a little bit faster. So naturally, I decided to lower the height of cut. I figured this would be just for this important event, so I really didn't hesitate too much in going down to 1/8th of an inch for a few weeks before the heat of the summer.

Before our members got used to that little bit of extra speed, I did the prudent thing. At my next green committee meeting I explained all of the downsides of having fast greens. You know all the problems: more pesticide applications, greater likelihood of Poa annua encroachment, greater possibility of losing turf during a stressful summer. etc. I told them that the greens were rolling a little over 11 feet on the stimpmeter during the Invitaional, but that I could not maintain that speed for an entire summer. I told them the risk could be greater than the reward. They were surprised to hear that the Senior PGA Tour plays on greens that roll about 9'6". I asked how many people thought they were better putters than Raymond Floyd and Dave Stockton. I have always thought that a smooth and true putting surface, consistent from green to green, was better than lightning fast putting surfaces where calling them greens would be a misnomer. Don't get me wrong, I like fast greens, especially if I don't have to maintain them. But I do not see all the fun in worrying about watching a downhill three-footer turn into a ten footer coming back. To me, golf is hard enough without that.

Well, to my delight, my instructions from the committee were to keep the greens as fast as I could, without jeopar-dizing the health of the greens. I was actually a little bit surprised by this logical decision, but maybe I shouldn't have been. I later talked to a few other superintendents who were told the same things by their members at about the same time of the year. All of this leads me to the conclusion that I have suspected all along. Superintendents are their own worst enemy. We are always trying to stretch that window just a little bit farther. It must be some type of macho thing to see who can have the fastest greens, even though we are the ones who should know better. I wonder if it is really worth the added expense and aggravation?

THE HEAT

If there was ever a summer to want to be growing bent-grass instead of *Poa annua*, this was it. And it was equally important to have USGA greens instead of old push-up style native soil greens. My greens handled the heat of July in remarkable fashion. I think I actually found a system that worked pretty well. We had assigned holes for three of my employees. Their job was to mow every morning, then spend all afternoon water their six holes. They watered anything that needed it—greens, tees, bunker faces or whatever. Again, with bent and its deeper root system, we did not need to water every green every day. By having the same person do the same hole everyday, they got to know exactly what needed water almost without even looking. And by keeping things on the dry side, we didn't see very much disease pressure.

Don't get me wrong; we did not make it through the summer without our share of problems. At the end of July, a couple of my shady greens started to thin out, just at about the same time that the irrigation controllers for these greens started to act up. It only took a few days without water to really stress them. In fact, after taking a day off at the end of July, I rode around the course as soon as I got to work on Monday morning. The refreshing feeling of having slept in the day before was replaced by a sudden surge of panic when I came to the 5th green. From the cartpath, it looked

like the whole green was dead. Upon closer inspection, I found that only about half the green was dead and the other half could withstand at least another few hours without water before it could be pronounced dead.

I had planned to quadra-tine aerify the green on this morning because it had already been thinning and the roots were dangerously close to non-existent. But under this much stress, and with the temperatures were experiencing, I didn't know if that would help or hurt. I decided to quadratine anyway, and we even put down a granular fertilizer for the first time in two months. I figured the combination would either help or just put the turf out of its misery and allow me to start over. We also started to do all the things that we should have been doing all along. We raised the height of cut, skipped a couple of mowings a week at the beginning of August, and the green started to recover.

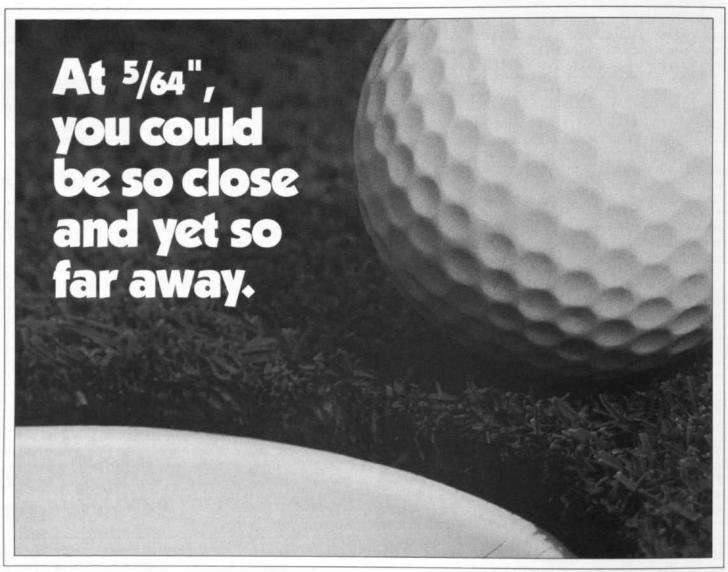
THE END IS NEAR, OR IS IT?

