James B. Beard

NORTHERN MICHIGAN TURF MANAGERS ASSOCIATION

TUESDAY, OCTOBER 6TH, 1981
GREEN HILLS GOLF CLUB
PINCONNING, MICHIGAN

FRANK HEMINGER, SECRETARY-TREAS.
1147 SANTO
TRAVERSE CITY, MI. 49684
PHONE: 616-947-9274

Next meeting of this Association will be as shown above with the same program of golf, "Happy Hour", dinner and our business meeting. For those of you that are not familiar with the location, Pinconning is north of Bay City on Michigan 13. Anyone coming either north or south, that can use I-75 should get off at the Pinconning Exit, go east to M-13 and turn south on M-13 at the light, then 4 3/4 miles south to Green Hills Golf Club on the west side of the road.

Tom and Dan Courtemanche have extended to you an invitation, to play their fine 18 hole golf course. Here you will find beautiful fescu e fairways that are not common in Michigan but might be what we see further down the road in time with the high escalating energy and fertilizer costs. Lunch is available at the club house, no starting times are necessary and golf carts are available. So ------ bring along your best game and enjoy yourselves. Don't forget to put your two bucks in the prize kitty when you register for golf.

Dinner will be served in the club house and we expect to eat at 6:15 P.M., or as close to this time depending upon some getting off of the golf course. So those of you wishing to play, please use this target time and pace yourselves accordingly keeping in mind Happy Hour.

We must know the number that will be there for dinner so please get this postcard back as quickly as possible. DO IT NOW.

Our speaker for the evening will be Dr. Paul E. Rieke who will speak on dormant fertilization plus have a word relative to snow mold if there has been any new development that we should know about. Paul as you know is now 50% on turfgrass extension and he will be the one for us to depend upon should problems arise throughout the year. We will look forward to an interesting evening.

****

We had a very successful meeting at Grand Traverse Hilton with 108 being present for dinner and the speaker, Tommy Sasser, who is Jack Nicklaus' head construction boss. At this meeting, three directors were elected to serve three years on the Board. At this meeting at Pinconning, the Board will elect the officers for the year 1982. Remember our fiscal year starts Nov. 1st and ends October 31st. This means that if you have not paid 1981 dues, you will be about due to pay for two years. We are happy to report that at our last Board meeting, the Board has decided that dues will not be increased for 1982.

****

Membership cards for 1982 will be a beautiful yellow so bring your check along for our Secretary-Treasurer Frank Heminger and your new card will be in your hands in a few days. This new card will not be available to you if you have not paid 1981 dues. You must be current.

****

New Fusarium Blight Treatment

by Dr. Joseph M. Vargas, Jr.

The debate among plant pathologists still goes on over the cause of the disease known as Fusarium blight. However, while the debate of the cause or causes of Fusarium blight goes on, a new chemical management tool has come on the market.

The fungicide is triadimefon which will be sold under the trade name of Bayleton. It has been one of the most effective fungicides for the management of Fusarium blight in research trials at several universities including Michigan State. Triadimefon is different from other Fusarium blight fungicides in that it is only effective when applied as a preventive treatment. Other Fusarium blight fungicides can be applied either preventively or curatively. This means if triadimefon is to be effective it must be applied to the turf before Fusarium blight symptoms appear or before the "frog eyes" from previous years become active again. This will vary from one location to another. One should check with the turfgrass experts in their area to determine the date when Fusarium blight normally occurs. Triadimefon should be applied 2-3 weeks prior to the time Fusarium blight symptoms normally occur.

The exact rate for effective management of Fusarium blight with triadimefon are still being investigated. The test results range from 2 oz/1000 sq. ft. to 8 oz/1000 sq. ft. and from one to two applications/season. This should not be surprising considering the confusing nature of this disease. But even more important in explaining the rate difference may be the cultural regimes under which the Kentucky bluegrass was maintained. Kentucky bluegrass turfs maintained with good cultural practices should have milder outbreaks of Fusarium and, therefore, lower rates should be more effective in managing Fusarium blight. Fungicide treatments are far more effective for more diseases where good cultural practices for disease management are followed.

