



# SIGNS OF YOUTH

By Monroe S. Miller

The WGCSA held a directors' meeting in February at the NOER Research Facility. I attended the beginning of the meeting to report on the GRASS ROOTS and some plans we have to implement in 1992.

All members should feel good about the group we have elected to represent us in association matters. They seem serious about their responsibilities and sincere in how they are executing their duties. It helps, too, that they are all good golf course managers.

It is impossible for me to disguise my pride in the fact that four of them worked at Blackhawk Country Club at one time or another while students at the University of Wisconsin.

One other thing impressed me about this group—their youthfulness. When they come to the board table, they bring with them all of those things youth brings—enthusiasm, ambition and exuberance. They are optimistic and aggressive and intelligent.

It was painfully obvious, however, at the March business meeting that they are also very inexperienced.

That meeting probably went a long way in maturing them as a cohesive group. I'll bet nary a one of them wants to suffer through such a long meeting again.

Several of us who are past directors and officers were talking about it later. Here's a summary of that conversation. Read this: THESE ARE CONSTRUCTIVE COMMENTS, NOT PERSONAL CRITICISMS.

1. Not every little suggestion made by a member has to be put before the entire membership. We have a board and officers to deal with such matters and dispense with those that have no merit.
2. The committees need to do a much better job. Some were totally unprepared for the meeting and it showed. The chair reports must be brief, to the point and contain specific proposals for the membership to deal with.

3. Issue discussions deteriorated into conversations and debates. Most should have taken place over a beer after the meeting.
4. Since many of the proposals involved money, why not have a budget presentation with income projections? Motions to spend money were flying around so fast it was hard to keep track of them! This is not a very good way to do business.
5. Although we cannot live in the past, I do feel some sense of previous policies and practices and traditions should be factored into the board's decision making process. A look back will provide a lot of sound and sensible direction.

Finally, there is some concern about the timing of the spring and fall business meetings. The spring meeting was very well attended this year. But when it conflicts with opening day preparations,

attendance suffers. Opening day will win every time.

Attendance at the fall meeting can conflict with the weather and final preparations for winter. Last fall was a good example. During the meeting, nearly all of the WGCSA members were at work purging irrigations systems or applying snowmold materials. Poor attendance was the result.

Frankly, I am at a loss for a suggestion or solution for the timing of these important meetings. But some thought needs to be given to some other options.

No doubt that Bruce, Mike, Tom, Mark, Pat, Bill, Mike and Scott noticed the same things the "old guys" did. It is going to be interesting to see how the fall meeting compares with the spring meeting past.

It is a certain bet that Pat Norton doesn't want another sixteen hour marathon!

"If there is any truth to the old saying  
'April showers bring May flowers',  
then we are going to have  
a very colorful month of May."

A Frustrated Wisconsin golf course superintendent.  
— April 24, 1992



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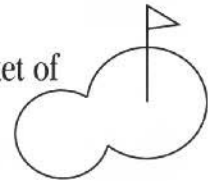
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## Spring Business Meeting

(Continued from front page)

Water conservation could easily become the next focus of political attention and receive the kind of publicity that pesticide issues receive today.

"Technical Tom" Emmerich, of T.G. Emmerich and Associates, gave the lowdown on the complexities of today's ultramodern irrigation systems. Contrasted against these systems were the quick coupler systems still in use in some places today.

Interestingly, Tom has left Reinders Brothers after many years of service in order to start up his own irrigation consulting business. If and when Tom becomes highly successful in his new venture, we can all say that it's because of his enthusiasm and energy. If Tom's nervous energy could be harnessed and converted to electric power, Northern States Power would probably go out of business!

Best of luck, Tom.

Peter Beaves finished the morning's education in a very informative and humorous style. Beaves, president of Midwest Irrigation, has been involved in irrigation design and installation for nearly 30 years. He shared many good tips on design, installation and service of irrigation equipment. He kept the audience involved and amused throughout his discussion and easily demonstrated why he has been so successful in business for almost three decades.