Unfortunately I am somewhat of a workaholic. By the beginning of August every year I start to get a serious case of burnout. It gets to be a real effort to get out of bed in the morning, and almost as soon as I get home from work, I fall asleep on the couch. Fortunately, my wife and kids know that this is only temporary and by fall I will actually begin to talk to them again.

I remember having a week of cool weather at the beginning of August. I felt so certain that the worst part of the summer was behind us that I fertilized the fairways. They had needed it for a few weeks, and I wanted to get the bent-grass growing real well again before the *Poa annua* had a chance to recover from the heat. We had been getting an increasing amount of *Poa annua* in our fairways for the past years, but this year helped to reverse that trend.

(Continued from page 43)





At superfine cutting heights, every aspect of your mower's performance is accentuated. For better or worse. And the same goes for greens play.

That's why Jacobsen puts so much into every Greens King™ walk-behind. Exceptional sideto-side, front-to-rear balance. A compact roller base for immaculate cutting. And only Jacobsen has the patented Turf Groomer® greens conditioner, for faster, truer and healthier greens.

When it comes to performance—when it comes to results—no other greens mower family can make this cut. For more information, and a complete demonstration, contact us today.



JISTRIBUTING, INC 444 N. Madison St. Chilton, WI 53014 1-800-279-2341



Our 500 series walk-behind greens mower family includes 18", 22" and 26" models to handle everything from severely undulating greens, to tee boxes and collars, flawlessly.

THE PROFESSIONAL'S CHOICE ON TURF.



Jacobsen Division of Textron Inc.

(Continued from page 41)

Well, wouldn't you know that as soon as I fertilized, the temperature soared over 90 degrees again, and the humidity was just unbearable. We then had a two-inch storm, making it impossible to mow for a few days. By the end of the weekend we had pythium on several tees and a few fairways. A couple of days later we had pythium, brown patch and wilt on the same fairway on the same day! I knew right then that the rest of the month was going to be a battle, and suddenly a rush of adrenaline started to replace the fatigue that I had been feeling.

In some warped kind of way it was thrilling to come to work every morning knowing that I would have to make some difficult decisions, and the life of the turf was hanging in the balance. Did I want the turf to die from pythium or drought stress? Should I water, or mow, or spray? Would mowing spread the disease, or would having less leaf surface reduce the humidity and help prevent the spread of disease?

For the record, the granular fertilizer application did help the fairways. At least it helped the parts of the fairways that didn't get fertilizer burn. It seems as though I forgot that after this type of summer, one week of cool weather wasn't going to cure all of our ills. I think next year I'll wait a little bit longer before I push the bent in the fairways again. Hopefully, at that time next year I'll be more rested and able to think more clearly.

THE DROUGHT

After all the disease pressure we had the first half of August, I was hoping for a few days of clear skies. Little did I know that, as if the summer hadn't already been cruel enough, next we would go through over four weeks without a drop of rain. Again, I was happy to be growing bentgrass and lucky enough to have a great irrigation system. They were both put to the test this year. The hotter it got, the better the bentgrass looked. If I wouldn't have had to buy irrigation water, I would have wanted the heat for another month.

We fill our irrigation lake with domestic water when the stormwater runoff isn't sufficient to recharge the lake. After being about \$15,000 over budget for pesticides in August, I decided not to buy any more water than was absolutely necessary during the rest of the season. This sounded like a good idea until my assistant called me at home one morning to tell me that the irrigation pumps shut down because the pond was empty. Of course this happened on a Friday, and the forecast called for 90 degree temperatures all weekend.