Good cultural practices for Fusarium blight management consist of nitrogen fertility in the summer months and light frequent irrigation during the warm weather. Kentucky bluegrass turf undergoing senescence (natural aging and dying) is more susceptible to Fusarium blight than those not undergoing senescence. Nitrogen fertility in the summer helps prevent the Kentucky bluegrass from undergoing senescence. This goes against traditional beliefs of only applying nitrogen in the spring and the fall on Kentucky bluegrass and avoiding summer nitrogen application. However, these recommendations were based primarily on research demonstrating the times of year Kentucky bluegrass could best utilize the nitrogen coupled with data showing high rates of nitrogen makes Kentucky bluegrass more susceptible to heat and drought stress. This would all be relevant if your primary goal was "growing grass" but it isn't, or at least it shouldn't be. The primary goal of any turfgrass manager should be "maintaining turf". More explicitly maintain healthy, dense, pest-free turf. Whether the plant can better utilize the nitrogen in the spring and fall compared to the summer is not the point. The point is Kentucky bluegrass needs some nitrogen applications in the summer to avoid senescence and severe Fusarium blight outbreaks. While excess nitrogen, 2 to 3 lbs/mo. in the summer, may make Kentucky bluegrass more susceptible to heat and drought stress, 1/2 lb actual nitrogen in June, July, and August will not noticeably increase Kentucky bluegrass susceptibility to heat and drought stress and it will reduce its susceptibility to Fusarium blight.

Light frequent watering also goes against traditional beliefs of heavy infrequent irrigation to encourage deep root growth. The idea behind this is that the soil will dry from the top down and the turfgrass root will grow down in search of moisture. Heavy infrequent irrigation will encourage deep root penetration in the spring and fall when the soil temperatures are cool. However, regardless of how a turf is irrigated in the summer, the natural tendency of all turfgrass species is to have shorter roots in the summer when warm soil temperatures occur. Therefore, the argument for heavy, infrequent irrigation to encourage deep root growth in the summer is not valid.

Light, frequent irrigation does reduce the severity of Fusarium blight. Its action is probably three-fold. One, it supplies water to Fusarium blight infected plants that have only short root systems. Secondly, if applied at midday, helps cool the turf better enabling it to survive heat stress. The third effect may be the encouragement of microorganisms which are antagonistic to the Fusarium fungi or other precursors of Fusarium blight.

The lawn care industry now has a new fungicide for the management of Fusarium blight, triadimefon (Bayleton), to go along with the other fungicides Tersan 1991, Fungo 50 and Cleary's 3336. The main difference with triadimefon is that it must be applied preventively before Fusarium blight begins to develop. Regardless of which fungicide is used to manage Fusarium blight, it will be far more effective if it is incorporated with good cultural practices discussed above.

The doctor explained to Walters that he had a serious ailment for which an operation was absolutely imperative.

The patient turned pale and asked, "Isn't it very dangerous?"

"Yes," the doctor replied. "Five out of six who have this operation die, but as for you, you have little to worry about."

"Why not?" eagerly inquired the patient.

"Well, you see you're a cinch to recover because my last five patients died," the doctor reassured him. *The Bagpipe*

EVALUATING YOUR OPERATION

With the passing of summer, golf course superintendents in many parts of the country have an opportunity to sit back, take a deep breath and evaluate their operations. On many courses, heavy player traffic has slowed, seasonal employees have gone and budget time is approaching. It's time to take inventory.

Besides the problems of getting the course and equipment ready for winter and infentorying leftover supplies, it's also time to look back over the summer and take a mental inventory of your operation's strengths and weaknesses.

For example, what went wrong during the season? Was your course damaged by insects or disease? If so, what can be done to prevent a recurrence? Now is the time to figure out what should be done and when.

Were your crew members aerifying the course on the day of a club tournament? The slow seasons are the time to work out lines of communication to prevent such misunderstandings from happening next year.

What can be done to improve the course? Take an objective look at your irrigation system, your equipment and the design and condition of your course. Maybe this is the time to plan improvements.

While you are evaluating your performance over the last season, don't overlook the things that went especially well, either. Did you pick up any additional responsibilities this year, responsibilities you might like to continue? Did you try a new scheduling program that was effective? How can it be changed to work even better?

Which of your employees really came through for you? Did an assistant take over some of your responsibilities and run with them? Which employees are willing to put out a little extra effort? Which ones seem to have good ideas? Did one of your seasonal employees prove to be especially hardworking and reliable? If so, you will want to make arrangements to have him back next year.

Now take a look at those projects that were put off all summer. Now is the time to dust them off and get to work on them.

Here is where a good filing system comes in handy. By taking clear notes on problems and opportunities as they occur, and by adding to those notes when you evaluate your operation at the end of the season, you can develop a handy reference tool for use in the future.

Whatever your evaluation of the summer proves, it's important to reap whatever benefits you can. If everything went relatively well, it's just as vital to know why as it is to uncover the causes if there were problems. By building on the past year's achievements and avoiding its mistakes, we can face anything the future has to offer. —Credit: *Forefront*

* * *

The husband was very unhappy. "Why do you keep talking about the mistake I made? I thought you said you had forgiven and forgotten."

