Vavrek, USGA Green Section Agronomist. Bob discussed thatch and its control of bentgrass fairways.

He focused on factors that increase thatch production — high N, specific cultivars and higher heights of cut — and those which can decrease thatch decomposition, things like certain pesticides, low pH, anaerobic conditions and lower temperatures and moisture.

From there he talked about advantages thatch offers (1/4") — insulation from soil extremes, some reduction in compaction and the addition of resil-







ience to playing surfaces — and some serious disadvantages — pesticide tie up, scalping, shallow rooting and a source of insects and diseases.

Finally, Bob offered some control measures: topdressing (easily the best control method), core cultivation and reincorporation, vertical mowing/slicing and power raking. He is also convinced spiking can be beneficial.

OLD TRADITION

The Chicago Golf Club is long on tradition; the club is one of the founding members of the USGA. One of their most tightly held traditions is maintaining bluegrass for their fairway turf.

CGC golf course superintendent Bill Whitley presented an excellent discussion on the golf course itself and the management of the bluegrass fairways.

The CGC has hosted a substantial number of championships, almost all of them PRIOR to 1928. He believes the reason for that is the bluegrass fairway turf — it does not allow the ½" height of cut required by such events. Because of that, Bill sees no future for Kentucky bluegrass fairways on private clubs; the grass simply cannot supply the conditions most players want.

There are a couple of factors that might encourage a move to bluegrass in the future. The most obvious is the imposition of water restrictions. Another is an increase in environmental regulation.

THE GCSAA

Greg Grigg is a director of the Golf Course Superintendents Association of America. He dealt with stress management of bentgrass. Educated at Utah State (B.S.) and Michigan State (M.S.), Gary spent ten years in golf course construction before settling at the Shadow Glen Golf Club in Kansas.

His experience in construction and grow-in has given him wide knowledge of bentgrass culture in the hot climates



An ice carving honoring our silver anniversary.

of Texas, Arizona and Kansas, areas where stress management is critical.

According to Grigg, principal stress management factors are:

1. Cutting height

Air movement and shade caused by too many trees

 Soil factors of low oxygen, excess water, deficient water, high soil temperatures and algae growth

4. pH

5. Salts, especially in southwest U.S.

6. Some minor element deficiencies

7. Disease and insect pests

8. Thatch

9. Layering.

Stress is especially serious when cool season grasses are growing in hot environments.

THE USGA

Stan Zontek returned to Wisconsin to wrap up the Symposium. This long held tradition of having a USGA agronomist summarize the education sessions differed this year only because

Zontek assumed the task for Jim Latham. Latham's job for 1990 was tracing the Symposium history at the Tuesday luncheon.

Stan's own history as a USGA agronomist is nearly as long as the Symposium's. His 20 years of experience gave him the chance to put a real perspective on this Wisconsin meeting. It's his view that the Wisconsin Symposium has prospered for two reasons—no concurrent sessions and a format of golf turf only.

A look back over a quarter of a century by Zontek reveals tremendous change. The year the Symposium began, Stanley's father had a good position as a superintendent and made \$13,500 along with a pickup truck!

Greens were cut at $\frac{3}{16}$ " to $\frac{1}{4}$ " and fairways were commonly bluegrass maintained at $\frac{1}{4}$ to $\frac{1}{2}$ " and were cut with pull frames. Irrigation was coming on strong and with it came *Poa annua*; the fescues checked out. Putting greens were watered with roller bases and hoses.

Twenty-five years ago golf course superintendents were greenkeepers and the educational offerings were a mere fraction of what is available today.

Stan suggested the silver anniversary of the Symposium was a celebration of change. We have the best maintained golf courses ever, the best playability and the best equipment ever. Golfers experience far less turf loss, play on lower heights of cut and have better holding greens. And the golf course superintendents of 1990 are the best educated ever and have become true professionals. "They've taken grasses 1,000 miles beyond their natural zones of adaptation," Stan said.

