

James B. Beard



NORTHERN MICHIGAN TURF MANAGERS ASSOCIATION

3733 APOLLO DRIVE • TRAVERSE CITY, MICHIGAN 49684 • 616-943-8343

JUNE 8, 1987

TREE TOPS COURSE AT SYLVAN RESORT, GAYLORD, MICHIGAN
3962 WILKINSON ROAD

(Turn just east of the Entrance to Hidden Valley)

DAMIAN KURKOWSKI, SUPERINTENDENT RICHARD C. SMITH, PROFESSIONAL

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Proceeds will go to
Michigan Turf Foundation
Turfgrass Research Fund

ENTRY FEE: \$60.00 per player
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FOUR MAN BEST BALL
Best Two of Four
Full Handicap



**Team Prizes &
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A Robert Trent Jones, Sr.
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Includes:

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Longest Drive

Sylvan lodge rooms are available
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**Closest to the Pin
and More!**

In case of inclement weather the banquets will be held as scheduled.

ENTRY FORM

Players	Handicap	Preferred Starting Times	All Tee Times are assigned on a first-come, first-served basis and will be confirmed by mail.
_____	_____	Shot Gun 8:00 am _____	
_____	_____	or	
_____	_____	Shot Gun 1:15 pm _____	

Make checks payable to N.M.T.M.A. and along with entrees, send to:

TOM BROGGER
175 Snyder
Harbor Springs, MI 49740

Dear Northern Michigan Turf Managers:

As the seasons change and our interests move back on to the golf course, your M.T.F. Benefit Committee is busy wrapping up the details for this years' fund raiser. We are very fortunate to have as our host, Damian Kurkowski and The Sylvan Resorts Treetops Golf Course, truly a Robert Trent Jones "Masterpiece." The participation we experienced at Shanty Creeks' Legend Golf Course in 1986 was outstanding. The \$6,000.00 raised for turf research was our largest donation ever. With this momentum and the reputation Sylvan has already gained, we are sure 1987's event will be an even bigger success.

The format has been changed slightly this year to a double shot gun beginning at 8:00 AM and 1:15 PM. There will also be two separate banquet dinners, as well as prize winners from the morning and afternoon rounds. These changes were made to cut down on the long waiting period between the beginning of golf and dinner.

Another obvious change is the increase in entry fee from \$50.00 to \$60.00. As turf managers, we can all appreciate the information we have gained from turf research in the past. Our additional contributions will help guarantee that this quality research will continue in the future. Putting aside the idea of "supporting your own" for just a minute, consider that each contestant receives a round of golf at the Treetops, cart, dinner (prime rib and other entrees), and a chance to win many prizes which will include for the first time, golf and cart certificates from some of Northern Michigan's top courses.

With this great opportunity to be one of the first to challenge the Treetops' layout and along with the camaraderie and renewal of old acquaintances that goes with all our meetings, we feel we are going to have something very special this year. So sharpen up your games and we'll see you on June 8th at the Treetops.

Sincerely,

Your M.T.F. Benefit Committee:

Tom Brogger (Chairman)
Jim Bogart
Paul Holmes

Damian Kurkowski
Charlie Menefee
Jim Olli

NEXT MEETING WILL BE AT HIDDEN VALLEY ON JULY 8, 1987 SO MARK YOUR CALENDAR WHILE IT IS FRESH IN YOUR MIND. JIM OLLI, IS THE GOLF COURSE SUPERINTENDENT AND MARK HOGAN, IS THE GOLF PROFESSIONAL. (517) 732-4653

BEHIND THE GREENS
A MONTHLY MESSAGE FROM THE BOARD
BY JON SCOTT, PRESIDENT

It seems we have entered the "age of yesterday" this year. By that, I mean that everything has to be done by then. Everyone I have talked to so far this season is trying to "catch up", whatever that means. Your Board is no exception. We needed just one more month to tie up all the loose ends before the season started, and WHAM! It started. Hopefully, all things promised will be done, but if not, we hope you'll understand that we are all as busy as you have been, and our primary responsibility is to our jobs. What doesn't get done this year can be addressed next fall and winter. After all, if we did it all at once, there wouldn't be anything to look forward to; right?