After a hefty noon lunch, lively debate and discussion followed at the business meeting. "Our man at the Capitol", Rod Johnson, updated the group on the status of AB468 and possible Ag 29 revisions.

Kudos to Rodney for his role as our informed advocate. His voluntary service is critical to the WGCSA and is typical for those members who have stepped forward in the past ten years to help with any number of causes critical to the profession.

It may be necessary for superintendents in Wisconsin to post signage at key points on their golf courses. The signs will likely read "Pesticides are periodically applied to this golf course. For further information please contact the golf course superintendent."

Hearings are being held around the state on Ag 29. Those in attendance felt that revisions to Ag 29 were very much in order. They felt very much opposed to the half-baked legislation included in Assembly Bill 468.

Other items of business that seemed to consume the entire afternoon were proposals for scholarship and research, committee reports and a review of the 1992 meeting sites and speakers.

## Legal Matters



## OFFICIAL POSITION OF THE WGCSA ON AG 29

"The membership of the Wisconsin Golf Course Superintendents Association has been informed of and supports the proposed amendments of Chapter Ag. 29 of the Wisconsin Administrative Code of Pesticide Use and Control.

Our organization is made up of professional golf course managers who approach their jobs with environmental sensitivity and integrity. We are supportive of golfers' right to know that pesticides are periodically applied to golf courses as a standard and necessary maintenance practice.

The Wisconsin Golf Course Superintendents Association is pleased to have been responsibly involved in the amending of Ag. 29 through representation on the Ad-Hoc committee which helped draft these proposals.

The posting of signs on the first and tenth tees and at the point of registration will serve to give adequate notice to our golfers that Landscape Applications, per the proposed rule definition, are periodically made.

The proposed signage has been discussed and has met with no resistance at meetings of the Wisconsin Golf Course Superintendents Association. It is our understanding that part of the Department of Agriculture, Trade and Consumer Protection focus in development of these proposals was to insure a high degree of voluntary compliance.

It is our feeling that this proposal, which was developed in partnership with industry, will meet with the desired voluntary compliance. We cite the fact that there are several Wisconsin golf courses that already post notice signs or are planning to do so, even before it becomes a requirement.

The proposed signage does have an impact on our industry, but we do not see it as a significant threat to the way that we do business. It is our belief that the financial impact and golfer reaction will be minimal.

All in all, it was a great meeting, even if it was too lengthy. Let's keep the professional interest in our association going for the remainder of the 1992 golf season!

The proposed sign regulations have a proven track record. Other states have successfully adopted similar regulations.

The information to be provided upon request is not of burden to golf course superintendents. Portions of the information to be provided is information already in hand through accurate and required recordkeeping. The remaining information is easily and readily available.

The Wisconsin Golf Course Superintendents Association wholeheartedly supports that these proposed regulations are of statewide concern and affect every county and municipality. We are in agreement with the need to preempt local units of government from enacting regulations which are in conflict with or expand or detract from the proposal."

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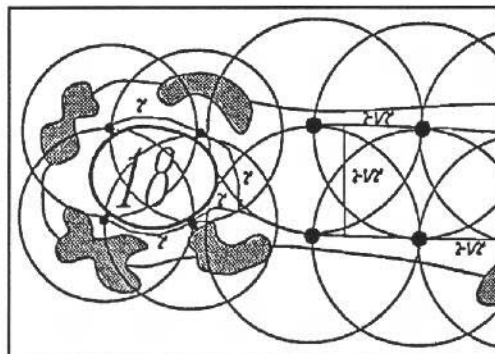
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## A PROCEDURE TO ENHANCE EARLY SPRING GREEN-UP

By Orrin W. Ellis  
Pine Meadows Country Club

Editor's Note: This article is one you might want to read again next spring. It was written by Orrin Ellis, a golf course superintendent in Woburn, Massachusetts. New England experiences winter conditions similar to those here in Wisconsin.

This piece is reprinted with permission from Kip Tyler, editor of *The Newsletter of the Golf Course Superintendents Association of New England*. Kip is the course superintendent at the Salem Country Club in Peabody, Massachusetts. It appeared in the February 1992 issue of *The Newsletter*.