Fortunately, we have a four-inch meter that fills that pond, and we can get about 500,000 gallons per day into the lake. We spent the next two weeks calculating how much water we would use that night, and then putting only that much water into the pond. We cut it real close a few times, and as a result we know a lot more about the irrigation system and water usage than we did before the drought.

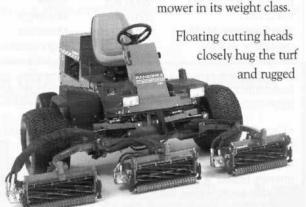
LOOKING BACK

Now that the summer is over, it is time to think about what I did right and what went wrong this year, too. Everyone makes mistakes, but the key is to always learn from those mistakes. I just hope, that over the winter, I don't forget everything I learned this summer.

The New Lightweight Champion

Introducing the Ransomes® 250 Fairway Mower

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



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

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

Call today for your free demonstration.



HANLEY COMPANY, INC.

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



Fungicidal Tendencies and Thoughts for a New Year

By Steve Millett Turf Disease Diagnostic Lab University of Wisconsin-Madison

Mother nature has many tricks in her pouch and she sometimes springs them on us with ruthless abandon. When they hit the fan, the informed turfgrass manager must call upon his/her reservoir of experience and education to make the best possible analysis of the problem, draw the best available information from our UW researchers, apply the best materials available from the industry, execute these tactics in a planned and logical manner and pray that the turfgrass survives.

This old philosophy has many characteristics of Integrated Disease Management (IDM). Many of you already practice IDM and don't even know about it. Most of you probably understand that spraying fungicides on a calendar basis is not right. You don't spray when you don't need it. because that would be wasteful. Most of you use common sense. Although IDM is accepted as the best management philosophy it continues to battle the fungicidal tendencies that were created with the invention of pesticides.

Integrated Disease Management (IDM) has been around a very long time. Don't let anyone try to convince you otherwise. Integrated Disease Management cult members will say that they are the coolest thing since the invention of pesticides. In my book, all the IDM cult members will get credit for is the "reinvention of the wheel," so to speak. IDM is a remake. It is just a modern version of an old idea. The name may be new but the philosophy has been around quite awhile.

Who invented Integrated Turfgrass Disease Management? The answer is easy. University of Wisconsin-Madison alumni John Monteith, Jr. (#54, 1923) and Arnold S. Dahl (#95, 1931) were the principal turfgrass pathologists in the late 1920's and early 1930's and authored the first comprehensive publication on turfgrass diseases which is considered by some to be the genesis of Integrated Disease Management.

These Badger-boys created the philosophy that turfgrass diseases can be successfully managed by utilizing a logical combination of cultural methods, resistant varieties, early detection and also chemical treatments. I have the honor of feeling their presence every time I walk down the 2nd floor hallway of Russell Labs on the UW-Madison campus. Yeah, that's right. Turf IDM started at the UW-Madison.

One thing that did not originate on the UW-Madison campus is fungicidal tendencies. Fungicidal tendencies began soon after pesticides were invented. Unfortunately, the first question a misinformed turfgrass manager will ask when confronted with a turfgrass disease is, "What do I spray?" If you have these fungicidal tendencies, please brush up on your basic plant pathology. Fungicides should not be the first weapon of choice. Diseases should not be managed by

spraying on a calendar basis. These fungicidal tendencies are a by-product of the pesticide industry sales hype and are proof-positive of the perpetuation of benightedness. The elevation of fungicides to the silver bullet category is not taught on the UW-Madison campus.

While fungicides are an effective tool that we can use to manage turfgrass diseases, they are not the most important. Furthermore, fungicides are overrated because they can pose health concerns (Table 1). How many times have you used a pesticide and wished that they weren't so odoriferous or were easier to apply? Or wondered why you have to use a body condom to spray? These concerns are well justified because some of the pesticides are nasty and must be handled with care.