A significant news item appeared in the Traverse City Record Eagle recently which may signal a new approach by the media and citizen interest groups toward pesticide usage. As most of you know, the prime focus of these groups has been the lawn care industry. The golf courses have been relatively overlooked in the campaign to limit or remove pesticides from the environment. I'm afraid that luxury may be ending, as the article seems to point to the golf course as a source of pollutants to trout streams. While this is not new, it has generally been a concern of a few disgruntled property owners and loosely organized environmentalists. Those days are ending. Golf courses, especially new ones, either planned or under construction, are likely to be targeted for increased scrutiny by the media and public on the urging of well organized environmental groups professionally trained in public relations. Some of you may be directly involved in making statements to the press or public forums, but many more of you will be indirectly involved by the increased public awareness of what pesticides you use and how you apply them in your turf management programs.

The article in the Record Eagle demonstrates what can happen when a well intentioned reporter senses a newsworthy topic of national interest with local impact. As most of you know, The Homestead has been trying to gain approval for a golf course development near Empire, east of Traverse City. Many environmental groups, including one in Traverse City, have allied against this project because of its proximity to a wildlife area, including a trout stream. Coverage of this controversy in the Record Eagle, as well as most statewide newspapers, such as the Detroit Free Press, has been both regular and, at times, sensational. Similar, but less aggressive, has been coverage of other developments such as Michaweh Hills and Sylvan Resort's Treetops. Other projects under way or in planning face certain study by local and state environmental groups. The most sensitive questions raised in these inquiries center around water, both surface and subsurface. Michigan's clean water is hot property in promoting industry and tourism. Anything that may negatively affect water quality will be newsworthy. How does that impact us? It puts turf managers on the defensive, and defensive battles can be lost if preparations are not adequate.

Step one in preparation is awareness. We must believe that this is not the other guy's problem. It can quickly be you! Read the papers and pay attention to local environmental controversies. If you are involved with a development project, consult with agencies such as

GCSAA and PLCAA to gain information on how to handle environmental concerns. The more informed you are, the better you can inform.

Second, we should make sure our programs are sound and in compliance with all laws. Don't assume that you can get away with any violations of the guidelines, no matter how minor. Make sure the chemicals you choose to apply are used according to label directions, and pay careful attention to any environmental warnings such as fish and wildlife toxicity statements. Try to use products which break down quickly in the soil once applied. Calibrate your equipment, and carefully train and supervise your applicators when not doing it yourself. If you are applying pesticides and fertilizers responsibly and legally, it will be easier to justify your pesticide management program should it come under review.

Next, be careful of your statements. Don't assume you won't be quoted, or that what you say will be printed as you said it. It is common when being interviewed to be asked leading questions that allow you to qualify your answer, only to have the qualifier omitted when the item gets to print. News space is expensive. Uninteresting statements are cut to save room for attention getters. It is not news when you say pesticides are safe to use in the environment when applied properly. It is news when the printed article contains the statement "Local turf manager thinks pesticides can be dangerous to the environment when misused." Both statements are true. The second one obviously gets attention. Sometimes, the safest statement is no comment. The worst that can be said is "Local turf manager refuses to respond to our questions." While that may sound like you are guilty of something, at least you haven't given any statements which may be twisted or taken out of context. Newspeople are not "out to get you". They merely want to get a story. If they can't find one in you, they are likely to go elsewhere to meet their deadlines. No one can make you comment or return calls. Common sense will keep you out of bad situations.

A question that has been asked at our board meetings concerns what our association can or should do when articles such as the Record Eagle's appear, or one of our fellow managers comes under fire. Not surprisingly, we haven't arrived at an answer. If one of us becomes a spokesperson, will that manager be exposed for targeting? What if our organization comes under scrutiny? Will what we say be accurately presented and properly interpreted? Past experience demonstrates the difficulty in this area. This may be one of the most important issues your association tackles this year and next. For the time being, don't hesitate to call for help. Some of us have had experience in dealing with the media and environmental groups. We may be able to assist you in this arena. We will be formulating a more formal procedure in later meetings, and we welcome your comments and ideas.