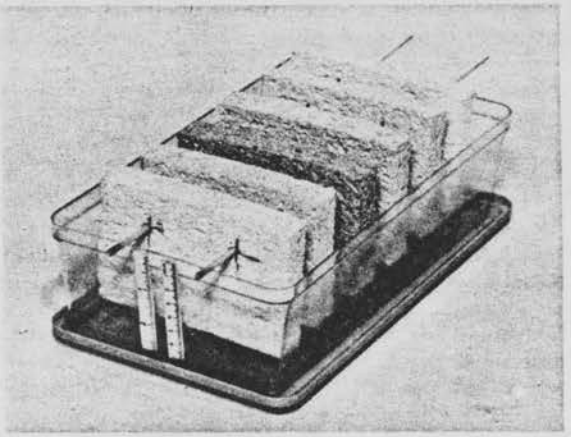
"I have forgiven and forgotten," she snapped. "But I just don't want you to forget that I have forgiven and forgotten!"

* * *

If you are challenged by your employer, your daily records will show why, how, and when each job was performed. This may prove to be a major part in holding jobs in these days of tough competition.

Properly used, the Turf Test Kit can aid in producing superior turf. That is the job we are being paid to do.

Bill Lyons has put together a limited number of the Lyons Turf Test Kits mentioned in the preceding article. Each tool box includes a year's supply of Daily Weather & Turf Reports in a three-ring binder, plus all the tools needed for moisture and temperatures sensing and for chemical testing of dew, clippings, and thatch. It even includes a weather radio. For further information contact Bill directly at Lyons Den Golf Inc., Canal Fulton, OH 44614 (phone 216 / 854-9910). In Canada contact Boyce Agro-Consulting Limited, 517 Highland Ave., Ottawa, Ont. K2A 2J8 (phone 613 / 722-1679).



WILLIAM'S EVAPORATOR GAUGE

List of Materials:

1 Plastic Shoe Box (Approx 3 x 7 x 12)
6 Coarse textured cellulose sponges
2 Fiber glass or stainless steel rods 14" long
1 12" plastic ruler (with metric scale too)

Assembling:

The sponges are cut to stand 1" above the top of box. The rods are forced thru so the sponges are held at the 1" level. This represents a grass blade 1" high. Cut plastic ruler 2-1/2" and same length in metrics. Glue on end.

Top of box is used as a shelf. Support with 2-5" shelf brackets. Be sure it is mounted level. Mount this in a sunny area.

Each morning fill it and make a record of how much water lost. On sunny days, make observations at 9 a.m., 12 noon and 3 p.m. This is an excellent tool to judge water requirements.

Suggest mounting near rain gauge; and where the golfer can see what you are doing. Good public relations.

(Use Yellow, Pink, Green and Blue Sponges.)

"Old Bill" Lyons has been caring for golf course turf for more than 30 years. Besides being president of Lyons Den Golf Inc. of Canal Fulton, Ohio, Bill is past president of the National Association of Public Golf Courses, a director of the Musser International Turfgrass Foundation, and a member of the GOLF BUSINESS Advisory Board. He was a founder of the Midwest Regional Turfgrass Foundation and the originator of Nimisila bentgrass.

UPGRADING THE K301 KOHLER ENGINE

I am writing this article because I feel my mechanic and I have found a very inexpensive way in which to upgrade the Kohler K301 twelve horse engine.

Since I have been at Troy C.C. we have had a problem with the Super Pro and Greensmaster three triplex mowers over heating. Discussing this with other superintendents I have found this to be a problem on hilly courses, such as ours with this engine.

Four years ago we purchased a new Greensmaster three triplex mower. It had a new upgraded engine, the K301 fourteen horse. The added two horsepower was enough to alliviate our problem. We also learned the manufacturer had upgraded the Super Pro engine in the same manner to solve the over heating problem.

Three years ago we were going to put short blocks on our Super Pro and Greensmaster three, which had the twelve horse engines. Both engines have had the cylinders bored to .030 a few years before. We thought we could not have them bored again because the cylinder walls would become to thin.

We began comparing the K301A fourteen horse engine with the K301 twelve horse engine. The model numbers being almost the same meant the blocks themselves were identical. Only the specification numbers were different, meaning internal parts would differ. With a Kohler small engine manual we started comparing the different specifications. We discovered the only difference was the cylinder bore size. In the twelve horse engine it was 3-3/8" verses the fourteen horse which was 3-1/2". This being the only difference all we needed to purchase was a piston and a set of rings for the fourteen horse engine. Then we took the engine to a machine shop and had the cylinder bored to 3-1/2". We put the engines back together and these two machines are currently in their fourth summer of use. They have never overheated and have performed as well, if not better, than I could have ever expected. Our cost analysis was a saving of approximately $325.00 on the two machines.