Table 1. Relative Nastiness of Turfgrass Pesticides

active ingredient*	Oral LD50**	Hazardous Rating***
chlorothalonil M123	4.2 g	Slight
iprodione M344	> 5000 mg	Moderate
mancozeb M376	> 5000 mg	Slight
triadimefon M185	> 5 g	Slight
propiconazole M26	1,310 mg	Moderate
PCNB M63	650 mg	Moderate
thiophanate-methyl M88	6640 mg	Moderate
thiram M67	780 mg	Moderate
flutolanil M311	>5,000 mg	Slight
vinclozolin M112	16,380 mg	Moderate
aluminum tris M348	2860 mg	Moderate
etridiazole M94	1077 mg	High/Serious
metalaxyl M48	1290 mg	Slight
propamocarb M 303	2000 mg	Slight
2,4 D M61	370 mg	Moderate
pendimethalin M215	> 5,000 mg	Moderate
oxadiazon M352	>5,000 mg	High/Serious
ethoprop M350	290 mg	High/Serious
diazanon M16	> 4 g	Moderate
fenamiphos M267	10.6 mg	High/Serious
glyphosate M284	non-toxic	Minimum

- Crop Protection Chemicals Reference; M#s are Product MSDS pages
- •• LD50: Dose which is expected to cause death in 50% of animals tested. A chemical with an LD50 of 10.6 milligrams per kilogram is more toxic thant one having an LD50 of 4 grams per kilogram.
- ••• Hazardous Materials Identification System 4 = Extreme/Severe, 3 = High/Serious, 2 = Moderate, 1 = Slight, 0 = Minimum.

The first thing a truly educated manager (ie. a UW-Madison alumnus) might ask is, "How can I help this turf-grass sward?" A pathologically enlightened turf manager knows that there are many weapons available to combat a turfgrass disease. Of these, host resistance is the preferred weapon of choice, not fungicides. Turfgrass disease management tactics include: chemicals, biologicals, host resistance, nutrition levels and environmental alterations. These methods, plus a sixth category—pathogen detection and disease forecasting—form the foundation for current turfgrass disease management.

The use of more than one of these methods in a planned and logical manner is called Integrated Disease Management. IDM is basically a three-pronged attack on

the turfgrass disease.

Attacking the disease by helping the host is the first prong. You can help the host by utilizing resistant varieties and cultivars and maintaining balanced nutrition levels.

Cultural tactics aimed at changing the environment to aid the host and hurt the pathogen are the second prong of the attack. Such things as improving drainage or syringing are common cultural methods that change the environment in favor of the turfgrass.

The third prong is centered on the pathogen. This is accomplished by utilizing chemical and biological warfare that directly or indirectly kills the target pathogen. Attacking the pathogen by applying fungicides can be very efficacious. However, fungicides work better when used in combi-

nation with other management tactics.

Another important aspect of IDM is constantly striving for better solutions and setting of higher goals. Usually with the coming of a new year it is customary to make New Year's resolutions or challenges. I challenge turfgrass managers in Wisconsin to reduce pesticide usage by 80% by the year 2000. This kind of endeavor is already in place with other crops and it is a matter of time before it comes to the turfgrass industry. This elephantine goal may or may not be feasible in this short time frame, but I believe that we can make some progress. It is like eating an elephant; you eat it one bite at a time.

The turf team at the O.J. Noer Facility will continue to provide cutting edge research aimed at reducing the amount of intensive inputs into turfgrass maintainenance. One future goal is to develop a better turfgrass for Wisconsin—Badgergrass. Badgergrass is only a dream right now, but wouldn't it be nice if we had a transgenic cold tolerant grass or a snow mold resistant variety? The profits from

THE GRASS IS ALWAYS GREENER
...TOPDRESSING WITH TDS-2150 SAND

Consistent Quality

Lab Reports with Every Shipment

Wisconsin's Largest Topdressing Sand Supplier

Give Us a Call for More Information

Lake Shore Sand

A Division Of Construction Aggregates
Corporation of Michigan
PO BOX 1213
Milwaukee, WI 53201 (414) 271-0625

the sale of Badgergrass could go to charity or to support further turfgrass research. Neat, huh? These challenges and goals aren't the ravings of a fungal pervert. They are worthwhile goals. Goals are an important part of IDM.