There is no doubt that a follow up will be done by the media on the issues raised in the Record Eagle article. How we handle that follow up may determine whether we remain able to use pesticides and fertilizers in our turf management programs. We are no longer immune to citizen concerns. We must address these issues professionally and aggressively as they are raised. Chemicals are a given part of the modern world. If we can demonstrate that we share the same citizen concerns about the environment we all live in, we can be part of the solution instead of the problem.

See you at Sylvan.

TRAVERSE RECORD EAGLE

our Sections, 44 Pages

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Golf course

toxins may

harm streams

By DIANE CONNERS
Record-Eagle staff writer

TRAVERSE CITY — Chemicals fused on golf course greens may be harming fish in nearby streams, say some state officials, sportsmen and environmentalists.

The issue is of particular concern in northern Michigan where many of the state's most sensitive streams and wetlands are located, said Howard Wandell, aquatic biologist with the Department of Natural Resources. This area also is where many of the new golf courses are being developed, he said.

Michigan has 570 public golf courses, more than any other state.

Concern about how golf course chemicals might affect the Crystal River and surrounding wetlands has been a major issue in the proposed development of a new course in Leelanau County. Robert Kurras, developer of The Homestead resort in Glen Arbor, has asked the Glen Arbor Township Planning Commission for approval to develop an 18-hole golf course and single-family housing project. A public hearing on

Continued on Page 10

• • • Toxins harm streams

Continued from Page 1 —
his proposal has been scheduled May 14.

The main opposition to the course has been from a group known as Friends of the Crystal River. Other groups opposed to the project are the Environmental Policy Institute of Washington, D.C.; the Tip of the Mitt Watershed Council of Conway; the Walter Hastings Audubon Club in Traverse City; and the Northern Michigan Environmental Action Council, also of Traverse City.

The Department of Natural Resources should research how chemicals used on golf courses affect nearby waterways before new courses are allowed to be built, said Bob Russell, president of the Northern Michigan Environmental Action Council.

Trout Unlimited is urging the DNR to limit chemical use to combat insects and fungus on golf courses bordering popular fishing streams, said Robert Andrus, the group's president.

Insecticides probably are the most significant problem, said Bruce Branham, assistant professor of crop and soil science at Michigan State University.

"An insecticide generally is working on the same types of systems in fish that it is working on in insects," Branham said. "Most of the insecticides that are used today are broken down into the soil easily."

Fungicides and herbicides also can contain chemicals that could be harmful to fish, and fertilizers can cause excessive algae growth that chokes out streams. Branham said.

Michael Allison, green superintendent at the Schuss Mountain resort golf course in Antrim County, said chemicals are being used with more caution than they were 15 to 20 years ago. Then, he said, greenkeepers applied lead arsenic to courses, and took few precautions for safety.

Now, he said, milder chemicals are applied only where and when needed and when it is not raining or windy. Rain would cause quicker leaching of the chemicals to the soil and wind could carry them to streams, he said.

He said bales of straw have been placed in creeks running through the course to filter chemicals before the water reaches the nearby Cedar River, he said.

Allison said he uses the chemical Sevin at half the recommended concentrations. It is used to kill cutworms that would eat away the entire green if allowed to live, he said. He said he applies it twice a year.

State permits required for new golf courses call for green belts or setbacks of 50 feet or more from waterways.

Branham said there has been "little or no research done" on how to treat golf courses without harming the surrounding area.

"It bears some watch and the DNR is taking a closer look at new courses," said Jack Bails, deputy director of the DNR.

Bails said most golf courses follow strict limits suggested by Michigan State University crop and soil scientists.

The Associated Press contributed to this report

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MILORGANITE DECLARED INNOCENT!