The future, in his opinion, will focus on the environment. "We'll all have to be environmental activists," he said.

And so the 1990 Wisconsin Golf Turf Symposium ended, with full respect for the past and anticipation of the future.



Jim Latham accepts the WGCSA Distinguished Service Award.



Professor Joe Duich finally makes it to the Symposium podium.



The wit and advice from Gene Haas was greatly appreciated.

1990 SYMPOSIUM AWARDS

Best Quote: By Stan Zontek, while discussing the most indispensable manager of a golf club situation: "Golf is played on grass, not on a hamburger or on an Izod shirt."

Second Best Quote: By Wayne Otto, during the Wisconsin panel discussion about recession impacts on golf course budgets and areas where cuts might occur, like tree trimming: "Golf isn't played in the trees."

Best Dressed Award: Goes to the golf course workers at the turn and earliest part of the century when the uniform of the day included a sport coat and necktie! Many of us wish some of



The only two who have been at all 25 Symposiums — USGA agronomist Jim Latham and plane player Sam Fugiasco.

the attendees of the Symposium in 1990 knew when to wear a coat and tie.

Best New Disease Control Advice: From Gary Grigg, during a discussion of the disease control necessary in shaded conditions, gave us the name of the three best fungicides in the world — Homelite, McCulloch, and Stihl!

Most Collectible Item: The program; this is a keeper. Designed by MMSD's Terry Ward, it really does commemorate the Symposium's Silver Anniversary.

Best Compliment Paid: From Dr. Duich, for the fellowship he noticed at our meeting. He said that was important to him; it is to many of us, too.



Chicago Golf Club's Bill Whitley.



Our longtime friend and counsel, Stan Zontek.



GCSAA director Gary Grigg.



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1990 Field Day Sees Record Crowd

By Monroe S. Miller

The relatively normal growing season in Wisconsin seems to have inspired an increase in the number of attendees at this year's Wisconsin Turfgrass Association Summer Field Day.

Over 450 people were at the event.

Event chairmen Tom Harrison and Tom Schwab were especially pleased with the number of new exhibitors for the year's field day. Needless to say, they broadened the appeal of the equipment show.

One of the great attributes of this field day is the opportunity to actually operate much of the equipment on display. That opportunity has been available for the entire history of the field day — Arlington Experiment Station, Oconomowoc Country Club, Camelot Country Club and Yahara Hills Golf Course.

Particularly evident were the new fiveplex mowers and a wide range of aerifying equipment. Both areas are getting a lot of attention on Wisconsin golf courses.

What would have been a great day anyway was made really special by two of our guests. Pat Richter, new athletic director at the University of Wisconsin-Madison, offered words of confidence about the sports program at the UW. Pat is on familiar ground during an event like ours. He earned his B.S. degree from the UW in Landscape Architecture.



CALS Dean Leo Walsh visits with Cherokee C.C.'s George Magnin.

After a career in the NFL (with the Washington Redskins), Richter returned to Madison, went to work as an executive with Oscar Mayer (his UW law degree in hand) and joined Maple Bluff Country Club. That led to a turn as the club's green committee chairman, a position that familiarized him with a lot of what goes on in turfgrass management.

Dr. Leo Walsh, Dean of the College of Agricultural and Life Sciences at the UW, also accepted an invitation to attend. Long a supporter of the turfgrass industry in our state, Walsh stayed for lunch and conversation. Joining him were Horticulture Department chairman Herb Hopen and a faculty representative of Plant Pathology Department Chairman Doug Maxwell.

This marked the final year of the WTA's three year visit to the Yahara Hills golf course. The cooperation offered by the YHGC staff surely has been appreciated. Next year, the field day will move to its permanent home for all time, the NOER CENTER.

Exhibitors at the 1990 Wisconsin Turfgrass Association Field Day

The Andersons
BASF
Badger Plastic and Supply
Cashton Farm Supply
Century Rain Aide



The field day included some rather dramatic plot results.