I am passing this information along as it is an easy way to upgrade these engines at very little cost.

Mark Graves

Credit: "Our Collaborator" Vol. 26 No. 3 June 1981

Thoughts on the Business of Life

Vitally important for a young man or young woman is, first, to realize the value of education, and then to cultivate earnestly, aggressively, ceaselessly, the habit of self-education. Without fresh supplies of knowledge, the brain will not develop healthily and vigorously any more than the body can be sustained without fresh supplies of food.
B.C. FORBES

I always try to tell them that it's what you learn after you know it all that really counts.
HARRY S TRUMAN

Another Scientific Marvel: Finding What Turned the Greens to Browns

By HEYWOOD KLEIN
Staff Reporter of THE WALL STREET JOURNAL

CHICAGO—Dead grass in the front yard may be just an ugly nuisance. On the putting green, it's a disaster.

Over the past year or so, disaster has been attracting more attention in the Midwest, where the putting greens of hundreds of golf courses sprout a special grass called Toronto C-15. A mysterious disease has attacked the greens of about 50 courses, including at least one course on the Professional Golfers of America tour.

In response, a histopathologist was flown from Virginia to examine the grass fibers. A mycologist in Ohio checked for fungi, and a nematologist searched for worms. A pathologist, a microbiologist and a chemist also tried to diagnose the disease. Houston B. Couch, the Virginia Polytechnic Institute histopathologist who coordinated the investigation, jokes that to pro golfers an epidemic "would be like all the Lincoln Continentals and Mercedes-Benzes dying at the same time."

Bumps and Bacteria

All the victimized courses can trace their grass to an experimental plot grown in the 1940s on the ninth green at Westmoreland Country Club, Wilmette, Ill. The disease makes greens so bumpy and discolored that some golfers call them "browns."

After other diagnostic tools failed, David L. Roberts, a graduate student at Michigan State University, solved the mystery with an electron microscope. He found a strain of bacteria, the first known to attack golf-course grasses. "There were so many in there," he says, "they were stopping the water movement. The plant would wilt and eventually die."

Spikes or Putters?

Researchers suspect golfers spread the disease when they walk on an infected green in spiked shoes and play their next round on another course. Other possibilities: mowers, putters, even birds' feet.

Tetracycline, the antibiotic used to control bacterial infections in people, can cure the grass. But the cure is expensive and probably only temporary; eventually, the bacteria are likely to resist the medication. Reseeding ailing greens with another grass can take years, and the results can leave greens uneven.

The only other known cure: Kill the grass and the soil beneath, and then replant with another variety. That has been done at Butler National Golf Club in Oak Brook, Ill., (site of the Western Open) and, more recently, at the Village Links in Glen Ellyn, Ill. Replanting at Glen Ellyn cost $30,000 but the course will be closed until next spring, costing the club another $200,000 in revenue.

CREDIT: "The Cactus Patch" (Southern Arizona GCSA), October, 1980

RESEARCH COMPLETED ON ELECTROSTATIC SPRAYING

Electrostatic spraying equipment could help golf course superintendents do a better job of applying pesticides and also save them money, according to Loren Bode, Agricultural Engineering Dept., University of Illinois. Despite the fact that this relatevely new equipment isn't on the market today, the basic research and development has been completed and patented.

Other industries have used electrostatic spray equipment for years to paint appliances. The charged spray particles are attracted to the grounded appliance and form a very even paint coat on the appliance surface.

Trying to adapt this principle to crop spraying without the controlled industrial conditions, created several problems.

Recent research has identified and solved many of these problems, creating a new life for electrostatic spraying of living plants, including turf.

Early attempts of electrostatic crop dusting in the 1960's were unreliable in regards to testing.

Ed Law, University of Georgia agricultural engineer, says he believes his newly designed and patented system overcomes the problems of earlier electrostatic machines, giving consistent results. Law's system uses electrostatic induction to charge the spray drops. Air transports the charged drops to the plants.

Each nozzle has a washer-like electrode embedded in a conventional air-atomizing spray cap device. The electrode is connected to a miniaturized built-in power supply, converting ignition battery output to 1000-2000 volts at a low amperage. The electrode sets up an intense electrical field in the insulated nozzle.

The spray droplets in the nozzle take on a negative charge. A stream of compressed air carried the spray toward the plant. The air stream also keeps the electrode dry to prevent discharges within the nozzle.