By MONROE S. MILLER

Despite the efforts of a UW-Madison researcher and a Milwaukee newspaper to convict Milorganite as a cause of ALS (amyotrophic lateral sclerosis - Lou Gehrig's disease), a jury of state and federal officials cleared the MMSD product of those unfounded, unjustified, unfair and untrue charges. At a meeting held in the University of Wisconsin-Madison Hospital and Clinics on February 19th it was determined that there is *no* need to further study whether Milorganite is tied to ALS. Those officials, composed of physicians and epidemiologists, criticized Benjamin Brooks, an ALS researcher at the UW-Madison, for the comments he made suggesting that the heavy metals found in sludge should be studied as ALS suspects. It was this irresponsible suggestion that took Milorganite into the headlines here in Wisconsin and all across the country.

Brooks was widely quoted in the media as saying that the incidence of ALS in Milwaukee was significantly higher than in the rest of Wisconsin or the rest of the country. He was also quoted from coast to coast as saying that the ALS death of two San Francisco 49er football players might have been the result of their exposure to the Milorganite used to fertilize the team practice field. Later investigations turned up no evidence that Milorganite had even ever been used during that time. But the damage to MMSD had been done by then.

Brooks was taken apart at the meeting in Madison by the seven or eight physicians and epidemiologists present. Dr. A.A. Rimm, an epidemiologist with the Medical College of Wisconsin, told Brooks: "I sort of feel you have found a product guilty of murder, and it's innocent." He pointed out that there is *no difference* between the ALS death rates in southeast Wisconsin (Milwaukee) and the rest of the country. Rimm also accused Brooks of "shooting from the hip". Henry Anderson, Chief of occupational and environmental medicine in the Wisconsin Department of Health and Social Services, told Brooks that "associating ALS with Milorganite was premature and speculative." Yet another physician, Dr. Henry M. Goldberg of Milwaukee, said, "No scientist here (at that Madison meeting) feels there is any connection between Milorganite and ALS. I have trouble with the logic of Brooks' proposed study." And finally, Dr. Patricia Murphy, an EPA epidemiologist from Cincinnati, summarized the meeting best when she told Brooks: "There is no evidence to indicate an increased incidence of ALS in Milwaukee or Wisconsin."

Brooks, apparently shaken and shocked that anyone would question him, was taken aback by the attack on his action. Dr. Murphy said the scare had "initially been blown out of some groundkeeper's imagination," referring to the 49ers football team. Then, Peter Parthum, a physician with the Milwaukee Health Department, said it wasn't uncommon for scientists to be "sucked in" by incomplete information. **THAT DOESN'T EXCUSE BROOKS.** I wonder if he'd like to make up for lost Milorganite sales for the next couple of years out of his own pocket? Dr. Rimm criticized Brooks for doing epidemiology work when he was unqualified and incompetent to do so. Dr. Anderson reminded Brooks that medical researchers had to distinguish between skin contact with a substance like Milorganite and exposure to that substance. There is an enormous difference.

To put this whole issue to rest forever, MMSD will continue studying Milorganite and ALS. "I want Milorganite to have the clean bill of health it deserves," said district chairman Dean Showers. Pat Marchese, MMSD Executive Director, said on February 19th that a special team was preparing a plan and cost estimates for that study.

All WGCSA members can help Bob Welch, Jim Spindler and the rest of the MMSD staff most by informing club members, golf players, neighbors and friends that Milorganite is **INNOCENT OF ALL CHARGES.** It is safe to use, as we all knew it was, and it remains one of the premier turf fertilizers ever marketed. As for Benjamin Brooks, I think, maybe, just maybe, the humiliation he has suffered has taught him a lesson. I guess we won't have to go to the UW hospital to tape his mouth shut; hopefully we aren't going to hear from or about him for a long time!

Reprinted from *THE GRASS ROOTS*

MILORGANITE MAKES MILWAUKEE FAMOUS!



Milwaukee is
the land of cheer-
German cooking,
ale and beer;
They eat and drink
from morn 'til night,
And then they make
MILORGANITE!