As superintendent of New England golf, I have often puzzled over the perfect time to remove winter green covers. After some experimentation, I have discovered a procedure which greatly enhances early spring green-up after green covers are removed. Once covers are removed (approximately the third week in March), cold night temperatures can set greens back to the color they would have been without covers. Many superintendents will remove covers during the day and replace them in the afternoon to prevent damage from the cold. The application of activated charcoal, combined with a sticker, can take away the worries of cold damage. This will not only prevent greens from setting back, but will stimulate turf color and will enhance root development. Leaf growth is apparently not stimulated, so all of the growth at this point appears to be in the root system. The charcoal application alone will slide off the grass blades after the first dew, rain, or irrigation; therefore, a sticker is necessary to achieve any results.

Another effect of this application is the reduction of leaf spot disease in the spring. Pesticide control for leaf spot has never been required on areas where the charcoal was used.

An added bonus to this procedure is that bentgrass responds better to the activated charcoal than *Poa annua*. If the greens were seeded the previous fall, the new grasses will be quite evident after only a few days.

On the negative side, mixing of charcoal is difficult, and so is the clean up of the mixed product. As soon as spraying

is completed, immediately rinse the system. The interior will clean out easily if the product does not have the opportunity to dry. Due to the sticker residue left on the outside of the sprayer, a steam cleaner will come in handy to clean it.

The procedure is as follows: After removing the cover from the greens, double cut at 1/4" (if greens are extremely high, then bring them down slowly or topdress to protect crowns from scalping). Blow off any loose materials from the greens such as leaves or grass clippings. Spray greens with a combination of activated charcoal and sticker. Spray the green or greens at approximately 2 lbs/M in one direction. After this coating dries, spray again in the direction perpendicular to the first application. This second coating will allow covering of more leaf area, and give a total coverage of 4 lbs/M.

The application rate is not critical, for I have found that 2 lbs. to 4 lbs/M works well, with the best results gained by using 4 lbs. Greens located in wetter areas will respond better than those in drier areas. For a few hours after the application, you will notice a black appearance to the turf. Within a few hours (possibly the next day depending on sunlight intensity), the black will be replaced with a deeper green than would normally be seen in March or April.

The first year that this application was used, the greens were so impressive that a second application was used three weeks later. The turf had an excellent response, so in May a third application was used. This time the amount of light the charcoal attracted was too much, and wilting occurred. My recommendation is that only one application of charcoal (or two if spring temperatures are lower than normal) be used.

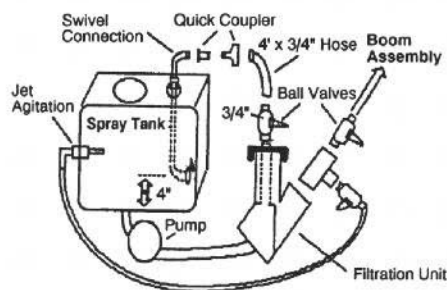
### Equipment and materials used:

1. 50 lbs. activated charcoal (Grow Safe)/100 gallons of water.
2. One pint Exhalt 800 spreader sticker/100 gallons water.
3. Cushman Truckster

4. Smithco 110 gallon tank, centrifugal PTO pump, Tee Jet 8008VH nozzles at 30 PSI without screens.

5. Main filter modified (see illustration) to allow full pump flow to mix 50 lbs. charcoal with 100 gallons of water.

(This modified filter cleans itself while spraying and always keeps the solution in suspension.) **KEEP VALVE OPEN WHILE SPRAYING.**



### Additional mixing information with modified filter

Fill system 3/4 full and run pump to cycle water through system. Open the 50 lb. bag of activated charcoal by using a knife to cut along the top of the bag. Place bag vertically over tank opening and press bag vertically over tank opening and press bag firmly to seal the dust from escaping. Tap bag slowly until all contents are released. Let bag stay in place until all dust is mixed. Once the charcoal is in suspension, add the rest of the water, rinse off any spilled charcoal, then add sticker and apply. This tank would cover 32 M at the 2 lb. rate, or 16 M at the 4 lb. rate.