The negative charge of the spray increases paint coverage two ways. First, because like charges repel, the spray cloud drives the plant's negative ions into the ground, leaving the plant with a positive charge. Because opposite charges attract, the negative spray particles are drawn onto the plant.

At the same time, the negatively charged drops in the spray repel each other, expanding the cloud and drawing it to any grounded surface. The spray is distributed under emerging leaves and stems, covering the plant more evenly than uncharged sprays can.

The charge level of the spray cloud necessary for maximum effectiveness varies and differs for different plants. Points or irregular leaf tips neutralize the electrified pesticide cloud when the charge is too large. Too small a charge, however, does not deposit enough pesticide.

A calibrating and monitoring system maintains a properly charged spray cloud in the field. A monitoring electrode in the nozzle corrects voltage settings to adjust for varying conditions, such as temperature and humidity changes.

Law's laboratory and his field tests both indicate that producers can control insects by applying half the recommended pesticide rate in one gallon of water per acre.

The electrostatic system appears to be adaptable to areas other than row crop spraying. Law says a system for turf would use the same technology as the row crop spraying system. He also has begun investigating orchard spraying and says he expects to develop a similar system for use in that area.

The electrostatic system would be suitable for home gardening because the electrode can be powered by a transistor radio battery. It would be safe to use because all high voltage components are insulated and embedded in the nozzle.

A single-nozzle sprayer's mobility would be limited only by a hose leading to a small air-compressor similar to those currently used.

An extremely wealthy man of questionable character was having marital problems with his beautiful blonde wife. He didn't want to get a divorce because he knew it would cost him a bundle, so he called on his old friend Artie, who was a "hit man" for the Mafia.

"Artie, how much would you charge to get rid of my wife for me?"

"Why, you're an old friend," replied Artie. "I wouldn't charge you a cent."

"No, I wouldn't feel right about that. I want to pay you."

"O.K.," replied Artie. "If it will make you feel better, give me a dollar. Now, where is the best place to make the hit?"

"Every morning she goes to the Safeway market at nine o'clock sharp. She's a beautiful blonde, and drives a powder blue Cadillac."

The next morning Artie waited in the Safeway parking lot, and sure enough, in drove the powder blue Cadillac with a beautiful blonde. When she parked Artie rushed over and choked her.

Just as he was rushing away, another identical car with a beautiful blonde pulled up and parked. "Gosh," thought Artie. "Maybe I got the wrong gal. I promised my old friend I'd help him out."

So he ran over and choked the second lady. Satisfied he had done the job and ready to leave, a third blue Cadillac with a beautiful blonde pulled in the lot. So, just to make sure, Artie rushed over and choked her too.

The next day, the headline in the paper read, *"Artie Chokes Three For A Dollar At Safeway."*

* * *

With the fiscal year ending, any member that would like his classification changed, should do so NOW. Any Class "B" member that wants changed to Class "A" or any other change, must notify the Sec.-Treas. otherwise your present classification will continue as is. These changes are the responsibility of the individual.

Below is a form for you to make any such change in classification, mailing address, spelling, telephone number, club affiliation or whatever. This will also be the instructions that we will use when we print the 1982 membership booklet unless advised differently. Please get your check into the mail immediately:

Class "A" Membership	$15.00
Class "B" Membership	10.00
Class "E" Membership	7.50
Class "F" "G"	25.00
Class "S" (Student)	7.50

Name .....(Please Print)

Home Address .....

City, State, Zip Code .....

Club Affiliation or Firm .....

Residence phone, include area code .....Business Phone.....

Send Mail to .....

Are you a member of GCSAA? Yes ..... No .....Do you want an application?

Type membership Class ..... Any Recommended Change? .....

If you are a new applicant for membership in our Ass'n and do not understand the category of membership that you might fit into, please ask any of our officers for assistance. Mail to our Sec.-Treas.

****

SURPRISE SURPRISE SURPRISE SURPRISE SURPRISE

This October 6th Meeting will be a "JOINT MEETING" with our new adjoining golf course superintendent group formed this year from east central Michigan, "The Mid Michigan Turfgrass Association". Jerry Faubel is President and George Carson, Secretary-Treasurer. So this will be an introduction to another group with all of us interested in furthering our profession in turfgrass, the same goal.

This all came about over the telephone without official sanction of either Association's Board and like surprises should be very interesting and above all, very enjoyable. We will look forward to your being with us at this special occasion.

****

Another letter is in the mail relative to the Social Party Oct. 10th, Get your check in the mail for that as only a check is confirmation.

****