Their baseball team
is quite their pride,
It's fame has traveled
far and wide.
The grandstand has
a room in sight
where they can make
MILORGANITE!

After the game
they go to dinner,
It doesn't matter
who's the winner -
And after sleeping
through the night,
They make some more
MILORGANITE!

I state without
equivocation,
This chore has
keen cooperation;
It's manufacture
is an art,
where everybody
does his part.

Old men, young men,
perfumed ladies,
Boys and girls
and even babies;
Grunt and strain
and do what's right,
To pile up more
MILORGANITE!

Author-unknown.



Burnout popular disease but there are treatments

AMHERST, Mass. (A) — Burnout! "It's become a very popular disease these days," says Dr. Alfred Alschuler, a clinical psychologist and a professor of education at the University of Massachusetts who did extensive research on teacher burnout.

"Probably the easiest term for it is exhaustion. People are simply tired of what they're doing. They just can't put out anymore."

Its victims include business executives, human services workers, social workers, psychologists, teachers and policemen.

"It's a phenomenon that cuts across occupational lines," says Walter Gorski, chief psychologist for the National Association of Chiefs of Police.

"It occurs to anyone who is primarily involved in problems having to do with other people," says Alschuler, "primarily because human problems are simply not solvable in the same way that a problem with your car or television set is solvable."

Alschuler says the symptoms of burnout include distance from people, spending less time on the job, increased cynicism and negativeness and emotional and physical fatigue.

Silvia Rodriguez, 35, suffered some of these symptoms and burned out after more than 10 years of teaching in the Connecticut school system.

By her own account, she had been dedicated to her students. She wrote her own class materials for her high school language courses to make them more interesting. She gave up her weekends for such causes as the March of Dimes walkathon and the Special Olympics for handicapped children. She gave the needy food and clothing.

She felt she wasn't appreciated by school administrators or the community itself.

Then in the spring of 1979 there was a fight between two students in her classroom. She was hurt.

"I went home and I began feeling very sick. I was out of school for three weeks. My body was in a lot of pain. I began looking at myself and I realized it was not worthwhile."

"I was increasingly tired, increasingly bored. The thought of having to go back to teach was very scary, very petrifying. I really had a tremendous fear when I went back to that classroom.

"When I realized I had lost the trust of my students and that I was not feeling comfortable in their company any longer, I decided they did not need me."

She left teaching in June 1979 and

now works happily at the National Institute of Education in Washington as an adviser on youth education and employment programs.

According to the National Education Association, the average length of teacher service has dropped from 20 years to 14 years in the past 20 years.

Alschuler says stress has been linked with almost every known human disease.

"The cause and relationship between stress and these diseases is not exactly clear but it does seem to be an aggravator of whatever tendency you have toward disease."

Some research, he says, indicates that people with high stress levels are far more likely to have an accident or illness within a significant period of time.

Gerald Arenberg, editor of Police Times, a magazine for members of the National Association of Chiefs of Police, quotes studies that show career police officers, both active and retired, die younger than most other occupational groups and suffer a high rate of health problems.

Gorski says burnout among police officers leads to psychosomatic illnesses, ulcers, backache and hypertension because "they have to deal with unpleasant situations over and over and over."

Among the primary causes of burnout are:

- Too much responsibility, at work or in your personal life.

- A lack of perspective on the stresses that do occur in your life.

- The inability to manage your body's reaction to stress.

- Poor time management and the inability to work effectively with other people.

- Singlemindedness, the lack of some important diversions in your life.

Moving, divorce, business problems create environmental stress, Alschuler says. The condition you are in and bad habits affect your ability to handle stresses. Too much caffeine, too much processed sugar only make things worse.

"If you don't have a positive addiction like jogging, or ceramics, or gardening, or even watching television, something you can do to take your mind off work completely, that's a major cause," says Alschuler.

He suggests talking about your problems with a friend, your spouse or your lover, reducing the amount of incoming stress in your personal life or professional life, qualifying your values to put into perspective what's really important and managing your

body by eating the right foods and getting regular exercise.