When cleaning equipment, there is no need to remove screen from filter. When emptying system, use of ball valve and quick disconnect connection between hose and tank, are used to quickly empty tank and screen off any particle too large to pass through screen. This bypass system is used for all my spraying and does make mixing and cleaning easier. Please remember, if you try this modification, you must RE-CALIBRATE your system, because the pressure will be reduced to the boom from the increase of flow through filter into tank.



# TURF'S UP.

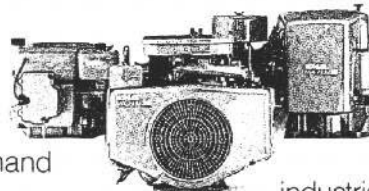
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# COMPUTER USE IN GOLF COURSE MANAGEMENT

By Marc P. Davison  
Golf Course Superintendent, Blackwolf Run Golf Course

Computers are very much a part of our everyday life today and without question will continue to be more so in the future.

Computers are being used everywhere you look: the weathermen use them with their forecasts; engineers use them to aid in designing structures; pro shop personnel use them to record members' scores and then produce their handicaps.

Computers are very powerful machines, in fact far too powerful for most of us to conceive. These powerful machines are now becoming useful in the turf industry. We see them used in controlling pump stations and irrigation cycles, disease prediction, monitors on sprayers, record keeping and electronic bulletin board networks, to name a few. We also have the capability of retrieving information from the Michigan State Library Turfgrass Information File through the use of our computer.

These were some of the uses I found while researching the potentials of having a computer in my office. In the meantime, our pro shop purchased a tee-time reservation software system which forced them to purchase three new computers.

The hospitality division at the Kohler Company also implemented a network system that links all of our businesses together via telephone lines and computers. Through the development of this large network system many other computers were purchased and I was fortunate to receive a computer as part of this expansion.

When I first saw this new computer in my office, my initial reaction was, "Now I have a computer, how do I use it?" Fortunately my computer was equipped with a hard drive which basically eliminates the use of disks. Included in the hard drive were four software programs: D-Base, Lotus 1,2,3, WordPerfect, and ProComm.

The next step was to learn how these programs could benefit my department. Each of these programs have a specific function: D-Base is a data base file

system; Lotus 1,2,3, is a spreadsheet program; WordPerfect is a word processing program and ProComm is a communication program which is required if a modem is going to be used.

**Lotus:** Lotus 1,2,3 was the first software program I worked with; it truly fascinated me. This program deals strictly with numbers and number operations. Its format consists of columns and rows, commonly called a spreadsheet. I have found this program to be very useful in budget preparations, recording of weekly man-hours, keeping monthly records on individual accounts, chemical price quotes, monthly labor expense projections and capitol equipment replacement schedules.

Labor comprises about half of my operating budget. Thus when it comes time to reduce the budget, labor is the most scrutinized account. Lotus is perfect for adjusting my labor account.

I received a program from my accountant that deals strictly with labor budgeting. The file is broken down into monthly columns. The rows consists of adjustable factors such as average wage, head count and average hours worked per week. The program is set up to automatically multiply the previously mentioned three factors to produce a monthly labor amount. By adjusting any one of the three, the totals automatically change. Once the spreadsheet is set up, making the adjustments is simple and the results are produced instantly.

Projecting capitol equipment replacement is another area where Lotus can be very helpful. I created a spreadsheet to help me lay out a five year equipment replacement program. Listed in the left margin or Column A are the primary pieces of equipment used and also replaced on a regular basis: utility vehicles, sand trap rakes, green mowers, fairway mowers, etc.

Column B contains the 1992 price for each piece of equipment. Column C shows the number of pieces of each type of equipment in our fleet and Column D is the expected life of each piece.

For the 5 year projection, I use 2 columns for each year. One column for the required number of units (Column E) to be replaced in a given year and the second (Column F) to show the cost.