The best turfgrass manager will draw from his/her education and experience to make an analysis of the problem, will seek the advice of University experts (i.e. the TDDL) and other turfgrass managers, choose the best tools available from the industry, do so in a manner that is in line with government regulations, set goals that reduce intensive inputs and hope and pray that his/her turfgrass survives. The bottom line of IDM is common sense with a bus load of faith.



Steve Millett and Roger O'Connor at the diamond at Wrigley Field in 1994.

Ponder points....

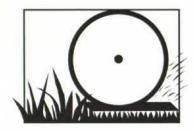
At the recent Milorganite Symposium in Milwaukee I had the honor of attending two great days of information and shop talk plus the opportunity to meet and briefly talk to George F. Will. I watch George every Sunday on "This Week with David Brinkley" and occasionally read his columns in the paper. I know he loves baseball and hates artificial turf just as I do. So what was the first thing I said to him? I said, "You should be the commissioner of baseball." George replied, "They wouldn't have me."

This experience renewed my desire for baseball and I am glad that my strike on baseball is over. Unfortunately, I can't help but feel that I missed out this summer. The Cubs were in it (I am told) until the end. The last baseball game I went to was at Wrigley Field on my birthday 1994. Somehow my wife Debbie got us field passes. I didn't have much to say or ask Shawon Dunston or Deon Sanders. However, I was at ease interviewing the late Roger O'Connor, the head groundskeeper. We talked about the turf, the diseases, the lip, the ivy and the infield. Turf Talk. He was a nice man who made me laugh. I missed baseball.

Top Ten Turfies

10. Oyvind Jüül Noer

- 9. John Monteith, Jr. and Arnold S. Dahl
- 8. Lee Burpee
- 7. Roger O'Connor
- 6. Joseph M. Vargas, Jr.
- 5. Joe Turf
- 4. Gayle Worf
- 3. "the Sodfather"
- 2. Douglas P. Maxwell
- 1. S. B. Martin



Satellite Weather Information Services

By Mark Kienert

How many times have you sent the crew home on a rainy day only to see the sun come out half an hour later? Have you ever had a play committee delay the start of a shotgun tournament due to a brief rain event? Then, once they decided to "play away," turn around and bring the entire field back in from the course due to heavy rain that made the greens now unputtable?

Have you ever made a decision to spray only to see the product "washed away" by another band of rain that moved in later? Have you ever made an fertilizer application or put down a wetting agent due to a weather prediction of 80% chance of rain only to see it rain a couple of drops or not at all?

How many minutes have you spent in the clubhouse with your eyes glued to the Weather Channel only to see radar update focus on another section of the country, feeling helpless as they go to yet another commercial break? I'll bet that this list could go on and on. To use a weather term, I think you get my drift.

Our jobs depend on the bounty of Mother Nature. With or with out her help, we are called on constantly to adequately predict the weather. For many of us, we gain a feel for the weather and can get pretty good at predicting its patterns only after a number of years of being out on the job. Sometimes our decisions are basically nothing better than our best guess, simply "flying by the seat of our pants." The "old trick" knee told me that I should make that wetting agent application or to put down that "non-burning" fertilizer just doesn't cut it anymore. For me, I needed something better. That's what brought me to subscribe to what I personally consider one of the best management tools I have had the privilege of using in the golf course industry.

What I am referring to is the satellite downlink to ground station weather subscription service. This service gives me a twenty-four hour per day, seven day per week instant look at the weather. No phone calls to make. No logging on. No being placed on hold while the long distant phone charges ring up.

It is a huge understatement to suggest that our jobs are so very weather dependant. Weather dictates to us what we can and cannot complete in scheduled golf course maintenance daily. It affects our crews, the billions of living organisms we care over, as well as the customers that we are grooming those plants for.

My search began after I had to make an emergency spray to a number of fairways on the lower end of the course. A quick peek toward the skies revealed the blue heaven I was hoping to see. My observation was also complete with the weather report that suggested that the intermittent rain would end by mid-morning. So I set out to spray

one tankful on the worst areas of the course. My application was made and it was off to church.

While listening to the sermon, I also heard the patter of raindrops striking the roof of the church. Louder and louder it grew until you knew that it was a full blown gully washer. I thought of the money wasted and the impact on my budget. If I could have seen the back lash of the storm's wrap around coming, you can bet I wouldn't have even taken the product off the shelf. That is all it took for me to start looking at all the weather options available to me.