"Learn biofeedback," he suggests.

Biofeedback machines that monitor bodily functions like pulse, heart rate and body temperature, are relatively inexpensive, he says, and can help manage the body's response to tension.

Alschuler, who says he is a little overweight, counterbalances his own work with karate workouts three times a week with his son, Alfie, 9, and his oldest daughter, Lisa, 14. He and his youngest daughter, Britt, 11, take care of the family horse. This makes for quality time with his family.

In the last 10 years, he has traveled across the country between college semester breaks as a consultant to more than 300 different organizations, most of them educational. He has written a dozen books dealing with the psychological and social problems in schools and has two more in the works. He has done radio and television programs.

At age 41, he avoids burnout by choosing his level of workload and pacing himself.

"I have learned how to say no to hundreds of attractive pieces of work. I hold certain times of the day and week as sacrosanct. For example, from Friday evening to Sunday evening, my children come before anything else.

There are a number of effective anti-burnout programs for teachers and police officers, emphasizing physical conditioning, good nutrition and working out tensions. Most, commonly, common sense helps.

When racial disturbances hit Opa-locka, Fla., last May, Police Chief Robert Ingram saw a potential for burnout among his officers because of the long shifts and the threat of attack. He called in Alschuler to give him a hand in stress reduction training.

"It worked very well as far as I was concerned," says Ingram, who picked up a few tips himself in time management.

"One of the stresses that I discovered," he says, "was the time management process. You schedule everything but time to yourself."

Dr. Jodi Kassove, a psychologist and business consultant in Colorado Springs, Colo., says burnout "is substantial among business executives and one of the symptoms is denial. I think some of the more humanistically orientated companies are just beginning to address the problem."

WARNING SIGNS OF BURNOUT AND EXCESSIVE STRESS

1. Sudden change in behavior, usually directly opposite of the person's normal behavior - becomes suddenly gloomy and pessimistic.
2. A gradual change in behavior that points to a deterioration in performance, self-esteem, and attitude - increasing lethargy, depression and sullen behavior.
3. Erratic work habits - coming to work late, leaving early, abusing comp-time and breaks.
4. Increased use of sick leave for minor ailments.
5. Inability to maintain a train of thought. Rambling conversation, preoccupation, difficulty in sticking to a specific topic.
6. Excessive or obsessive worrying about what might happen at the exclusion of other thoughts.
7. Grandiose behavior - preoccupation with religion, politics, etc.
8. Excessive use of alcohol and/or drugs, disinterested in appearance, hangovers, bragging about drinking, indicates avoidance of problems.
9. Continual fatigue - lethargy, sleeping on the job.
10. Peer complaints - others refuse to work with the person.
11. Excessive complaints from clients of the general public - sarcastic comments relating to clients.
12. Consistency in complaint patterns, picks on specific groups.
13. Sexual promiscuity - "recreational sex" used as an escape from stress and problems.
14. Excessive accidents or injury - not paying attention to driving, handling machinery, etc.
15. Manipulation of fellow workers and citizens - uses others to achieve one's own needs without caring for their welfare.

Oak Wilt — A Serious Threat Or Just One More Disease?

by James A. Fizzell
Horticulturists, Univ. of Illinois

The summer of 1986 was marked by an unusually high incidence of Oak wilt throughout North Eastern Illinois.

Oak wilt is a disease closely related to Dutch elm disease. It affects a tree in much the same manner as does D.E.D., plugging the xylem, preventing water movement throughout the tree.

Infected trees of the red oak group, those with pointed lobes on their leaves, are killed quickly, usually within months of the appearance of the first flagging. Leaves bronze, dry and drop. Members of the white oak family (rounded lobes on their leaves) die back gradually, becoming stagg-headed before succumbing. Leaves on affected branches become light green, tan, and dry, remaining attached. There are reports of spontaneous recovery by white oaks, which seem to be capable of walling off infections if the trees are vigorous enough. Affected branches of all species show characteristic brown streaking of the xylem.