Column F is a mathematical operation; it takes the number of units required from Column E and multiplies by the 1992 price found in Column B.

For the year 1993, I built in a 5% inflation factor. So the 1992 price of a piece of equipment is multiplied by 105% and then multiplied by the number of pieces being requested in 1993. The inflation is increased by 5% each year; i.e., 1994 is equal to 1992 price times 110%.

The columns are then totaled for each year to give an annual equipment replacement cost projection. This has

(Continued on page 19)

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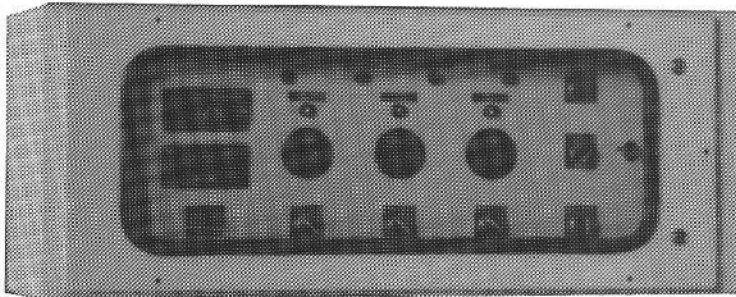


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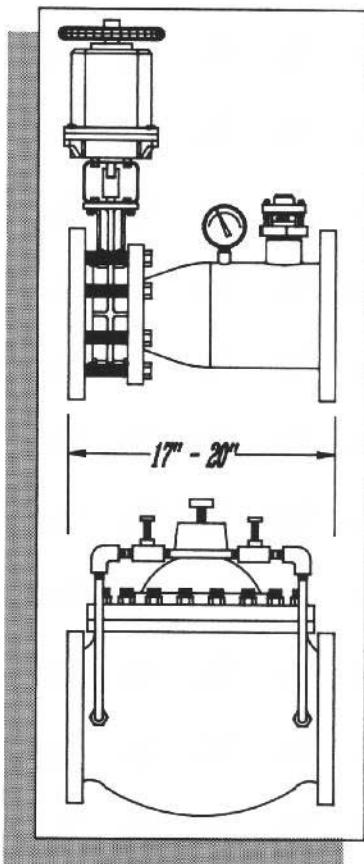
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(Continued from page 17)

proven to be very beneficial as capital dollars are always being adjusted. I can easily work backwards from a target figure or show how I need a certain amount due to life expectancy and the numbers that we operate with.

In addition to the examples listed above, Lotus is capable of computing more in-depth, involved functions. It can average, sort, round-off, format and graph figures. Numbers in a spreadsheet can easily be converted into a line, bar or pie graph.

**D-Base:** The second program I dove into was D-Base. The main function of D-Base is to compile and extract data in various fashions. Some of the data base files that I have developed using D-Base are an Employee File, an Equipment File, and a Hazardous Materials File.

The Employee File contains a complete history of each employee working in my department. Included are the names, addresses, phone numbers, clock numbers, date hired, classification, which course they work on, wage, last raise date, amount of last raise, training received, and any disciplinary notices. After all of this information has been entered, it can be retracted in almost any format. Some examples of how information might be pulled from the file are: a list of all employees earning between \$5.00 and \$5.25 per hour; a list of all employees hired in 1991; a list of all employees and phone numbers; or a list of all employees that have had hazardous materials training.

Another data base file I have developed is an Equipment File. In this file I have all the equipment stored in our building listed with date purchased, purchase price, vendor, serial number, Kohler asset number, type of fuel used, the department equipment is owned by, maintenance records, and dollars spent repairing each piece of equipment. By entering a few simple commands information such as a list of all Toro equipment, all 1989 Club Cars, or all Jacobsen equipment purchased between \$5,000-\$10,000 in 1991 and that uses diesel fuel can be retracted.

The most recent D-Base file we developed consists of all the hazardous materials in our maintenance building. We started this file to aid in the development of our hazardous communication program. The information stored in this file on each hazardous material includes: common name, trade name, type of material (fungicide, fertilizer, oil, fuel, cleaner, etc.), location of material (mechanic's shop, fertilizer storage area, pesticide room, janitor's closet, etc.), department that purchased material, quantity on hand, MSDS on file yes or no, and where to find the MSDS in our Hazardous Communication Book.