I started looking into the weather systems that the pilots use. These systems are usually located in some distant location like Salt Lake City or in Pennsylvania somewhere. They are easy to use if you have a speedy modem in your PC. Most of these services charge you for a monthly subscription fee based on the number of times you figure on using them. It takes time to log on and to download a weather file. It takes additional time then to unpack it and to view it.

I also looked into a hookup with a local TV station that would provide me with twenty-four hour per day Doppler radar. This service was not cheap, but was still cheaper than the chemical wasted on the course that day.

I wasn't able to attend last year's WTA Winter Turfgrass and Greenspace Exposition, but I did hear about a weather system that might possibly fill the bill. My first hands-on experience came with a demo of the unit in my office. I was impressed, but not sold, yet. I wanted to check out the competition first.



Your key Team Pro is: John Turner Senior Sales Representative 708-462-9866 NITROFORM®
NUTRALENE®
TURCAM®
BANOL®
PROSTAR®
PROXOL®
PROGRASS®
FINALE™
ACCLAIM®
ILLOXAN®

ACOMPANY of
Hoechst and NOR-AM

Advertisements in our trade publications alerted me to yet another company. Both would be demonstrating their products in San Francisco at GCSAA's International Turfgrass Conference and Show. While there, I looked over both systems and chose the one that offered the features that I wanted the most.

The unit resembles a small computer complete with a monitor. The only key pad is on the face of the units CPU. It is simple to use. After a couple of times of using it, you know exactly what buttons to push next without having to rely on any aids. A two-foot diameter dish is positioned on the roof of your shop and is aimed at the southern skies were it picks up the signal from the satellite. Setup is fairly easy, yet will take a couple of hours as you have to drill holes to secure the dish on the roof and route the communication cable.

One of my first "WOW" reactions to this impressive technology came as I was logging on to the service. Your machine has to know what data it is entitled to use in the digital decoding process before it will fill the screen with weather magic. As I was speaking to a service technician on the telephone, she informed me that she would send a page of information. The information she sent changed on the screen right before my eyes as she completed her sentence.

That is impressive when you consider that she sent the information into space and that the data was downloaded, decoded and interpreted into the base station from a satellite 23,500 miles above the face of the Earth. Einstien and nanoseconds, it was just fantastic!

At present there are two companies that are selling their services in this area. As I drive around town I can see other dishes popping up on schools, highway departments, farmers homes and construction companies. I have even seen them at large public events were weather information is needed for public safety.

Some of the features that I use daily are supplied as both pictures and text-based information. The information I use is a twenty-four hour Wisconsin forecast map and a recap map for the past 24 hours for selected cities around the area. If you want to become more specific, you can have zone forecasts for the county that you live in. One to five day forecasts are also given in both text and picture forms.

(Continued on page 49)





MILORGANITE®

Spring Valley is launching a series of new products made with a larger, granular size Milorganite, called "Top Cut". Top Cut is sized to blend uniformly with Nutralene, GSL sulfate of potash and SCU. Milorganite has exclusively endorsed Spring Valley to



formulate fertilizer with this new granular product. Spring Valley's new "Top Cut" Milorganite products give you a clean, uniform spread, and the non-burning features you expect from Milorganite.

SPRING VALLEY Fertilizers

"Top Cut" Milorganite

12-1-12 (Fairway Special) 25-2-4

20-2-5 + TEAM®

Only SPRING VALLEY has "Top Cut" (granular) Milorganite



SPRING VALLEY

Call for FREE sample

1-800-635-2123

Milorganite is a registered trademark of the MMSD TEAM is a registered trademark of DowElanco Nutralene is a registered trademark of AgrEvo GSL is a registered trademark of Great Salt Lake Minerals



TURF'S UP.

There's tough mowing ahead! City parks, back yards, baseball diamonds, municipal sites, golf courses—to name a few.

The whole nine yards!

Through it all, tough Magnum and Command engines keep clipping right along.

Kohler's high torque rise cuts jobs down to size in no time, flat.