Ciba-Geigy Dow Elanco Grace Sierra Hanley Horst Distribution Jerry's Small Engines Johnson & Associates KEI Kellogg Seed Kohler Engines Lakeside Lawn Service Lebanon Turf Products LESCO Lingrens Michaels Co. Inc. Mid-State Power and Equipment Milorganite Nor Am Northrup King Olds Seed Co. PBI Gordon PJ Golf Cars Pendelton Turf Reinders Reinders Irrigation Rhone Poulenc Scotts Sprayer Supply Spring Valley Tiziani Golf Cars Tractor Loader Sales Turf Management Supply Tyler Enterprises, Inc. Vigoro Waupaca Materials



Wisconsin Turf Equipment

Wilbur Ellis

Prof. Bob Newman and Athletic Director Pat



A panoramic view of the Horst/Wisconsin Turf display.

CEDAR CREEK: Birthplace Of A Golf Course

(Part Two)

"THE CHALLENGE"

By Pat Norton

The first half of the Cedar Creek story (*The Grass Roots*, May/June 1989) dealt with the actual planning and construction of this Robert Lohmann layout, located along the Mississippi River in Onalaska, Wisconsin. It covered the story through the seeding of the first nine holes in the fall of 1988, which seems like ancient history as my mind mulls over the last two years.

This half of the story will deal with the challenge of finishing actual construction, ridding ourselves of contractors, and easing our way into the transformation of this 140-acre parcel of bare ground into a lush, playable golf course.

The story continues with a discussion of grow-in while dealing with outside interference (sewer and water lines, residential roads, and endless delays). There were many high points and many low points from spring of 1989 until now.

Looming large was the real possibility that the course wouldn't be opening at all in 1989. A mixed blessing, to be sure, but certainly by spring 1990 we would have a completed clubhouse, road network, and a more beautiful golf course. This became our new goal, one that we had to achieve. How we achieved it and went on to have a very successful first year will finish our story.

The original projection for opening Cedar Creek for play called for completion of all construction in 1988, with the entire course open by July 1, 1989. After suffering numerous delays in spring 1988, a revised construction schedule called for first nine seeded in the fall of 1988 and opened by July 1989. The second nine would be completed in the spring of 1989 for a spring 1990 opening.

"In order to meet this schedule," we all say, "no more delays, no more surprises, lots of teamwork, no hassles. Right?"

WRONG! Considering all of the delays with sewer, water and roads, hassles between principal partners and architects, and surprises (as in 'look at **all** the erosion that storm gave us last night'), I still feel that we did a pretty good job of completing Cedar Creek; although not exactly according to our revised schedule.

The first nine holes, after considerable regrading and

The first nine holes, after considerable regrading and reseeding, looked pretty good by end of May 1989. Yet to come, however, was sewer and water line installation, which was delayed until late August. After seeing how extensively damaged the course became, I began to get really angry.

All the planning, coordination, and hard work that went into the first nine made no difference now. After screwing around all spring and summer, the city of Onalaska and our principal developer finally got their act together. We all knew that the route of these lines would cut right through the first nine. Yet nothing was ever expedited, pushed through, or hurried up in this approval process.

In fact, it was just the opposite. There was a damned casual attitude about these delays and the long term effect on the golf course. A three-month project starting in late August allowed almost no leeway for actual sewer installation, and absolutely no leeway for reconstruction of the golf course.

The only people who were really upset about it all were my crew, the sewer contractor, and myself. The sewer contractor knew full well that he'd have a hard time finishing his job before winter. I knew that there was no chance of any reseeding or healing in of these areas of the golf course in fall 1989. In effect, we lost almost the entire construction season because of that damned casual attitude that people sometimes display.

The sad part of it all is that these potential problems were well known very early on and noted in meetings between Lohmann Golf Designs and Cedar Creek. Get into a knowledgeable discussion sometime about the pitfalls and prob-



A rear view of the clubhouse. A new wing may be added onto the right side within two to three years.



Our 13th green. Algae problems here were severe until we began hand mowing exclusively.