Oak wilt has been around for many years with localized outbreaks reported in red and black oak stands every year or so. Spread has been mostly by root grafting, although obviously something had to bring the fungus into the area to start with.

Fortunately, there has been no powerful vector such as elm bark beetle which efficiently moved D.E.D. throughout elm plantings nationwide in only a few years. 1986 was different. Oak wilt appeared in many places. It showed in individual oaks far removed from other oak trees. The first occurrence verified by our lab was in a pair of red oaks in the middle of a fairway, nearly 1/2 mile from another oak. No other infection was found in the vicinity. The pattern was repeated all season.

Apparently, something is moving the disease more efficiently than we have seen in the past.

Sap beetles are known to carry spores from fungus mats beneath the bark of wilt-killed black and red oaks, to open wounds on healthy trees. These insects could be carried miles by winds. Squirrels, too, could carry spores; but this has not been proven.

Once the disease gets started, it spread quickly to any adjacent oaks through root grafts. There is no cure, so prevention is the only means of control.

Prevention includes care to avoid wounding of healthy trees during the growing season, quick treatment of wounds, breaking of root grafts and prompt removal and destruction of diseased trees.

Wound infection is most likely to occur from bud break in spring until growth ceases in early summer. Pruning or any other work around oaks which could result in open wounds should be delayed until well past this time, preferably until the trees are dormant.

Wounds during the critical period must be treated promptly. This is one case where wound dressing is recommended to prevent the insects from coming in contact with the damaged wood. Paint generously with orange shellac, and cover with an asphalt-based tree dressing.

Sever root grafts between diseased and healthy trees as soon as symptoms are observed. The sooner the better. In large plant-

(Oak Wilt cont'd.)

ings of oaks it may be advisable to sever root grafts to create a barrier between the apparently healthy trees around an infection and the next healthy trees, just in case the disease has already moved through root grafts.

Diseased trees should be removed immediately unless such operations would injure nearby healthy oaks.

Wood from diseased trees may be used as firewood, but should be burned or debarked before spring.

There is speculation as to the reasons for increased incidence of the disease last year. There may have been unusually high populations of sap beetles because of the mild winter. Or, trees which were previously infected simply showed no symptoms until stressed; Appearance of a new vector is possible, as well.

Keep a close watch this spring as your oak trees develop. If you see suspicious symptoms, be prepared to take appropriate steps to protect nearby oaks. If you need assistance in diagnosis, contact our office or the Cooperative Extension Service office in your county.

CREDIT: THE BULL SHEET



The obnoxious customer was giving the clerk in the department store a bad time. Finally, she said, "Isn't there a smarter clerk I can get to wait on me?"

"No, lady," the clerk said. "All of the smart clerks ducked out when they saw you coming."

"Walking the Tightrope with Ultra-Fast Putting Greens"

Dr. R. T. Kane, Turfgrass Advisor

Over the last few years, new standards for putting green quality has emerged, with the primary emphasis on green speed. Mowing heights for greens are now commonly in the 1/8 inch range (.125"), and other management practices such as frequent sand topdressing, verticutting, and brushing are used to accentuate speed and improve smoothness.

However, these same management techniques can be quite detrimental to the bentgrass and *Poa annua* plants that comprise the putting surface. Low mowing heights and the abrasive action of sand, verticutting, and other grooming activities reduce the leaf surface available for plant growth which, in turn, reduces root depth and volume. The result is a weakened plant which lacks vigor and is much more susceptible to environmental stresses and pathogen invasion (e.g. bacteria and nematodes). During summer heat and humidity, the superintendent must balance water, pesticide, nutrition, and other inputs in order to insure survival of the green.

De-emphasizing green speed as a determinant of putting quality would make the superintendent's life easier. Ultra-fast greens are not required to test the ability of the average golfer on a day-to-day basis. Raising the cutting height as little as 1/32" (to 5/32") will reduce plant stress and help insure a healthy, green putting surface through the entire season. Improved plant vigor will add a safety net of sorts to the tightrope walking routine.

Credit: "The Score Card", Spring 1987