For power that can cut it, at any angle, Kohler verticals are equipped with full pressure lubrication and full-flow oil

filtration. And to protect your engine from low oil conditions, there's optional Oil Sentry.™

Plus, with genuine Kohler parts, a strong dealer network and a two year

industrial strength warranty, Kohler engines keep your customers on the cutting edge of their field. For more information about Kohler Magnum and

Command engines write Kohler Co., Engine Division, Kohler, Wisconsin 53044. Or call 414-457-4441.

KOHLER. Engines

Built for a

hard day's work.

(Continued from page 47)

A jet stream map alerts you to the track that any potential storm might use and a four day map tells you what kinds of precipitation you can expect in the upcoming days.

Radar maps are snapshots of both the state and of the nation and are updated every fifteen minutes. Both radar maps can be put into motion so you are able to get a feel for the direction that the heaviest precipitation band is heading. This system also provides me with forecast maps that make many of my irrigation decisions easier. How many times have you set up your system before heading home only to return to make changes after having watched the six o'clock news weather report? More than a just a few I'll bet.

There are many forecast maps, but the one that I like the best at this time of year is the low temperature frost zone map. It gives me enough lead time early in the day to alert the starter at the public course to put out the course closed sign the night before. The golf pro also appreciates the lead time so he can mentally brace himself for the onslaught of impatient golfers in the morning. It also gives me the opportunity to decide if the crew should be brought in for a later start time. They always seem to enjoy the extra hour of sleep.

The traditional satellite infrared map gives you an idea if you will see any sun during the day. This always seems to matter most on scheduled aerification dates for some reason. A lightning map, which is not good enough to alert golfers to exit the course, does provide you with a feel for the location of the heaviest storm cells and allows you time to shut down irrigation system components in advance.

One of the text screens that I use constantly for information comes right from the two University of Wisconsin

introduces a family of mid-sized fertilizer grades designed to meet the needs of today's

closely-

mowed

Par Ex®



THE EX STANDS FOR EXCELLENCE
Par Ex* and IBDU* are registered trademarks of Vigoro Industries, Inc.

WHY MID-SIZE GRADES FOR CLOSELY-MOWED TURF?

BECAUSE fairway-sized particles are too large to apply to closely-mowed turf.

BECAUSE greens-sized products can be difficult to spread.

BECAUSE IBDU is the most reliable, most consistent source of slow-release nitrogen.

For more information contact:

Reinders Brothers, Inc. 13400 Watertown Plank Road Elm Grove, WI 53122-0825 800/782-3300 414/786-3300

> Ken Quandt Territory Manager West Allis, WI 414/327-3993

Agricultural Experimental Stations that my course is sandwiched between, located in Marshfield and Hancock, Wisconsin. Both supply me with information like reference ET, the amount of solar radiation reaching the ground, temperature and dew points, relative humidities (min./max/ave.), soil temperatures at a 2" depth (min./max/ave) and wind speeds. The downside of this information is the fact that it is twenty-four hours old. It does, however, supply you with a week at a glance to determine patterns and to explain some of the frustrating problems that we encountered this past summer. You might ask, "what benefit is it to me to know not only the intensity and amount solar radiation that reaches the ground?" I saw the answer the day after the day many of us call "Black Monday."

This was the day that many of us experienced wet wilt for the first times in our careers. The amount of solar radiation that reached the ground was unusually high for that period. Coupled with a low relative humidity, wind speeds set up conditions that were ripe for wet wilt. The information was also of benefit to me that on the day after our USGA visit when the temperature tied an all time high of 108 degrees, the soil temperatures, as measured in the sandy soils of the Hancock experimentation station, reached 106 degrees and this was at two inch depth! I do not know if these readings are under field conditions of bare soil, but all I know is that the turfgrass root system starts to protect itself by moving toward a state of dormancy when soil temperatures move above 85 degrees.