Having this information in the computer allows us to keep an up-to-date file on all the hazardous materials found in our maintenance building. When a new product is purchased it will be entered into this file. We then have the



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capability of printing out a complete list of all our hazardous materials or, more specifically, all hazardous materials used by the janitor or mechanics. Hazardous communication books have been developed for each area in our building that houses these materials; i.e., pesticide room, fertilizer room, mechanic's shop, janitor's room, pump house, and fuel area. The first page of each book is a listing of all materials found in the area that the book is located.

The list includes commonly used name, trade name, and a location where to find the MSDS of each product within the book. As products are added or deleted this list can be easily updated on the computer and a new list printed out and placed in our Hazardous Communication Book.

Following this list in each book is a copy of our Hazardous Communication Program, which we keep in our word processing program, and the third section includes all the MSDSs for products listed on page one.

D-Base is a wonderful filing system. It allows you to retrieve information readily and in a variety of ways. It is not difficult to use and I am sure I will find many other ways to use D-Base in the future.

**Word processing:** Word processing is probably used more than any other system on computers today. Word processing and the computer have replaced the old fashioned typewriter.

Typing with the use of a word processor can make a typist out of anyone. Mistakes are easily corrected by back spacing and making the corrections. Margins are easily set through the use of a few simple commands. Complete paragraphs can be moved to another location within a document or completely eliminated.

After completing a paper, a great feature called the *Spell Check* can be executed. This tool scans the paper, stops and highlights any word it does not recognize. You then have the opportunity to replace a misspelled word with the correct spelling from a list of possibilities offered by the program. A Thesaurus is another convenient tool found in most word processing programs.

Through the use of word processing an article like this can be typed at home then taken to your office on a disk to continue writing. Once the article is finished it can be mailed on a disk to Monroe Miller who then can load this article into his computer and edit it as he likes.

Word processing is also used to type form letters. From a list of names and addresses, a single letter can be personalized to every person on the list. Mailing labels can also be generated from the same list to be placed on envelopes.

**Modems:** Computers have the capability of communicating with other computers through a small device called a modem. A communications program, such as ProComm, is necessary to operate a modem. Modems convert computer information into pulses that can be transferred to other computers via telephone lines. This allows the already powerful personal computer to link up with other computers and become even more powerful.

Modems provide a convenience which allows the user to access information from a distant location. Computer controlled irrigation systems can be accessed from your home through the use of a modem on each end. Salesmen are able to hook into their company's base computer via their modems.

There are many services available to us through the use of a computer and a modem. Weather Brief, TurfByte, and Turfgrass Information File (TGIF) are three services I benefit from through the use of my modem.

Weather services around the country are available to supply a large variety of weather data to us. I subscribe to a service in Salt Lake City, Utah, called Weather Brief. The initial cost to purchase this program is \$35.00. A charge of \$.20 per minute while connected seems minimal seeing how I spent only \$25.00 last year. The long distance telephone calls are additional, however. Depending on the type and amount of data requested, most requests are downloaded in less than one minute.

Every morning during the golf season I call Weather Brief to get the day's weather forecast and a five-day forecast for zone 13 which is Sheboygan County. If rain is predicted I will also request a radar map of the Midwest to see where the precipitation is and how large of an area is being effected.

The day's forecast is then duplicated and a copy faxed or hand delivered to the pro shop for any out of town golfers who may call and ask about the day's weather forecast. This has proven to be very beneficial to our pro shop staff.

The information and detail available through Weather Brief is phenomenal. There are 26 different selection topics available. Following are a few of the topics subscribers can choose from: 5, 15, 30 and 90 day forecasts; radar maps including current, 12, 24, 36 and 48 hours ago which is helpful when monitoring storm history; severe weather alerts and warnings; soil temperature maps; wind forecast maps at various altitudes; selected major inter-

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