There is more to this system than this column allows me to talk about, features I'm sure that you could put to good use. Having used my system for nine months, I can't imagine myself being with out it. It is as valuable to me in my office as is the trusty jack knife I carry in my back pocket. The system is not cheap, but it is cheaper than a case or two of some of our most popular brands of fungicides. I can tell you that in the first month of using the system, I was able to forecast instantly that the rains were going to be hanging around for a while so I sent the men home. I know that we are not going to have wet springs like the one we had this past year every year. But having the gang hang around for a couple of hours until it became very apparent that projects would not be finished is now a thing of the past. Now that management decision can be reached earlier,...but only after the shop has been thoroughly cleaned! W

Why You Need Protection for your Irrigation Control System

The D & B Power Protection Package is designed specifically for golf course irrigation systems to eliminate the problem of lightning strikes and prevent catastrophic damage to expensive irrigation control equipment.



Phone (708) 232-6411



WHAT ABOUT PETER GUNN?

By Monroe S. Miller

You all know Pete. He's been at the Lake Merion Golf Club in Chautauqua, Wisconsin for a couple of years now. He is perfect for the job; he wanted to get back to his hometown right after graduation, but the job at LMCC wasn't open.

I doubt Pete is even thirty, but he is well known to WGCSA members. He was a WGCSA scholarship winner while at the UW-Madison, graduated from Professor Kussow's program and spent several years as the assistant golf course superintendent at a couple of Wisconsin golf courses. You cannot find a better or more well liked guy than Peter Gunn.

Make no mistake—he could have found employment at a dozen different golf courses before he applied for and accepted the Lake Merion job. But he wanted to go home, be around his parents, two sisters and brother in Chautauqua. His wife Patty grew up there, too, and both of them want to raise their kids in that peaceful, beautiful town. They want the kids to be close to cousins and grandparents and aunts and uncles.

I have never once heard Pete grouse about the limited resources of Lake Merion Country Club. Although the budget is relatively small—barely \$100,000—the golf course is a gem. The shop is really good, clean and tidy and big enough for the equipment they have for the golf course. The main thing for Pete, however, is that it is in Chautauqua.

Pete has never said, and I have never asked, what his salary is. But it is not hard to figure out he likely is not making much over \$20,000 a year. It helps that Patty works part-time at the school, and housing is far less expensive than it is in Madison, Milwaukee or the Fox River Valley.

His budget hasn't included any money for professional dues or travel or meeting expense, but the board promised Pete that in a couple of years they'd include \$500 for educational costs.

Pete was elated. It won't go far, but it will get him back into the WGCSA and the Wisconsin Turfgrass Association and give him a little money for some chapter educational meetings and maybe the Field Day or Winter EXPO.

Make that "would have". Now that the GCSAA has launched its chapter affiliation requirements, Pete might be out of luck. It will depend on how the Wisconsin GCSA members feel about affiliation and the unfairness it inflicts on people like Peter Gunn.

So what is Pete supposed to do? If Wisconsin affiliates and Pete wants to join, he will have to pay up \$110 for our dues and \$210 (likely more by then) for GCSAA dues. The WTA dues are \$100, leaving Pete \$80 for meeting attendance. If it happens, it will be a pathetic set of circumstances for Peter and others like him, here in Wisconsin and in other states.

"For me, GCSAA membership will be a very expensive magazine subscription," Pete said. It is hard to argue with him.

"And I'd like to know why it is okay for a guy who joins the WGCSA a year before me to get away without having to join the GCSAA, but it isn't for me. Where's the fairness in that?"

I didn't have an answer for him.

"Even without joining the GCSAA, I am only going to have about \$300 for meetings and seminars for the year. So it is not like I am a fat cat or anything close to it. Our club is small and just doesn't have a very big budget. And my salary is all accounted for even before I get paid each Tuesday."

"But beyond that," Pete continued, "I don't know if I even want to belong to an organization that passes judgment based on what I belong to and how much money I have. I just cannot believe the Wisconsin guys are going to endorse reducing me and superintendents like me to some meaningless membership category so we don't screw up affiliation with the GCSAA."

I felt embarrassed. I could not answer Pete's question, and I felt bad he was even forced to talk about such dreary prospects. He went on, the bitterness in his voice rising and becoming more apparent.

"How can it be that paying \$210 dues to one organization somehow makes me more qualified to vote, serve as an officer or accept a director position in another organization? I do not understand that."

"I have always learned your true worth was measured by the kind of person you are, and by how you conduct your personal and professional life. Money is supposed to matter lit-

